The undecided student and self-assessment: a journey toward decision

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THE UNDECIDED STUDENT AND SELF-ASSESSMENT: A JOURNEY TOWARD DECISION

By
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A Thesis
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ABSTRACT

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THE UNDECIDED STUDENT AND SELF-ASSESSMENT
A JOURNEY TOWARD DECISION
2001/2002
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Master of Arts in Applied Psychology

The purposes of this single subject study were (a) to create a profile of the undecided student in regard to academic and career direction and (b) to explore the effectiveness of self-assessment tools as aides for the undecided student. An undergraduate student, who voluntarily came to a Career and Academic Planning Center, was chosen based upon (a) her declaration of being undecided regarding the direction of academic and career pursuits and (b) her willingness to explore self-assessment tools. After selection, the student was given (a) a single item questionnaire, to solely determine whether she was decided or undecided regarding career and academic direction, and (b) the Career Blueprint, to determine the student's level of occupation knowledge. The student also completed three career guidance tools: the DISCOVER Program, MyRoad Inventory, and The Career and Occupational Preference System. The student received three career counseling sessions to review the results of the assessments and assist her in exploring career goals. The single item questionnaire, the Client Satisfaction Inventory and the
Career Blueprint were used as outcome measures. Analysis indicated that the self-assessment tools and career counseling process moved the student from undecided to decided regarding academic and career pursuits.
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CHAPTER 1: LITERATURE REVIEW

A challenge that faces career and academic counselors, at the college level, is facilitating the movement of students from a state of indecision to the selection of majors and careers. This thesis will present viewpoints and research from theorists in the field of career and academic planning which attempt to explain factors influencing student indecision, and the methods used to resolve the indecision, with an emphasis on self-assessment tools. A single subject study will be presented which highlights the theoretical and applied issues in moving an undecided student to decided status when choosing a major and career.

Defining the Population

Defining the undecided college student has been a source of research for decades. Understanding this population is crucial for assisting in the advising process. Varying theories and empirical research emerge from the literature and reveal three concepts which attempt to characterize, define and offer explanation for the construct of the undecided student.

The first concept defines the undecided student as a complex, heterogeneous group (Gordon, 1984; Harman, 1973; Larson, et al.1988; Lewallen, 1993). In early research, Harman (1973) examined the differences between vocationally decided and undecided students on personal interests and abilities measures. Males had greater difficulty attending to indecision for sufficient time to come to a solution, felt less positive about themselves, and had more negative feelings about their situation. However, undecided
females did not show any statistically significant differences from decided students with respect to personal interests and abilities. This suggested the complexity and heterogeneity of the undecided population as a group, or at least raising the possibility of gender differences in the decision-making process. In agreement with Harman (1973), Gordon (1984) added, “there are as many reasons for being undecided as there are students” (p.75). Gordon (1984) concluded further, “Research has yielded little in characterizing this heterogeneous group” (p.17).

Larson, et al. (1988) also examined the heterogeneity and complexity of undecided students as a group. In an attempt to define the undecided population, they studied 113 college sophomores to determine whether undecided students were different from decided students on a number of career planning variables. Once students were labeled undecided, by self-report, Larson, et al. (1988) used cluster analysis to determine whether this group should be defined by subtypes. The results revealed that when compared with the decided students, the undecided students acknowledged more career problem solving deficits, more career myths, more pressure to make a career decision, less confidence in their ability to perform academically, less knowledge of the world of work and more career obstacles. The results also revealed that the undecided students were clustered into four subtypes which Larson labeled as Plan-less Avoiders, Informed Indecisive, Confident But Uninformed, and Uniformed. Therefore, Larson, et al. (1988) concluded, “it is appropriate to consider undecided students as comprising multiple subtypes” (p. 443).

Lewallen’s (1993) study surveyed undecided students in over 400 colleges on institutional characteristics, student background characteristics, self-concepts, values,
aspirations, behavior patterns, persistence, achievement, competency, career development, and personal satisfaction. Students were tested twice; entering college and exiting college. Similarly to Harman (1973) and Larson et al. (1988), Lewallen (1993) concluded, “...undecided students are a heterogeneous group and making generalizations about them may be misleading” (p. 110).

A second line of investigation indicates that undecided students present with a greater number of identity concerns, unique personality traits, and greater anxiety around career/academic decisions than do decided students (Fuqua, et al. (1987, 1988); Holland & Holland (1977); Jones & Chenery (1980); Lucas & Epperson (1988, 1990). Holland and Holland (1977) studied 692 college juniors in an attempt to characterize vocationally undecided students. The participants were assessed by The Vocational Attitude Scale, The Occupation Information Scale, The Interpersonal Competency Scale, The Preconscious Activity Scale, The Anomy Scale, The Identity Scale, The Life Plans Inventory and The Career Maturity Inventory. They found that undecided students showed a correlation between variables of types of difficulties in making vocational choices expressed in complex but consistent clustering of personal traits, attitudes, and skills; interpersonal incompetence, lack of self confidence, lack of involvement, anxiety, unclear and shifting identity, and poor decision-making skills. Therefore, Holland and Holland (1977) concluded, “…undecided students lacked a sense of identity, vocational maturity, had doubts about their self-perceptions of abilities, strengths, weaknesses, lack of occupational knowledge and decision making ability” (p. 408). Holland and Holland (1977) suggested, “future investigations of vocational indecision would be benefited by
viewing the undecided student as comprising multiple subtypes rather than a single type” (p. 412).

