INDIVIDUAL DIFFERENCES IN DECISION-MAKING STYLES: AN EXAMINATION OF PERSONAL GROWTH INITIATIVE AND COPING IN COLLEGE STUDENTS

by

SHERRY ELIZABETH HAGGINS

(Under the Direction of Diane L. Cooper)

ABSTRACT

The purposes of this study were to: (a) identify differences in decision-making style and personal growth initiative in college students with respect to class standing, race, gender, and age; (b) determine whether coping strategy profiles of college students differ with respect to high or low personal growth initiative; (c) examine the relationship between differences in decision-making styles and level of personal growth initiative relates to differences in decision-making style and coping strategies employed by college students.

The General Decision Making Styles scale, the COPE Inventory, and the Personal Growth Initiative Scale, were administered to 143 undergraduate students during the last month of the fall 2004 semester. Students were enrolled in a section of either first-year/sophomore level classes or junior/senior level classes that were not required but recommended by the University of Georgia.

Individuals with high personal growth initiative reported higher problem-focused and emotion focused coping than individuals with low personal growth initiative. However, personal growth initiative was more strongly linked to problem-focused coping than emotion-focused coping. Findings also revealed that the propensity to use rational and intuitive decision-making styles increase as personal growth initiative increases. Results indicated that the propensity to use avoidant decision-making decreases as personal growth initiative increases.

The knowledge gained from this study will have implications for counselors, student affairs practitioners, and faculty to: (a) assist clients or students in the process of change and growth in order to prepare them for challenges associated with making career and other life decisions; (b) prepare clients or students to cope with and adapt to new circumstances that result from decisions; and (c) enable clients or students to perceive choices and actively choose avenues for growth. The findings also have implications for career development, decision-making, and coping literature.

INDEX WORDS: College Students, Decision-Making Style, Coping, Personal Growth Initiative

INDIVIDUAL DIFFERENCES IN DECISION-MAKING STYLES: AN EXAMINATION OF PERSONAL GROWTH INITIATIVE AND COPING IN COLLEGE STUDENTS

by

SHERRY ELIZABETH HAGGINS

B.A., Wittenberg University, 1999

M.A., The University of West Florida, 2002

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

© 2005

SHERRY ELIZABETH HAGGINS

All Rights Reserved

INDIVIDUAL DIFFERENCES IN DECISION-MAKING STYLES: AN EXAMINATION OF PERSONAL GROWTH INITIATIVE AND COPING IN COLLEGE STUDENTS

by

SHERRY ELIZABETH HAGGINS

Major Professor:

Diane L. Cooper

Committee:

Yvette Q. Getch Pamela O. Paisley Alan A. Stewart

Electronic Version Approved:

Maureen Grasso Dean of the Graduate School The University of Georgia August 2005

ACKNOWLEDGEMENTS

I owe sincerest gratitude to the many individuals who took part in my academic journey. I am forever grateful to Dr. Diane Cooper for accepting the position of academic advisor and all of the responsibilities that this position entailed. I recall my excitement during doctoral interviews when I first met Dr. Cooper. I remember feeling so pleased to meet someone with similar research interests and who showed such enthusiasm about my areas of interest. I genuinely appreciated her style of advising because she provided a sense of trust in my formulation of dissertation ideas, while knowing when to step in and provide the guidance needed for me to stay on course. Her support and encouraging words were paramount to my academic achievements. I continue to hold on to her encouraging reminders of my skill as a writer.

I am grateful for each dissertation committee member, as I learned and developed through hearing their comments and feedback during each stage of the process toward completion of my degree. I extend deep gratitude to Dr. Yvette Getch for her instrumental role in the data collection process of my dissertation. She created a line of communication between me and instructors of classes at the University of Georgia from which I obtained my participants. I am grateful for Dr. Pamela Paisley's insightful comments that challenged me to consider various perspectives. I am thankful for Dr. Alan Stewart's way of framing questions that

iv

helped consolidate ideas in ways that fostered appreciation for the possibilities inherent in various constructs.

I am incredibly grateful to the individuals involved in other aspects of my academic journey outside of dissertation. I appreciate the staff at The Ohio State University who worked to provide a rich internship training experience, and the other interns who helped to make it an enjoyable process. I am truly thankful for having Dr. Brian Glaser as training director at the University of Georgia. His faith in my abilities and undying encouragement helped foster a positive academic experience throughout my time in the program. I am exceedingly grateful for having an amazing cohort at the University of Georgia, and will continue to hold on to the memories and friendships that emerged from that experience.

Through my supervision experiences with Dr. John Dagley and Dr. Gayle Spears, I learned so many things that I will continue to carry with me in my personal and professional journey onward. I am grateful to Dr. Ronald Belter of The University of West Florida who told me "just be yourself", as I prepared for challenges that seemed bigger than myself. I thank Dr. Patricia Kaminski of Wittenberg University who served as mentor and advisor during my early beginnings in research. The role that she played in teaching and preparing me was critical to where I am today.

I thank my family, siblings, and friends for their encouraging support and understanding throughout my pursuit of this degree. I am eternally grateful to my Mother and late Father, for without their love, support, and faith, my education would not be complete. I owe special thanks to my Mother, as she energetically

v

and intensely assumed the role of coach throughout this process. She supported me in my decision to pursue psychology from day one, and has done everything in her power since then to provide encouragement by reminding me of my abilities and the power of God working in my life. While most people are unaware of the many steps and daily challenges associated with working toward this degree, I am tearful as I reflect on my Mother's ceaseless efforts to understand and listen as I shared with her my experience of each hurdle and triumph.

Finally, I thank God for being my source of strength throughout all of life's endeavors. Without Him, this dissertation would not have been possible.

TABLE OF CONTENTS

Page	
ACKNOWLEDGMENTS iv	ACKNO
LIST OF TABLESx	LIST OF
CHAPTER	CHAPTE
I INTRODUCTION1	Ι
Decision Making4	
Identity	
Coping11	
Personal Growth Initiative12	
Significance15	
Operational Definitions15	
Research Questions	
Limitations19	
Chapter Summary20	
II REVIEW OF LITERATURE	II
Decision Making Theory21	
Coping27	
Personal Growth	
Chapter Summary	

Ι	Π	METHOD	
		Participants	34
		Data Collection	
		Instrumentation	
		Data Analysis Notes	41
		Data Analysis Procedures	42
		Chapter Summary	43
]	IV	RESULTS	44
		Analyses	44
		Results of Data Analyses	44
		Chapter Summary	56
	V	CONCLUSIONS	59
		Review of Study	59
		Summary of Findings	60
		Implications for Practice	66
		Limitations and Recommendations for Future Research	67
		Chapter Summary	68
REFE	EREN	NCES	71
APPE	ENDI	ICES	
	А	Institutional Review Board Approval	
	В	Consent Agreement	85
	С	General Decision-Making Styles Scale	
	D	COPE Inventory	91

Е	Personal Growth Initiative Scale	.94
F	Demographics Information	.96
G	Debriefing Statement	.98

LIST OF TABLES

Pa	age
Table 1: Intercorrelations between Coping Styles, Decision-Making Styles, and Persona	al
Growth Initiative	.47
Table 2: Hierarchical Regression Summary of Rational Decision-Making Style	
Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and	
Personal Growth Initiative	.51
Table 3: Hierarchical Regression Summary of Intuitive Decision-Making Style	
Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and	
Personal Growth Initiative	.52
Table 4: Hierarchical Regression Summary of Dependent Decision-Making Style	
Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and	
Personal Growth Initiative	.54
Table 5: Hierarchical Regression Summary of Avoidant Decision-Making Style	
Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and	
Personal Growth Initiative	.55
Table 6: Hierarchical Regression Summary of Spontaneous Decision-Making Style	
Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and	
Personal Growth Initiative	.57

CHAPTER I

INTRODUCTION

Effective decision making is a critical life skill (Loo, 2000). In life, individuals frequently encounter situations that require a decision. From relatively minor decisions to major life altering decisions, individuals make choices that will ultimately affect the rest of their day or the rest of their lives. People vary in their approach to decision-making. This assertion is not surprising given the individual differences that exist with respect to many aspects of human behavior. If outcomes derived from choice are contingent upon decisions made, it seems important to explore possible influences associated with variance in decision-making approaches.

When considering major life decisions, special attention is often given to deciding on a career path. Perhaps this occurs for many people because career involves a combination of values, interests, skills, and abilities that relate to a total life experience. Career indecision has been a significant research topic in career development (Germeijs & Boeck, 2002). While exploration of career decision-making is important, an important topic that is often overlooked is stylistic differences in decision-making that exist long before people formally begin to consider career options. In essence, attention to specific characteristics of the individual that impact decision outcomes is lacking compared to the focus that has been placed on the decision situation and decision task (Scott & Bruce, 1995).

In order to consider individual characteristics that contribute to an overall style of decision-making, it may be important to focus on the various ways in which individuals seek, receive, and process information. Collectively, this perspective represents decision-making style, a construct defined by Harren (1979) as an individual's typical manner of perceiving and responding to decision-making tasks. Decision-making style reflects the amount of information gathered; number of alternative generated; and approach to making sense of that information (Hunt, Krzytofiak, Meindl, & Yousry, 1989; McKenney & Keen, 1974; Mitroff, 1983).

Because information is often derived from experiences or learning opportunities, it is important to consider differences in the extent to which people seek out experiences; approach learning opportunities; and process what is gained from resultant experience. Perhaps such variations are related to differences in how individuals approach life; specifically, whether they are strategic and deliberate in their approach to integrating information, or reactive and unintentional. These differences may be related to the way in which people vary in the degree to which they are oriented toward personal growth or sense of progression as an individual.

