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A study of academic advising satisfaction and its relationship to student self-confidence and worldviews

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A Study of Academic Advising Satisfaction and Its Relationship to Student Self-

Confidence and Worldviews

by

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A dissertation submitted in partial fulfillment of
the requirements for the degree of
Doctor of Philosophy
Department of Psychological and Social Foundations
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Date of Approval:
June 14, 2007

Keywords: retention, psychosocial development, academic success, freshmen advising

Dedication

This dissertation is dedicated to my wife Cary, Marcus, Dominik, Nicholas, and Sophia. Their understanding, patience, and love provided me the opportunity to take on and complete this monumental life changing task. To my parents who with love provided me a fundamental appreciation for hard work and sacrifice.

Acknowledgement

Though only one name appears in the cover of this dissertation, a great many people have contributed to its production. I owe my gratitude to all those people who have made this possible. Dr. Herbert Exum an amazing person who provided me the freedom to explore my own research interest. His patience and support helped me overcome and finish this dissertation. I hope that one day I would become as good an advisor to my students as Dr. Exum has been to me.

Dr. Carlos Zalaquett, a true leader and instrumental figure in my professional and identity development. To Dr. Barbara Schircliffe, who provided insightful comments and constructive feedback during the various stages of this study and who supported earlier concepts. Dr. Wilma Henry, her dedication to student success and willingness to become part of this great effort in such short notice. Dr. Cranston-Gingras, for her encouragement, practical advice, and guidance as an outside chair has truly made this a positive experience. I would like to acknowledge Dr. Henry Beltran who has been a true mentor and figure in my life.

Semper Fidelis

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ABSTRACT

The purpose of the present investigation was to determine the relationship between

worldview, student academic confidence, and satisfaction with advising. More

specifically, this study examines the relationship among level of advising satisfaction,

worldviews of students, and the student's perceived style of advising received. The

findings of this study indicate that a positive relationship exists between developmental

advising and advising satisfaction. The results suggest that overall student characteristics

such as gender and self-confidence are not as relevant to advising satisfaction as the style

of advising used by the faculty or advisor. Furthermore, this study supports findings by

Coll and Zalaquett (in press) and Coll and Draves (in press) who suggest that overall

student worldviews are not a function of gender or age but may be more closely related to

individual experiences.

Chapter One

Introduction

This chapter will briefly address the importance of academic advising in the academic success of college students as well as how the changing demographics of college students influence the quality of academic advising. The chapter will also briefly explain the relationship between certain noncognitive student factors and advisor factors that influence advising outcomes, and how these factors might be manipulated to improve student advising outcomes. Finally, this chapter will provide an overview of the organization of the remainder of the dissertation.

Background

The college student population in different institutions across the United States is increasing in diversity in terms of gender, ethnicity, race, social class, and age. Since the 1980's, colleges and universities have become a much more diverse environment as ethnic minority and other groups continue to increase in numbers (Priest & McPhee, 2000). Given the many changes in the characteristics of their student bodies, such as socioeconomic status, ethnicity, and gender, many institutions have begun to reexamine their retention strategies. This reexamination often has focused on the role of the academic advisor in the institution as well as certain noncognitive student characteristics or variables.

An academic advisor traditionally has been defined as a staff member who ensures students' individual academic plans are consistent with their academic interests

and abilities (Midgen, 1989). In addition, Midgen stated that the advisor provides current and accurate information regarding the curriculum and academic policies, while serving as a referral agent. Educational institutions historically have used advising as a primary means to increase retention, and many researchers (Carstensen & Silberhorn, 1979; Glennen, 1976; Noel, 1976; Tinto, 2006) have supported the link between academic advising and student retention. The main thrust of these studies is that the ongoing contact of advisors and students is an essential element in retaining students.

Researchers also have found that student retention is linked to student satisfaction, which plays an important role in students' commitment to their academic institutions (Bailey, Bauman, & Lata, 1998; Brown & Rivas, 1995). Academic advising often is the only academic service that guarantees prolonged interaction with students, and it is precisely this guaranteed interaction that makes the advisor key to the development of positive relationships and positive experience for students (King, 1993). Noel-Levitz's (2007) National Student Satisfaction Report, based on responses from 796 higher education institutions, indicated that academic advising is a key variable in student satisfaction. Similarly, students ranked the importance of academic advising second only to instructional effectiveness in four-year private colleges/universities. Noel-Levitz's study confirmed the importance of academic advising and its relationship to student satisfaction within colleges and universities.

Nutt (2000) described academic advising as an integral part of how the student will perceive his or her relationship with the institution. Gordon, et al. (2000) indicated that the relationship between student and academic advisor is a major factor in not only retention but also in college admission recruitment. These studies support Edwards and

Person's (1997) contention that academic advisors have become a critical element in the recruitment, retention, and "survival of most institutions of higher education" (p. 20).

Redefining the Role of Academic Advising

Although Midgen (1989) defined the academic advisor essentially as a source of information about the curriculum and the university, other definitions regarding academic advising also are found in the literature. Grites (1979) defined academic advising as a "decision making process during which students realize their maximum educational potential through communication and information exchanges with an advisor" (p. 1). Creamer (2000) described academic advising as an educational activity that assists college students in making decisions in their personal and academic lives. Frost (1990) stated that advising has moved from just providing students with information to a student-centered service that includes the needs of the institution as well. Winston, Miller, Erder, and Grites (1994) stated that a shift in the advisor/advisee relationship began in the 1970's when advising went from being purely informational to being more holistic. The holistic academic advisor needs to be familiar not only with the curriculum and the institution but also with theories of student development, learning styles, cognitive abilities, and cultural diversity (Grites & Gordon, 2000). The role of the advisor has become increasingly complex due to changes in the composition of the student body.

Importance of Worldview

Another main foci of examinations related to retention has been students' perceptions of and their relationships with their academic institutions (Reinarz, 2000). This is a process often determined by the students' worldviews (Sue, 1978). The term

worldview comes from the German word *Weltanschauung* and was originally introduced by Immanuel Kant in his *Critique of Judgment* (1790). Sue (1978) defined worldview and its importance to the identity of the person by stating that it relates to the individual's perception of and relationship with the world. Ibrahim (1991) and Ibrahim and Kahn (1987) referred to a worldview as a philosophy of life or the individual's experiences within social, cultural, environmental, and psychological dimensions. The importance of an individual's worldview to his or her life is emphasized by Koltko-Rivera (2004), who stated that individuals are actively engaged with their surroundings through the process of specifically constructed worldviews in order to gain a self-defined individualistic purpose. The importance of understanding worldviews is imperative to the development of relationships, which Sue and Sue (2003) note.

Sue and Sue (2003) and Sue, Arredondo, and McDavis (1992) recommended specific worldview-related competencies for counselors working with diverse populations, and these competencies also seem to be appropriate for academic advisors in our increasingly diverse academic system. First, the advisor should become aware of the interpersonal dynamics that exist between their advisees and themselves; and second, the advisor should have a comprehensive understanding of his or her advisees' cultural backgrounds in order to better understand the advisor/advisee relationship. This is important because as Hicks and Shere (2003) stated, an advisor's inherent values (worldview) may have a negative impact on the advising relation with a student whose life experiences do not match those of the advisor.

Importance of Understanding Student Development

Those who research student development (e.g., Chickering, 1969; Chickering & Reisser, 1993; Creamer, 2000; Grites & Gordon, 2000) postulated that students go through various developmental stages during their college experience. Student developmental theories help college personnel understand differences in students and how these differences in development may influence student learning, behavior, success, and social interaction (Rodgers, 1990). Chickering's (1969) psychosocial development theory is one of the most influential theories of college student development (Foubert, Nixon, Sisson, & Barnes, 2005; King & Kerr, 2005). Psychosocial theories assert that an individual's life span is characterized by certain stages and tasks through which a person develops. Central to psychosocial theory is the belief that the individual's social and cultural surroundings influence and shape the way in which development occurs. Therefore, critical aspects of advisor's recognizing student behavior includes the person within his or her social context, worldviews, and understanding his or her developmental stages (Johnson & Rhodes, 2005).

Statement of the Problem

The development of multicultural competence is, perhaps, the modern academic advisor's greatest challenge (Coll & Zalaquett, in press; Upcraft, et al. 2005)). In order to be most effective, the advisor must be sensitive to the many values and perspectives his or her advisees hold (Herr, Cramer, & Niles, 2004; Sue & Sue, 2003). Academic advisors should become aware of the importance of worldviews and also understand that worldviews are dynamic paradigms that can be influenced by individuals and/or their environment. It is essential that advisors take into consideration the psychosocial

development of students and their worldviews because these frameworks provide students with the personal information they use to make decisions. When students and advisors communicate well, the end product is a more satisfied student who is willing to persist to graduation (Edwards & Person, 1997). Most current models of advising do not take worldviews or levels of student development into consideration, and this may be one of the reasons many students fail to persist academically when they otherwise might be successful.

Purpose of Study

The relationship of worldviews to advising satisfaction has received little attention in the literature. Coll and Zalaquett (in press) found that students who have or who develop worldviews to those of their advisors appear to seek advising more often and perceive advising as an important event. Thus, the goal of the proposed study is to extend Coll and Zalaquett's investigation by (a) examining similarities and differences among the worldviews of students; (b) comparing satisfaction with the advising process among students as it relates to their reported worldviews; (c) examining the relationship between selected noncognitive and demographic variables among students and advisors as a possible means of predicting academic success for students; and (d) comparing students' satisfaction with the advising process, as related to the students perception of the style of advising they received.

With this in mind, the specific purpose of this study is to determine the relationships among a student's worldview, personal characteristics, and satisfaction with advising. This study also examines the relationships between the level of satisfaction and perceived style of advising received. Because the enrollment of diverse student

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populations continues to rise, it is important that advisors understand the unique makeup of student worldviews in order to improve the advising relationship and students' academic success. The goal of the study was to determine whether specific student worldviews enhance the student/advisor relationship, improve the quality of advising, and increase the level of academic success among students.

Theoretical Framework

Historically, the fundamental purpose of student advising has been to provide critical answers to specific questions and to facilitate discussion of academic issues (Creamer, 2000). The role of advisors in higher education has shifted and become more complex as theorists linked advising interaction, level of student development, and satisfaction within the learning process (Chickering, 1969; Frost, 1990; Gordon, 2006). The promotion and enhancement of advising and of the student/advisor relationship has given rise to the term "developmental advising."

Developmental advising seeks to provide a holistic approach to the student/ faculty (advisor) relationship outside of the classroom environment, where the student can receive guidance and discuss topics such as coursework, career, and values (Upcraft, et al., 2005). These informal interactions between the student and advisor have yielded positive outcomes in student attitudes towards college, achievement, personal development, social integration, motivation, satisfaction with advising, and retention (Chickering & Reisser, 1993; Grites & Gordon, 2000). On the other hand, studies have shown that inadequate advising by faculty members leads to negative outcomes such as the decision to leave college, negative attitudes about faculty and staff, and lower academic achievement (Grites & Gordon, 2000).

The foundation for academic success begins when the student builds positive relationships with his or her advisor. Empirical investigations of student development across disciplines and college environments have shown that positive student development is associated with positive student/faculty interaction, developmental advising, and overall student satisfaction (King & Kerr, 2005; Upcraft, Gardner, & Barefoot, 2005). Chickering's (1969) theory of student development and developmental advising continues to provide a platform for examining student/advisor relationships and how they may contribute to overall academic satisfaction and development. The components of the theoretical framework and how they may influence a student's satisfaction with advising are shown in Figure 1.

The conceptual model presented in Figure 1 hypothesizes that there is a relationship between student characteristics and how students perceive advising. Furthermore, the model hypothesizes that the student's perceptions of the advising style and student characteristics have an influence on student satisfaction with advising, which may in turn influence retention, grade point average, interpersonal relationships, emotional development, and career decision making.

Conceptual Model

_____

Advising Style Perceived
    a) Developmental
    b) Prescriptive

| Retention |
| GPA |
| Relationships |
| Development |
| Careers |

Student Characteristics
    a) Benevolence
    b) Self-worth
    c) Meaningfulness
    d) Self-confidence

Advising Satisfaction

_____
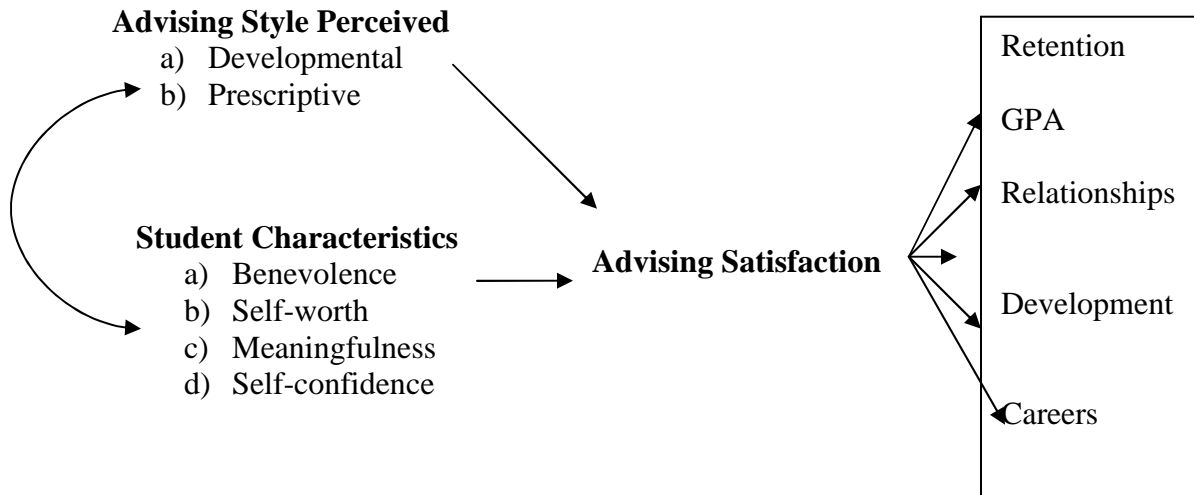
Research Questions

The theoretical framework illustrates the importance of developmental advising in an educational setting. The degree to which faculty provide developmental advising may vary according to institution environment, student, and student/advisor worldviews. This study will address the following question:

1. To what degree do a student's worldview, self-confidence, gender, and perceptions of a counselor's advising style influence the student's reported level of advising satisfaction?

   Four hypotheses have been developed to help answer the question posed in this study:

Students who report high levels of satisfaction with advising will also report high levels of self-confidence as measured by the Erwin Identity Scale.

Students who report high levels of satisfaction with advising will also report that they received developmental advising as measured by the Academic Advising Inventory.

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Students with reported high levels of worldviews will report high levels of satisfaction as measured by the World Assumption Scale.

Female students will report higher levels of satisfaction and higher levels of self-confidence than male students.

Definition of Terms

This study uses several key terms repeatedly. As a means to assist the reader their definitions are as follows:

Chickering's Theory of Psychosocial Development. This is a widely used theory of college student development. The original theory was postulated by Chickering in 1969 and revised in 1993 by Chickering and Reisser. The following seven vectors explain Chickering's psychosocial theory of student development: (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 (Chickering & Reisser, 1993).

Worldview. Worldview is defined as a set of presumptions that individuals hold about the makeup of the surrounding environment (or world) and that influence the behavior of these individuals. It is the combination of culture, experience, attitude, opinion, value, thought, and events that directly affect our daily lives (Koltko-Rivera, 1998, 2004).

Self-efficacy. According to Bandura (2001), self-efficacy is a person's self-confidence of his or her capability to develop, organize, and execute an action required to complete a set goal. This paper uses the terms academic self-confidence and self-efficacy interchangeably.

Self-confidence. According to Erwin (1991), self-confidence is assuredness in one's self and in one's capabilities. It includes a conscious self-reliance on one's capabilities to complete tasks, make decisions, and fulfill goals.

Advising. Advising is defined as a process that helps students develop professional, interpersonal, and academic success through a relationship with and the guidance of faculty members or assigned professional staff (Gordon, 2006).

Delimitations of the Study

This study is confirmatory in nature and uses an existing data set that was collected during fall 2006 from freshman students enrolled in a freshman seminar class at the institution. The sample consists of 50% of the freshman who were enrolled in a required course. This study examines self-confidence, which is one of three components found in Erwin's (1991) Identity Scale. Finally, the study does not assess the style of advising the advisor actually used.

Educational Significance

Academic advising continues to be a critical element in the student's college experience and academic decision making. Because most universities and colleges strive to retain every student that is enrolled (Upcraft, et al., 2005), it is crucial that advisors build positive relationships with their student advisees, which, in turn may promote retention and academic success. Therefore, a particular interest of this study is to determine the relationship that a student's worldview and self-confidence have to his or her satisfaction with academic advising.