Jones and Chenery (1982) attempted to complete the delineation of subtypes of vocational indecision, as suggested by Holland and Holland (1977), by creating a model of vocational decision states (comfort, reasons and decidedness) to determine the sense of identity, traits, and anxiety levels of undecided students. They administered the Assessment of Career Decision-Making, Identity Scale, Career Salience Questionnaire, and The Anomy Scale to 224 college students in a test-retest format. Jones and Chenery (1982) concluded, “Persons who are undecided or transitional between decided and undecided were generally anxious, lack a clear sense of identity, and experience a feeling that the world and they themselves were adrift” (p. 475). In addition, the study revealed “decidedness is associated with a clear sense of identity, career salience, and showed no evidence of anxiety” (p. 475).

Lucas and Epperson (1988) also examined personality types in vocationally undecided students. They studied 302 undecided students who were administered the Life Style Inventory, The Career Salience Questionnaire, The Self Esteem Scale, State Trait Anxiety Inventory, and the Internal-External Locus of Control Scale in order to investigate how undecided students differ on personality variables such as level of anxiety, self esteem and salience of career. After testing was completed, they applied cluster analysis to the results and found five distinct clusters with specific personality traits. These clusters were labeled: Happy and Work Oriented, showing low anxiety and high decisiveness; Anxious and Unclear on Goals, having high anxiety, low self esteem, need for occupational information and a lack of clarity; Undecided and Limited Interest,
indicating low motivation, low sense of competence and helplessness; Caught in a Dilemma, displaying a lack of career dedication; and, Happy and Playful, showing non-commitment tendencies. The results showed a fairly even distribution between each cluster, with a slight elevation in the Undecided and Limited Interest cluster. Lucas and Epperson (1990) revisited their 1988 study to determine if the personality types found in that study would emerge in another independent sample of students and what kinds of behaviors will likely be associated with each cluster. Therefore, they conducted a study of 196 undecided college students using the same measurements as administered in 1988. The results of the cluster analysis for this sampling of undecided students again revealed the same five clusters as discovered in their previous study. However, the clusters were not as evenly distributed as was the case in their 1988 study, and, the cluster with the largest population fell into the Caught in a Dilemma cluster. This shows that vocational indecision can be linked to several personality traits depending on the population. Lucas and Epperson (1990) concluded, “the results of this study confirm our belief that different forms of career indecision exist, but also, to a larger extent, the different personality types that exist within the undecided student population as found in our 1988 study” (p. 384).

Fuqua, Seaworth and Newman (1987) attempted to correlate the specific personality trait of anxiety with indecision, testing a population of 133 undergraduate students. They were administered four measures of anxiety (S-R Inventory of General Trait Anxiety, State-Trait Anxiety Inventory containing a State Anxiety Scale and a Trait Anxiety Scale, and Taylor Manifest Anxiety Scale), and four measures of indecision (Career Decision Scale, My Vocation Situation, Career Maturity Inventory, and Vocational Decision Scale) in a test re-test format. After the completion of testing the collected data was
analyzed using zero-order correlations which showed no statistical significance between the Career Maturity Inventory (CMI) and the S-R Inventory of General Trait Anxiety (S-R). The data was examined, using canonical correlation, which indicated a 44% correlation between anxiety and indecision. Finally, a factor analysis was performed on the data. This analysis confirmed the zero-order correlation analysis and the canonical correlation analysis. Fuqua, et al. (1987) concluded that “the results would support the conclusion that there is a correlation between indecision and anxiety” (p. 183). Fuqua, Seaworth and Newman (1988) revisited this subject, studying 349 undergraduate students. In this study, they used four primary factors of indecision: lack of information about self and career; uncertainty about appropriateness or degree of fit between self and career; specific barriers to a previous choice, and multiple interests. Fuqua, et al. (1988) concluded anxiety was found to be significantly related to all factors with the exception of multiple interests” (p. 157). These studies demonstrated a relationship between career indecision and anxiety; however, they do not shed much light on the reason for this relationship. Anxious students may have more difficulty making a career decision, but it is equally plausible that students who can not decide are more anxious as a result of their indecision. Further, some third variable may exist that leads students to be both anxious and indecisive: e.g., low self-efficacy or other salient personality characteristics.

The third concept emphasizes the influence of family systems on the undecided student (Bratcher, (1982); Crites, (1976); Kinnier, et al. (1990); Lopez & Andrews, (1987)). Examining the influence of the family on the undecided student’s ability to reach a career decision, Bratcher (1982) identified the family system as the primary and most powerful system to which one belongs. Therefore, the imposing of rigid rules and
restrictive boundaries by the family system to maintain its own balance inhibits the
development of identity and autonomy of its members. This dynamic, because it creates
a lack of identity and a lack of autonomy, keeps the undecided student indecisive. The
effect of family influences on indecision was also observed in the clinical experiences of
Lopez and Andrews (1987) with vocationally indecisive college students. From their
observations, Lopez and Andrews (1987) suggested that very different processes exist
within the families of undecided students, specifically, the over involvement of parents
with their child over career and educational matters. In other cases, Lopez and Andrews
(1987) suggested that one parent may support the student’s indecision whereas the other
parent assumes a more antagonistic role. Minuchin’s (1974) view of this type of family
alignment, where on parent sides with a child against the other parent, as cited in Lopez
and Andrews (1987), represented a cross-generational coalition, a pattern frequently
correlated with family dysfunction and with the presence of overt or covert marital
conflict.