Robitschek (1998) described this sense of progression in life as personal growth initiative; an intentional, active engagement in the growth process. Personal growth initiative may be an important construct when it is considered within the context of decision-making, because it encompasses both cognitive and behavioral components. In terms of cognitive processes associated with making decisions, personal growth initiative serves to enhance self-awareness and environmental awareness because of the active, intentional manner in which one gathers information. Behaviorally, personal growth

initiative activates one's ability to maintain intentions and actually execute cognitions (Robitschek).

Furthermore, according to DeCarvalho (1990), individuals who are actively engaged in the personal growth process are better able to perceive choices in the midst of environmental stressors. Therefore, it is important to consider the role of coping style as it pertains to both decision-making and personal growth initiative. Previous research on stress and coping (e.g., Lazarus & Folkman, 1984) has indicated that stress involves appraisal of the perceived threat, followed by appraisal of the potential response that generates a coping process used to execute the chosen response.

Given that personal growth initiative involves an active, intentional approach to life, it may play a role in one's ability to minimize, recover from, or even prevent psychological distress associated with decision-making. Perhaps such individuals could make efforts to alleviate distress (or cope) in an adaptive, intentional manner. Because stress can result from the manner in which information is perceived at the appraisal stage, consider how individuals invested in the personal growth process can adopt a learning frame as opposed to threat frame when faced with challenging or typically stressproducing situations. A similar finding is reflected in career development literature; specifically, proactive coping strategies are positively associated with greater confidence in career decision-making (Heppner, Reeder, & Larson, 1983).

Despite the large body of literature in the specific area of career decision-making, research that addresses the relationship among general decision-making styles, personal growth initiative, and coping, is virtually non-existent. Examining the relationships among the aforementioned constructs could shed light on the ways in which individuals

approach decisions based on their orientation toward personal growth, or approach to encountering and managing life problems. Furthermore, career decision-making literature would benefit from research designed to examine what accounts for the variance in the tendency to actively engage in behaviors that demonstrate a commitment to cognitive decisions regarding career related goals.

Since previous literature suggests that individuals present with a variety of approaches to decision making, the purposes of this investigation were to: (a) identify differences in decision-making style and personal growth initiative in college students with respect to class standing, race, gender, and age; (b) determine whether coping strategy profiles of college students differ with respect to high or low personal growth initiative; (c) examine the relationship between differences in decision-making styles and level of personal growth initiative in college students; and (d) examine how the degree of personal growth initiative relates to differences in decision-making style and coping strategies employed by college students.

Decision Making

Much of the current literature on decision making appears to presuppose that there are no individual differences among decision makers, instead focusing on how the situation and decision conflict affect the decision process (e.g. Kleindorfer, Kunreuther, & Schoemaker, 1993; Payne, Bettmam, & Johnson, 1993). By examining individual differences, one is able to obtain a more complete picture of how the decision-making situation is appraised and what strategies are implemented when approaching decisionmaking tasks.

Failing to examine individual styles could result in a narrow understanding of the decision-making process and a misguided assumption that all individuals react to difficult decisions in a similar manner. Such an assumption would inaccurately suggest that all individuals require similar interventions, rather than approaches that meet the unique needs of each individual. The present study is focused on decision-making style, a characteristic that has received relatively less attention in the decision-making literature and somewhat more attention in the career development and vocational behavior literature.

Harren (1979) defined decision-making style as an "individual's characteristic mode of perceiving and responding to decision-making tasks, or the manner in which the person goes about making decisions" (pp. 124-125). Decision-making style has also been defined as a habitual pattern an individual uses in decision-making (Driver, 1979).

Researchers have also posited that decision-making style is defined by the amount of information gathered and the number of alternatives considered when making a decision (Driver, Brouseau, and Hunsaker, 1990). Other researchers postulate that decision-making style refers to the way in which individuals make sense of the data they gather (Hunt, Krzytofiak, Meindl, & Yousry, 1989; McKenny & Keen, 1994; Mitroff, 1983).

Thunholm (2004) used a broader definition of decision-making style that takes the whole individual into account. Thunholm combined the findings of his own study with results of earlier studies on decision-making style to develop the following definition:

Decision-making style is the response pattern exhibited by an individual in a decision-making situation. This response is determined by the decision-making

situation, the decision-making task and by the individual decision maker. Individual differences between decision makers include differences in habits but also differences in basic cognitive abilities such as information processing, selfevaluation and self-regulation, which have a consistent impact on the response pattern across different decision-making tasks and situations. (p. 941)

Scott and Bruce (1995) have attempted to integrate all earlier work on decisionmaking style by defining it as "the learned, habitual response pattern exhibited by an individual when confronted with a decision situation. It is not a personality trait but a habit-based propensity to react in a certain way in a specific decision context" (p. 820).

Driver et al. (1990) postulated that decision-making style is a habit that is learned and differences result from the amount of information considered and the number of alternatives the individual identifies. He suggested that an individual uses a primary style as well as back up styles. Researchers are divided on the issue of whether decisionmaking approaches reflect consistent styles or a combination of strategies. However, general decision-making literature tends to regard decision making as a strategy rather than a disposition (Beach& Mitchell, 1978; Payne, Bettman, & Johnson, 1992).

The current investigation focuses on Scott and Bruce's (1995) theory because it identified five decision-making styles by drawing from and integrating empirical research from Harren's (1979) decision-making model and Johnson's (1978) decision-making model. The five decision-making styles were defined in behavioral terms as: (a) rational decision-making style, characterized by a systematic search for and logical appraisal of alternatives; (b) intuitive decision-making style, characterized by a reliance on hunches and feelings, as well as attention to details in the flow of information rather than a

systematic search for and processing of information; (c) dependent decision-making style, characterized by a search for advice and direction from others before making important decisions; (d) avoidant decision-making style, characterized by attempts to avoid making decisions when possible; and (e) spontaneous decision-making style, characterized by a sense of immediacy and desire to go through the decision making process as quickly as possible (Bruce & Scott, 1995).

Career Indecision

The focus of the current investigation is on general decision-making styles in college student populations. Therefore, it is important to mention an area of decision making that is particularly relevant to college students: career indecision. Career indecision is considered to be a complex construct by a number of researchers (Larson, Heppner, Ham, & Dugan, 1988). Two different forms of decision-making patterns have emerged from previous research on vocational decision making: 1) undecidedness as the product of a normal stage of human development (Chartrand et al., 1993); and 2) chronic indecisiveness, the product of an abnormal stage of development (Callahan & Greenhaus, 1992). Noting the distinction between these two sources of indecision is important because the latter will likely require a different career counseling approach.

Salamone (1982) found that indecisiveness was common among individuals who possessed certain personality characteristics such as high levels of frustration and ambivalence, externalized locus of control, low self-esteem, tendency to blame others for their situation, helplessness, and unclear sense of separate identity. This finding lends support to the argument that individual differences play an important role in decision-

making. Such stylistic differences may be a reflection of differences in decision-making style.

Chronic indecisiveness extends beyond simply not deciding on a major and a career and generalizes across other dimensions of one's life that demand decision-making (Crites, 1969; Osipow, 1999). While career indecision can represent a normal stage of human development or reflect a need for information, career indecisiveness arises from excessive anxiety or other types of personal problems (Chartrand et. al, 1993; Goodstein, 1965; Tyler, 1961). In fact, Holland and Holland (1977) used the term "indecisive disposition" to describe a life history that is devoid of a sense of identity and ability to cope with vocational decision-making.

Recall that decision-making involves the method by which information is gathered and how it is processed. An individual who is ambivalent is likely to process information much differently than an individual who is determined and purposeful. A strong tendency to externalize will likely affect how one gathers information and lead to decision-making that is based on a perspective that is askew. A feeling of helplessness may lead to low motivation in gathering information, and result in a self-defeated attitude when processing the information gathered. Finally, a person who lacks a clear sense of identity may have an unstable perspective when gathering information and feel uncertain about how to evaluate the information because values and other characteristics that make up a solid identity have not been clarified (Haggins& Cooper, 2003).

Identity

Given Salamone's (1982) assertion that indecisiveness is linked to an unclear sense of identity, it seems important to consider identity as an important construct in

understanding decision-making. Chickering and Reisser (1993) conceptualized identity development mainly as resolving crises. Young adults develop high self-esteem and develop a strong ego by facing crises and making commitments with continuing reformation throughout adulthood.

Josselson (1987) articulated identity as the integration of personality parts with the social world, resulting in a sense of significant relatedness to the real world as well as a sense on internal consistency. Josselson postulated that by focusing on comfort with appearance/body, sexual orientation, and gender; sense of self within a cultural, historical, and social context; self-concept clarification through life-style and life roles; sense of self in reaction to feedback from others whom one values; self-esteem and selfacceptance; and integration and personal stability, one could observe the components that make up a solid sense of self.

Recall that chronic indecisiveness generalizes across all areas of one's life. Now consider the impact of chronic indecisiveness on a young adult who is confronted with crises that he or she must resolve by making important life decisions. How will he or she establish the inner sense of consistency that Josselson (1987) described?

Identity Formation

According to Chickering and Reisser (1993), "forming an identity involves reexamining belief systems about a larger reality, about our place in the universe, meaning of life and death, and our purpose for being here (p. 207)." Knefelkamp, Widick, and Parker (1978) suggested that identity formation requires experiences that help individuals clarify their attitudes, interests, and skills, thus aiding them in making commitments.