Organization of this Study

       This study will be organized into five chapters. The first chapter provides an overview of the topics that will be discussed in the study. Chapter 2 provides the literature framework upon which this study is grounded. Chapter 3 provides a detailed description of the method used for this study and describes the sample. Chapter 3 also will discuss the instruments used and their respective psychometric properties. Chapter 4 presents the findings, and chapter 5 will provide a discussion of the findings, their implications, and implications for further research.

Chapter 2

Literature Review

The following literature review will examine a number of factors that influence

student development and academic advising. In order to discuss student development

from a psychosocial perceptive, I selected Chickering's (1969) student developmental

theory, which continues to be the most widely used theory in college student

development. Academic advising models will be reviewed to provide the reader with an

understanding of the various models that may be applied to advising and also to

demonstrate the complexity associated with each model. Lastly, the literature review will

discuss how personal worldviews may influence relationships and perceptions of student/

advisor roles.

Academic Advising

Academic advising is defined as a process that helps students develop

professional, interpersonal, and academic success through a relationship with and the

guidance of faculty members or assigned advising staff (Gordon, 2006). Creamer (2000)

stated that academic advising is a developmental and educational delivery method that

empowers college students to make personal and academic decisions that promote

personal growth. Advising has moved from providing students with information to a

student-centered service that includes the needs of the institution (Frost, 1990; Gordon,

2006). Midgen (1989) defined an advisor as a staff member who helps to ensure that

students' individual academic plans are consistent with their academic interests and

abilities. Furthermore, Midgen stated that the advisor provides the student with current

and accurate information regarding the curricular and academic policies, and serves as a

referral agent. According to Winston, et al. (1994), the shift in the advisor/advisee

relationship began in the 1970s when it changed from an informational to a

developmental focus. Academic advising is, perhaps, one of the only services that

guarantees interaction with students and offers a unique opportunity for faculty to

develop positive, lasting relationships that can promote student development (King, 1993;

King & Kerr, 2005; Upcraft, Gardner, & Barefoot, 2005).

Advising Models

King and Kerr (2005) described seven organizational models for student advising,

and they evaluated each in terms of the following seven factors: access to student,

institutional priority placed on advising, academic knowledge within discipline,

knowledge of student development, training required or needed, cost, and faculty or staff

credibility (see Appendix A). The seven organizational models are as follows: (a) The

Faculty-only model, in which faculty members are assigned to each incoming freshman.

Most often the advisor is a faculty member in the student's declared major. (b) The

Satellite model, which employs advising subunits with colleges and schools. The role of

the advisor can shift from a specific advising center to faculty advising depending on the

needs and assets of the institution. The satellite model has disadvantages and advantages

that are similar to those of the faculty-only model. (c) The *Self-contained model*, is based

on an advising center and begins with student orientation. It employs a centralized unit of

advising staff who are skilled at working with undecided students and have general

information regarding all majors. (d) *Supplemental models*, which deliver advising

through the use of faculty members, but within a central advising center with a part-time coordinator who assists faculty members with academic transactions. (e) The *Split model*, in which advisors provide advising at a specific student center, to undeclared students, while faculty members provide advising of declared majors. (f) The *Dual model* involves two types of advisors: a faculty member who delivers advising related to curricula and a staff advisor who provides general education advising, such as academic policies, transition, and graduation requirements. (g) The *Total Intake model* involves the use of a central office for all students until they have attained a specific level, at which time they are transferred to a specific faculty advisor who represents the students' chosen major. The use of decentralized models such as faculty-only, self-contained, and satellite has decreased in the past 10 years, whereas shared models such as a combination of paraprofessionals and faculty have increased. Furthermore, the use of any model without an appropriate framework is outdated.

The 3-I process developed by Gordon (2006) is among the most popular advising frameworks. The 3-I process integrates career advising with academic advising through the use of the following three stages: inquire, inform, and integration. It provides for a planning and action phase in which both students and advisors are decision makers. During the "inquire" phase, the student is seeking questions and may begin to identify certain academic and career options of interest. Furthermore, the student begins to ask direct questions that are triggered by thinking about career concerns as well as identity concerns. The second phase is the "inform" stage, in which the student begins to gather information pertaining to his or her personal attributes, career goals, and coursework. Within this phase the advisor plays a critical role in disseminating curriculum and

academic information as the student attempts to retain and organize its meaning in order

to make the correct academic and professional decision. The third phase, "integration,"

allows the student to engage actively in decision making by using the information he or

she has learned about in the previous two stages. Although the student is encouraged to

develop autonomy, the advisor continues to play a critical role in guiding student

development (Gordon, 2006). The approach used to guide students is instrumental, and

may impact the relationship between advisor and advisee. The two most common

approaches to advising are developmental and prescriptive. A developmental approach to

advising suggests that the advisor takes time to understand and know students by helping

them with decision making, not just course selection. However, a prescriptive approach

tends to be more task-oriented and concrete, focusing mostly on course selection and

registration (Winston & Sander, 1984). It is important for advisors to understand that

each student who seeks and needs advising brings with him or her specific experiences

and perceptions of the student/faculty relationship. Furthermore, according to Chickering

and Reisser (1993), a successful advisor needs to understand student development as a

means to deliver and create a successful advising approach within a specific environment.

The 3-I process is illustrated in Figure 2.

Figure 2.

Gordon (2006) *3-I Process*

INTEGRATE

INQUIRE

INFORM
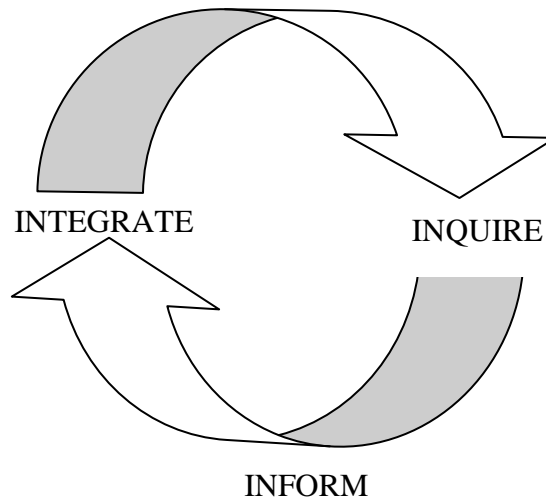
Source: Gordon (2006)

Chickering's (1969) Psychosocial Theory of Student Development

Chickering's (1969) psychosocial developmental theory is one of the most

influential theories of college student development (Estanek, 1999; Foubert, et al., 2005;

King & Kerr, 2005). Psychosocial theories state that an individual's life span is

characterized by predictable stages and tasks through which he or she develops. An

individual must complete each developmental tasks or issue in order for the next stage to

occur (Johnson & Rhodes, 2005). Central to psychosocial theory is the belief that the

social context and environment surrounding the individual influences and shapes the way

in which the individual's development occurs. Therefore, a critical aspect of

understanding student behavior is to understand the person within his or her environment

or social context (Johnson & Rhodes, 2005; Knefelkamp, Widick, & Parker, 1978). In

order to understand better Chickering's psychosocial theory, it is important to discuss

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other theories and works that influenced Chickering, such as works by Erik Erikson and Nevitt Sanford.

Erikson's (1968) influence can be found in Chickering's earlier writings, in stating that developmental dimensions can be subsumed into a general classification of identity construction and should be considered as the most important tasks of young adults (Chickering, 1969; Pascarella, 1999). Erikson was one of the first theorists to conceptualize identity development for young adults. He outlines eight stages of personality development across the life span or cycle: trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt, industry versus inferiority, identity versus identity confusion, intimacy versus isolation, generativity versus stagnation, and integrity versus despair (Moore & Upcraft, 1990; Torres, Howard-Hamilton, & Cooper, 2003). As previously stated, a psychosocial theory requires that an individual successfully complete the previous stage prior to moving forward; therefore, during each stage certain key developmental tasks are preeminent (Erikson, 1968; Newman & Newman, 2005). The resolution of a specific stage may result in an enhanced sense of self that, in turn, may result in an expansion of personal and social capabilities (Moore & Upcraft, 1990). Stage completion and growth from one stage to the next are viewed as a movement into a more complex level that establishes a differentiated sense of self (Johnson, Buboltz, & Seeman, 2003).

A major theme in Erikson's theory is the concept of identity crisis. The term "crisis" suggests that there is an opportunity for development, a point at which there is an increased potential for growth as well as delicate vulnerability. It is expected that a form of crisis will occur during each developmental stage (Erikson, 1968). Therefore, the term

identity crisis signifies the efforts a young adult makes as he or she attempts to forge an identity during the college years and redefines his or her sense of self in college (Upcraft, et al., 2005).

Erikson (1968) stated that the development of adolescence is the key challenge in identity and that one could not pass beyond the adolescent stage without the creation of some form of crisis (crisis is not identified as always being a negative experience) affecting the individual's life cycle. Similarly, Chickering's (1969) theory of college student development focused on the psychosocial development of the adolescent and his or her identity during the college years.

Sanford (1967) stated that identity development of college students is a cognitive, intellectual, and emotional growth process that is achieved through the use of internal and external stimuli such as those found in a college environment. According to Sanford, challenges faced by college students result in disequilibrium, at which time the student must attempt to establish or restore emotional equilibrium. The level of environmental support available to the student will determine the success of the response. This crisis may create differentiation and integration, which are opportunities for students to develop complex thought and to connect the relationships among concepts. The psychosocial development of a student requires differentiation and integration; however, this is not an automatic process. It requires challenges and support from the environment (Foubert, et al., 2005).

Exploring beyond Erikson and Sanford, Chickering eventually constructed a student development theory that he published as *Education and Identity* in 1969. Chickering attempted to demonstrate a connection between dimensions of student

development and the actual supporting environment. His work in *Education and Identity* is based on a longitudinal study conducted at 13 liberal arts colleges, with most of his participants being Caucasian males (Chickering, 1969).

In his original work, Chickering (1969) created seven vectors of student development during college: (a) developing competence, (b) managing emotions, (c) developing autonomy, (d) establishing identity, (e) freeing interpersonal relationships, (f) developing purpose, and (g) developing integrity (Chickering; Chickering & Reisser, 1993). Chickering emphasized that development and growth occur along the seven vectors and will vary accordingly, depending on the student and the environment or the college. However, all students will at some point during their academic careers travel through the seven vectors (Chickering & Reisser).

The first stage or vector, *developing competence,* comprises three components: intellectual skills, physical and manual skills, and social and interpersonal competence. The ability of the individual to perceive competence appears to be the most important aspect of this stage. Confidence, in this vector, is the individual's ability to cope with crisis and successfully attain his or her goals (Chickering, 1969; Chickering & Riesser, 1993).

The second vector, *managing emotions,* describes an individual's ability to learn and understand how to control emotions. A particular concern in college student development is the ability to control aggression and sexual impulses. Chickering (1969) viewed growth in the second vector as the opportunity to reflect on and increase individual awareness, while developing more effective means of emotional expression.

Similar to the first vector, the third vector, *developing autonomy*, is composed of three components: emotional independence, instrumental independence, and interdependence. An emotionally independent student, according to Chickering (1969), is free from the need for continued reassurance and approval from others. Instrumental independence is the ability to achieve specific activities and resolve problems with little or no assistance. The third component, interdependence, is the culmination of autonomy, or a student who is "attuned to the whole, and aware" of his or her environment and responsibilities (p. 75).

The fourth vector, *establishing identity,* was identified in Chickering's (1969) earlier work as dependent on the development and the successful completion of the first three vectors. Identity development requires an individual to reflect on his or her sense of self. Furthermore, it assumes that the person will have the ability to understand his or her sexual orientation and be able to conceptualize his or her image. Chickering considers these two elements as two of the major components in development and a growing sense of self.

The fifth vector, *interpersonal relationships*, is defined as an increase in tolerance for others. Most recently,   counselors and advisors have had the opportunity to discuss interpersonal relationships with members of diverse populations and examine how students develop an appreciation for cultural diversity. Overall, the student should develop a sense of greater trust and individuality (Chickering, 1969).

Developing purpose, which is the sixth vector, concerns the person's ability to develop direction in his or her life. The student begins to develop purpose through the use of goal setting and by developing a set of priorities that allows him or her to experience a

vocational interest. Developing purpose may seem to be one of the most difficult tasks that advisors may encounter with nondeclared students (Chickering, 1969).

The seventh vector, which is the last vector in Chickering's (1969) theory, is *developing integrity,* Developing integrity is the means by which an adolescent develops a valid set of beliefs and values that influence his or her behavior. The development of values and beliefs, as presented by Chickering, occurs within overlapping stages that include humanizing of values, personalizing of values, and identifying similarities between values and the individual's behavior (Chickering & Reisser, 1993).

In order to demonstrate the validity of a theory, it must be tested so as to demonstrate cause and effect and to support the stated hypothesis. Since the original 1969 postulation of Chickering's theory, researchers have published numerous articles using and testing Chickering's psychosocial developmental theory (Estanek, 1999; Foubert, et al., 2005; Pascarella, 1999; Pascarella & Terenzini, 1991). The various studies on student development prompted Chickering and Riesser (1993) to revisit and modify Chickering's (1969) student development theory by publishing the second edition of *Education and Identity.* The reevaluation of Chickering's theory occurred with the support of more than 20 years of studies and offered the opportunity to revise and update the theory for application to a more relevant and diverse student population.

Revising Student Development: Chickering and Reisser (1993)

Winston and Miller (1987), based on findings from 241 female students, stated that interpersonal relationships precede autonomy. This study suggested that female college students are developmentally different from the population that Chickering

described in 1969. The researchers interviewed 24 of the 241 participants, who had above-average levels of autonomy as measured by the Student Development Task Inventory (SDTI) (Chickering & Reisser, 1993). Winston and Miller found quantitative differences among female participants, particularly with respect to females' development of autonomy. The researchers concluded that the establishment of interpersonal relationships plays a critical role in the development of autonomy for females. Because of similar findings in earlier studies, Chickering and Reisser renamed the fifth vector. Instead of "freeing interpersonal relationships," it became "developing mature interpersonal relationships" and, consequently, moved to its current position, which is fourth and occurs prior to establishing identity (Chickering & Reisser).

Based on findings from several similar studies, Chickering and Reisser (1993) developed a greater emphasis on interdependence, and stated that interdependence with others in fact is the foundation of autonomy. They define "interdependence" as the ability to be part of a larger entity such as a community, culture, and society, while having the ability to maintain awareness of the role that one has within the specific setting, such as receiving or contributing (Rodgers, 1990). Because of this particular definition and its use, researchers retitled the vector "developing autonomy" as "moving through autonomy toward interdependence."

"Establishing identity" also was modified in order to reflect research findings that supported cultural diversity, sexual orientation, and minority identity development (Atkinson, Morten, & Sue, 1983; Branch-Simpson, 1984; Rodgers, 1990). Based on a study of 40 African American college students, Branch-Simpson found that developing competence through the college years was achieved through spiritual and religious

dimensions and that the relationships with immediate and extended family signified

identity.

The vector of establishing or managing emotions also was expanded beyond its

original topic of aggression and the desire for sex. Managing emotions currently includes

depression, anxiety, anger, guilt, and shame; moreover, the revision includes positive

emotions such as joy, hope, and love. These changes are in keeping with the

understanding that college students come with various degrees of mental capability and

emotional stability, no matter their age and experience (Chickering & Reisser, 1993;

Reisser, 1995). The following reflect changes to the original vectors: (a) First vector:

Developing competence is described as the student's ability to develop competence in

three fundamental areas: intellectual, physical, and interpersonal. Furthermore, this first

vector builds on the student's self-confidence and capability to cope with crisis and

ability in order to achieve goals (Chickering & Reisser); (b) Second vector: The second

stage focuses on the student's ability to manage emotions. Unlike in the original 1969

theory, this vector has been expanded to include a broader range of emotions, not solely

anger and sexual desire. Managing emotions is considered to be the student's awareness

and acceptance of feelings that may be interpreted as positive and negative schemas.