Crites (1976), in counseling a vocationally indecisive adolescent saw a similar family
pattern emerge and noted, “...her indecisiveness mirrored the divergent values of her
parents...and her conflict concerning career choice emanated from anxiety associated
with these divided parental loyalties” (p. 10). Bratcher (1982) further explained a
student’s anxiety associated with these divided parental loyalties to be a manifestation of
the family system’s need for balance. While these clinical observations are useful for
generating hypotheses regarding the importance of family influence on the undecided
student, empirical research is required to validate these hunches.
In one such attempt, Kinnier, Brigman and Nobel (1990) examined the relationship between career indecision and the family-of-origin enmeshment in a sample of 604 undergraduate and graduate students. The students were administered the Career Decision Scale and the Personal Authority in the Family System Questionnaire. Through the use of simultaneous multiple regression analyses on the collected data, Kinnier, et al. (1990) tested the hypothesis that the dynamic of family-of-origin enmeshment is related to the problem of career indecision. Kinnier, et al. (1990) cited Minuchin, Montalvo, Guerney, Rosman, and Shumer (1967) who defined enmeshment as, “a familial environment in which members are undifferentiated from or overly dependent upon each other” (p. 309). Kinnier, et al. (1990) concluded from analysis of their research, “Those students who are enmeshed in their families-of-origin are more likely than those who are not enmeshed to experience difficulty in making decisions about their careers” (p. 310).

In addition, Kinnier, et al. (1990) noted, “the results of this study provide empirical evidence that family dynamics and the process of career indecision making are intertwined” (p 311).

Although theorists have generated these three major concepts describing the undecided student, studies preclude a clear and concise characterization of the undecided student. Therefore, one can point to the need for further research, conclude that presently the concept of the undecided student describes a category of individuals with little in the way of distinguishing features, and there may, in fact, be negative consequences for the undecided student.

Negative Consequences of Indecision
Research indicates that the negative consequences of indecision for college students range from frustration along with debilitating anxiety to dropping out or withdrawing from school. Holland and Holland (1977) found undecided students tended “...to drop out of school, earn fewer credits and receive lower grades” (p. 411). At the other end of the spectrum, Gordon (1985) described these students as “experiencing anxiety which is debilitating and permeates all life decisions, not just those concerned with educational or career choices” (p. 433). In addition, researchers Holland and Holland, (1977); Muskat (1979), have concluded that undecided students tend to drop out or withdraw from school. Other research conducted by Lewallen (1993) found that undecided students do not have any greater chance of not persisting than does the general student population. Therefore, as one can see from the diversity of these findings, negative consequences for the undecided student are not clear-cut, supporting the diversity of the undecided population.

The Journey toward Decision: The Use of Self Assessment Tools

Holland and Holland (1977) concluded from their study, “…when interventions such as self-assessment, workshops, counseling, vocational decision-making training and occupational information are applied to students expressing indecision, many students make decisions or feel better because of these interventions” (p. 413). This extensive list of interventions can pose a problem for college counselors, namely how best to administer these interventions to students in need. Rayman, et al. (1978) summarized evaluations from surveys conducted by the American College Testing Program and the National Institute of Education. They reported that self-assessment tools, especially computer based systems, are enthusiastically accepted and easily used by students, are
enthusiastically embraced by parents of students and produce increased conversation at home about career planning. Also, self-assessment tools cause measured increases in vocational maturity, occupation exploration, occupational knowledge, self-knowledge, and specification of career plans, and, are preferred by students for obtaining career guidance information.

In their study of 130 undergraduate students, Barnes and Herr (1998) used a three group, pre-test/post-test design. The students were randomly divided into three groups; one which received career counseling only, one which received career counseling and the Strong Interest Inventory, and the third group which received counseling in addition to supervised use of the DISCOVER system. Before counseling was initiated and after five weeks of interventions, the Survey of Career Development, the Career Decision Scale, and My Vocational Situation were administered to all students. The data was analyzed using a double multivariate repeated measures design. Barnes and Herr (1998) concluded, “Individual counseling in combination with DISCOVER, a computer-based self-assessment tool, resulted in significant progress by students participants in reducing their indecisiveness and increasing their certainty about their academic and career goals, clarifying their career identity, and clarifying their values, interests and abilities related to career planning” (p. 188). This clearly aligns with Ettinger (1991), who stated that helping students understand the academic and career planning process would break down the mystery of the decision making process.

In the same way, Roselle and Hummel (1988) conducted a study to examine the effects of DISCOVER on the decision-making ability of students with career indecision. They used audio and video tapes of the students during their interaction with the
DISCOVER program. Roselle and Hummel (1988) concluded that computerized career
guidance systems, like DISCOVER, offer a number of advantages over more traditional
forms of career guidance, including: easy access to accurate information, quick
assessment and presentation of self information, and a user friendly process that always
results in a list of occupations.