Decision-making involves information gathering and information examination (Johnson, 1978). Therefore, it is important to consider that the decision-making style an individual adopts when taking in and examining various life experiences could influence the commitments to be either solid and clear, or weak and ambiguous. From an ego identity perspective, variations in decision making may be a reflection of the way in which individuals resolve various developmental tasks of late adolescence and early adulthood (Harmon & Farmer, 1983; Miller-Tiedeman, 1980).

Ego Identity

Research that has applied Erikson's (1968) identity versus identity diffusion theory have postulated that the major developmental tasks during late adolescence involve exploration of aspects of ones identity which culminate in a commitment to consistency or an inner sense of stability called ego identity (Marcia, 1966).

Marcia (1966, 1980) operationalized identity formation by conceptualizing four categories of identity based on two main dimensions from Erikson's framework. These dimensions include: presence or absence of a crisis period (exploration) and commitment period (commitment to belief system).

Researchers have determined that differences in decision-making styles are related to ego identity statuses (Blustein & Phillips, 1990). Specifically, individuals who have achieved a stable identity (explored and committed to ego identity) tend to adopt a systematic, rational approach to decision-making, while persons with foreclosed identity generally endorsed dependent decision-making strategies. Individuals with diffused identity (lacking exploration and commitment) exhibited a reliance on dependent or

intuitive styles and absence of internal or more systematic approaches to decision making.

Coping

Research on differences in coping style and its relationship to self-exploration has further aided in understanding decision-making. Crystallization and prioritization of values in preparation for decision-making is reflective of self-exploration. An individual's approach to self-exploration (active or passive) varies based on his or her coping style (problem-focused or emotion-focused) (Haggins & Cooper, 2003).

Coping has relevance to personal growth initiative and decision-making. Individuals who are intentionally engaged and aware of the process of becoming are likely able to choose the manner in which they will overcome obstacles, learn from experiences, and grow from challenges. Thus, a closer examination of self-exploration and values is warranted.

Self-Exploration

To execute proactive coping responses, it is important for individuals to engage in a self-reflection and evaluation (Salomone & Mangicaro, 1991). If proactive coping responses are not activated, one could respond to transition passively or impulsively and have an insufficient understanding of and approach to the problem situation. Beyond selfreflection is the importance of assimilating information gained through experiences.

Assimilation of experiences is important during adolescence, as identity is beginning to take shape. However, if areas of self-concept are in conflict, one's development of an integrated personality is delayed (Super, 1957). Furthermore, a person who is clarified with respect to values is more likely to exhibit purposeful behavior that

reflects self-actualization as identified in Maslow's hierarchy of needs theory (Kinnier, 1995).

Values

Examination of values is relevant to understanding decision-making because making choices that match values is at the core of achieving satisfaction. Values represent needs and determine the ways in which needs are met, thereby providing standards of behavior that lay the groundwork for setting goals (Rokeach, 1973).

Furthermore, "needing (lacking, wanting) something leads to valuing something that seems likely to meet that need" (Super & Sverko, 1995, p.55). This assertion highlights the importance of examining needs when seeking to understand human motivation and personal growth initiative. Individuals are able to set goals and effect action necessary for achieving goals when they identify opportunities that relate to their values (Brown & Crace, 1995). Brown and Crace considered values to be "cognitive filters" through which one perceives and evaluates extrinsic reinforcers. These findings drawn from existing literature provide further support for the importance of understanding individual differences in decision-making style and the influence of coping and personal growth initiative.

Personal Growth Initiative

Exploratory activity is associated with characteristic differences in the way in which individuals develop and sustain motivation (Blustein, 1988). Therefore, it seems necessary to take into account an orientation toward growth and exploration (or personal growth initiative) when examining decision-making.

According to Thunholm (2004), decision-making style involves the ability to initiate and maintain intentions and engage in self-evaluation. Personal growth initiative is defined as "active, intentional engagement in the process of personal growth (Robitschek, 1998, p. 184). Intentionality involves being skilled in "consciously choosing priorities, in aligning action with purpose, in motivating oneself consistently toward goals, and in persevering despite barriers or setbacks" (Chickering & Reisser, 1993, p. 212).

It is important to consider both cognitive and behavioral components of decisionmaking. Some individuals may believe on a cognitive level that they are capable of doing many things, but the task of committing to that decision behaviorally may render them immobilized to intentionally move in one direction or another. Personal growth initiative includes both cognitions and behaviors. While self-efficacy is a construct that is often positively associated with career development (Bandura, 1977), it refers only to cognitive beliefs. The behavioral component enacts the motivation to actually implement the cognitions across growth domains. By including the behavioral piece, everyday activities or behaviors that an individual chooses to engage in are taken into account.

It is important to understand to what extent such behaviors are purposeful, planned actions that are in some way related to major life goals. "People who integrate their major life goals and their everyday goals by focusing on growth are in a unique position to have higher levels of personality development" (Bauer & McAdams, 2004, p. 125). Thus, it is possible to postulate that individuals who have a personal orientation toward growth and development tend to adopt a decision-making style that is systematic.

These individuals will likely make short-term decisions that are somehow related to long term goals.

Sense of purpose

Chickering and Reisser (1993) suggested that by setting priorities and making plans of action that integrate vocational plans/aspirations, personal interests, interpersonal and family commitments, and increasing the degree of intentionally implementing will on a daily basis, one is able to develop purpose. According to Miller, Galanter, and Pribram (1960), developing purpose involves a growing ability to assess interests and options, clarify goals, formulate plans, persist in the face of obstacles, and possess an intentional way of being.

It is important to note that intentionality suggests a more rational or systematic approach to decision making, rather than a spontaneous approach. Individuals who are able to integrate personal interests and interpersonal or family commitments are probably less likely to have adopted a dependent decision-making style.

Self-Actualization

Maslow (1954; 1962; 1971) was the forerunner in studying characteristics of selfactualization, autonomy, self-realization, self-development, and growth. He challenged the field of psychology to consider individuals in terms of what they have the potential to become, as opposed to what they currently are. Maslow (1970) defined self-actualization as "the full use and exploitation of talents, capacities, potentialities, etc...They are people who have developed or are developing to the full stature of which they are capable" (p. 150). Rogers (1951) pioneered strategies for helping individuals develop healthy personalities. A significant movement initiated by Abram Maslow and Carl Rogers, among others, emerged in the 1950's and became known as *humanistic psychology*. The approach emphasized emotions, beliefs, abilities, values, and healthy characteristics. Humanistic psychology continues to be a core force today in the field of psychology.

Significance

The knowledge gained from this study will have implications for counselors, student affairs practitioners, and faculty to: (a) assist clients or students in the process of change and growth in order to prepare them for challenges associated with making career and other life decisions; (b) prepare clients or students to cope with and adapt to new circumstances that result from decisions; and (c) enable clients or students to perceive choices and actively choose avenues for growth.

According to Gelso & Fretz (1992), teaching individuals the skills needed to have a fulfilling and productive life is one of the basic tenets of the field of psychology; therefore personal growth initiative is likely to be an important construct to counseling. Researchers postulate that personal growth orientation may influence levels of psychological functioning, wellbeing, and distress (Robitschek, 1998; Robitschek & Cook, 1999). Finally, the conclusions and outcomes of this investigation can be beneficial to the participating institution because the data apply directly to its students.

Operational Definitions

It is important to differentiate between theoretical and common understandings of the concepts that were investigated in the current study. The following definitions guided the present research:

- Decision-making style "the learned, habitual response pattern exhibited by an individual when confronted with a decision situation. It is not a personality trait but a habit-based propensity to react in a certain way in a specific decision context" (Scott & Bruce, 1995, p. 820). "Individual differences between decision makers include differences in habits but also differences in basic cognitive abilities such as information processing, self-evaluation and self-regulation, which have a consistent impact on the response pattern across different decision-making tasks and situations" (Thunholm, 2004, p. 941).
- Rational decision-making style a planful, logical approach to evaluating alternatives (Harren, 1979; Johnson, 1978; Scott & Bruce, 1995).
- Intuitive decision-making style attention is focused on present feelings and hunches with little systematic information-seeking behavior, resulting in a decision that is reached relatively quickly (Harren, 1979; Scott & Bruce, 1995).
- Dependent decision-making style the degree to which the decider places the responsibility for making decisions on others, characterized by a tendency to seek advice and direction from others before making important decisions (Harren, 1979; Scott & Bruce, 1995).
- 5. Avoidant decision-making style refers to an individual's attempts to avoid decision-making (Scott & Bruce, 1995).
- Spontaneous decision-making style a sense of immediacy and desire to go through a decision making process a quickly as possible (Scott & Bruce, 1995).

- Problem-focused or task oriented coping style (active approach) when a
 person tackles a stressor directly in an attempt to adjust the cause of the
 stressor (Endler & Parker, 1990). It typically predominates when individuals
 believe that something productive can be done to address the problem
 (Folkman & Lazarus, 1980; Carver, Scheier, Weintraub, 1989).
- Emotion-focused coping style (passive approach) involves dealing with one's emotional reaction to the stressor (Endler & Parker, 1990). It usually predominates when individuals believe that they must endure the stressor (Folkman & Lazarus, 1980; Carver, Scheier, Weintraub, 1989).
- 9. Personal growth initiative or personal growth orientation "active, intentional engagement in the process of personal growth" (Robitschek, 1998, p. 184).
- 10. *Career indecision* indecision about a major or career that represents the product of a normal stage of human development (Chartland et al, 1993).
- 11. Career indecisiveness persistently extends beyond simply not deciding on a major and career, representing an abnormal stage of development. It generalizes across other dimensions of one's life that demand decision-making (Crites, 1969; Osipow, 1999).
- 12. Identity the development of high self-esteem and strong ego by young adults facing crises and making commitments with continuing reformation throughout adulthood (Chickering and Reisser, 1993). It is the integration of personality parts with the social world, resulting in a sense of significant

relatedness to the real world as well as a sense of internal consistency (Josselson, 1987).