Within this vector a student should be able to control his or her emotions and feelings in

order to respond appropriately to his or her environment (Chickering & Reisser); (c)

Third vector: Within this stage a student begins to move through autonomy towards

interdependence. Students begin to develop an increasing emotional independence while

developing an understanding of their own independence from others and the larger

community--for example, college or society (Chickering & Reisser); (d) Fourth vector:

The student's ability to develop mature interpersonal relationships can be described as an increase of tolerance for cultural and interpersonal differences. Beyond cultural awareness, the fourth vector has been modified to include the individual's capacity for intimacy, which may result in his or her ability to develop lasting relationships (Chickering & Reisser); (e) Fifth vector: Establishing identity can be considered as the dependent variable of the previous vectors because they play a role in the development of individual identity. However, Chickering and Reisser identify specific elements in the fifth vector that support identity development, such as (1) the person's ability to feel comfortable with his or her body and appearance; (2) the person's level of understanding and comfort with his or her sexual orientation; (3) the person's awareness of self within the environment; (4) the person's ability to identify and conceptualize his or her societal role; (5) the person's ability to self-identify in response to the criticism he or she receives from respected peers and family; (6) the person's self-esteem and acceptance of identity; and (7) the person's stability and ability to integrate the previous element. It is believed that as the student's identity develops, a mature sense of self becomes evident (Alessandria & Nelson, 2005; Chickering & Reisser); (f) Sixth vector: "Developing purpose" looks at the student's ability to make plans and set priorities. The student develops growth along this vector that includes vocational, personal, and familial investments. Students who move through this vector start to establish meaningful goals that contribute to a meaningful purpose (Chickering & Reisser); (g) Seventh vector: Developing integrity is the foundation of developing values and is a structure that the person can use as a guide to beliefs and experiences. The development of values establishes congruency between behaviors and beliefs that result in the student's ability to

move away from dualistic automatic views and begin to think about and conceptualize

his or her values and to respect those of others (Chickering & Reisser). Figure 3

illustrates Chickering and Reisser's model.

Figure 3

Chickering's Seven Vectors of Student Development
Source: Chickering & Reisser (1993)

Managing Emotions		Autonomy/ Interdependence

Establishing Identity
*Comfort
* Sexual Orientation
* Roles/Lifestyle
* Sense of Self
* Stability
* Integration

Developing Competence		Developing Interpersonal Relationships

Developing Purpose
- Clearer vocational plans
- Personal interests
- Family commitments

Developing Integrity
- Humanizing values
- Personalizing values
- Developing congruence

Chickering and Reisser's (1993) vectors have been criticized for being too broad and for not being able to guide practitioners through the underlying changes that occur in each vector (Foubert, et al., 2005). However, Chickering and Reisser supported the broad conceptual nature of the theory and stated that this is, in fact, its strength. Furthermore, they stated that the theory's breadth allows practitioners to promote and adapt it to their specific student population and to provide their own interpretation as it applies to their environments. However, Pascarella (1999) pointed out that there is not enough consideration of the process and the change within and between the vectors, which is similar to the difficulties associated with Erikson's theory of development. Furthermore, the nonspecifics and the breadth have prompted criticism that vectors in nature do not constitute a theory and are closer to a model. Therefore, what appears to be developing within the vectors is in fact a natural phenomenon of student life and development. This lack of specification between vectors has made it a difficult to validate Chickering's theory of student development. However, these criticisms over the years have not prevented researchers from being inspired to make this theory into the most widely used psychosocial theory in student development (Estanek, 1999; Foubert, et al.; Pearson & Bruess, 2001; Smith, 2005).

Foubert, et al. (2005) explored gender differences among college students as these differences relate to Chickering and Reisser's vectors of student development. Chickering and Reisser (1993) acknowledge that there may be differences in development as a function of gender (Gilligan, 2005; Josselson, 1996).

The Foubert, et al. (2005) research focused on two specific questions. First, they sought to determine whether college students progressed in developing academic

autonomy, tolerance, mature interpersonal relationships, and purpose during their college experience. Second, they asked whether gender differences influenced the degree of development (Foubert et al.). The sample for this longitudinal study was traditional-age college students. The authors randomly selected 407 participants from an unstated total of incoming first-year students. The sample consisted of females ($n = 227$), males ($n = 180$), Caucasians ($n = 321$), Asian Americans ($n = 44$), African Americans ($n = 28$), and others ($n = 12$), including Hispanics. Although the authors adequately described the sample, they failed to state the percentage of the total population that was randomly selected or the methods by which they were selected.

Chickering's (1969) vectors of development were measured via the Winston, et al. (1994) Student Development Task and Lifestyle Inventory (SDTLI), which is a 152-item instrument with an established score reliability coefficient of (.85). Similar instruments that may be used to measure student development are the Erwin (1991) Identity Scale or the Iowa Developing Competency Inventory (Hood & Jackson, 1983).

Foubert, et al., (2005) used a multivariate analysis of variance (MANOVA) to predict gender differences with respect to the multiple dependent variables. The MANOVA results revealed statistically significant differences across the vectors measured, with a moderate effect size of .68 indicating a high degree of developmental change among the first year through the fourth year. With regard to gender differences, a statistically significant difference emerged for the vectors Tolerance and Interpersonal Relationship. However, the effect size was extremely low, threatening the possibility of generalizing this finding. Nevertheless, Foubert, et al. concluded that females develop a

higher tolerance through time than do males. However, females in this study began college with tolerance levels exceeding those of males.

Although it is difficult to generalize from the results, because the sample used predominantly Caucasian participants, unequal group sizes, and findings that yielded low effect sizes, the results support Chickering's theory of student development and provide confirmation of the importance of understanding student development across the life span and across gender differences (Thieke, 1994). Moreover, this study supports the importance of understanding individual student development and schemas that may influence students' relationships and academic achievement within various college environments. In an attempt to determine variables that impact student success, Smith (2005) researched psychosocial factors and noncognitive variables, such as high school GPA and SAT scores, to determine the best predictors of academic success.

Smith (2005) explored multiple variables, such as high school GPA and SAT scores, gender, and student development, to determine which variables best predict college student failure and dropout. The ongoing debate about college student retention prompted this study as a means to determine the role that institutions may take to retain students who are classified as at-risk. The study defined at-risk students as a catch-all category, including minority students from single-parent homes, students of lower socioeconomic status, and students whose parents had no high school diploma (Smith).

Cabrera and LaNasa (2000) documented the importance of nonacademic factors in college student retention, demonstrating that students' abilities to build relationships, navigate their first-year experience, and manage emotional crises are critical components in college success. Similarly, Gerdes and Mallinkrodt (1994, as cited in Smith, 2005)

found that emotional and social variables have a higher predictability of student college success than does GPA. It is also noteworthy that the institution can contribute to students' success in various ways, such as helping students transition, providing counseling centers, and offering a positive college environment. Smith focused on examining the importance of nonacademic factors that influence retention, such as student development, relationships with the institution, and emotional characteristics, all variables mentioned in Chickering and Reisser's (1993) theory of student development.

Smith (2005) implied that students who have emotional, social, and environmental support, even if they are at-risk, have a higher probability of succeeding than do students who have low support and higher GPA and SAT achievement. The independent variables in this study were identified as student receptivity and emotional characteristics, whereas institutional and social relationships and GPA outcomes were identified as dependent variables. The independent variable was measured using the College Student Inventory Form (CSI; Noel-Levitz, 2007), which is a 194-item instrument that has been found to yield a test-retest reliability coefficient of .80. The CSI contains 19 subscales that are scored on a 7-point Likert-format scale, with five major categories: academic motivation, social motivation, coping skills, receptivity to services, and relationship to institution. The dependent variables were measured by monitoring existent GPA and levels of retention.

Smith's (2005) sample consisted of 991 students from a four-year state institution in the Northeast. Students identified as at-risk made up 30% ($n = 378$) of the total sample. A multiple regression analysis revealed that incoming high school GPA, SAT scores, and receptivity were statistically significant predictors of student academic GPA up to the

fifth semester. Moreover, it appears that high school GPA was the strongest predictor of the fifth-semester college GPA. This would lead us to believe that the relationship between the high school GPA and the college GPA is weakened when students score low on the CSI. Further analysis revealed that students entering college with high GPAs and low CSI scores had the lowest fifth-semester GPA, and were at higher risk for dropping out (Smith). The results demonstrate the importance of establishing services that support student development in the areas of emotional and social support as a means to increase retention and academic success. Furthermore, the study supports the use of Chickering and Reisser's (1993) developmental theory as a means to understand student development and identity crisis during their college years, instead of focusing so heavily on previous SAT and GPA achievements.

According to Chickering and Reisser (1993), an individual's cognitive schema provides the capability to manage emotions and to become aware of his or her environment, and assists in the development of acceptance of his or her own and others' culture. Jannoff-Bulman (1992) defines schema as the latent nature of a person's observation and perception of a specific experience of the surrounding environment. This basic assumption and interpretation of an individual's experience and surroundings is also identified as the person's worldview.

Worldview

Immanuel Kant (1724-1804) defined "worldview" (*Weltanschauung*), in his *Critique of Judgment,* as a means for individual comprehension and construction of infinite perceptions within the context of the individual's world (Kant, 2005). The term "worldview" has been used in various professions and contexts since its first use by Kant.

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The *Oxford English Dictionary* defines "worldview" as the perception of the world, a particular "philosophy of individual life," and the outlook an individual or a group has on the world (Jewell & McKean, 2005, p. 1937). Additionally, a worldview is defined as a set of presumptions that are held individually about the makeup of the surrounding environment or world (Koltko-Rivera, 1998, 2004). Sigmund Freud (1933), in his *New Introductory Lectures in Psycho-Analysis,* stated that a worldview is a cognitive construction that attempts to solve individual problems of existence by placing everything that interests us in a fixed place. Freud's definition supports a conceptual worldview that is individually constructed and may differ within a various people within a specific culture.

Only two years after Kant's universal introduction of the term "worldview," Johann Gottlieb Fichte (1762-1814) used the term in his book *An Attempt at a Critique of All Revelation* in 1792. Fichte, who took a religious perspective, defines "worldview" as a governed supreme legislation and wrote that if humanity were able to accept the principle of natural causality and moral freedom, people would be in state of free moral law, and nature would appear as contingent. He later explained that God is the union of moral and natural domains that creates the foundation for a divine individual worldview and that humanity has little control over infinite and universal perceptions (Fichte, 1988). Fichte's argument contradicts the idea that a worldview is an individual construct and supports the concept that a higher force develops and controls all worldviews.

In contrast, G. W. F. Hegel stated that a worldview is an objective and subjective reasoning that allows us to define elements in our infinite world intuition to its richest and finest identity (Tubbs, 1997). Hegel referred to worldview as a moral view of the

universe in that the moral experience of the individual defines attitudes that are developed by moments found in the present relations to nature's independence and significance. That is, an individual worldview construct is a perception of the individual's relationship to his or her environment. Furthermore, Hegel later suggested that worldviews are indeed characterized by the individual and national consciousness; therefore, each person may have his or her own worldview (Tubbs, 1997). If this is an accepted notion--that a worldview is individually molded and that there are various types--then Hegel would have been the first to address individual multiculturalism. Vincent McCarthy (1978) supported the statement that a worldview is a general view that an individual acquires by design and by participating in his or her culture within a specific time and through individual experiences.

Levine (1995) suggested that Friedrich Nietzsche's use of the term "worldview" is an ordinary perspective on the realities and the concept of life. He supported this assertion by stating that Nietzsche would always use culture, race, nation, religion, era, or name when attempting to describe a person's worldview. Furthermore, Levine stated that Nietzsche took into consideration cultural entities, historical eras, geographical variables, race, and religion, indicating an individual paradigm or worldview. It is Nietzsche's definition of the term "worldview" that begins to take on a fundamental and universal meaning that is currently used across disciplines.

Anthropologist Robert Redfield (1953) described worldview as an inescapable paradigm of being human. Redfield stated that we all have a worldview that differs depending on cultural context and personal experiences: two elements that support a psychosocial perspective. Carl Jung observed that the dynamics of a worldview are some

of the principal elements affecting the client/therapist relationship. Furthermore, he explained that in order for psychotherapy to be effective, the therapist must focus on the deeper issues that encompass the person as a whole and attempt to understand the client's perspective. This definition and approach may be one of the first attempts in psychology to identify the person with his or her environment, leading to a more psychosocial phenomenon (Jones & Butman, 1991; Koltko-Rivera, 2004). This definition also lends itself to the advisor/advisee relationship.

Koltko-Rivera (1998, 2004) has developed conceptual elements that help to further define an individual worldview. These fundamental elements or variables are as follows: (a) Fundamental postulate: the psychological process (cognition) is strongly influenced by a person's beliefs about what will or can happen; (b) Individuality corollary: dissimilar people have distinctive worldviews that result in different level of understanding of reality and experiences; (c) Dichotomy corollary: a worldview is composed of a limited number of bipolar dimensions dependent on the person's perception of his or her experience and environment (1998, p. 13-14). Moreover, individuals actively engage in their surroundings through the process of specific, constructed worldviews as a means to gain a self-defined, individualistic, purposeful end (Koltko-Rivera, 1998, 2004). In other words, an individual worldview is the combination of culture, experience, attitude, opinion, value, thought, and events, which directly affect our daily lives (Sue & Sue, 2003).

Approaches to and Models of Worldview

Sue and Sue (2003) discussed dimensions that support a value-oriented model to individual worldviews as shown in Table 1. This framework, developed originally by

Kluckhohn and Strodtbeck (1961), recognizes that racial/ethnic groups vary with respect to their perceptions of: (a)Time: the concept of time varies according to culture. Stages of time can be defined as a historical and traditional setting, the now moment, and/or the future; (b) Human activity: the behavior of cultures varies greatly; whereas some value a doing philosophy ("remaining busy"), others value being and becoming through the sense of growth. This sense of growth also is valued differently and can be measured by material accomplishments versus the inner self; (c) Social relations: relationships are viewed in terms of people's interaction with others, such as lineal and authoritarian. Within some cultures (traditional Asian cultures) it is apparent that the male figure in the home has absolute rule and creates a hierarchical relationship. Other cultures may have a more collateral relationship, defining members of the culture and how they may relate to others; and (d) Relationship to nature: one's relationship with nature signifies either one's harmonious and subjugating perceptions of nature, such as can be observed with many Native Americans, or a control and conquer nature, as displayed by many White Euro-Americans (Sue & Sue).

Table 1

Value-Orientation Model

Dimensions	Value Orientations		
1. *Time Focus:* What is the temporary focus of human life?	*Past* The past is important. Learn from history.	*Present* The present moment is everything. Don't worry about tomorrow.	*Future* Plan for the future. Sacrifice today for a better tomorrow.
2. *Human Activity* What is the modality of human activity?	*Being* It's enough just to be.	*Being & In-Becoming* Our purpose in life is to develop our inner self.	*Doing* Be active. Work hard, and your efforts will be rewarded.
3. *Social Relations* How are human relationships defined?	*Lineal* Relationships are vertical. There are leaders and followers in this world.	*Collateral* We should consult with friends/families when problems arise.	*Individualistic* Individual autonomy is important. We control our own destiny.
4. *People/Nature Relationship* What is the relationship of people to nature?	*Subjugation to Nature* Life is largely determined by external forces (God, fate, genetics, etc.).	*Harmony with Nature* People and nature coexist in harmony.	*Mastery over Nature* Our challenge is to conquer and control nature.

Source**:** Sue & Sue (2003).

The value-orientation model allows for a review of how members of a specific minority group differ from members of a dominant cultural worldview. Moreover, through acculturation and assimilation, the blending of worldviews can be visible within a specific individual of a specific cultural group. A cultural worldview is changeable according to the experiences and perceptions of the member.

Using a similar values approach, Janoff-Bulman (1992) identified three variables as a way to understand and predict individual worldviews. In an attempt to understand how the worldview of rape victims changes through the use of psychotherapy, Janoff-Bulman identified the following assumptions or beliefs about the world: (a) Benevolence of the world is the belief that the world is a "good place" (p. 6). This belief refers to an event and to people, and assumes that people in general are benevolent, kind, and caring toward others. This view of the world appears to support research that suggests individuals believe events in their lives are for the most part pleasant. Furthermore, people are more likely to classify their life cycles or experiences as pleasant versus unpleasant, whether or not they experience positive events (Matlin & Stang, 1978; Peterson, 2000); (b) Meaningfulness of the world defines our assumption of the world regarding the belief that events happen to specific people, while attempting to understand the distribution of good and bad. Therefore, we recognize or believe that good things happen to people who conduct good deeds, and vice versa. It is through the display of personal deservedness and determination that a moral and good person gains positive outcomes in life. Furthermore, when a person views the world, meaningfulness also allows for negative behaviors to be punished as positive behavior is rewarded; (c) Self-worth is the global evaluation of self and perception of our own individualistic sense of good and capacity. A person's willingness to engage in appropriate behavior and judge individual competence is believed to be a self-worth value that promotes outcomes. Self-worth is intuitive, and supports the first two values of benevolence and meaningfulness (Janoff-Bulman).