Similarly, in a study of over 500 students who used either SIGI or DISCOVER career
guidance systems during class, Kapes, Borman, and Frazier (1989) attempted to examine
the effectiveness of SIGI and DISCOVER on career indecision. The students were
administered the Career Decision Scale, Survey of Career Development, Self-assessment
of Confidence and Progress in Educational Career Planning, and, Computer Assisted
found that students showed statistically significant advances in career development. In
addition, both computer self-assessment tools received high ratings from students on
information received from the programs.

In another study of computerized guidance systems, Pinder and Fitzgerald (1984)
attempted to provide counselors with proof of the value of computerized career guidance
systems. They determined, “Computer guidance systems are viable counseling
interventions that can assist in meeting the career development needs of the undecided
student” (p. 128). These studies support Spokane and Decker (1999) who noted that once
a student aligns their measured and expressed interests, abilities and values, then they can
efficiently move to a career decision.

As noted above, the research literature indicates that the undecided student population
is heterogeneous. Despite this heterogeneity, and the fact that research has not been able
to discern a viable characterization of the undecided student, undecided students seem to benefit from and report satisfaction with self-assessment tools. In particular, recent research suggests that undecided students find computer-aided guidance systems helpful in reaching their goal of deciding on academic majors and careers. Most important, the knowledge of the heterogeneity of the undecided student population, an awareness of the effects of personality traits and anxiety on decision making, the impact of family systems on career indecision, and, the use of interventions such as self-assessment, will aid the career counselor in effectively assisting the undecided student.
CHAPTER 2: OBSERVATIONS OF STUDENT

Jan is a 20 year old, full time student attending a four-year university. She came to the Career and Academic Planning (CAP) Center because she was experiencing indecision regarding her major and future career plans.

General Appearance

Jan, petite in stature, arrived suitably dressed for the appointment. Her attire was neat, and she was well-groomed. She did not exhibit any mannerisms or external behavioral characteristics that would deter her from securing employment.

Attitude and Behavior

Walking with a confident stride, Jan extended a firm handshake upon her arrival. She maintained eye contact throughout the appointment. She communicated well and was articulate about her situation. Her intellectual functioning appeared to be above average. She was demonstrative, using her hands a great deal while talking. Jan was very alert and oriented during the appointment, providing sufficient insight into her indecision regarding career and academic pursuits. She appeared to be highly motivated for working toward the resolution of her indecision with the help of self-assessment tools, as well as career and academic counseling.
Affect and Mood

Jan’s mood was appropriate to the setting. As the session continued, she seemed to become frustrated and discouraged as she expressed indecision regarding her academic and career pursuits. She also revealed concern over her plans to study abroad for spring semester 2002. Her mood elevated at the end of the appointment when suggestions of self-assessment testing were offered for resolving her indecision and concern regarding academic and career pursuits.

Demographics

Jan is a single Caucasian female. She does not have any children. Jan resides on campus at the university. Her biological parents are divorced and each of them has remarried. Jan has two step siblings from her mother’s remarriage. She did not designate either parent’s residence as her permanent address; however, she revealed that she does consider her maternal aunt’s residence her home.

Reason for Referral

Jan stated, “I am anxious over the terrorists’ attacks of September 11, 2001 because I’m scheduled to study abroad in Spain for spring semester. I am also undecided about whether my major is the right one for me or whether I should go to graduate school directly following graduation from college.” Jan expressed that although she enjoyed her elementary education core courses and received grades of 3.0 or above, she could not picture herself in the elementary classroom. She stated that she enjoyed and felt confident when speaking before groups, but didn’t feel she would like to be in a classroom setting. She also expressed feelings of boredom when creating mock lesson
plans for children. Therefore, she was hopeful that the CAP Center would provide
direction for her regarding career and academic pursuits.

History of the Problem

During high school, Jan was determined to go to college to secure a better future.

During her senior year in high school, she applied to the university, where she is
currently enrolled, for pre-major enrollment due to her indecision regarding a choice of
major and was accepted as a pre-major. During her freshman year at the university, Jan
made friends with Elementary Education majors. From this exposure to them and their
curriculum, she decided to apply to the Elementary Education department for enrolment
as an Elementary Education major. She was accepted in her sophomore year. However,
entering her junior year, as she began taking her curriculum core courses, Jan discovered
her boredom with the curriculum and her indecision regarding the future pursuit of this
major. Therefore, she began to doubt her career plans to become a teacher. Her
indecision brought her to the CAP Center.

Medical History

Jan reports that she recently underwent a physical examination and received
confirmation from her physician that she is in excellent health. Jan revealed that she has
experienced frequent headaches. These headaches have been medically attributed to her
extensive studying. Jan was recommended by her physician to take Tylenol as needed
for her headaches. She did not exhibit any physical abnormalities that would restrict her
from accepting work.
Education

An honor student, Jan attended high school from September, 1985 through June, 1989. Jan was a member of the National Honor Society, the Spanish Club, and the Key Club, which was a community service organization. She served as the Social Events Officer during her senior year, and she was a member of Student Council during her junior and senior years. Jan attended dance school and was involved in many recitals throughout high school. She received an SAT score of 1220 and graduated high school with a Grade Point Average of 3.9.

Since entering college, she has maintained a 3.2 Grade Point Average. Jan has a desire to learn about different cultures; therefore, she made the decision to study abroad in Spain during the spring semester 2002. She anticipated that this experience would allow her to study the Spanish culture. However, her desires for cultural experiences did not outweigh her concerns for her safety with traveling and living abroad for an extended period of time. Jan anticipates completing the coursework necessary to receive her Bachelor of Arts degree in two years.