13. Ego identity - the major developmental tasks during late adolescence involve exploration of aspects of ones identity which culminate in a commitment to consistency or an inner sense of stability (Marcia,1966)

Research Questions

This investigation addressed the following research questions (RQ):

RQ 1: Are there differences in personal growth initiative with respect to class standing, race, gender, and age?

RQ 2: Do the coping strategy profiles of high and low personal growth initiative respondents differ?

RQ 3: Are there differences in decision-making styles employed by college students with respect to class standing, race, gender, and age?

RQ 4: Is there a relationship between the degree of personal growth initiative and decision-making style employed by college students?

RQ 5: Is there a relationship between the degree of personal growth initiative and rational decision-making style after controlling for potential effects of problem-focused coping and emotion-focused coping?

RQ 6: Is there a relationship between the degree of personal growth initiative and intuitive decision-making style after controlling for potential effects of problem-focused coping and emotion-focused coping

RQ 7: Is there a relationship between the degree of personal growth initiative and dependent decision-making style after controlling for potential effects of problem-focused coping and emotion-focused coping?

RQ 8: Is there a relationship between the degree of personal growth initiative and avoidant decision-making style after controlling for potential effects of problem-focused coping and emotion-focused coping?

RQ 9: Is there a relationship between the degree of personal growth initiative and spontaneous decision-making style after controlling for potential effects of problem-focused coping and emotion-focused coping?

Limitations

This investigation can contribute to the body of literature concerning decision making, career decision making, personal growth orientation, and coping in significant ways. As with any study, there are limitations to the generalizability of the findings. The study's reliance on self-report data for all three constructs is a limitation. In using selfreport data, it is important to recognize that participants may not have responded truthfully to all questions. Instead, they may have responded in a socially acceptable fashion or in way that they believe matches the researcher's expectations. There is also the possibility that participants lacked the reflective ability or self-awareness required to accurately respond to questions regarding decision-making, coping, and personal growth.

There are other factors that can possibly influence constructs that were examined in this investigation. Socioeconomic status, race/ethnicity, sexual orientation, identity development, and academic ability are some of the many possible factors that are not controlled for in this study, and thus, these or other variables could affect results.

Chapter Summary

Results of this investigation can benefit college students, counselors, student affairs practitioners, faculty, decision-making literature, and career development literature. The findings can have positive implications for helping professionals who work with a variety of individuals who present different approaches to career decisionmaking. Examining the degree of personal growth orientation in college students is likely to contribute to a better understanding of the person's sense of direction, purpose in life, tendency to set life goals, and likelihood of intentionally engaging in behaviors that effect movement in a chosen direction.

CHAPTER II

REVIEW OF LITERATURE

The current study addresses three core concepts: decision-making styles, coping, and personal growth initiative. The three aforementioned areas have been addressed in the literature to varying degrees. The general topic of decision-making, as well as the topic of coping, represents areas that have been examined extensively in the literature. Personal growth initiative, however, has only recently emerged as an area of study; therefore, it represents the smallest body of associated research out of the three areas that will be examined in the current investigation. The current study will focus on personal growth initiative and coping as they relate to decision-making styles in college-student populations.

Decision Making Theory

The manner in which individuals come to conclusions after processing information can be conceptualized using frameworks or decision-making models. A decision-making model takes into account the decision situation and any pertinent information that the individual possesses both internally and externally.

The decision-making concepts are arranged according to the functions that the information will serve. Several outcomes are generally anticipated from alternative actions. The outcomes are characterized by the value or significance to the decision-maker, and probability of future occurrence. If the decision-maker is to identify and commit to a useful course of action, he or she implements a strategy to organize the information (Jepsen & Dilley, 1974). Decision-making models address internal

psychological processes more specifically than career development models, which tend to be broader in scope with minimal focus on the variation that exists in the decisionmaking process.

Harren's Theory of Decision-Making Styles

In Harren's (1979) decision-making model, he included a "characteristics" parameter that represents the self-concept and style of decision-makers. Central to self-concept in this model is self-esteem and identity, which collectively refers to one's vocational self-concept. "Style refers to the individual's characteristic mode of perceiving and responding to decision-making tasks, or the manner in which the person goes about making decisions" (Harren, 1979, pp. 124-125).

Harren (1979) described three decision-making styles: rational, intuitive, and dependent. Rational decision-making style involves taking personal responsibility for decisions and is distinguished from the other styles because it takes into account the consequences of prior decisions in making future decisions. The individual who has a rational decision-making style anticipates future situations, intentionally seeks information, and makes decisions in a deliberate, sequential manner.

Intuitive decision-making style also involves taking personal responsibility for making decisions, but it is characterized by an attendance to personal emotions, present feelings, and fantasy. This style does not involve as much information seeking, logical examination of consequences, and anticipation of the future as the rational style. The intuitive style is not as consistently effective as the rational style because the person reaches a commitment based on internal feelings that generally fluctuate over time.

The dependent decision-making style involves the projection of responsibility for decision making onto others. Individuals with a dependent decision-making style are heavily influenced by external expectations and are therefore more likely to seek social approval due to passivity and compliance. Persons who possess a dependent style and have a tendency to be emotionally unstable are more prone to report emotional barriers when faced with career decision (Chartrand et al., 1993). The dependent style can serve to reduce anxiety in the short-term, but can lead to personal dissatisfaction in the long-run (Harren, 1979).

Johnson's Theory of Decision-Making Styles

According to Johnson (1978), making a decision involves attitudes, perceptions, information, and thoughts. In his individualistic model of decision-making styles, Johnson grouped the phenomena of making decisions into two factors: gathering information and analyzing information (1978). Johnson found that there are two basic processes in which individuals gather information: spontaneous or systematic. The two processes are distinguished from one another based on the way in which the person reacts to events, makes commitments, and is oriented toward goals. These processes represent internal, psychological processes rather than observable behavior. Johnson believed that while an individual's psychological process or style will remain the same, his or her actual behavior may change to adapt to different situations (1978).

Spontaneous decision-making style is reflective of individuals who react to a total experience rather than breaking the experience down and reacting to each piece of it separately. While a spontaneous individual is likely capable of breaking an experience down and verbalizing it, their first inclination is to react to the whole situation (e.g. a

spontaneous individual would consider that a particular occupation was either good or bad rather than considering that he or she liked certain tasks but disliked the work environment). In essence, this type of reaction to events can lead to generalizing present feelings while discounting other information that could be used to help with future plans. Conversely, individuals who possess a systematic style are likely to collectively react to events by breaking them into parts.

Individuals who possess a spontaneous style are also likely to form quick psychological commitments because they personalize the alternatives in order to evaluate them (e.g. the individual says "I could see myself as a pharmacist and I am going to pursue a career in pharmacy" even though he or she knows very little about what the position actually entails). These types of commitments may change just as quickly as they were established. This typical manner in which the individual goes about determining how he or she feels about alternatives is characteristic in all aspects of his or her life, which may make the person appear to be "wishy-washy" (Johnson, 1978).

Individuals with a systematic style on the other hand, are characterized by their tendency to make more cautious psychological commitments, by evaluating alternatives before selecting the one they are going to personalize. Rather than psychologically committing to the action and then gathering more information (spontaneous style), the systematic style involves gathering the data before psychologically committing to an action.

Individuals with a spontaneous style are likely to move from thought to thought or goal to goal with out consciously realizing it. Conversely, individuals who possess a systematic style are more methodological in their approach to goal orientation. Such

individuals progress from idea to idea or goal to goal in a deliberate manner. These individuals are aware of the goals they are setting and tend to prefer to establish longterm goals, even though they are capable of changing their plans or being flexible should the need arise.

Johnson (1978) also found that individuals differ in the way in which they analyze the data they receive. He termed the two processes for analyzing data as being either internal or external. Individuals characterized as having an external style tend to think aloud, by verbalizing the data they have gathered to others or to themselves, before making a decision. Individuals characterized as having an internal style prefer to think about things before they discuss them, in other words, talking about things only after they have thought about them.

Decision-making literature that focuses on individual differences often makes reference to variations in cognitive style. This is because decision-making style is closely related to cognitive style. Cognitive style in the context of decision-making typically refers to individual thinking practices critical to understanding decision processes (Hunt, Krzystofiak, Meindl, & Yousry, 1989). According to Mitroff (1983), cognitive style is the method by which individuals take in data from the external world and then make decisions based on that data.

Jung's Psychological Types

Many researchers have cited Jung's (1976) work on psychological types. Attitudes and functions are the two elements that form the basis for Jung's (1976) typology. Function is divided into perception tasks (sensing and intuition) and judgment tasks (thinking and feeling). Anderson (2000) postulated that Jung's typology can be
viewed as affirming that judgment and perception tasks determine an individual's decision-making style.