Understanding a multidimensional and multicultural worldview construct is an important undertaking to promote competence in diversity and as a means to promote

professional relationships that support and build empowerment and self-efficacy among our students.

Cheng and O'Leary (1995) conducted a study using the Scale to Assess World Views (SAWV; Ibrahim, 1991) instrument developed by Ibrahim and Kahn (1987) to understand differences between cultural values or worldviews of Taiwanese and U.S. counseling graduate students. Cheng and O'Leary reported scores that yielded high test coefficients of .95 and .96. Similar to Sue and Sue's (2003) cultural values inventory, the SA WV measures the following: (a) human nature (bad, mixture of good and bad, good); (b) human relationships (lineal-hierarchical, collateral-mutual, individualistic); (c) time orientation (past, present, future); and (d) activity orientation (being, being-in becoming, doing) (Cheng & O'Leary, p. 3).

Cheng and O'Leary conceptualized the importance of counselors as well as their clients understanding their personal worldview. Moreover, they recommended that we go beyond understanding differences and begin to develop an understanding for culturally sensitive values and perceptions, as described by Sue and Sue (1990, 2003). Furthermore, it is imperative that we begin to understand that there are more common values than differences among cultures, specifically the need for self-efficacy or motivation to reach self-actualization (Cheng & O'Leary, 1995).

Cheng and O'Leary's (1995) study concentrated on determining the worldview of Taiwanese and U.S. graduate counseling students, using the following 15 values as their dependent variables: (a) human nature (bad, mixture of good and bad, good); (b) human relationships (lineal-hierarchical, collateral-mutual, individualistic); (c) time orientation (past, present, future); and (d) activity orientation (being, being-in becoming,

doing). The sample for this study consisted of Taiwanese ($n = 37$) and Caucasian ($n = 64$). Because there were 15 subcategories and two independent variables, the authors used analyses of variance (ANOVAs) to measure relationships among variables, using a .01 significance level to determine statistical significance.

ANOVA results revealed statistically significant differences between the participants in all 15 subcategories; however, most significant were findings that contradicted the current literature. Within the first three ANOVAs, Evil, Good-Evil, and Good as dependent variables and gender and nationality as independent variables, there was a statistically significant difference, suggesting that Taiwanese students ($M = 8.2$) saw human nature as being more negative than did U.S. students ($M = 6.6$). Further analysis showed that Taiwanese students ($M = 7.9$) saw human relationships as being more individualistic compared to U.S. students ($M = 5.6$). Both of these findings are significant because the literature suggests that traditional Taiwanese should demonstrate more lineal and hierarchical relationships, as opposed to individualistic orientations, and should believe in the harmony and good of nature.

These findings suggest that there are differences in cultural worldview values; however, the study further suggests differences within a culture that are not consistent with the literature, as demonstrated by the Taiwanese students. This study also reveals a significant finding regarding time orientation because it stated that Taiwanese students have a greater orientation toward the future than do U.S. students, who are more oriented toward the present. Past studies suggested that U.S. students are more likely than Asian students to have an orientation toward the future.

However, this study was limited by the sample size, and thus, as Cheng and

O'Leary (1995) stated, it should be used as a pilot study and as a mechanism for future

research. In addition, the authors failed to address other instruments that could have been

used as a means to measure student worldviews, such as Janoff-Bulman's (1992) World

Assumption Scale and Montgomery, Fine, and James-Myers' (1990) Belief Systems

Analysis Scale (BSAS).

A recent study that attempts to understand student worldviews is that of Coll and

Zalaquett (in press), who used Janoff-Bulman's (1992) Worldview Assumption Scale.

The authors sought to understand the differences and similarities between traditional and

nontraditional student worldviews and the relationship between these views and student

satisfaction with academic advising by comparing student and advisor worldviews. Beans

and Metzner (1985) defined nontraditional students as individuals over the age of 25 who

may or may not be married and with or without children. Many nontraditional students

who work, commute, and assume the role of single parents tend to be goal-oriented and

often more mature than traditional-age students. On the other hand, a traditional student

can be defined as a student under the age of 25 who is not a parent and is not married or

divorced (Coll & Zalaquett, in press).

Current diversification of students has led many universities and colleges to study

new strategies for recruitment and retention (Reinarz & Whites, 2001; Tinto, 2006). With

the effort to retain students, the academic advisor has become a much more important

member of the university. Coll and Zalaquett (in press) discussed this pivotal role and

addressed the need for institutions to recognize the rising numbers of nontraditional

students seeking a degree.

The focus of the Coll and Zalaquett (in press) study was to understand better the perceptions students held regarding their relationship with their academic advisors. The authors focused on how a student's relational perception differs according to his or her academic category (i.e., traditional or nontraditional) and according to how similar his or her worldviews were to the advisor's worldview. The sample consisted of 113 students and their assigned advisors, who consisted of five advisors in the School of Education and Social Sciences in a private, southeastern, four-year liberal arts university. The demographic characteristics were as follows: females ($n = 86$), males ($n = 17$), Caucasian ($n = 95$), Hispanics ($n = 9$), African Americans ($n = 5$), and others ($n = 4$); there were 62 traditional students and 51 nontraditional students. All participants were volunteers and were selected according to simple random sampling as part of class participation. Participants were informed of their rights and informed that not participating would have no effect on their grades.

The authors did not state a hypothesis. However, it may be inferred that they expected that traditional and nontraditional students would have different worldviews. The reported dependent variable was student perception of academic advising, which was measured via the following six questions developed by the researchers: (a) Is your academic advisor effective at meeting your academic needs? (b) Are you satisfied with your academic advisor? (c) Is your academic advisor personable? (d) Does your academic advisor understand you? (e) Do you actively seek academic advising? and (f) Is advising important to you? ANOVA results revealed an unexpected finding of no statistically significant difference between traditional and nontraditional student worldviews. However, a statistically significant relationship emerged between how students perceived

their advisor and how similar were the students' and advisors' worldviews (i.e., measured standard deviation units).

Coll and Zalaquett (in press) also found a statistically significant relationship between students' self-worth and whether they perceived their academic advisors as understanding them. The authors concluded that students with perceived levels of self-worth equal to or higher than their advisors' tended to believe that their advisors understood them better than did those students whose perceived levels of self-worth were lower than those of their advisors. Furthermore, students whose levels of perceived self-worth were higher than those of their advisors tended to report that they actively sought advising and believed that advising was important to them. The authors' unexpected findings suggest that, at least for this sample, differences in age or personal experiences of students do not correspond to differences in worldviews, as suggested in the research literature. However, the finding pertaining to the relationship between the self-worth levels of students and their advisors makes a significant contribution to the literature and provides avenues for further research into student advising relationships.

The effort to understand individual worldviews represents a significant movement to build affective relationships with students. It allows for a deeper understanding of the student's perspectives, principles, and values of life that can provide advisors with a glimpse into a multidimensional and multicultural worldview. Additionally, understanding of a worldview construct is an important undertaking that promotes competence in diversity and serves as a means for promoting professional relationships that support student self-efficacy.

Self-Confidence

According to Erwin (1991), self-confidence is assuredness in one's self and in one's capabilities. It includes a conscious self-reliance on one's capabilities to complete tasks, make decisions, and realize goals. Similarly, Bandura (1997, 2001) defined self-efficacy as a person's confidence in his or her capability to develop, organize, and execute an action required to complete a set goal. Self-efficacy is a component or concept that derives from social cognitive theory, which establishes that behavior is subjective and is affected by the person, thought, and environment. Social cognitive theory suggests that a person has the capacity to symbolize, develop, and control self-thought as well as to learn from internal and external personal and social experiences. The development and control of self-thought would suggest that an individual possesses an internal self-regulating system that affects motivation and learning (Bandura, 2001; Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003).

The triadic relationship becomes interrelated and influences a person's self-belief or self-confidence to accomplish goals. This process is part of the self-regulatory system that all individuals possess and, furthermore, aids in the development of an individual's beliefs and behaviors. Moreover, research shows that self-regulation contributes not only to beliefs and behaviors but also accounts for academic achievement (Pajares, 2002; Pajares & Schunk, 2001).

Bandura (2001) introduced self-efficacy as a concept related to an individual's self-regulatory system and self-confidence. It is the mechanism that regulates an essential part of the person's reciprocal motivation through the belief in an achievable goal or the ability to execute an action required to complete a set goal. The self-regulatory system

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mediates the degree to which each triadic component influences a person's thought, feelings, behavior, and motivation. Moreover, individual experiences and perceptions develop self-regulation in important ways, such as the accumulation of perceptions about performance, and ultimately influence self-belief. These experiences and beliefs comprise a person's self-system, which influences a person's ability (Bandura; Pajares, 2002).

Zimmerman and Risemberg (1997) stated that the psychological development of self-regulation involves motivation, self-awareness of performance, social settings, and sensitivity to environment, which is similar to the way in which Erwin (1991) identified self-confidence. Self-regulation, according to Zimmerman and Risemberg, is interdependent with the person's social environment and behavioral triadic influences. An individual's perception activates the self-system, providing information about past events and experiences, accomplishments, and failures. These events are processed, stored, and used by the self-efficacy belief system, which affects the individual's thought, behavior, and action within his or her environment. This process influences motivation and action, determining what activities a person likely will engage in and succeed at. For instance, a student's perception is based on the data or information obtained from class and work performance, vicarious experiences, and persuasive advice received from others such as a peer or professor; a student uses the interpretation and perception of these educational experiences to gauge his or her capacity and ability to succeed (Bandura, 2001).

Because human behavior is ever-changing, educators need to understand that learning is a bi-directional experience that is influenced by the student's self-regulatory system (Bandura, 2001). Therefore, a student's perception of achievement is determined

by how he or she understands the bi-directional experience, and is influenced by a teacher or advisor relationship that may enhance self-efficacy. Self-efficacy has been found to predict a behavior in a given task (Zimmerman, 2000; Zimmerman, Bandura, & Martinez-Pons, 1992). Negative perceived self-efficacy may cause a person to behave anxiously in a situation, which may create negative behavioral outcomes. Furthermore, according to Zimmerman, researchers have found that perceived self-efficacy has a positive association with academic choice and overall success in school. Moreover, self–efficacy or self-confidence in oneself is a task-specific entity, which has been found to be a consistent predictor of performance, achievement levels, success, and personal goal (Zimmerman, et al., 1992).

Bandura, Adams, and Beyer (1977) stated that there are four sources of self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. A person's performance and accomplishment of a task is considered to be the most influential source for the development of self-efficacy. In other words, a person will develop perceived success according to how he or she performed on the previous task and how successful he or she was (Bandura, et al., 1977). However, a criticism of this belief is that the perception of previous events does not lead to higher self-efficacy and, in fact, just decreases anxiety due to positive reinforcement (Hawkins, 1992).

Vicarious experience is interpreted as the idea that a person is in control or determines his or her capability for a given goal based on continuous observation of others performing and completing a specific task. Bandura, et al. (1977) posited that observing others conducting a task similar to one's own will result in the belief that this

specific goal also can be completed. In other words, through modeling, one can cognitively develop a schema that supports oneself in engaging and completing the assigned task.

Verbal persuasion is the most frequently utilized and recognized source of self-efficacy. Verbal persuasion is the idea that a person gains a higher level of self-efficacy through the use of verbal command. However popular, Bandura, et al. (1977) found that persuasion per se is not as reliable a source as is performance accomplishment and vicarious experience.

The fourth and final source for self-efficacy is emotional arousal, or the belief that self-efficacy may be influenced by the individual's physiological stimulation, such as a person's anxiety regarding a specific task or goal. Emotional arousal determines the level of self-efficacy according to the individual's level of anxiety regarding the performance of a specific task (Bandura, et al., 1977). Hence, a person's given perception of the world (i.e., worldview) may influence his or her self-confidence, life expectations, standards, values, environment, and culture (Ross & Wertz, 2003).

If self-confidence levels are influenced by a person's worldview, environment, and values beyond the four previously mentioned components, it may be possible to predict college success to some degree by understanding the student's worldview, developmental stage (i.e., values, environment, emotional stability, and identity) and his or her experiential perception.

A study by Quimby and O'Brien (2004) revealed the role that self-efficacy has in predicting student and career decision making among nontraditional college students. The authors indicated in the literature review that perceived career barriers and social support

account for the variance in student and career decision making and for the self-efficacy of nontraditional college women. Furthermore, they discuss career counseling interventions that help facilitate success among nontraditional female college students. Quimby and O'Brien sought to understand particular risks associated with nontraditional female college students, such as low levels of self-efficacy that can affect their ability to achieve academically and advance in their related careers. Furthermore, the authors attempted to gain knowledge and develop awareness of factors impacting academic success among nontraditional students. The authors hypothesized that perceived self-efficacy expectations would explain variance in academic and career decision making among nontraditional college women (Quimby & O'Brien, 2004).

Participants were 354 nontraditional college women enrolled at a large mid-Atlantic University. Participants ranged in age from 26 to 68 years; nearly 71% were Caucasian, 15% were African American, 2.5% were Asian American, 3.8% were Latino/a, 3.1% were Middle Eastern, 1.3% were Native American, 0.6% were biracial, and 3.1% were classified as Other (Quimby & O'Brien, 2004). All participants were enrolled as part-time or full-time undergraduate students for an average of 5.2 semesters.

This study measured self-efficacy using Taylor and Betz's (2004) original Career Decision Self-Efficacy Scale (CDMSE-SF), which assesses the role that self-efficacy has on career decision making. The CDMSE-SF measures self-confidence in accomplishing career-related tasks and consists of 25 items rated on a 5-point Likert-format scale. The CDMSE-SF has been found to yield scores that culminated in a high score reliability coefficient of .94 for the total scale. Students also were administered the Self-Efficacy Expectations of Role Management (SEERM, Lefcourt, 1995) form, which measures

participants' beliefs in their ability to manage successfully the tasks related to the student role. This scale has been reported to yield a coefficient alpha score reliability coefficient of .95.

An ANOVA was conducted to compare levels of perceived career barriers, social support, and self-efficacy between two groups of nontraditional college students. Results revealed that female nontraditional college students without children perceived the three barriers mentioned earlier as being a greater hindrance to academic success than did students with children. Furthermore, a statistically significant difference was found on other measures of perceived social support. That is, students who had children had a higher sense of self-efficacy. This study revealed that nontraditional college women have a high perceived self-confidence in their ability to manage the student role and pursue career-related tasks. Consistent with previous research, this study indicates that nontraditional college women feel confident in completing the necessary steps associated with career development with high levels of perceived social support.

Quimby and O'Brien's (2004) study represents the first investigation of the role of contextual variables in predicting student career decision-making and self-efficacy among nontraditional college women. The significance of this study is evident as the population of nontraditional female college students increases, and educators need to provide appropriate advising as a means to increase self-efficacy and academic success.

Jakubowski and Dembo (2004) examined the relationship among academic self-regulation, self-efficacy, and the student's self-belief system of identity style during their first year in college. Most college students come into higher education with a set of beliefs that are either based on cultural values based or are developed due to specific

experiences. Hofer, Yu, and Pintrich (1998) stated that a student's early beliefs might have individual constraints or facilitate identity development.

Jakubowski and Dembo (2004) identified the development of a student as a psychosocial process and described Marcia's (1966) psychosocial developmental model that derives from Erikson's development through the life span theory. However, unlike Erikson, Marcia identifies four major categories or lateral stages of development: (a) identity diffusion, (b) foreclosed, (c) moratorium, and (d) identity achievement. Furthermore, Jakubowski and Dembo recognized Berzonsky and Kurk's (2000) framework as representing a model of social cognitive development.

Berzonsky and Kurk (2000) stated that it is possible to identify individuals by the use of identity styles. These identity styles help distinguish individual process and evaluate self-relevant information used as an identity construct. In addition, Boyd, Hunt, Lucas, and Kandell (2003) stated that a person's identity style and psychosocial development, and individual self-efficacy is directly related to identity development through motivation and the willingness to engage in self-regulated behaviors. Jakubowski and Dembo (2004) hypothesized that informational identity and the action stage of change (self-regulation) are related to academic self-regulation. Therefore, a person who is willing to engage in identity change has a higher probability of self-regulating his or her academic achievement and progress. Identity style and stage of change (student self-belief system) were identified as independent variables. Dependent variables were identified as academic self-regulation and levels of self-efficacy.

This study consisted of 194 undergraduate students at a private four-year institution, who at the time of the study were enrolled in a learning and study strategy

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class. The sample consisted of 114 females and 96 males, which ethnically consisted of 91 Caucasian, 42 African Americans, 37 Hispanics, and 24 Asian Americans. The mean SAT score of surveyed students was 119 points lower than the University means of 1182.