Work Experience

Jan has exhibited an industrious nature regarding her work history. At 15, she began working at a bakery and continued her employment at that establishment throughout high school. She would often agree to work extra hours whenever she was needed. Jan expressed the highlights of this experience at the bakery to be the interaction with customers, working with a small intimate staff, training new staff members, and having supervisory responsibilities. She received excellent performance reviews and commensurate compensation for the performance of her duties. Jan revealed her only
complaint about the position at the bakery was that she was required to work weekend
hours.

Upon graduation from high school, Jan secured employment as a bank teller. She continues working as a teller for this bank on a part-time basis during college breaks and on a full-time basis during summers. As a bank teller, Jan enjoys dealing with the public, working in a professional atmosphere, dressing in professional attire, and the abbreviated working hours. She dislikes the non-flexible hours required by a company or business of this nature and she finds the coldness of a large corporate structure undesirable. Jan defined coldness as a less intimate, more restrictive environment. Jan received much recognition from her supervisors for good performance.

During the fall and spring semesters at college, Jan maintained a part-time student job at the Student Affairs office. She enjoys the intimate, friendly working environment, the flexible hours, facilitating student tours and interfacing with students and the general public. She expressed no negatives around this position. Jan receives positive feedback from the student affairs' staff regarding her work performance.

After reflecting on these experiences, Jan envisions her future worker role as that of a manager, independent contractor or dance performer. She expressed little emphasis on her family role and would be opened minded to relocation if the position required doing so. Jan considered her weekends to be important leisure time and would not desire a position that required weekend work. She also expressed a desire to work in an occupation that made a contribution to society and therefore considered her citizen role as an important one.
Jan concluded that she would require the following attributes essential for acceptance of future employment: a small intimate staff, flexible hours, a leadership role and daily interaction with the general public. Some of these job attributes such as flexible work hours, a leadership role and daily interaction with the general public are not necessarily equated with a teaching position in elementary education. Jan was counseled that these attributes could cause frustration to her if she were to secure employment as a teacher.

Interventions

Jan was referred to the Counseling Center for therapeutic interventions concerning her anxiety issues. In terms of her career and academic planning, Jan was given three self-assessments, DISCOVER, COPS, and MyRoad. The results of these assessments were reviewed with her in feedback sessions.
CHAPTER 3: ASSESSMENT TOOLS EMPLOYED

The three self-assessment tools employed in this study, The DISCOVER Program, The Career and Occupational Preference System, and MyRoad Inventory, are used at an Academic Planning Center. These tools measure the student’s interest, values, self-rated abilities, and personality, which are helpful for undecided students seeking decisions regarding academic and career pursuits.

The DISCOVER Program

The DISCOVER program was developed by Joanne Harris-Bowlsby (1990) as a systematic career guidance program to assist in career development. The effectiveness of DISCOVER has been researched by Barnes and Her (1988); Fukuyama, et al. (1988); Garis and Niles (1990); Kapes, et al. (1989); Luzzo and Pierce (1996); Rayman, et al. (1978); Sampson, et al. (1987) who concluded that, whether used alone, in conjunction with a group workshop, or individual career counseling session, DISCOVER increases career decisiveness.

DISCOVER familiarizes the user with major aspects of career decision-making and career planning. When users enter the program, they are graphically presented with a floor map of a museum with four halls of learning. They can then select which hall they wish to explore. Hall #1 contains a 90-item questionnaire developed by the American College Testing Service (ACT) to address the user’s interests, abilities and values in the world of work. The questions are divided into three distinct sections: The Inventory of Interests, The Inventory of Work Related Abilities and The Inventory of Work Related Abilities.
Values. The Inventory of Interests reveals the user's interests in work activities such as people interaction, investigative work, or scientific analysis. The Inventory of Work Related Abilities indicates the user's perspective of their ability to complete various work related tasks such as auditing, construction, and managing. The Inventory of Work Related Values determines which work values, such as types of work cultures, work setting, salary, and recognition, are needed to achieve career satisfaction.

After the user completes the three inventories, the program analyzes the data inputted by the user and displays the results for the user to review. In the result section, the user is presented with a World of Work Map which graphically depicts how the user's interests, abilities and work values relate to each other and to career options. In addition, the user receives a summary of the three inventories. In this summary, each inventory is coded by single letters of the alphabet, each letter representing a distinct career area, which corresponds to the World of Work Map. For example, depending on the answers of the user, the user may be scored high on leadership and management which would key to administration and sales or business operations on the World of Work Map.