Scott and Bruce's Integrated Research on Decision-Making Styles

The current investigation focuses on the five decision styles identified by Scott and Bruce (1995). Their research is based on rational decision-making style, intuitive decision-making style, dependent decision-making style, avoidant decision-making style, and spontaneous decision-making style. Scott and Bruce define decision-making style as a "habitual response pattern exhibited by an individual when confronted with a decision situation" (1995, p. 820). The theory is comprehensive and integrates prior empirical research on decision-making styles.

Previous research indicates that rational decision-making style is associated with more effective decision making (Tiedeman, 1961; Miller & Tiedeman, 1972), active planning and information-gathering behaviors (Jepsen, 1974), enhanced progress in certain career decision making tasks (Harren, 1979), and a higher level of vocational maturity. Lunneborg's (1978) results yielded a negative correlation between a dependent style and self-concept crystallization, and a moderate positive correlation between a planning style and self-concept crystallization. However planning style was more positively related to the later stages of career decision making, and more negatively linked to early stages of career decision making.

Dependent decision making style was found to correlate negatively with occupational certainty and satisfaction. Scott and Bruce's (1995) further supported previous findings that decision making style is reflective of individual cognitive style, and that people tend not to rely on only one decision-making style. Instead, people appear

to use a combination of decision-making styles when making decisions. They also found that avoidant and rational decision-making styles were negatively correlated, supporting Phillips, Pazienza, and Ferrin's (1984) finding that rational decision makers have a tendency to approach problems rather than avoid them.

Coping

Problem Solving

The issue of coping is relevant to the current investigation because proactive coping strategies characterize effective self-appraised problem solving (Larson, Piersel, Imao, & Allen, 1990; MacNair & Elliot, 1992), which is positively related to greater confidence in career decision-making (Heppner, Reeder, & Larson, 1983). Chartrand et al. (1993) theorized that an individual who prefers to use a rational career decision-making style is probably goal-directed, emotionally stable, and tends to approach problems rather than avoid them.

A person who prefers to use an intuitive decision-making style is likely to selfreport that they are not persistent or generally organized and that they avoid problems rather than approach them. An individual who prefers to execute a dependent decisionmaking style is probably anxious and has difficulty exploring or tolerating the unfamiliar. Scott and Bruce's (1995) finding that dependent decision makers were more likely than rational or intuitive decision makers to avoid making decision is also consistent with Harren's (1979) theory that dependent decision makers are avoidant and relative passive when it comes to decision making.

Coping Theory

In 1966, Lazarus began a line of research addressing stress and coping that has grown and remained ever present in the literature. Lazarus theorized that stress involved a primary appraisal of a perceived threat, followed by a secondary appraisal of a potential response, resulting in a coping process to implement the selected response. Folkman and Lazarus (1980) operationalized the coping process by distinguishing between problemfocused coping and emotion-focused coping.

Problem-focused coping refers to an individual's attempt to somehow alter his or her environment or source of stress. This type of coping style tends to predominate when the person believes that something constructive can be done to rectify the problem. Emotion-focused coping refers to an individual's attempt to respond emotionally in a manner that eases distress. This type of coping style usually predominates when the person feels that the stressor must be endured and that there is nothing constructive that can be done to address the problem (Folkman & Lazarus (1980).

In assessing coping behavior it is possible to focus on an individual's disposition or stable coping style that tends to be employed in most stressful situations across a variety of circumstances (Carver,Weinbraub, & Scheier, 1989). Levy (1983) postulated that traits can be used to explain human behavior because personality dispositions are consistent and stable. "Traits represent the probability of an individual's engaging in certain behaviors under certain circumstances; and, in a sense, they are explanatory constructs" (Chartrand, et. al., 1993). Digman (1990) pointed out that family influence and heritage can contribute to the many differences in personality traits. It is also possible to examine coping from a situational standpoint by focusing on how the individual has

reacted during a specific time (Carver, et al., 1989). For the purposes of the current study, dispositional coping behavior will be assessed. Previous findings which involved research that examined individual differences, suggest that coping dispositions and personality traits both play roles, perhaps complementary roles, in situational coping (McCrae & Costa, 1986; Carver, et al., 1989).

Personal Growth

The likelihood of making an effective decision is increased when information is gathered and processed in a way that enhances awareness about one's environment and oneself (Greenhaus, Callanan, & Godshalk, 2000; Harren, 1979; Super, 1980). Differences in decision-making strategies may lead to variance in how much and what kind of information individuals look for, as well as how much awareness they attain about themselves and the environment. Singh and Greenhaus (2004) postulated that the differential effectiveness of decision-making styles is a "function of differences in the awareness of oneself and one's environment that are associated with each strategy" (p. 202). Greenhaus et al. (2000) defined awareness in this context as being a relatively accurate and complete perception of the characteristics of the environment and of one's own qualities.

An examination of personal growth is relevant to this study because individuals are better able to perceive choices when faced with environmental pressures if they are intentionally engaged and aware of the process of becoming, thus being able to actively choose the manner in which they will grow and follow through with their choices (DeCarvalho, 1990). Personal growth is defined as "an individual's sense of ongoing growth and progression as an individual" (Whittaker & Robitschek, 2001, p. 420).

Prochaska and DiClemente (1986) posited that personal growth is the affective, behavioral, and cognitive change that occurs within a person. From a developmental perspective, the individual is not usually aware of when personal growth or change is occurring (Robitschek, 1998). Prochaska & DiClemente (1986) theorize that environmental, developmental, or intentional processes can prompt personal growth.

If personal growth is prompted by environmental factors, such as regaining strength following the death of a loved one, growth is likely to ensue even though the bereaved may resist this type of growth. Alternatively, the individual is fully aware when growth occurs as the result of an intentional process, such as, feeling dissatisfied with a current career and taking the appropriate steps to pursue another career. Prochaska & DiClemente (1986) termed this "intentional change" and theorized that it is organized into stages that can be explained to clients to enhance their understanding of change and increase their ability to employ identifiable methods for continued growth.

Personal Growth Initiative

Personal growth initiative is the "active, intentional engagement in the process of growth...a metcognitive construct, an awareness and control of intentional engagement in growth enhancing cognitions and behaviors in all areas of life" (Robitschek, 1998, p. 184). It includes two components: cognitive and behavioral. The cognitive component refers to knowing how to change specific aspects of one's life, and it involves the cognitive component of self-efficacy such as attitudes, values, and beliefs. For example, "I know how to change specific things that I want to change in my life" (Robitschek & Cook, 1999, 128).

Personal growth initiative also considers how these cognitions and initiation of changes are actually executed across growth domains by looking at behavioral components (Robitschek, 1998; Whittaker & Robitschek, 2001). An example of behaviors that would enact the motivation to change is: "If I want to change something in my life, I initiate the transition process." (Robitschek & Cook, 1999, p. 128). Prochaska and DiClemente's (1992) preparation stage is incorporated into the personal growth initiative because this stage represents a readiness to change a behavior.

Higher levels of personal growth initiative have been found to correspond positively with psychological wellbeing (Robitschek & Kashubeck, 1999), as well as a stronger tendency to explore possible vocational environments and possess a more crystallized occupational identity (Robitschek & Cook, 1999). Lower levels of personal growth initiative have been found to correspond positively with psychological distress (Robitschek & Kashubeck, 1999) and a less crystallized occupational identity (Robitschek & Cook, 1999).

Personal growth initiative is also important to include in this investigation because it may play a role in one's ability to minimize, recover from, or even prevent psychological distress associated with decision making. Therefore, a higher level of personal growth initiative might provide one with the resiliency required to better recognize the problems that the distress is causing and make efforts to alleviate distress in adaptive ways by engaging in active, intentional processes (Robitschek & Kashubeck, 1999). Recall that decision-making style involves not only self-evaluation, but also the capacity to initiate and maintain intentions (self-regulate) (Thunholm, 2004).

Role of Values and Self-Awareness

Young & Witmer (1985) refer to values as elements one believes in or prefers that aids in achieving a sense of purpose or meaning in life and serves to guide one's approach to making choices. Gorden Allport postulated that if the decision-maker is clear about his or her own internal values, visions, and priorities "decisions on specific issues (would) automatically follow" (p.76).

Self-awareness is introduced along side values in this section because it is likely that self-awareness is necessary to define values. Maslow stated that life is a continual series of choices and every person is in part his or her own project and therefore makes him or herself (1968).

Values and self-awareness converge with respect to growth, which is "a progressive process to increase that which already exists and to create that which is new for the purpose of enhancing the well-being of the individual. Growth refers to a personal change in a desired direction" (Witmer, 1985, p. 22). A person demonstrates growth when he or she becomes more capable and knowledgeable; productive and creative; discerning and insightful; responsive and appreciative; responsible to others; and accepting of self (Witmer).

Chapter Summary

Decision-making and coping are well established topics in the current literature; however, the possible relationship with personal growth initiative is less understood and under-explored until now. The aforementioned constructs speak to the importance of viewing healthy personality as more than the absence of mental illness. The concept of human potential is not new; particularly considering the humanistic psychology

movement, which emerged in the early 1950's. It emphasizes human strengths and possibilities, fostering a shift from the preoccupation with unhealthy behavior to focus on development of psychologically healthy behaviors.

CHAPTER III

METHOD

The purpose of this chapter is to describe and identify the individuals participating in this study, explain the plan for data collection, discuss instrumentation, outline the research design, and describe data analysis procedures.

Participants

Undergraduate college students from a large southeastern university (n=143) participated in the present study. There was no inclusion or exclusion criteria for the participants. Participants came from 20 sections of first-year/sophomore level classes, and 6 sections of junior/senior level classes that were not required but recommended by the institution. Participation in this study was completely voluntary. Utilizing participation in this study as an optional opportunity for students to earn extra credit was at the instructor's discretion. The project was reviewed and approved by the University of Georgia Institutional Review Board for Human Subjects (see Appendix A).