The authors used the following instruments to measure specific variables. Self-regulation was measured via a 9-item survey derived from the 32-item Dynamic and Active Learning Inventory (DALI; Chissom & Iran-Nejad, 1992), which measures proactive learning strategies. Self-efficacy was measured via a 9-item self-efficacy subscale from the Motivated Strategies for Learning Questionnaire (MSLQ). Student identity was measured via Berzonsky and Kurk's (2000) Identity Style Inventory (ISI- 3), which consists of 30 statements representing a 5-point Likert-format scale with a coefficient of .79. The final instrument the authors used was the ATTS inventory that measures the stage of change, using 32 items representing a 5-point Likert-format scale. The authors reported a .82 coefficient; however, no previous published studies have provided test/re-test coefficient scores for the ATTS. Due to the large number of items, the author developed various random subscales in order to control for and minimize any effect that one scale may have had on another and on reported fatigue.

A two-step analysis was used to determine whether an increase in knowledge of self-regulation occurs among first-year college students. Findings revealed that students who scored high in the informational subscale indicated that they had invested time in constructing their identities. Furthermore, students with higher self-efficacy scores appeared to have a higher sense of willingness and self-regulation. Moreover, identity subscale scores were statistically significantly correlated to students' willingness to improve their self-regulation; that is, students who scored high on identity were more

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likely to monitor their beliefs and identity development. This study contributes to the literature by demonstrating once more the need for educators to be aware of the importance of self-efficacy in academic achievement and, as discussed by Jakubowski and Dembo (2004), in student identity development.

Summary

The current increase in diverse students in college student enrollments and their increase in public and private colleges and universities mandates a unique approach and methodology for recruiting, enrolling, and advising as a means to retain students and increase academic success. The need for institutions to improve how they address the student/advisor relationship is discussed by Coll and Zalaquett (in press), who report that those students who develop worldviews similar to those of their advisors appear to seek advising more often and perceive advising as an important event. Similarly, King and Kerr (2005) state that the development of a relationship between students and advisors is a fundamental necessity in order to address diversity among college students, retention, and academic success.

In order to help understand students' development during their college experience, Chickering (1969) developed a psychosocial theory that has assisted educators in addressing student identity development. His theory is derived from Erickson's psychosocial theory of human development through the life span. Psychosocial theories focus on factors such as environment, emotions, biology, and relationships with the environment, or what is considered the person in his or her environment (PIE). Chickering developed and modified his theory in 1993 with Reisser

as a means to meet the changing demographics of students in college and to maintain theory validity and reliability.

Winston and Miller (1987) found that female students developed differently from male college students; specifically, female students developed interpersonal relationships before they developed autonomy. This finding is an important contribution to the literature, providing an understanding of how college students develop according to their gender, and may provide educators an approach to advising that is nontraditional and more individualized to the student. Furthermore, this study supports the development of an advising model that focuses on building a relationship between student and advisor based on the student's developmental stage.

The rise in a more diverse student population and the rise in student enrollment also brought an awareness of mental health concerns in college. Chickering and Reisser (1993) addressed these concerns by establishing the management of emotional development as a vector, which includes depression, anxiety, anger, and shame, as well as positive emotions such as joy, hope, and love. The seven vectors of development provide educators the opportunity to view students holistically and to interact with each student individually as he or she proceeds through the following stages of development: competence, managing emotions, autonomy and interdependence, interpersonal relationship, establishing identity, developing purpose, and developing integrity.

The development of identity is asserted to be the dependent variable within Chickering's theory (Figure 3). However, as Chickering and Reisser (1993) and Zimmerman (2000) state, a student must conform in terms of body appearance, self-awareness of sexual orientation, environment, role in society, self-identification with

criticism by peers, and self-esteem as a means to develop the capacity to make appropriate, informed, mature thought.

Identity development, and specifically the seventh vector, requires the person to develop values and perceptions that guide beliefs and experiences. These beliefs are shaped by the person's experience, cognitive schema, and perceptions of the world, which can be identified as a person's worldview (Ibrahim, 1991). This approach is different from a singular hierarchical model of advising in which the student becomes only a participant of an institution, yet it is imperative that we attempt to understand individual worldviews and how the student uses them to define their college experiences.

A worldview is the combination of culture, experience, attitude, opinion, value, thought, and events that directly impact our daily living (Sue & Sue, 1990, 2003). Tubbs (1996) and Levine (1995) stated that individuals are the result of variance in culture and worldviews. Another approach to the development of worldviews that is culturally based and experience based is the values-oriented model by Sue and Sue (2003). Sue and Sue identified four stages: time, activity, social relations, and people/nature relationship. Understanding cultural values or worldviews can enhance student development and the relationship between student and advisor as the student seeks advising (Coll & Zalaquett, in press). Furthermore, Coll and Zalaquett suggested that students matched with an advisor with similar worldviews ultimately would seek advising more often from that advisor, increasing the likelihood of a positive relationship. However, the point at which a student will seek a change in advisor is in part dependent on the student's self-efficacy level (Jakubowski & Dembo, 2004). Therefore, students with low self-confidence may

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not address concerns or disappointment with their advising procedure and consequently may suffer the consequences of a lower grade or GPA.

According to Bandura (2001), self-efficacy is a person's judgment of his or her capability to develop, organize, and execute an action required to complete a set goal, while, according to Erwin (1991), self-confidence is the assuredness in one's self and in one's capabilities. It includes a conscious self-reliance on one's capabilities to complete tasks, make decisions, and goals. These similarities allow us to interchange the terms within the literature.

Self-efficacy is a component or concept that derives from social cognitive theory, which establishes behavior and which is subjective and affected by the person, thought, and environment. As a means to help us understand self-efficacy, Bandura stated that the following four elements help develop and increase self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. A person's performance and accomplishment of a task is considered to be the most influential source for the development of self-efficacy. In other words, a person will develop perceived success according to how he or she performed on a previous task and how successful he or she was (Bandura, 1997). This process of observation and task performance is a major function in social learning from which the self-efficacy concept is derived.

Various studies have demonstrated that students with high levels of self-efficacy tend to have a higher probability of achieving and performing better in college than do students with low levels (Bandura, 2001). However, there appears to be a gap in the literature as to what role self-efficacy has on academic satisfaction. Specifically, what

role does a student's worldview, developmental stage, and his or her self-efficacy have on academic advising satisfaction? The implications of these questions may lead to the development of an advising model that matches the student with a specific worldview and developmental level to an advisor with the same or similar worldview as a means to increase retention and academic performance.

Chapter 3 will discuss the purpose of the study as mentioned in chapter 1, and address the research question; description of sample; instruments; procedures used to analyze the data; and the limitations of the study.

Chapter 3

Methodology

Introduction

The following chapter will discuss the purpose of the study; the research question;

description of sample; instruments; procedures used to analyze the data; and the

limitations of the study.

Purpose of Study

The purpose of this study is to determine the relationships among worldview, self-

confidence, and satisfaction with advising. This study also examines the relationships

among the level of satisfaction, the worldviews of students, and the students' perceptions

of the style of advising they receive. Because the enrollment of diverse students continues

to rise, it is important that advisors understand the dimensions that make up unique

student worldviews in order to assist with establishing effective advising relationships.

The goal of the study was to confirm the proposition that specific student worldviews,

self-confidence, and perceptions of the advising style enhance the student/advisor

relationship and increase students' reported satisfaction.

Research Questions

This study explored the following research question and hypothesis:

1. To what degree do a student's worldview, self-confidence, gender, and perceived

   advising style received influence the student's reported level of satisfaction with

   the advising he or she receives?

The research question was analyzed using a simple-linear regression, which would reveal the degrees for which any of the variables are related and whether any are statistically significant. A Pearson's correlation was used to calculate and determine the strength of the relationship between variables. Further examination using mean, standard deviation, and skewedness were calculated to examine the distribution of each variable.

Hypothesis

Four hypotheses were developed to help to answer the major question posed in this study. All four hypotheses were calculated and analyzed by using Pearson's correlation with an alpha of .05 to determine the strength of the relationship between variables.

a) Students who report high levels of advising satisfaction will also report high levels of self-confidence.

b) Students who report high levels of advising satisfaction will also report that they received developmental advising.

c) Students with reported high levels of worldviews will report high levels of satisfaction.

d) Female students will report higher levels of satisfaction and higher levels of self-confidence than male students.

Design of the Study

This study uses an existing data set that was collected during fall 2006 from freshman students enrolled in a freshman seminar class at a private comprehensive university in the Southeast. The sample consists of 50% of the freshman who were enrolled in a required course. The research examines the degree to which student advising

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satisfaction can be predicted by the students' reported level of self-confidence, worldview, and the advising style they received.

Description of Sample

The data used in this study were collected at a private, Catholic institution, located in Florida. The university is comprised of three academic schools: the School of Arts and Sciences, the School of Business, and the School of Education and Social Services. The institution has an undergraduate population of approximately 12,137 students and graduate students ($n = 881$), of whom 57% are female. Slightly more than ($n = 1,384$) of these undergraduate students reside in on-campus housing; the remainder of the students commutes to campus or attends one of the 14 centers across the United States ($n = 6, 916$).

Sample

The sample consists of a convenient population of 382 students enrolled in the freshman seminar course in fall 2006. All students were invited to participate, and 202 agreed to participate. A total of 11 surveys were eliminated due to incomplete responses. The 191 students who completed the surveys included 90 males and 101 females, with a sample mean age of 18.28 (SD = 1.63). Most of the participants in the study (71.2%) were Caucasian ($n = 136$). The remaining participants were African American ($n = 20$), Hispanic (n = 20), Asian ($n = 1$), and other ($n = 13$). One person did not report ethnicity ($n = 1$).

Table 2

Frequencies and Percentages of Participants

		N	%	Valid %
Valid	African American	20	10.5	10.5
	Hispanic	20	10.5	10.5
	Asian	1	.5	.5
	Caucasian	136	71.2	71.6
	Other	13	6.8	6.8
	Total	190	99.5	100.0

Variables

The independent variables in this study are the students' reported world

assumptions, level of academic self-confidence, and student reported perceived advising

style received. The dependent variable is student level of academic advising satisfaction.

 Instrumentation

For the purpose of this study, worldview was assessed using the World

Assumption Scale (WAS) developed by Janoff-Bulman (1992) (see Appendix C). Level

of psychosocial development was assessed by the Erwin Identity Scale (EIS,; Erwin,

1991) (see Appendix D). Self-efficacy was assessed via the self-confidence subscale of

the EIS, and student advising satisfaction was assessed using the Academic Advising

Inventory developed by Winston and Sander, 1984 (see Appendix E). A discussion of

each instrument's reliability and validity is provided below.

The World Assumption Scale (WAS) is a 32-item questionnaire developed to

assess individual worldviews. The WAS assesses the following three major assumptions:

 (a) *benevolence of the world*: believing that the world is a good place and that, overall,

people are kind; (b) *meaningfulness of the world*: measures a belief of justice, control,

and randomness; and (c) *self-worth*: assesses whether the person is happy with who he or

she is and whether the person does good in order to receive the greatest good.

Respondents report their assumptions by indicating their agreement on a 6-point Likert-format scale ranging from 1(strongly disagree) to 6 (strongly agree). Benevolence is an 8-item subscale with a possible score range of 18- 38 and measures how people feel in general about the world. Meaningfulness is a 12-item subscale with a possible score range of 32–52, and it measures assumptions of justice, control, and randomness. Self-worth has 12 items within the subscale and has a possible score range of 27–57, measuring assumptions about personal luck, self-control, and self-worth. Consistent with Janoff-Bulman (1992), Goldenberg and Kimberly (2005) reported a calculated total scale alpha coefficient of .86.

The Erwin Identity Scale (EIS) is a 59-item questionnaire designed to measure three components of identity as defined by Chickering (1969). There are three subcategories of identity: confidence, sexual identity, and conceptions about body image. Self-confidence is an assuredness in one's capabilities (i.e., self-efficacy) that includes a conscious self-reliance and understanding of necessary dependence on environmental factors. A person who exhibits self-confidence tends to feel comfortable with his or her beliefs, decisions, and behavior. Sexual identity is identified as a person's ability to clarify and accept his or her sexual feelings and orientation. A reported high degree of sexual identity can be interpreted as the absence of guilt from sexual feelings. Conceptions about body and appearance are an individual's ability to assess accurately and accept his or her appearance. A person who reports a high degree of self-acceptance regarding body and appearance has the ability to balance personal preference and the desires of social norms set by his or her peers. Respondents report their agreement on a 5-point rating scale, ranging from 1 (not true of me) to 5 (very true of me). The range of

scores for the subscales being utilized is as follows: (Confidence 24-120 and Sexual

Identity 19-95). Consistent with Erwin's (1991) score of the EIS, DeMars and Erwin

(2004) reported a total scale score alpha coefficient of .79.

The Academic Advising Inventory (AAI) is a 52-item questionnaire designed to

have a prescriptive and developmental advising subcategory and is divided into four

major categories: (a) *developmental and prescriptive advising* measures how the student

perceives his or her advising, (b) *descriptive and frequency of activities* a student

observes during sessions with his or her advisor, (c) *reported satisfaction of advising*

scored on a 4-point scale, and (d) *demographic information* (Winston & Sander, 1984).

Within the developmental and prescriptive measures, the AAI has subcategorized three

subscales that are used to assess perceived services received. The first is Personalizing

Education (PE), which is an 8-item subscale that measures the advisor's approach to a

holistic concern for the student's education, including vocational/career, relationships,

university activities, personal and social concerns, goal and outcome expectation-setting,

and assisting students with the identification and location of services and resources

available on campus. The Personalizing Education subscale has a possible range score of

8-64. Scores of 33-64 are characterized as "developmental advising" and reflect a

mutually derived relationship between the student and the advisor. A reported score range

of 8-32 is identified as "prescriptive advising," which indicates a formal and distant

relationship between the student and the advisor. The second is Academic Decision-

Making (ADM), a 4-item subscale that measures the student's perceived academic

process that takes place at each meeting between the advisor and advisee, including

academic progress, student interest and abilities, and academic concentration as a means

to assist with the registration for appropriate courses. ADM has a possible score range of 4-32. Reported high scores of 17-32 are indicative of developmental advising, and low scores of 4-16`represent prescriptive advising. The third, Selecting Courses (SC), is a 2-item subscale that measures a student's perceptions of how the advisor approaches him or her selecting courses. Emphasis is placed on assisting students in course selection by first determining specific course needs and later developing an appropriate plan and schedule. SC has a possible score range of 2–16, with high scores (9-16) representing developmental advising and low scores (2-8) indicative of prescriptive advising. The AAI was reported by Dickson, Sorochty, and Thayer (1998) to have high construct-related validity and test retest reliability of .78.

As a means to determine and measure the internal consistency of the instruments used in the study, the author used Cronbach's alpha in order to measure reliability. Cronbach's alpha comprises a number of items that are designed to measure a single construct and determine the degree to which the items in the instrument measure the same construct. However, it does not measure the validity of the instrument. The results of Cronbach's alpha for all instruments are shown in table 3.

Table 3

Cronbach's Alpha Instrument Overall Reliability

Scale	Items	Mean	SD	Skew	Sample Range	*N*	Cronbach's Alpha
Worldview Assumption Survey	32						.85
Benevolence	8	32.03	6.5	-.215	12- 48	188	.79
Meaningfulness	12	42.91	7.83	-.472	13- 67	190	.71
Self-worth	12	52.66	8.71	-.351	32- 70	184	.80
Erwin Identity Scale	59						.92
Self- Confidence	24	87.62	14.61	-.163	54- 115	186	.88
Sex Identity	19	62.65	10.96	-.053	32- 92	181	.81
Academic Advising Inventory	49						.92
PE	8	38.81	10.90	.024	13- 64	199	.73
ADM	4	17.90	5.79	.120	4- 32	199	.48
SC	2	10.64	3.74	-.304	2- 16	199	.32
Satisfaction	5	14.17	.452	-.964	5- 20	200	.86

Data Collection

The data for this study are derived from existing data collected in fall 2006.

Appendix F contains an approved copy of the Institutional Review Board (IRB). During

mid-semester, students and advisors were approached in a required SLU 101 (freshman

seminar course) and asked to participate in an institutional study that was approved (see

appendix G) by the Vice President for Academic Affairs. Participants read and signed an

informed consent that explained the intent and purpose of the study (see Appendix F).