Based on this knowledge, the user is ready to return to the main menu and select hall #2 in order to explore those career occupation identified by the inventories. This hall provides occupation descriptions which reveal outlook, work place setting, travel demands, educational requirements and other pertinent facts concerning that career. With respect to educational requirements, the user can enter Hall #3 to research institutions that have programs in a particular field of interest. When the user is ready to being a job search, Hall #4 provides instructions concerning resume writing, cover letter creation, interviewing techniques, and job application preparation. As indicated, all data imputer
Career and Occupational Preference System (COPS)

The COPS Interest Inventory (Knapp & Knapp, 1981) is designed to assist individuals in their career decision-making process by helping them define the type of work they may be interested in doing. The Inventory lists 192 activities found in a variety of occupations. To determine the degree of interest for each activity, the user is given the following scale of four choices: Like Very Much, Like Moderately, Dislike Moderately, and, Dislike Very Much. The user is asked to select one of the choices, identifying the degree of interest for each activity. Upon completing the inventory, the user or the inventory administrator scores the results. The inventory scores are representative of the user’s interest in activities across 16 career clusters: Science (Medical-Life and Physical), Technology (Electrical, mechanical and Civil), Outdoor (Nature and Agriculture), Business (Financial and Management), Computation, Communication (Written and Oral), Arts (Performing and Design), and Service (Instructional and Social). These scores then create a profile of the user, indicating those career cluster that show strong interest. Once acquiring this information, the user can refer to the back of the booklet which contains a general description of each career cluster, the skills and abilities necessary for the career cluster, the titles of various occupations within those clusters, and the college majors which prepare individuals for each occupation. For further research, a cross reference to the Occupational Outlook handbook (OOH) and the Dictionary of Occupational Titles (DOT) is provided for occupations within the COPS career clusters.
Knapp, et al. (1985) conducted a correlation study of over 1,091 students to evaluate the predictive validity of the COPS interest inventory. In this follow-up study 4,097 students, who had the COPS Interest Inventory administered to them in Grades 10, 11, and 12, were mailed questionnaires concerning their current educational and occupational status. Of the 1,091 total respondents, 660 respondents were in educational programs or jobs representing career clusters consistent with the three highest interests, as measured in their original COPS Interest Inventory. “Thus the results indicate that COPS is an accurate instrument for prediction of career choice or college major” (Knapp, et al. (1985), p. 348). The same questionnaire results were then analyzed using the MCArthur categorization of hits based on interest areas falling in standardized score ranges. This method of analysis yielded a 74% correlation, reaffirming the predictive validity of the COPS Interest Inventory. This study also shows the instrument as an effective self-assessment tool.

MyRoad

MyRoad is an interactive, on-line education and career planner. This self-assessment tool has been developed by a partnership of the CollegeBoard.com Inc. with Organization Renewal Associates Inc. (ORA). The user of MyRoad is required to begin the process by registering. The registration process allows for the physical identification of the user for information retrieval purposes. Once registered, the user may browse any of the possible components: Insights, I.D. Me, Explore Majors, Find a College, Research Careers, or My Plan.

The first step toward self-assessment should begin at the ID Me component. The ID Me component has three distinct elements. In the Quick Starts Element, the user answers
a short questionnaire which helps the program begin profiling the user. Upon completion of the questionnaire, suggestions for colleges and major are displayed and may be stored. Another element within the ID Me component is the Personality Profile. This Profile is a more detailed questionnaire that describes the user's personality type in terms of extroversion, intuition, feeling, and organizing. The results of the questionnaire produce a summarized description of the user's personality type as well as suggestions for majors and careers that match that personality type. The last element in the ID Me component is View Your Profile. This element gives the user the ability to review data.

After completing the ID Me component, the user is free to explore components. The Explore Majors component gives the user the ability to find majors, read detailed descriptions of majors, learn the academic requirements of a major, and view a Career Spiderweb that correlates different careers to a specific major. The Find a College component is a comprehensive listing of 3,500 two-year and four-year colleges in the United States. These colleges may be searched by a number of variables including location, size, tuition, and available degree programs. The Research Careers component covers over 330 career tracks, supplying the user with career descriptions, outlooks, requirements, compensation, advancement, and perspectives of individuals in those careers. The My Plan component is the repository for all data collected in the ID Me, Explore Majors, Find a College, and Research Careers components. The last component is the Insights component, which is the on-line magazine of MyRoad. The features of the magazine include a Resource Library, a cartoon, an interactive message board, as well as articles in its Campus View and Mentors Corner elements. Thus, this self-assessment is a
comprehensive tool that allows the user to explore personality traits and increase career knowledge
CHAPTER 4: OUTCOME MEASURES USED

Three outcome measures were employed during this single subject study. They were:

(a) a single item questionnaire declaring whether the student was decided/undecided regarding career and academic pursuits; (b) The Career Blueprint, a spreadsheet used to determine the student’s awareness of interests and values concerning career pursuits; and (c) a Client Satisfaction Inventory, which indicated the degree of client’s satisfaction regarding the use of the self-assessment tools in the decision making process regarding academic and career pursuits.

Single Item Questionnaire

The single item questionnaire inquired as to the decided or undecided status of the student regarding choice of major and career. This outcome measure was given to the student pre/post administration of the DISCOVER Program, COPS, and MyRoad Inventory.

The Career Blueprint

A five column spreadsheet, the Career Blueprint is an exercise to determine the user’s awareness of interests and desired values of variables associated with the concept of the perfect job. The spreadsheet was developed by William S. Frank, founder of Career Lab, a career strategy and human capital services firm that specializes in career development worldwide. The user is asked to determine the wants, don’t wants, must have details, and the fun/frivolous components of 16 variables that are important to career satisfaction namely, the type of company, the industry, the culture, the people, work tasks, the boss, geography, values, travel, intangibles, the office, politics, fun stuff, emotional
compensation, and benefits. The 4 components for each variable and the 16 variables create a 64 cell matrix for the student to complete. This outcome measure was administered to the student pre/post administration of the DISCOVER program, COPS, and MyRoad Inventory to determine if the self assessment tools made the post Career Blueprint more comprehensive and enabled the student to make a decision regarding major and career pursuits.