The researcher informed the instructors that if they choose to offer extra credit to their students for participating in this study, they must also provide a non-research alternative for students to earn extra credit. The alternative extra credit assignment was to be equivalent to the research participation in both time and effort required. For this study, that meant students choosing the alternative extra credit assignment should spend approximately 15-20 minutes on the assignment. The researcher provided suggestions to

the instructors for the non-research option, but they had the option to develop their own extra credit alternative.

Data Collection

The instruments chosen for this investigation were: the *General Decision Making Styles* scale (GDMS) (Scott & Bruce, 1995) (see Appendix C), a 25-item decisionmaking styles measure; the *COPE Inventory* (COPE) (Carver, Scheier, & Weintraub, 1989) (see Appendix D), a 60-item coping behavior measure; the *Personal Growth Initiative Scale* (PGIS) (Robitschek, 1998) (see Appendix E), a 9-item personal growth orientation measure; and a demographics questionnaire (see Appendix F). The instruments were placed on a data collection website: www.surveymonkey.com.

The data collection website allowed for on-line administration of the questionnaires. The researcher collected the data by providing the instructors of the participating classes with information to relay to students about accessing the on-line surveys, and a brief explanation of the research and its purpose. Students were invited to complete instruments on decision-making styles, coping, and personal growth orientation.

Students interested in participating in the study were informed of procedures for consulting webpage designed for the study and follow the links. Once participants entered the website, they were linked to an informed consent page (see Appendix B) that described the nature of the study, what the research would involve, and the terms of their participation (that it will take about 15-20 minutes). After reading the consent form and pressing the submit button indicating their understanding and consent of the informed consent document, the participants were linked to the first of three research surveys

followed by the demographic questionnaire. After completing the demographics questionnaire, participants were linked to a debriefing page (see Appendix G) which provided information about the study and thanked them for their participation. Each participant took part in one testing session that was approximately 15-20 minutes in length.

The participants' responses to the questionnaires in this study were confidential. No one except the investigator was allowed to view/see the dataset that contained participants' names. If the participants' instructor had chosen to use this study as an optional extra credit assignment, the researcher submitted the names of participants to their instructors so that they could be awarded extra credit. The researcher did not require completion of a certain percentage of questions for participating students' names to be submitted to instructors.

After data collection was complete, the author safely and confidently entered and stored the data into a statistical database. Once data was in the statistical database, the dataset was cleaned, edited, and analyzed, at which point the participant names were taken out of the data base. The data was archived in electronic format without participant's names. Before completing the research, participants were informed that only the researcher would have access to the data file wth their names. The participants were also informed that while completing or submitting their survey, the confidentiality of their responses would be limited to the level of privacy or confidentiality provided by the internet.

Instrumentation

Decision-Making Style

Decision-making style was assessed with the General Decision-Making Styles Scale (GDMS) (Scott & Bruce, 1995) which ascertains the characteristic differences in how individuals approach important decisions and choices. The GDMS was selected for use based on its sufficient reliability and validity statistics and relevance to research questions. The GDMS is composed of 25 items that are evenly distributed among five decision-making styles: Rational, Intuitive, Dependent, Avoidant, and Spontaneous. The GDMS yields separate scores for each of the five decision-making styles

Participants respond in a five-point Likert scale format, ranging from strongly disagree to strongly agree. The frequency with which the participants use each of the five decision-making styles is indicated in their responses.

The definitions for each of the decision-making styles measured by the GDMS are as follows:

- *Rational:* "a thorough search for and logical evaluation of alternatives" (Scott & Bruce, 1995, p. 820).
- 2. Intuitive: "a reliance on hunches and feelings" (Scott & Bruce, 1995, p. 820).
- Dependent: "a search for advice and direction from others" (Scott & Bruce, 1995, p. 820).
- 4. Avoidant: "attempts to avoid decision making" (Scott & Bruce, 1995, p. 820).
- 5. *Spontaneous*: a sense of immediacy and desire to complete decision making as soon as possible (Scott & Bruce, 1995).

Since the items were drawn from previous empirical research, the GDMS is considered to have logical content validity and face validity (Scott & Bruce, 1995). GDMS scales have been shown to be reliable with students, engineers, technicians, and military officers with Cronbach alphas scores ranging as follows: Rational (.77 to .85); Intuitive (.78 to .84); Dependent (.62 to .86); Avoidant (.84 to .94); and Spontaneous (.83 to .87) (Loo, 2000; Scott & Bruce, 1995). Scott and Bruce (1995) reported that overall, test results for factor stability and internal consistency were excellent across three samples.

The COPE Inventory

The COPE Inventory (COPE) (Carver, Scheier, & Wentraub, 1989) was used to measure coping strategies typically employed when dealing with stressors. The COPE is applicable to the current research questions, and was selected because of its strong theoretical base and sound evidence of validity (Cook & Heppner, 1997). Because different orienting instructions may be used with the COPE, for the purpose of the present study, participants were asked to think about what they typically do when they are experiencing stress. The COPE is a 60-item, self-report instrument that uses a 4-point Likert scale to measure the frequency at which each coping behavior is employed by the individual (1 = "I usually don't do this at all", 4= "I usually do this a lot"). The preceding values are added to obtain fifteen scales. The summed items that are associated with each scale constitute the score for each scale.

The present investigation was designed to assess emotion-focused and problem focused coping, consequently, ten of the actual fifteen coping scales will be utilized. Emotion-focused subscales will include 20 of the original items that reflect: acceptance, seeking social support for emotional reasons, turning to religion, denial, and positive reinterpretation and growth. Problem-focused subscales included 19 of the original 20 items that denote: active coping, suppression of competing activities, seeking social support for instrumental reasons, restraint coping, and planning.

Definitions for the scales (Carver et al., 1989) represented by the COPE are as follows:

- 1. *Acceptance:* acknowledging that the situation does exist and that the individual may not have adequate approaches for dealing with the stressor.
- 2. *Seeking social support for emotional reasons:* frequently co-occurs with support seeking for instrumental reasons, and refers to obtaining understanding, sympathy, or moral support from others.
- 3. *Turning to religion:* using belief in higher sources or religion as a means for dissolving distress.
- 4. *Denial:* attempting to act as though the stressor is not real or refusing to accept that the stressor actually exists.
- 5. *Positive reinterpretation and growth:* interpreting a stressful situation in positive terms to handle emotional upset, and continue actively using problem-focused approaches to deal with the situation.
- 6. *Active coping:* making active movements toward trying to eliminate or evade the stressor or to improve its effects.
- 7. *Suppression of competing activities:* attempting to avoid becoming diverted by other events by laying other projects aside or placing other things in lower priority in order to deal with the stressor.

- 8. *Seeking social support for instrumental reasons:* a problem-focused approach to seeking information, advice, or assistance for the matter at hand.
- 9. *Restraint coping:* refraining from action until an appropriate opportunity emerges.
- 10. *Planning:* contemplating new strategies to actively deal with the stressor and considering the most effective way to approach the problem.

Carver, Scheier, and Weintraub (1989) demonstrated that the COPE Inventory has construct validity. They also stated that the scales do not correlate strongly with each other and thus measure distinct factors. Carver et al. (1989) demonstrated that the COPE has test-retest reliability of .42 to .89, suggesting that the COPE measures coping patterns that are relatively stable over time.

The COPE has been found to rate situational coping behaviors with greater internal consistency than dispositional coping tendencies. Most of the correlations ranged from .22 to .76 between the dispositional and situational versions of the COPE scales, with the exceptions of: Seeking Social Support – Instrumental, .10; Restraint Coping, .07; and Suppression of Competing Activities, .14 (Carver et al., 1989). Carver et al. found that personality characteristics that are generally considered adaptive are positively correlated with coping strategies and that personality characteristics that are generally considered maladaptive are negatively correlated with coping strategies (1989).

Personal Growth Initiative Scale

The Personal Growth Initiative Scale (PGIS) (Robitschek, 1998) was used to assess personal growth initiative. The scale was selected for use in the current study for it's applicability to research questions and solid evidence for reliability and validity. The PGIS is a 9-item instrument that measures an individual's degree of active engagement in self-change. This self-report instrument uses a six-point Likert-type scale ranging from 1 ("definitely disagree") to 6 ("definitely agree"). A total score that results from the summed item responses can range from 9-54. Scores that fall higher on the continuum indicate more active engagement in personal growth. Robitschek (1998, 1999) found internal-consistency estimates for the PGIS to range between .78 and .90. Test-retest reliabilities were found to be .84 for 1 week, .73 for 4 weeks, and .74 for 8 weeks, in samples of adults and college students during transition. Moderate positive correlations between the PGIS and internal locus of control, assertiveness, and instrumentality, and moderate negative correlation with chance locus of control supports the scale's convergent validity. Significant correlations were lacking in the areas of age, social desirability, or SAT scores, and significant differences between members of the majority group and ethnic minority group, suggesting the presence of discriminate validity. There was a significant positive correlation between PGIS scores and domain-specific growth processes that were intentional, and negative correlations between the PGIS and growth processes that were unintentional (Robiteschek, 1999).

Data Analysis Notes

Data analysis was performed using SPSS 11.5. Each participant obtained totals for each of the decision-making styles (rational, intuitive, dependent, avoidant, and spontaneous). Each participant obtained totals for problem-focused coping and emotionfocused coping based on scores obtained on each of the 10 *COPE Inventory* scales. Each participant obtained a PGI total score and was designated high or low based on a median split. When a participant scored on the median, he or she was included with participants scoring above the median.