The survey instrument was presented in the following six ways as a means to decrease

response fatigue: (a) WAS, EIS, AAI, (b) AAI, WAS, EIS, (c) EIS, AAI, WAS, (d) AAI,

EIS, WAS, (e) WAS, AAI, EIS, (f) EIS, WAS, AAI. Responses were collected and immediately secured.

Data Analysis

Data will be analyzed using SPSS 14.0 for Windows. Descriptive and inferential statistics will be employed to analyze the retrieved data. The demographic data collected using the AAI will be used to produce a description of the sample in terms of gender, age, grade point average, and reported ethnic group. The data analysis involves the use of descriptive statistics, which in this study includes sums, means, and standard deviations.

This study used a correlational research design to test the relationship between student reported worldview and academic advising satisfaction, as a means to expand on the reported findings of Coll and Zalaquett (in press). In addition, an analysis of reported levels of psychosocial identity development, worldview, and perceived advising style received will be conducted in order to determine the relationship between reported scores and advising satisfaction. The students' reported gender was considered as a moderating variable. A missing value analysis will be conducted as a means to determine, manage, and identify trends within the data. If outliers are identified within the data set, the appropriate measure is transformation, alteration, or deletion.

Because the number of participants was predetermined and because the study consisted of existing data, a priori power analysis was not possible. Therefore, a post-hoc power analysis was conducted (Granaas, 1999). Statistical power can in fact be controlled by the study design, however, in situations in which the researcher is conducting an analysis of existing data; a post-hoc power analysis can assist the researcher in determining whether a nonsignificant statistical finding is the result of low

power (Onwuegbuzie & Leech, 2004). Thus, in order to better understand the findings of this study and to control for internal validity, I computed a post-hoc power coefficient using G Power 3, a statistical power program set at high effect size of .50, sample 169, and (α .05) (Faul, Erdfelder, Lang, & Buchner, in press). The results of the input for a one tail *t test* reveal a post-hoc power analysis of: *t* value 1.65, *df* = 167, and a post-hoc power value of 1.00. The post-hoc power analysis suggests that the sample size is sufficient, and the probability of committing Type II error is decreased. This analysis could be used as a guide to future researchers who are not able to perform an a priori power analysis.

A summary of chapter 3 reveals that this study sought to answer one major question and four hypotheses that seek to help understand the relationships among levels of self-confidence, worldviews, and advising satisfaction according to how students perceived the advising received. Data analysis consisted of descriptive statistics, simple linear regression, and correlations to determine the degree of relationship of variables. Chapter 4 will provide descriptive statistics that help us answer the stated question and corresponding hypothesis.

Chapter Four

Results

The purpose of the present study was to examine the relationships among worldview, self-confidence, and satisfaction with advising. More specifically, this study examines the relationships among level of satisfaction, worldviews of students, and the student's perceptions of the style of advising he or she received. This investigation also employed Chickering's (1969) theory of student development to assess the impact that a student's level of self-confidence may have on his or her worldview and satisfaction with advising. Furthermore, this study examines the relationship between a student's worldview and satisfaction with developmental and prescriptive advising styles. The methodology for the present study involves an examination of existing data.

Survey

All analysis is presented for the total sample as well as separately for males and females, as various studies have suggested the probability of gender differences in determining satisfaction with academic advising and noted the importance of examining gender differences (Kelly, 2003). To control for error, findings with a statistical significance of $p > .05$ will be considered nonsignificant. However, it should be noted that even nonsignificant consideration does not imply nonpractical consideration.

Participant Descriptive Statistics

The participants whose responses constitute the database that was used for the present study were full-time students at the university campus. The number of

participants included in the existing data set or sample, mean score, the standard

deviation, and minimum and maximum scores on the measures conducted are presented

in Table 4 for the total sample sub-category scores, with representing gender-specific

scores.

Table 4

Descriptive Statistics for Female Students

	N	Mean	Standard Deviation	Minimum	Maximum
WAS: Benevolence	100	33.07	6.51	14	48
WAS: Meaningfulness	101	42.41	7.45	20	61
WAS: Self-Worth	98	52.77	8.75	32	70
EIS: Confidence	99	88.70	14.32	54	111
EIS: Sex Identity	98	62.76	11.13	32	87
AAI: PE	99	37.86	10.88	13	63
AAI: ADM	98	17.98	5.91	8	32
AAI: SC	98	10.68	3.64	3	16
AAI: Satisfaction	99	14.08	3.5	5	20

Table 5
Descriptive Statistics for Male Sample

	N	Mean	Standard Deviation	Minimum	Maximum
WAS: Benevolence	88	30.84	6.45	12	43
WAS: Meaningfulness	89	43.48	8.25	13	67
WAS: Self-Worth	86	52.55	8.72	32	70
EIS: Confidence	87	86.39	14.61	57	115
EIS: Sex Identity	83	62.53	10.82	41	92
AAI: PE	88	38.42	10.64	13	64
AAI: ADM	89	17.51	5.61	4	29
AAI: SC	89	10.56	3.71	2	16
AAI: Satisfaction	89	14.06	3.8	5	20

Table five presents the descriptive statistics for the male sample such as mean, standard deviation, and score ranges for each subscale of the various instruments utilized.

Table 6

Descriptive Statistics for Total Sample

	N	Mean	Standard Deviation	Minimum	Maximum
WAS Benevolence	188	32.03	6.565	12	48
WAS Meaningfulness	190	42.91	7.837	13	67
WAS Self-Worth	184	52.66	8.719	32	70
EIS confidence	186	87.62	14.611	54	115
EIS Sex identity	181	62.65	10.963	32	92
AAI PE	187	38.12	10.746	13	64
AAI ADM	187	17.75	5.763	4	32
AAI SC	187	10.63	3.670	2	16
AAI Style	185	1.7027	.45831	1.00	2.00
SATISFAC	188	14.0745	3.69489	5.00	20.00

Note. WAS= World Assumption Scale; EIS= Erwin Identity Instrument; AAI = Academic Advising Inventory.

Table six presents the descriptive statistics for the total sample such as mean, standard deviation, and score ranges for each subscale of the various instruments utilized.

Table 7

Scale Intercorrelations

	Benevolence	Meaningfulness ss	Self-Worth	Confidence	PE	ADM	SC
Meaningfulness	*.35***						
Self-Worth	.34**	*.38***					
Confidence	.08	.01	*.46***				
PE	.04	-.09	-.08	.009			
ADM	.05	-.08	-.06	-.05	*.30***		
SC	.09	-.02	-.04	-.04	*.27***	*.44***	
Satisfaction	.03	-.11	-.10	-.023	*.41***	*.18***	.10

Note. N = 188 * p < .01

    The instruments employed in this study exhibited acceptable psychometric properties. With the exception of some dimension sub-scales, all internal consistency reliability coefficients exceeded .80, as shown in Table 3.   Scale intercorrelations are presented in Table 7, with alpha reliability coefficients along the diagonals.

The sample of participants used in this student sample included both sexes, with a homogeneous age population with a mean of 18.28 (SD = 1.63). Only responses of students who had fully completed all of the instruments were utilized for the current study and the basis of analysis. Question one: "To what degree do a student's worldview, self-confidence, gender, and perceived advising style received influence the student's reported level of advising satisfaction?" is analyzed by conducting a simple linear regression, which would reveal the degree to which the variables are related and if any are statistically significant. A Pearson's correlation will be calculated to determine the strength of the relationship between variables.

Four hypotheses were developed to help answer the question posed in this study. All four hypotheses were analyzed by using Pearson's correlation with an alpha of .05 to determine the strength of the relationship between variables.

a. Students who report high levels of advising satisfaction will also report high levels of self-confidence (See table 8).

b. Students who report high levels of advising satisfaction will also report that they received developmental advising (See table 10).

c. Students with reported high levels of worldview will report high levels of satisfaction (See table 11).

d. Female students will report higher levels of satisfaction and higher levels of self-confidence (See table 12).

Table 8

Satisfaction Regressed on AAI, EIS, and WAS

Variables	B	Std. Error	Beta	T	sig
(Constant)	10.041	2.777		3.616	.000
Benevolence	.043	.045	.076	.959	.339
Meaningfulness	-.040	.039	-.083	-1.020	.309
Self-Worth	-.024	.040	-.055	-.600	.549
Confidence	-.025	.028	-.095	-.905	.367
Sex Identity	.041	.034	.120	1.209	.229
PE	.134	.027	.384	5.034*	.000
ADM	.051	.053	.079	.980	.329
SC	-.084	.082	-.082	-1.018	.310

Table eight represents a simple linear regression, which was calculated predicting student satisfaction based on the following independent variables: (a) Benevolence, (b) Meaningfulness, (c) Self-worth, (d) Confidence, (e) Sexual Identity, (f) PE, (g) ADM, (h) SC. The analysis revealed a significant equation between PE and Satisfaction of (F (8, 160) = 4.649, $p < .005$), with an $R2$ of 189. Student satisfaction is equal to 10.041 + .134

(PE) when measuring developmental advising, representing an increase in satisfaction for every .134 points reported in PE.

This analysis reveals the importance of a developmental model for advising and suggests that the other variables, which were shown not to be significant ($p > .05$), are not a good predictor of advising satisfaction. Similar to the results Coll and Zalaquett (in press) reported, scores on worldview alone are not predictors of satisfaction nor was there a statistical significance in gender and worldview. However, unlike Coll and Zalaquett, who matched student and advisor worldview, this study was limited to just the self-reporting of student worldviews.

Table 9

Pearson's Correlation of Satisfaction and Self-confidence

Variables		Confidence	SATISFACTION
Self- Confidence	Pearson Correlation	1	-.023
	Sig. (2-tailed)		.758
	N	186	184
SATISFAC	Pearson Correlation	-.023	1
	Sig. (2-tailed)	.758	
	N	184	200

Hypothesis 1. Hypothesis 1 shown in table nine tested the relationship between self-confidence and satisfaction with advising and hypothesized that students who report high levels of advising satisfaction will also report high levels of self-confidence. This study did not find a correlation between self-confidence and satisfaction ($p > .05$, $n = 184$).

Table 10

Pearson's Correlation of Satisfaction and Developmental Advising

Variables		SATISFAC	PE
SATISFAC	Pearson Correlation	1	.413(**)
	Sig. (2-tailed)		.000
	N	200	199
PE	Pearson Correlation	.413(**)	1
	Sig. (2-tailed)	.000	
	N	199	199

** Correlation is significant at the 0.01 level (2-tailed).

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Hypothesis 2. Hypothesis 2 shown in table ten tested the relationship between

developmental advising and satisfaction with advising, and hypothesized that students

who report high levels of satisfaction with advising also perceived that they had received

developmental advising. This study did find a significant relationship between student

reported level of advising satisfaction and perceived advising style received ($p < .01$, $n =$

199). Furthermore, an independent-sample t test revealed a statistical significant

difference in satisfaction ratings between students who rated their advisors as

developmental and students who rated their advisors as prescriptive (t (195) = 4.064, $p <$

.05). The mean score for satisfaction among the students who perceived that they had

received developmental advising was significantly higher ($m = 14.84$, $sd = 3.65$) than the

mean score for the students who perceived prescriptive advising ($m = 12.50$, $sd = 3.64$).

Table 11

Pearson's Correlation of Satisfaction and Worldview

Variables		SATISFAC	Benevolence	Self-Worth	Meaningfulness
SATISFAC	Pearson Correlation	1	.036	-.103	-.115
	Sig. (2-tailed)		.623	.166	.118
	N	200	186	182	187
Benevolence	Pearson Correlation	.036	1	.347(**)	.359(**)
	Sig. (2-tailed)	.623		.000	.000
	N	186	188	182	187
Self-Worth	Pearson Correlation	-.103	.347(**)	1	.387(**)
	Sig. (2-tailed)	.166	.000		.000
	N	182	182	184	183
Meaningfulness	Pearson Correlation	-.115	.359(**)	.387(**)	1
	Sig. (2-tailed)	.118	.000	.000	
	N	187	187	183	190

** Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 3. Hypothesis 3 shown in table eleven tested the relationship between worldview and satisfaction with advising, and hypothesized that students who report high levels of advising satisfaction would also report high levels of worldviews. This study did not find a correlation between worldview and satisfaction ($p > .05$, $n = 187$).

Table 12

Pearson's Correlation of Satisfaction, Self-confidence, and Gender

		Gender	SATISFAC	Confidence
Gender	Pearson Correlation	1	.002	.079
	Sig. (2-tailed)		.980	.284
	N	191	188	186
SATISFAC	Pearson Correlation	.002	1	-.023
	Sig. (2-tailed)	.980		.758
	N	188	200	184
Confidence	Pearson Correlation	.079	-.023	1
	Sig. (2-tailed)	.284	.758	
	N	186	184	186

Hypothesis 4. Hypothesis 4 shown in table twelve tested the relationship between gender, self-confidence, and advising satisfaction, and hypothesized that female students would report higher levels of self-confidence and higher levels of advising satisfaction. This study does not support a relationship between female reported levels of self-confidence and higher levels of advising satisfaction ($p > .05$, $n = 186$). Furthermore, there are no statistically significant differences in reported levels of advising satisfaction between male and female students ($p > .05$, $n = 186$).

Chapter Five

Discussion

The purpose of the present investigation was to determine the relationship between worldview, self-confidence, and satisfaction with advising. More specifically, this study examines the relationship among the level of advising satisfaction, the worldviews of students, and the student's perception of the style of advising he or she received. In this discussion, the purpose of the study will be reviewed and the major findings of the main research question and hypotheses summarized, and the implications for future research discussed. In addition, chapter 5 will provide a brief discussion regarding the relevance of developmental advising as a tool for developing affective relationships with students that may yield higher levels of advising satisfaction and may, in turn, increase retention and academic success and provide an environment that supports student development. Finally, the limitations of the current research and directions for further research will be discussed.

Inherent in academic advising is the relationship that faculty members and student develop through the process of academic and career decision making (Gordon, 2006). Although there are several models of academic advising, the developmental model is, perhaps, most progressive. Developmental academic advising is a delivery method that empowers students to make personal and academic decisions that promote personal growth (Creamer, 2000). The relationship that an advisor and a student build may enhance the student's personal development and promote higher levels of academic

satisfaction. Variables such as worldview, gender, age, and developmental level are salient to the development of a relationship between the advisor and student. They are foremost in determining the degree to which the student is satisfied with the advising he or she receives. Student satisfaction with advising may, in turn, may directly impact institutional retention efforts. The literature suggests consistently that student retention is linked to student satisfaction with advising, and advising satisfaction has been linked to the similarities of student/faculty worldviews, cultural value perspectives, and advising competence (Bailey, Bauman, & Lata, 1998; Coll & Zalaquett, in press; Herr, Cramer, & Niles, 2004; Upcraft, et al., 2005). Although the results supporting advising satisfaction continue to be promising, a gap exists in the literature regarding the relationship between the students' perception of advising, reported worldviews, self-confidence, and their overall advising satisfaction. Hence, the purpose of this study was to extend the literature on advising satisfaction by developing a better understanding of the relationship between advising satisfaction and the student's perception of the advising he or she received, the student's reported score on self-confidence, and the student's worldview.

Summary of Findings

The research question assessed to what degree a student's worldview, self-confidence, gender, and perceived advising style received influence his or her reported level of advising satisfaction, as measured by the Academic Advising Inventory

A simple linear regression was calculated, predicting student satisfaction based on the following independent variables: (a) Benevolence, (b) Meaningfulness, (c) Self-worth, (d) Confidence, (e) Sexual Identity, (f) Personalized Education, (g) Academic Decision-Making (h) Selecting Courses. The analysis revealed a significant relationship

equation between PE (developmental advising) and satisfaction with advising (F (8, 160)

= 4.649, $p < .05$), with an $R2$ of 189. No other significant relationships were found

between the eight monitoring sub-scales. Four hypotheses were developed to help answer

the major question posed in the study.

The first hypothesis stated that students who report high levels of advising

satisfaction would also report high levels of self-confidence. Pearson's correlation with

an alpha of .05 was used to determine the strength of relationship between variables. Data

analysis did not reveal a significant correlation between self-confidence and satisfaction

($p > .05$, $n = 184$). The finding suggests that the level of student self-confidence is not

directly related to the level of reported advising satisfaction. Although, self-confidence

may determine how comfortable a student is with decision making and self-image, it

appears that there is no significant relationship between self-confidence and satisfaction.

However, self-confidence may be indirectly related to the reported level of advising

satisfaction since a student uses self-confidence when making the decision to speak to or

seek an advisor, or to actively engage in their academic career independently.

The second hypothesis stated that students who report high levels of advising

satisfaction would also report that they received developmental advising. Data analysis

revealed a significant relationship between students' reported level of advising

satisfaction and their perceptions of the advising style they received ($p < .01$, $n = 199$).