Client Satisfaction Inventory

The Client Satisfaction Inventory was developed exclusively for this single subject study. The student was asked to rate the degree of helpfulness of the administered self assessment tools (DISCOVER, COPS, and MyRoad) in the academic and career planning process. The degree of helpfulness was rated on a five item scale (Very Helpful, Helpful, Not Sure, Slightly Helpful, or Not Helpful). This outcome measure was administered to the student post administration of the DISCOVER program, COPS, and MyRoad Inventory to determine if the student felt that the self assessment tools were helpful in making a decision regarding major and career selection.
CHAPTER 5: INVENTORY RESULTS

DISCOVER

The Inventory of Interest, the Inventory of Work-Relevant Activities and the Inventory of Work Relevant Values, as defined in Chapter 3, were completed by the student to explore academic and career pursuits. Based on the input data entered by the student, the DISCOVER program presented a summary recommending that the student explore the following career areas in Hall 4: Employment Related Services, marketing and Sales, management, Health Care, Community Services and Personal Services. Also based on the student’s responses, specific work setting and personal judgment characteristics were listed for review by the student prior to a career search. It was revealed in the work setting characteristics that Benefits, Privileges, and Location were ranked very important. Conversely, being self-employed and working in a fast paced environment were ranked as characteristics that student would avoid in a career. Additionally, the characteristics of advancement, steady raises, caring supervisors, nice co-workers, attractive environments, dressing well, short commute, efficiency, moral values and respected employer were ranked as somewhat important by the student. In terms of personal judgment characteristics, compensation, making a difference, and, time for family and self were very important. Remaining somewhat important was job expertise and job security. These results were discussed with the student in a feedback session.
COPS

After the student completed the COPS Inventory, the data was scored by the administrator. As explained above in chapter 3, the results of the inventory reveal those career clusters in which the student has the most interest. The student scored highest in the area of Business-Management, Arts-Performing and Services-Instructional. She had the highest score for the Service-Instructional cluster. In a feedback session, the student and administrator reviewed these three career clusters and the occupation of interest in the back of the manual.

MyRoad

The MyRoad program, based on data provided by the student in the inventory portion of the “ID Me” section, as defined above in Chapter 3, identified the student’s personality type as ENFZ. This acronym is representative of the student’s ranking of Extraversion, Intuition, Feeling and Organizing. The rank of E for Extraversion is based on the personality traits of being talkative, intrepid, outgoing, and participative. The rank of N for Intuition is based on the personality trait of being visionary. The rank of F for Feeling indicates the student is empathetic and warm. The rank of Z for Organizing reveals that the student is planful and conforming. In a graphical representation of Extroversion, Intuition, Feeling and Organizing, the student was ranked Strong in Extroversion. This indicates that the student answered between 50% and 75% of those questions which would result in a strong Extraversion classification. In the other 3 categories, Intuition, Feeling and Organizing, the student was ranked Clear. This indicated that the student answered between 35% and 50% of those questions which would result in a Clear Intuition, Feeling and Organizing classification. The combination...
of the ranking Strong for Extroversion, within the ENFZ profile, defined the student as being the Communicator. The Communicator classification is associated with those individuals who are social, compassionate and creative. The Communicator requires occupations which interface with people and are associated with duties that pertain to the greater good of society. In a feedback session, the student reviewed the research career section with the administrator to identify those careers of interest that matched The Communicator; specifically, social worker, public health educator, and community services officer.

Feedback Sessions

The client received 3 feedback counseling sessions to review the results from the DISCOVER Program, COPS, and MyRoad, to determine her career plan and to assist with resume preparation.

Feedback Session: #1

In the first feedback session with the student, the results of the three self-assessment inventories were reviewed. She stated that she had never systematically categorized her interests, abilities and values regarding career planning. By taking these self-assessment inventories, she reported being able to organize her thoughts about career planning. Prior to taking the self-assessment inventories, the student felt that her thoughts about her major and career plans were quite scattered and uncertain regarding any direction.

When asked specifically about the results of DISCOVER, the student stated that she could see herself in a management field, an employment field or personnel services field because she had been told by her past job supervisors that she was very responsible, very good with public interaction, and seemed more mature than other individuals her age.
She agreed with the results that benefits and making time for family and self would be very important in her future job search. She also agreed that she would not want to be self-employed or work in a fast-paced environment.

In review of MyRoad, the student remarked that she definitely saw herself as a social being or as a communicator. She stated that she has a need to make sure information is always expressed to others. When asked to clarify this point, she cited an example of settling an argument between two friends using herself as a mediator and that all involved were very impressed with her techniques and skills in this experience. She remarked that she tended to be the organizer in her family relations, her school affiliations, and in her social interactions. With respect to being classified as empathetic and warm, she describes her friendships as very important to her and very long lasting.

When discussing the results of COPS, she stated that she was amazed that her artistic side was revealed. She reported that she had been a dancer during high school and that she had studied ballet and jazz for eight years. She also remarked that she could see herself in business, especially since she has enjoyed her banking experience. However, at the conclusion of this session, the student determined she would be most interested in exploring a career in Student Personnel Services based on the combined results of the inventories. Careers in Student Personnel Services were researched and given to the student for review.