Thirteen questions were skipped on the GMDS and two participants who completed the GMDS failed to complete the remaining questionnaires. Thirty items were skipped on the COPE. Two items were skipped on the PGIS. One participant who had completed all three surveys, failed to respond to any items on the demographics questionnaire. This condition prevented SPSS from deriving scores on the respective instruments for each of the participants. Therefore, for each of the participants who skipped a question, the researcher averaged the scores of their other answers on the respective scale and substituted that average for the missing value.

Data Analysis Procedures

Means and standard deviations of demographic variables (class standing, race, gender, and age) were computed with respect to personal growth initiative. Separate oneway analyses of variance (ANOVAs) were conducted to examine the relationship between personal growth initiative and each of the aforementioned demographic variables. Tukey post hoc tests were used to test for pair-wise differences among means. Means and standard deviations of the demographic variables were also computed with respect to decision-making styles (rational, intuitive, dependent, avoidant, and spontaneous). An ANOVA was used to examine intercorrelations between personal growth initiative and coping. Separate one-way ANOVAs were conducted to examine the relationship between each of the five aforementioned decision-making styles and each of the demographic variables. Tukey post hoc tests were again used to test for pair-wise

differences among means. A correlation was used to explore the relationship between personal growth initiative and each of the five decision-making styles.

A hierarchical regression analysis was conducted to regress each of the decisionmaking styles onto emotion-focused coping, problem-focused coping, and personal growth initiative. This analysis followed the guidelines set forth by Cohen and Cohen (1983), and was used to determine whether or not personal growth initiative accounted for the variance in each of the five decision-making styles above and beyond that accounted for by emotion-focused coping and problem-focused coping.

Chapter Summary

The *General Decision Making Styles* scale, the *COPE Inventory*, the *Personal Growth Initiative Scale*, and demographics questionnaire were completed during the last month of the fall 2004 semester by approximately 143 undergraduate students enrolled in a section of either first-year/sophomore level classes or junior/senior level classes that were not required but recommended by the institution. Participants completed the instruments through an on-line data collection website. These instruments yielded data for each participant with regard to decision-making style, coping, and personal growth orientation.

CHAPTER IV

RESULTS

This chapter presents the analysis procedures conducted and results of the statistical analyses of the data by addressing each research question individually by providing an explanation of analysis procedures, followed by a presentation of analysis results, and concluding with a description of the findings. For each research question that resulted in significant findings, the reader can assume that findings regarding other scales that were not reported did not reach significance. The variance in degrees of freedom reported in the following sections reflects data that was not complete in all cases.

Analyses

For each instrument administered, reliability analyses yielded the following Chronbach alpha scores: problem-focused and emotion-focused coping (COPE) were .83 and .80, respectively; decision-making styles (GDMS) for the 5 subscales were: rational, .76; intuitive, .76; dependent, .66; avoidant, .85; and spontaneous, .78; and personal growth initiative (PGI), .89. The alpha coefficients of all instruments indicate that all scales, with the exception of dependent decision-making style, have sufficient homogeneity.

Results of Data Analyses

Research Question 1

To examine research question 1, "Are there differences in personal growth initiative with respect to class standing, race, gender, and age?", means and standard deviations of demographic variables, with respect to personal growth initiative, were computed. Four separate one-way univariate analyses of variance (ANOVAs) were conducted to test the relationship between personal growth initiative and each of the aforementioned demographic variables. Personal growth initiative totals served as the dependent, with class standing, race, gender, and age as the independent variable. As a follow-up when overall *F* values were statistically significant, Tukey post hoc tests were conducted to evaluate pair-wise differences among the means.

Separate one-way analysis of variance (ANOVA) tests were computed for personal growth initiative across each category of class standing, race, gender and age. Across class standings (first-years: M = 36.18, SD = 6.88; sophomores: M = 39.12, SD = 6.53; juniors: M = 39.80, SD = 4.67; seniors M = 42.92, SD = 6.01), a statistically significant ANOVA was found for personal growth initiative scores, F(3, 133) = 8.39, p < .001. However, examination of sample means through Tukey post hoc tests revealed a significant difference in personal growth initiative scores only between first-year and seniors t(88) = -5.02, p < .001. No other differences were observed.

In a one-way ANOVA with personal growth initiative total as the dependent variable and race as the independent variable, no significant differences were revealed by the data, F(4, 133) = 1.23, *ns*. The same result was found with respect to gender in relation to personal growth initiative, F(1, 135) = .00, *ns*.

In a one-way ANOVA with personal growth initiative total as the dependent variable and age group as the independent variable a significant result emerged from the data, F(3, 134) = 9.14, p < .001. Examination of sample means through Tukey post hoc tests revealed a significant difference in personal growth initiative scores only between

18-year-olds (M = 35.44, SD = 7.38) and individuals 21+ (M = 42.49, SD = 5.78), t(84) = 5.10, p < .001, as well as between 19-year-olds (M = 38.19, SD = 6.27) and individuals 21+, t(84) = 3.09, p < .01. No differences were found between 20-year-olds (M = 40.19, SD = 4.99) and the other age groups.

Research Question 2

To examine research question 2, "Do the coping strategy profiles of high and low personal growth initiative respondents differ?", a one-way ANOVA was conducted. Intercorrelations between personal growth initiative totals and coping style were also examined.

A median split was made on the personal growth initiative scores to group participants into high (n = 70, M = 44.47, SD = 3.64) and low (n = 69, M = 33.59, SD = 5.34) personal growth initiative groups, F(1, 137) = 197.01, p < .001. Individuals with high personal growth initiative reported higher problem-focused coping (M = 54.95, SD = 7.03) than individuals with low personal growth initiative (M = 50.37, SD = 8.06), F(1, 125) = 11.68, p < .001. Individuals with high personal growth initiative also reported higher emotion-focused coping (M = 53.58, SD = 7.44) than individuals with low personal growth initiative (M = 50.04, SD = 8.41), F(1, 131) = 6.59, p < .02.

Correlations among personal growth initiative, emotion-focused coping, and problem-focused coping were also examined and are displayed in Table 1. Both problemfocused coping and emotion-focused coping were positively correlated with personal growth initiative. However, a test of the differences between the magnitude of the correlations (.36 and .20) showed that the relationship between personal growth initiative and problem-focused coping was statistically stronger than that between personal growth initiative and emotion-focused coping, t(124) = 2.19, p < .05.

Table 1

Intercorrelations between Coping Styles, Decision-Making Styles, and Personal Growth Initiative

Variable	1	2	3	4	5	6	7	8
1. Emotion-focused coping	_							
2. Problem-focused coping	.62**	_						
3. Rational DMS	.08	.33**	_					
4. Intuitive DMS	.21*	.18*	.31**	_				
5. Dependent DMS	.39**	.34**	.32**	.15	_			
6. Avoidant DMS	.13	.04	25**	02	.15	_		
7. Spontaneous DMS	01	03	32**	.09	06	.17*	_	
8. Personal growth initiative	.20*	.36**	.35**	.27**	* .11	26**	14	_

Note. DMS = Decision-Making Style.

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

Further support for the notion that personal growth initiative is more strongly linked to problem-focused coping than emotion-focused coping was gained through regression analysis. A statistically significant inter-method regression was created ($R^2 =$.14, F(2, 121) = 9.94, p < .001) using problem-focused coping and emotion-focused coping as simultaneous predictors and personal growth initiative as the criterion. These results also revealed a main effect of problem-focused coping on personal growth initiative ($\beta = .41$, t(121) = 3.85, p < .001) but no main effect of emotion-focused coping was supported by the data ($\beta = .07$, t(121) = -.63, ns).

Research Question 3

To examine research question 3, "Are there differences in decision-making styles employed by college students with respect to class standing, race, gender, and age?", means and standard deviations of demographic variables, with respect to decision-making styles (rational, intuitive, dependent, avoidant, and spontaneous), were computed. Four separate one-way ANOVAs were conducted to test the relationship between the five decision-making styles and each of the aforementioned demographic variables. Each of the five decision-making styles served as the criterion, with class standing, race, gender, and age as the predictors. As a follow-up when overall *F*-tests were significant, Tukey post hoc tests were conducted to evaluate pair-wise differences among the means.

Separate one-way analysis of variance (ANOVA) tests were computed for decision-making style across each category of class standing, race, gender and age. Across class standings (first-years: M = 17.68, SD = 3.26; sophomores: M = 19.28, SD = 2.53; juniors: M = 18.40, SD = 2.35; and seniors M = 19.35, SD = 2.42), a statistically significant ANOVA was found for rational decision-making style, F(3, 130) = 3.37, p < .05 and avoidant decision-making style, F(3, 133) = 2.99, p < 05. However, examination of sample means through Tukey post hoc tests revealed a significant difference in rational decision-making style only between first-year and seniors t(85) = -2.78, p < .05. For avoidant decision-making style, Tukey post hoc tests revealed a significant difference only between sophomores and seniors, t(70) = 2.69, p < .05. No other differences were observed.