Pearson's correlation analysis was used to determine the relationship between variables at

an alpha of .05. In order to determine if there was a statistical significance in advising

satisfaction between prescriptive advising and developmental advising, an independent t

test was conducted. This revealed a significant difference between student satisfaction

with prescriptive and with developmental advising ($p < .05$), suggesting that students preferred a developmental approach versus a prescriptive approach. The findings of this hypothesis support previous studies in which developmental advising led to an increase in advising satisfaction. The use of a developmental approach can provide the faculty/advisor with the opportunity to develop positive relationships with his or her students, which may enhance the students' academic performance and college experience.

The third hypothesis tested the relationship between worldviews and satisfaction with advising. It stated that students who report high levels of advising satisfaction would also report high levels of worldview in three areas: benevolence, meaningfulness, and self-worth. Data analysis did not reveal a significant correlation between overall worldview scores and satisfaction ($p > .05$, $n = 187$). However, data analysis did reveal a statistically significant correlation between high levels of benevolence and gender ($F (1, 187) = 5.528$, $p < .05$). This suggests that female students in this sample were more likely to perceive the world as a good place and that, overall, people are kind. This finding contradicts findings by Coll and Draves (in press) who reported no significant differences between gender and overall worldviews when using the World Assumption Instrument (WAI), but it provides evidence of a relationship between various aspects of worldview and optimism. Coll and Draves results suggest that worldview may vary as a function of individual experiences.

Astin (1977) and Gurin, Dey, Hurtado, and Gurin (2002) found that female students tend generally to increase in self-confidence through academic participation and college student involvement, resulting in higher peer and faculty interaction. Therefore,

my fourth and final hypothesis of this study tested the relationship between gender, self-confidence, and advising satisfaction. It stated that female students would report higher levels of self-confidence and advising satisfaction than male students. Data analysis did not reveal a significant relationship between female reported levels of self-confidence and higher levels of advising satisfaction ($p > .05$, $n = 186$). There were no statistically significant differences in reported levels of advising satisfaction between genders ($p > .05$, $n = 186$). The analysis suggests that gender is not a factor in satisfaction with advising. Although, there were significant differences between gender and reported levels of benevolence of the world, it appears that male and female students had similar reported levels of satisfaction with advising. Moreover, the analyses of the following hypothesis revealed no significant difference in self-confidence and gender, suggesting that male and female students did not report differences in their level of self-confidence. This suggests that an advisor's approach to advising may not have to differ based on the student's gender, allowing the advisor to focus mostly on his or her approach to developmental advising. Although not a significant finding, advisors should remain aware of gender factors, such as experience that may influence the student's perception of advising and education.

Practical Implications

Creamer (2000) described academic advising as an educational activity that assists college students developmentally in making decisions in their personal and academic lives. The role of the advisor has become multifaceted due to changes in the composition of the student body at many academic institutions. In most cases, the definition of and the job requirements for advising have evolved to meet the needs of the

diverse groups that comprise the contemporary college-student population in various settings.

Developmental advising seeks to provide a holistic approach to the student/faculty (advisor) relationship outside of the classroom environment, where the student can receive guidance and discuss topics such as coursework, career, and values (Upcraft, et al., 2005). These informal interactions between the student and advisor yield positive outcomes in student attitudes towards college, achievement, personal development, social integration, motivation, advising satisfaction, and retention (Chickering & Reisser, 1993; Grites & Gordon, 2000). On the other hand, inadequate advising by faculty members has been shown to have negative outcomes such as the decision to leave college, negative attitudes about faculty and staff, and lower academic achievement (Grites & Gordon, 2000).

The findings of this study indicate that a positive relationship exists between developmental advising and students' level of satisfaction with advising. The results would suggest that overall student characteristics are not as relevant to advising satisfaction as the style of advising that the faculty or advisor uses. Similar to findings by Noel-Levitz (2007) and Winston and Sander (1984), this study supports the positive relationship between developmental advising and advising satisfaction versus prescriptive advising. Gordon's (2006) 3-I process is an effective means to promote developmental advising. Developmental advising integrates career advising with academic advising through the use of the following three stages: inquire, inform, and integration. In the first phase, the advisor should seek to inquire for information about students, as means to better understand students' needs, relationship to and place within society, and cultural

norms. During the second phase, the advisor plays a critical role in disseminating curriculum and academic information as the student attempts to retain and organize its meaning in order to make the correct academic and professional decision. The second phase helps students to become informed about their career and academic goals. In the last phase, integration, the student and advisor engage actively in decision-making by using what has been provided and learned in the previous two stages. This study recommends that the advisor and student both engage in the 3-I process as a means to develop a positive and lasting academic relationship that promotes and encourages the development of student autonomy, while allowing the advisor to continue to play a critical role in guiding and mentoring the student.

The approach used to guide students is instrumental and may impact the relationship between advisor and advisee. Although the present study suggests that individual student characteristics may not be significant in how students reported advising satisfaction, it is important that advisors not dismiss the role of individual values and cultural differences and awareness in their attempt to implement a developmental advising approach.

Worldview

A worldview is the combination of culture, experiences, attitudes, opinions, values, and thoughts that directly impact an individual's daily living (Sue & Sue, 1990, 2003). Sue and Sue (2003) and Ibrahim (1991) asserted that there are differences in cultural worldview values; however, the literature also notes differences within specific cultures, suggesting that a worldview may be an individual construct that is not entirely culturally bound. Coll and Zalaquett (in press) reported that the worldviews of a student

alone were not positively related to student advising satisfaction unless the student's reported worldview matched that of the advisor. In a more recent study, Coll and Draves (in press) concluded that there were no significant differences between the worldviews of male and female students, and that the worldview may be influenced by individual experiences. These findings suggest that cultural values and experiences, the environment, and religion are significant contributors to how a person may perceive his or her environment and interpret the world. The present study hypothesized that students with higher levels of worldview would report higher levels of advising satisfaction; however, this study did not find statistically significant differences in overall worldview scores or any significant relationship to advising satisfaction. However, it is important to note that female students reported higher levels of benevolence of the world. This finding suggests that although no significant differences exist in overall worldview scores, there is a possibility that gender does influence some aspects of how an individual perceives the world. This finding, although inconclusive, would suggest the possibility that gender differences exist between male and female students' perceptions of their surroundings and their relationships with others. Furthermore, this finding would suggest that female students may approach the advising session more positively or benevolently than male students, which would influence their overall experience and relationship with their advisor. It is important to note that although not measured in this study, there may exist a relationship between a student's perceived levels of advising satisfaction and the advisor's gender.

Self-confidence

Self-confidence, according to Erwin (1991), is assuredness in one's self and in one's capabilities. It includes a conscious self-reliance on one's capabilities to complete tasks, make decisions, and fulfill goals. Self-confident persons feel comfortable with expressing beliefs and making decisions, have faith in their capabilities, and are aware of their own limitations (Erwin). The results of this study did not reveal a statistically significant relationship between a student's reported level of self-confidence and his or her satisfaction with advising.

Nonetheless, findings by Zimmerman, Bandura, and Martinez-Pons (1992) provide support for the notion that there is a positive association between academic choice and overall success in school and self-confidence. Moreover, self–efficacy or self-confidence in oneself is defined as a task-specific entity that has been found to be a consistent predictor of performance, achievement levels, success, and personal goal attainment.

It is important for advisors to assist students in developing self-confidence, and a strength-based perspective could be useful when working with students who may have low self-confidence. A strength-based perspective is an orientation that emphasizes the student's resources, capabilities, support systems, and motivation to meet challenges and to overcome adversity and to achieve and maintain social well-being (Coll & Colman, 2007; Baker, 1999). A strength-based perspective can change a student's view from resignation to resilience (Edwards & Chen, 1999; Schreiner, 2005). Students eventually develop a systematic plan that encourages self-improvement and empowerment. This

perspective should not substitute for the developmental approach to advising or the 3-I process. It should be used, however, as a catalyst to and support for good advising.

Limitations

This study employed a post-hoc analysis of the existing data. Nonetheless there were several limitations to this study. The first limitation is the degree to which students could accurately report the advising style that their advisor delivered. Since advisors within the institution have not been trained to deliver a specific approach to advising, such as developmental or prescriptive, students may have been reporting what they would prefer from an advisor and not what was actually delivered.

Another limitation involved the assignment of advisors. Whereas some advisors might be using a developmental approach to teaching and advising, others are actively using a prescriptive approach, which might be due to a lack of appropriate training. Some students might have had an assigned advisor within their specific study areas, but undeclared students would not have this type of advisor. The level of advising and the type of advising relationship might differ greatly depending on whether the student has a faculty advisor or an assigned, nondeclared academic advisor. Moreover, the composition of advisors is not diverse, with male advisors making up 64% ($n = 25$) of the advising body and female advisors comprising 36% ($n = 13$). Another limitation is related to sampling, since the majority of the students sampled were Caucasian. The results may reflect the beliefs of only this group.

The next limitation is related to generalizability. The data were collected from freshman students at a small Catholic university, and were gathered during the first freshman semester in a university experience course. These factors may have influenced

the students' attitudes towards advising and education, and may not be generalized to other institutions of higher education.

Suggestions for Future Research

While this study demonstrates that developmental advising can be used to increase advising satisfaction, the question remains regarding how students perceive the advisor/student student relationship. Therefore, further investigations are still needed to determine how individual students may construct their relationship with their advisors and how they perceive the advising services they receive. This is important and would allow college advisors to understand how students perceive the student/advisor relationship, which may directly influence outcomes. Given the limited research on how worldviews may influence student decision making, cross-cultural and gender studies are needed in order to compare the similarities and differences of worldviews among various student groups, allowing us to develop the best advising practices accordingly. Finally, additional longitudinal studies are needed to determine how a student's developmental level influences advising satisfaction and how advising satisfaction may influence student retention.

Conclusion

This study supports the current research literature that affirms the importance of nonacademic factors in advising satisfaction (Gordon, 2006; Winston & Sander, 1984). Students' perception of their relationship with their advisors is well documented as a factor in successful retention efforts. Cabrera and LaNasa (2000) have demonstrated that students' abilities to build relationships, navigate their first-year experience, and manage emotional crises are critical components in college success and the advising outcome.

Nutt (2000) described academic advising as an integral part of how the student will perceive his or her relationship with the institution. Gordon and Habley (2000) indicated that the relationship that a student and academic advisor build is a major factor in recruitment and retention. Many researchers have supported the link between academic advising and student retention, suggesting that ongoing contact between advisors and students is an essential element in retaining students (Carstensen & Silberhorn, 1979; Glennen, 1976; Noel, 1976; Tinto, 1993). Researchers also found that student retention is mostly linked to student satisfaction and plays an important role in the students' commitment to their academic institutions (Atkins & Hord, 1983; Brown & Rivas, 1993; Bauman & Lata, 1998). These studies support Edwards and Person's contention that the academic advisor has become a "critical" piece in the "recruitment," "retention," and "survival of most institutions of higher education" (1997, p. 20).

The present study attempted to determine the relationships among students' reported worldview, self-confidence, perceived advising style received, and their reported level of academic advising satisfaction. Although preliminary results suggest that developmental advising can be effective in increasing the probability of satisfaction with academic advising, additional research is warranted to validate and standardize measures of prescriptive and developmental advising styles. This study also revealed a significant difference in benevolence of the world between genders, suggesting that female students have a greater belief that the world and people are for the most part good. Although not conclusive, this finding suggests that there may exist a difference in worldviews, or at minimum, a difference in how female students perceive their surroundings and

relationships with others, which may have a direct bearing on how they perceive the experience of receiving advising.

Therefore, it is important to create positive college environments that promote student development and autonomy. The present study suggests that universities should provide appropriate training in developmental advising to faculty members because this may enhance the student/faculty relationship and the student's college experience. Furthermore, this study supported findings by Coll and Zalaquett (in press) and Coll and Draves (in press) who suggested that overall student worldviews are not a function of gender or age but may be more closely related to individual experiences. As a result, advisors should become aware of affective advising methods and styles as a means to enhance student learning and promote positive college experiences that may influence decision making.

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Appendices

Appendix A
Advising Delivery System Matrix:

Delivery system	Access/ Availability To Student	Priority Placed on Advising	Knowledge of academic Discipline	Knowledge of student development	Need for required Training	Cost to Institution	Credibility with faculty and staff
Faculty	Low	Low	High	Low	High	Low	High
Professional Advisor	High	High	Average	High	Average	High	Low
Counselor	Average	Average	Average	High	Average	High	Average
Peer	High	Average	Low	Low	High	Low	Average
Paraprofessional	High	High	Average	Average	High	Low	Average

Source: King & Kerr (2005)

Appendix B
Journal Critiques

Author	Title	Theory	Population/Sample	Instrumentation	Comments
Sheehan, O. T. & Pearson, F. (1995).	Asian international and American students' psychological development	Chickering Student Identity Development	126 Freshmen students (*n= 63 Asian*) (*n=63 American*) Convenience Sample *no random assignment	Student Developmental Task and Lifestyle Inventory (SDTLI) (Winston & Miller, 1987).	No significant difference in gender. However, there are similarities among American and Asian students on the SDTLI tasks. Caution should be placed on the SDTLI since it is based on Western values.
Alessandria, K. P. & Nelson, E. S. (2005).	Identity development and self-esteem of first generation American college students: An exploration study	Chickering Student Identity Development	175 college students (*n=45 FGA*) (*n= 130 NFGA*) Convenience Sample *no random assignment FGA=first generation	Erwin Identity Scale (EIS-III) (Erwin, 1987). Index of Self Esteem (ISE) (Hudson, 1982).	Counter to H1: FGA had significantly higher self-esteem scores than NFGA *F(1, 146)=10.28, p <.05).* No significant relationship between gender and EIS-III. Furthermore, a one-way ANOVA was tested to measure for ethnic group differences with EIS-III, resulting in no significance.
Foubert, J. D., Nixon, M. L., Sisson, S. V., & Barnes, A. C. (2005).	A longitudinal study of Chickering and Reisser's vectors: Exploring gender differences and implications for refining the theory	Chickering Student Identity Development	407 college students (*n=227 females*) (*n=180 males*) (79% Caucasian; 11% Asian; 11% African American; and 3% other) *Random assignment	Student Developmental Task and Lifestyle Inventory (SDTLI) (Winston & Miller, 1987).	This study on like previous examples did find a significant difference within gender and the SDTLI; F(3, 192)=11.54, p<.001. However, the effects size was reported as being extremely low (.04).
Chemers, M. M., Hu, L., & Garcia, B. F. (2001).	Academic self-efficacy and first-year college student performance and adjustment.	Social Cognitive (self efficacy & optimism)	1st year college students Wave 1 (*n=373*) Wave 2 (*n=256*) Longitudinal	Life Orientation Test (Scheier & Carver, 1985) Authors developed an 8-item liker scale to measure self-efficacy. (*article reported Coefficient alpha .81, but no pilot study)	A powerful relationship between self-efficacy and student's level of optimism and their successful first year experience. Furthermore, self-efficacy directly correlated with academic success.
Dinter, L. D. (2000)	The relationship between self-efficacy and lifestyle patterns	Social Cognitive (self efficacy)	195 college juniors/seniors (*n=73 females*) (*n=122 males*) Convenience Sampling	General Self Efficacy Scale (Sherer,et al., 1982) Scale for Interpersonal Success (Wheeler, Kern, & Curlette, 1993).	The study revealed a significant correlation between belonging and social interest scale of (*r=.484, p<.001).* Furthermore, the study revealed a relationship between striving for perfection and self-efficacy.