Feedback Session: #2

The second feedback session emphasized designing the student’s career plan. After reviewing the career information on Student Personnel Services, the student decided to continue as an Elementary Education major. Upon graduation from college, she would
then apply to the graduate department at her current college for enrollment into the Student Personnel Services Master’s Program. While researching career options/paths, she discovered that most occupations within the realm of Student Personnel Services require one to two years of teaching experience. Therefore, she will attempt to acquire a teaching position until receiving her Master’s degree. At that time, she will pursue a position as a Student Affairs Administrator at the college level.

Feedback Session: #3

The third session focused on resume writing and cover letter preparation. At the end of this session, with the assistance of the counselor and the information provided from the DISCOVER program and the MyRoad inventory, the student completed a resume and a sample cover letter for use in future career pursuits.
CHAPTER 6: RESULTS OF OUTCOME MEASURES

Single Item Questionnaire

The single-item questionnaire, as defined in Chapter 4, was completed by the student during both the pre/post self-assessment process. The question asks if the student is decided or undecided regarding career and academic pursuits. The student responded that she was undecided prior to self-assessment. After self-assessment, the student was re-administered the questionnaire and she responded that she was decided regarding career and academic pursuits. This indicates that the self-assessment process had successfully moved the student from undecided to decided.

The Career Blueprint

The Career Blueprint, a five column spreadsheet used to determine the user’s awareness of interests and desired values of variables associated with the concept of the perfect job, as defined above in Chapter 4, was administered to the student during pre/post self-assessment. During the pre/self-assessment process, the student entered comments for only 7 out of the 16 variables, which were: The People, Work Tasks and Functions, The Boss, The Values, Fun Stuff, and Emotional. Her answers for these variables were very brief and vague with short phrases. The student only completed 10 of the 28 possible cells for the 7 variables. The majority of the completed cells described The Want components of the variables. Only one category, Emotional, described more than 2 of the components, namely, The Want, Don’t Want and Must-Have components. The inability to complete the Career Blueprint indicated that the student had a low level
of career information which is consistent with Holland’s (1977) finding regarding the undecided student.

After completing the self-assessment process, the student was re-administered the Career Blueprint. In this iteration, the student was able to comment on 15 out of the 16 variables. The Company was the only variable where the student did not offer a comment. Of the 15 variables that contained comments, she described The Want component for 14 variables, The Don’t Want component for 9 variables, The Must-Have component for 8 variables, and The Fun and Frivolous component for 2 variables. In addition, her comments within these cells contained detailed descriptions as opposed to her pre/self-assessment responses which were very brief and vague. This result can be directly attributed to the increase in the amount of career knowledge she obtained from the self-assessment process. Therefore, the self-assessment process can be viewed as a positive one with regard to decision-making in career and academic pursuits.

Client Satisfaction Inventory

The student was asked to complete the Client Satisfaction Inventory, a questionnaire designed exclusively for this study and defined above in Chapter 4, at the completion of the self-assessment process. She gave a rating of Very Helpful to the overall self-assessment process. The student rated the DISCOVER Program as Helpful. With regard to COPS, she assigned a rating of Very Helpful. MyRoad was also rated Very Helpful. Finally, she rated the career advisement as Very Helpful. In reviewing the results of the Client Satisfaction Inventory, it can be concluded that the combination of a self-assessment process rating of Very Helpful, with the rating of Helpful or above for all
three self-assessment tools, is an indication that the self-assessment process is a major component in moving the student from undecided to decided.
CHAPTER 7: SUMMARY AND CONCLUSIONS

The student came to the Career and Academic Planning Center as undecided regarding academic and career pursuits, but left with a clear decision regarding academic and career pursuits. Based on the outcome measures completed by the student, self-assessment was helpful. This information empowered the student with the skills to make decisions. She revealed in the feedback sessions, held after the self-assessment tools were administered, that these tools provided her with insight into her interests, abilities and values that were previously unknown to her. In conclusion, this study revealed that self-assessment tools are effective instruments in aiding undecided students along the journey toward decision of academic and career selection.
REFERENCES


APPENDIX 1
CAREER AND ACADEMIC PLANNING SINGLE ITEM QUESTIONNAIRE

With respect of career and academic pursuits:

a. Would you consider yourself ____decided _____undecided?

b. If undecided, would you be interested in taking self-assessment tests?
   _____yes _____no
CLIENT SATISFACTION INVENTORY

1. How would you describe the self-assessment instruments that were administered to you?
   _____ Very Helpful _____ Helpful _____ Not Sure _____ Slightly Helpful _____ Not Helpful

2. How would you describe the DISCOVER program in your decision making process for academic and career planning?
   _____ Very Helpful _____ Helpful _____ Not Sure _____ Slightly Helpful _____ Not Helpful

3. How would you describe COPS in your decision making process for academic and career planning?
   _____ Very Helpful _____ Helpful _____ Not Sure _____ Slightly Helpful _____ Not Helpful

4. How would you describe MyRoad in your decision making process for academic and career planning?
   _____ Very Helpful _____ Helpful _____ Not Sure _____ Slightly Helpful _____ Not Helpful

5. How would you describe the career advisement you received?
   _____ Very Helpful _____ Helpful _____ Not Sure _____ Slightly Helpful _____ Not Helpful