Continuation of Appendix B

Author	Title	Theory	Population/Sample	Instrumentation	Comments
Coffman, D. L., & Gilligan, T. D. (2002).	Social support, stress, and self-efficacy: Effects on student satisfaction.	Social cognitive (self-efficacy)	College students Convenience Sampling	Satisfaction with Life Scale (SWLS) (Diener, Larson, & Griffin, 1985). Interpersonal Support Evaluation List (ISEL)(Cohen & Hoberman, 1983). Perceived Stress Scale (PSS)(Cohen & Kamarck et al., 1983). College Self Efficacy Instrument (CSEI)(Solberg et al., 1993).	Self-efficacy was reported and correlated with higher levels of life satisfaction as was with those individuals who scored low on stress. Social support appears to have had the strongest correlation with life satisfaction; however, the authors warn us not to generalize due to the small sample size and sample population.
Coll, J. E., & Zalaquett, C. (in press).	The Relationship of Worldviews of Advisors and Students and Satisfaction with Advising: A Case of Homogenous Group Impact.	Worldview	Traditional & Nontraditional College students & advisors (n=115 students) (n=5 advisors)	World Assumption Scale (WAS) (Janoff-Bulman,1992) Authors developed a 5 item Likert scale to measure advising satisfaction.	Analysis of the data revealed no significant differences among traditional and nontraditional student worldviews. However, there was a significance of (F = 4.398, p < .0148) when comparing student self-worth and their perceptions of how well their advisor understood them.
Hsiao-Ping, C., & O'Leary, E. (1995)	A cross-cultural comparison of the worldviews of American, Chinese, and Irish	Worldview	Graduate Counseling Students (n=37 Asian) (n=29 Irish) (n=64 American)	The Scale to Assess World Views (SAWV) (Ibrahim & Kahn, 1987)	There were significant differences between cultural groups as to how they perceived the world. Chinese participants viewed relationships as hierarchical and perceived nature to be good and bad.
Lyddon, W. J., & Adamson, L. A. (1992)	Worldview and Counseling Preference: An analogue Study	Worldview	Undergraduate Students (n=69 females) (n=21 males)	Organicism Mechanism Paradigm Inventory (OMPI)(Germer et al., 1982). Counseling Approach Evaluation Form (CAEF) (Ponterotto & Furlong, 1985).	This study supports that individuals may be inclined to respond to a specific counseling modality according to how they perceive the world.

Appendix C

Janoff-Bulman (1992)
WORLD ASSUMPTIONS SCALE

Using the scale below, please select the number that indicates how much you agree or disagree with each statement. Please answer honestly. Thanks.

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = slightly agree
5 = moderately agree
6 = strongly agree

1. Misfortune is least likely to strike worthy, decent people.

2. People are naturally unfriendly and unkind.*

3. Bad events are distributed to people at random.*

4. Human nature is basically good.

5. The good things that happen in this world far outnumber the bad.

6. The course of our lives is largely determined by chance.*

7. Generally, people deserve what they get in this world.

8. I often think I am no good at all.*

9. There is more good than evil in the world.

10. I am basically a lucky person.

11. People's misfortunes result from mistakes they have made.

12. People don't really care what happens to the next person.*

13. I usually behave in ways that are likely to maximize good results for me.

14. People will experience good fortune if they themselves are good.

15. Life is too full of uncertainties that are determined by chance.*

16. When I think about it, I consider myself very lucky.

17. I almost always make an effort to prevent bad things from happening to me.

18. I have a low opinion of myself.*

19. By and large, good people get what they deserve in this world.

20. Through our actions we can prevent bad things from happening to us.

21. Looking at my life, I realize that chance events have worked out well for me.

22. If people took preventive actions, most misfortune could be avoided.

23. I take the actions necessary to protect myself against misfortune.

24. In general, life is mostly a gamble.*

25. The world is a good place.

26. People are basically kind and helpful.

27. I usually behave so as to bring about the greatest good for me.

28. I am very satisfied with the kind of person I am.

29. When bad things happen, it is typically because people have not taken the necessary actions to protect themselves.

30. If you look closely enough, you will see that the world is full of goodness.

31. I have reason to be ashamed of my personal character.*

32. I am luckier than most people.

-**Scoring**:
Reverse score the asterisked statements and then sum the responses for each of the three subscales, as indicated below.

Benevolence of the World: Statements 2+4+5+9+12+25+26+30

Meaningfulness of the World: Statements 1+3+6+7+11+14+15+19+20+22+24+29

Self-Worth: Statements 8+10+13+16+17+18+21+23+27+28+31+32

Appendix D
Erwin Identity Scale (EIS) (1977, 1980

1=not true of me
2=not very true of me
3=unsure
4=somewhat true of me
5=very true of me

1. I am sure of myself as most other people seem to be sure of themselves.

2. I have found one of the easiest ways to make friends with others is to be the kind of person they would like me to be.

3. It seems like when I trust someone to whom I am attracted I get hurt.

4. I do not have as strong a control over my feelings as I would like.

5. It does not bother me that I am not as attractive as other people.

6. I rarely express my feelings to a friend for fear I will get hurt.

7. When I look in the mirror at myself, I am satisfied with the physical image I see.

8. I usually do not have the assurance that what I am doing is the best thing.

9. I believe that people should follow an established dress code in order to be accepted in a work environment.

10. I sometimes regret my behavior in informal social situations, e.g. parties.

11. My feelings often interfere with my interactions with other people.

12. It usually takes so much effort to make decisions that I wish somebody else would make decisions for me.

13. I have many doubts about what I am going to do with my life.

14. I feel comfortable when I am seen with someone who dresses out of style.

15. If I really let go of my feelings, I probably would not do anything that I would later regret.

16. When I compare myself to people whom I think are extremely good looking, I feel inferior.

17. In most situations, I would not hesitate to express my beliefs to those with opposite beliefs.

18. Most of the time I am comfortable with my feelings.

19. I believe there is only one right person for me with whom I could establish a close love relationship.

20. A person should adapt his or her appearance to the group that happens to be with him or her at the time.

21. I envy those people who know where they are going in life.

22. If I did not wear the basic style of dress that other people wear, I would feel left out and excluded.

23. If I shared my true feelings with a close friend (male or female), s/he would probably think less of me.

24. No matter how sad I feel, I usually think things will get better.

25. Each day presents new challenges that I cannot wait to confront.

26. I feel confident that I have chosen or will choose the best occupational field for me.

27. I am capable of understanding most ideas I read about.

28. When I am hurt by someone I care for, I find it hard to trust others for quite a long time.

29. I often feel inferior when I compare myself to other people.

30. I often have uneasy thoughts about the way I appear to other people.

31. I believe there are only a few people (1 or 2) in the world with whom I could be happy with in a close love relationship.

32. I do not mind appearing different in dress from other people because that is me.

33. No matter how hard I try, I do not feel prepared to enter the working world.

34. Even though it may be contrary to my normal wishes, I usually dress to fit the situation or wishes of others.

35. My confidence is really shaken when I see so many capable people with abilities as good as or better than mine.

36. If I seem to be not dressed appropriately for a particular situation, I usually become very anxious and feel out of place.

37. When I am a stranger in a group, I often introduce myself to others.

38. When other people discuss how important it is to be handsome and pretty, I feel badly and wish I were more attractive.

39. I would not change my style of clothes just because my boss indicated that I should dress more like him or her.

40. When I am in a crowd, I feel uncomfortable about the way I look.

41. It is uncomfortable for me to speak out in groups for fear my statement may be incorrect.

42. I realize that most of my feelings and desires are natural and normal.

43. My relationship with people of the opposite sex usually have not lasted as long as I would like.

44. There are certain feelings I have that I do not understand.

45. My feelings often overwhelm me when I try to establish close friendships.

46. I would not pattern my appearance after the dress style expected by my peer group.

47. If a boss or teacher criticizes my work, it is usually because they do not understand me.

48. I frequently have doubts that I can have a successful and happy close love relationship.

49. I usually do not smile because I am uncomfortable with the way my smile looks.

50. When I fall in love, I am reasonably sure of my feelings.

51. I still have difficulty making decisions for myself.

52. To satisfy my needs, I have to be aggressive or clever.

53. I feel some guilt when I realize how strong my feelings are.

54. I do not understand myself very well.

55. I do not know myself well enough to make a firm occupational choice.

56. It is difficult for me to answer questions like these about myself.

57. I have trouble making decisions when other people disagree with me.

58. Even when I have most of the facts, I often postpone making decisions.

59. Other people know what is better for my life than I do.

1

ACADEMIC ADVISING INVENTORY
Roger B. Winston, Jr. and Janet A. Sandor

PART I

Part I of this Inventory concerns how you and your advisor approach academic advising. Even if you have had more than one advisor or have been in more than one type of advising situation this year, please respond to the statements in terms of your **current situation.**

There are 14 pairs of statements in Part I. You must make two decisions about each pair in order to respond: (1) decide which one of the two statements most accurately describes the academic advising you received this year, and then (2) decide how accurate or true that statement is (from *very true* to *slightly true*).

Mark your answers to all questions in the *Inventory* on the separate optical scan answer sheet provided. Use a number 2 pencil. If you need to change an answer, erase it completely and then mark the desired response.

EXAMPLE

80. My advisor plans my schedule. **OR** My advisor and I plan my schedule together.

A--------------B--------------C--------------D   E--------------F--------------G--------------H
very   slightly   slightly   very
true   true   true   true

RESPONSE ON ANSWER SHEET: A B C D E F G H I J
80 (0) (1) (2) (3) (4) ● (6) (7) (8) (9)

EXPLANATION: *In this example, the student has chosen the statement on the right as more descriptive of his or her academic advising this year, and determined that the statement is toward the slightly true end (response F).*

----

1. My advisor is interested in helping me learn how to find out about courses and programs for myself.

OR

My advisor tells me what I need to know about academic courses and programs.

A--------------B--------------C--------------D   E--------------F--------------G--------------H
very   slightly   slightly   very
true   true   true   true

OR

2. My advisor tells me what would be the best schedule for me.

My advisor suggests important considerations in planning a schedule and then gives me responsibility for the final decision.

A--------------B--------------C--------------D   E--------------F--------------G--------------H
very   slightly   slightly   very
true   true   true   true

OR

3. My advisor and I talk about vocational opportunities in conjunction with advising.

My advisor and I do not talk about vocational opportunities in conjunction with advising.

A--------------B--------------C--------------D   E--------------F--------------G--------------H
very   slightly   slightly   very
true   true   true   true

4. My advisor shows an interest in my outside-of-class activities and sometimes suggests activities.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor does not know what I do outside of class.

E-------------F-------------G-------------H
slightly   very
true   true

5. My advisor assists me in identifying realistic academic goals based on what I know about myself, as well as about my test scores and grades.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor identifies realistic academic goals for me based on my test scores and grades.

E-------------F-------------G-------------H
slightly   very
true   true

6. My advisor registers me for my classes.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor teaches me how to register myself for classes.

E-------------F-------------G-------------H
slightly   very
true   true

7. When I'm faced with difficult decisions my advisor tells me my alternatives and which one is the best choice.

A-------------B-------------C-------------D
very   slightly
true   true

OR

When I'm faced with difficult decisions, my advisor assists me in identifying alternatives and in considering the consequences of choosing each alternative.

E-------------F-------------G-------------H
slightly   very
true   true

8. My advisor does not know who to contact about other-than-academic problems.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor knows who to contact about other-than-academic problems.

E-------------F-------------G-------------H
slightly   very
true   true

9. My advisor gives me tips on managing my time better or on studying more effectively when I seem to need them.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor does not spend time giving me tips on managing my time better or on studying more effectively.

E-------------F-------------G-------------H
slightly   very
true   true

10. My advisor tells me what I must do in order to be advised.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor and I discuss our expectations of advising and of each other.

E-------------F-------------G-------------H
slightly   very
true   true

11. My advisor suggests what I should major in.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor suggests steps I can take to help me decide on a major.

E-------------F-------------G-------------H
slightly   very
true   true

12. My advisor uses test scores and grades to let him or her know what courses are most appropriate for me to take.

A-------------B-------------C-------------D
very   slightly
true   true

OR

My advisor and I use information, such as test scores, grades, interests, and abilities, to determine what courses are most appropriate for me to take.

E-------------F-------------G-------------H
slightly   very
true   true

13. My advisor talks with me about my other-than-academic interests and plans.

A--------------**B**-------------**C**-------------**D**
very   slightly
true   true

OR

My advisor does not talk with me about interests and plans other than academic ones.

E--------------**F**-------------**G**-------------**H**
slightly   very
true   true

14. My advisor keeps me informed of my academic progress by examining my files and grades *only*.

A--------------**B**-------------**C**-------------**D**
very   slightly
true   true

OR

My advisor keeps informed of my academic progress by examining my files and grades and by talking to me about my classes.

E--------------**F**-------------**G**-------------**H**
slightly   very
true   true

PART II

Directions-Consider the following activities that often take place during academic advising. During **this academic year**, how many times have you been involved in each activity? Use the code below to respond to questions 15-44 on the separate answer sheet.

A=None (0 times)   **C=2 times**   **E=4 times**
B=1 time   **D=3 times**   **F=5 or more times**

How frequently have you and your advisor spent time…

15. Discussing college policies

16. Signing registration forms

17. Dropping and/or adding course(s)

18. Discussing personal values

19. Discussing possible majors/academic concentrations

20. Discussing important social or political issues

21. Discussing content of courses

22. Selecting courses for the next term

23. Planning a class schedule for the next term

24. Discussing transfer credit and policies

25. Discussing advanced placement or exempting courses

26. Discussing career alternatives

27. Discussing probation and dismissal policies

28. Discussing financial aid

29. Identifying other campus offices that can provide assistance

30. Discussing study skills or study tips

31. Discussing degree or major/academic concentration requirements

32. Discussing personal concerns or problems

33. Discussing studies abroad or other special academic programs

34. Discussing internship or cooperative education opportunities

35. Talking about or setting personal goals

36. Evaluating academic progress

37. Getting to know each other

38. Discussing extracurricular activities

39. Discussing job placement opportunities

40. Discussing the purposes of a college education

41. Declaring or changing a major/academic concentration

42. Discussing time management

43. Talking about experiences in different classes

44. Talking about what you are doing besides taking classes

PART III

Considering the academic advising you have participated in at this college this year, respond to the following five statements on the answer sheet using the code below.

A = Strongly Disagree **C = Agree**
B = Disagree **D = Strongly Agree**

45. I am satisfied in general with the academic advising I have received.
46. I have received accurate information about courses, programs, and requirements through academic advising.
47. Sufficient prior notice has been provided about deadlines related to institutional policies and procedures.
48. Advising has been available when I needed it.
49. Sufficient time has been available during advising sessions.

PART IV

Please respond to the following questions. Continue marking your responses on the same answer sheet.

50. What is your sex?
    (a) male
    (b) female

51. What is your cultural/racial background?
    (a) African American/Black   (c) Asian American or   (e) White/Caucasian   (g) Other
    (b) Hispanic American/Latino/a   Pacific Islander   (f) Biracial/multiracial   (h) Decline to respond
                                    (d) Native American

52. What was your age at your last birthday?
    (a) 18 or younger   (c) 20   (e) 22   (g) 24   (i) 31 or older
    (b) 19   (d) 21   (f) 23   (h) 25 - 30

53. What is your academic class standing?
    (a) Freshman (first year)   (c) Junior (third year)   (e) Irregular/Transient/Special Student
    (b) Sophomore (second year)   (d) Senior (fourth or more years)   (f) Other than any of the above

54. Which of the following **best describes** the majority of the academic advising you have received this academic year?
    Select only one.
    (a) Advised individually by assigned advisor at an advising center
    (b) Advised individually by any available advisor at an advising center
    (c) Advised individually, **not** through an advising center
    (d) Advised with a group of students
    (e) Advised by a peer (student) advisor
    (f) Advised in conjunction with a course in which I was enrolled
    (g) Advised in a manner other than the alternatives described above
    (h) No advising received

55. Approximately how much time was generally spent in each advising session?
    (a) less than 15 minutes   (c) 31-45 minutes   (e) more than 1 hour
    (b) 15-30 minutes   (d) 46-60 minutes

56. How many academic advising sessions have you had this academic year in your **current** situation?
    (a) none   (c) two   (e) four   (g) six   (i) eight
    (b) one   (d) three   (f) five   (h) seven   (j) nine or more

57. How many academic advising sessions **in total** have you had this year?
    (a) none   (c) two   (e) four   (g) six   (i) eight
    (b) one   (d) three   (f) five   (h) seven   (j) nine or more

Appendix F

November 13, 2006

Dear Saint Leo University Student,

I fully support the study described here on student development because it has several potential benefits to the University and to you as students. Therefore, I encourage you to assist and participate in this important research.

Sincerely,

Maribeth Durst

Maribeth Durst, Ph.D.
Vice President

About the Author

Jose E. Coll received an Associated Degree from Palomar Community College, CA. in 1999 while serving in the Marine Corps. He later went on to receive a Bachelor's Degree in Social from Saint Leo University, FL and a Masters in Social Work from the University of Central Florida.

Mr. Coll has worked as a clinical social worker with adolescents and families in an outpatient facility. He went to work later as a behavioral specialist serving children within Autism, Severely Emotionally Disturbed, and Emotionally Mentally Handicap.

Mr. Coll's research interests are predominately focused on the development of worldviews and its relationship to student development, cognitive complexities, and multicultural counseling. He has published and presented on worldviews in national and international conferences. Currently, Mr. Coll is an Assistant Professor of Social Work and Director of Freshman Advising at Saint Leo University, FL.