In separate one-way ANOVAs with rational, intuitive, dependent, avoidant, or spontaneous decision-making style as the dependent variable and race as the independent variable no significant differences were revealed by the data, F(4, 130) = .510, ns; F(4, 134) = .627, ns; F(4, 134) = 1.26, ns; F(4, 133) = .318, ns; and F(4, 133) = 1.07, ns, respectively. In one-way ANOVAs with each of the five decision-making styles as dependent variables and gender as the independent variable, dependent decision-making style revealed the only significant difference between males and females, F(1, 136) = 8.17, p < .01. No gender differences were observed in rational, intuitive, avoidant, and spontaneous decision-making styles, F(1, 132) = 1.83, ns; F(1, 136) = 1.75, ns; F(1, 135) = .515, ns; and F(1, 135) = 2.09, ns, respectively.

In one-way ANOVAS with rational, intuitive, dependent, avoidant, or spontaneous decision-making styles as the dependent variable and age group as the independent variable, a significant result emerged only from the data on rational decision-making style, F(3, 131) = 3.55, p < .05. Examination of sample means through Tukey post hoc tests revealed a significant difference in rational decision-making style scores between 18-year-olds (M = 17.41, SD = 3.60) and individuals 21+ (M = 19.40, SD= 2.34), t(82) = 3.26, p < .01. No differences were found between rational decisionmaking and 19-year-olds (M = 18.71, SD = 2.58) or 20-year-olds (M = 18.75, SD = 2.18). *Research Question 4*

To address research question 4, "Is there a relationship between the degree of personal growth initiative and decision-making style employed by college students?", a

correlation was conducted. Intercorrelations between personal growth initiative totals and each of the five decision-making styles were examined.

Intercorrelations between decision-making styles and personal growth initiative were computed and are displayed in Table 1. Of greatest interest concerning Research Question 4 were the relationships between personal growth initiative and decision-making style. As shown in Table 1 personal growth initiative had a positive relationship with both rational decision-making style (r = .35, p < .001) and intuitive decision-making style (r = .27, p < .001). However, the data revealed a negative relationship between personal growth initiative increases, propensity to use rational decision-making and intuitive decision-making increases, while propensity to use avoidant decision-making decreases. There were no significant correlations found between personal growth initiative and syontaneous decision-making style or personal growth initiative and dependent decision-making style.

Research Question 5

To examine research question 5, "Is there a relationship between the degree of personal growth initiative and rational decision-making style after controlling for the potential effects of problem-focused coping and emotion-focused coping?", a hierarchical regression analysis was conducted which regressed rational decision-making style onto emotion-focused coping, problem focused coping, and personal growth initiative following the guidelines set forth by Cohen and Cohen (1983). This analysis determined whether or not personal growth initiative accounted for variance in rational decisionmaking above and beyond that accounted for by emotion-focused coping and problem

focused coping. Thus, emotion-focused coping and problem focused coping were entered in the first step of the analysis. These predictors combined to account for a total of 15% of the variance in rational decision making (see Table 2).

Both emotion-focused coping and problem focused coping appeared to account for unique variance in rational decision-making style. However, these two main effects were qualified by a statistically significant increase in R^2 (4%) by adding personal growth initiative in the second step. These results indicate that personal growth initiative predicts unique variance in rational decision-making style above and beyond that of coping styles. Both correlational and regression analyses indicate that as personal growth initiative increases, the likelihood of adopting a rational decision-making style increases.

Table 2

Hierarchical Regression Summary of Rational Decision-Making Style Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and Personal Growth Initiative

Step / Predictor	R^2	ΔR^2	В	SEB	β
Step 1	.15**	.15**			
Emotion-focused coping			09	.04	26*
Problem-focused coping			.17	.04	.49**
Step 2	.19**	.04*			
Personal growth initiative			.09	.04	.21*

p < .05. p < .01.

Research Question 6

To examine research question 6, "Is there a relationship between the degree of personal growth initiative and intuitive decision-making style after controlling for the potential effects of problem-focused coping and emotion-focused coping?", a hierarchical regression analysis was conducted which regressed intuitive decision-making style onto emotion-focused coping, problem focused coping, and personal growth initiative following the guidelines set forth by Cohen and Cohen (1983). This analysis determined whether or not personal growth initiative accounted for variance in intuitive decisionmaking above and beyond that accounted for by emotion-focused coping and problem focused coping. Thus, emotion-focused coping and problem focused coping were entered in the first step of the analysis. These predictors combined to account for a total of only 6% of the variance in intuitive decision making (see Table 3).

Table 3

Hierarchical Regression Summary of Intuitive Decision-Making Style Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and Personal Growth Initiative

Step / Predictor	R^2	ΔR^2	В	SEB	β
Step 1	.06*	.06*			
Emotion-focused coping			.06	.04	$.20^{\dagger}$
Problem-focused coping			.02	.04	.06
Step 2	.08*	$.02^{\dagger}$			
Personal growth initiative			.07	.04	$.17^{\dagger}$
$rac{p < .05. **p < .01. ^{\dagger}p < .08}{r}$					

< .05. **p < .01. p < .08P

Only emotion-focused coping appeared to account for unique variance in intuitive decision-making style (and this main effect can only be considered marginal). However, this main effect was qualified by a statistically significant increase in R^2 (2%) by adding personal growth initiative in the second step (this increase was also only marginal). These results indicate that personal growth initiative predicts unique variance in intuitive decision-making style above and beyond that of coping styles. Both correlational and regression analyses indicate that as personal growth initiative increases, the likelihood of adopting an intuitive decision-making style increases.

Research Question 7

To examine research question 7, "Is there a relationship between the degree of personal growth initiative and dependent decision-making style after controlling for the potential effects of problem-focused coping and emotion-focused coping?", a hierarchical regression analysis was conducted which regressed dependent decision-making style onto emotion-focused coping, problem focused coping, and personal growth initiative following the guidelines set forth by Cohen and Cohen (1983). This analysis determined whether or not personal growth initiative accounted for variance in dependent decision-making above and beyond that accounted for by emotion-focused coping and problem focused coping. Thus, emotion-focused coping and problem focused coping were entered in the first step of the analysis. These predictors combined to account for a total of 17% of the variance in dependent decision making (see Table 4).

Only emotion-focused coping appeared to account for unique variance in dependent decision-making style. This main effect was not qualified by adding personal growth initiative in the second step. These results indicate that personal growth initiative

fails to predict unique variance in dependent decision-making style above and beyond that of coping styles.

Table 4

Hierarchical Regression Summary of Dependent Decision-Making Style Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and Personal Growth Initiative

Step / Predictor	R^2	ΔR^2	В	SEB	β
Step 1	.17**	.17**			
Emotion-focused coping			.10	.04	.29*
Problem-focused coping			.06	.04	.16
Step 2	.17**	.00			
Personal growth initiative			01	.04	02

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

Research Question 8

To examine research question 8, "Is there a relationship between the degree of personal growth initiative and avoidant decision-making style after controlling for the potential effects of problem-focused coping and emotion-focused coping?", a hierarchical regression analysis was conducted which regressed avoidant decision-making style onto emotion-focused coping, problem focused coping, and personal growth initiative following the guidelines set forth by Cohen and Cohen (1983). This analysis determined whether or not personal growth initiative accounted for variance in avoidant decisionmaking above and beyond that accounted for by emotion-focused coping and problem focused coping. Thus, emotion-focused coping and problem-focused coping were entered in the first step of the analysis. These predictors combined to account for a total of 2% of the variance in avoidant decision making (see Table 5); yet this was not a statistically significant finding.

Neither emotion-focused coping nor problem-focused coping appeared to account for unique variance in avoidant decision-making style. However, the null effects were qualified by a statistically significant increase in R^2 (10%) by adding personal growth initiative in the second step. These results indicate that personal growth initiative predicts unique variance in avoidant decision-making style above and beyond that of coping styles. Both correlational and regression analyses indicate that as personal growth initiative increases, the likelihood of adopting an avoidant decision-making style decreases.

Table 5

Hierarchical Regression Summary of Avoidant Decision-Making Style Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and Personal Growth Initiative

Step / Predictor	R^2	ΔR^2	В	SEB	β
Step 1	.02	.02			
Emotion-focused coping			.09	.06	.18
Problem-focused coping			04	.06	08
Step 2	.12*	.10**			
Personal growth initiative			21	.06	34**
*n < 05 **n < 01					

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

Research Question 9

To examine research question 9, "Is there a relationship between the degree of personal growth initiative and spontaneous decision-making style after controlling for the potential effects of problem-focused coping and emotion-focused coping?", a hierarchical regression analysis was conducted which regressed spontaneous decision-making style onto emotion-focused coping, problem focused coping, and personal growth initiative following the guidelines set forth by Cohen and Cohen (1983). This analysis determined whether or not personal growth initiative accounted for variance in spontaneous decisionmaking above and beyond that accounted for by emotion-focused coping and problemfocused coping. Thus, emotion-focused coping and problem-focused coping were entered in the first step of the analysis. These predictors combined to account for a total of 0% of the variance in spontaneous decision making (see Table 6).

Neither emotion-focused coping nor problem-focused coping appeared to account for unique variance in spontaneous decision-making style. These null effects were not qualified by adding personal growth initiative in the second step. These results indicate that personal growth initiative fails to predict unique variance in spontaneous decisionmaking style above and beyond that of coping styles.

Chapter Summary

The researcher used a variety of statistical analyses to answer nine research questions pertaining to decision-making style, coping, and personal growth initiative among college students. Significant differences in personal growth initiative total scores were found with respect to class standing and age. Specifically, seniors scored higher than first-years, and individuals 21+ year-olds scored higher than 18 and 19-year-olds.

Table 6

Hierarchical Regression Summary of Spontaneous Decision-Making Style Regressed onto Emotion-Focused Coping, Problem-Focused Coping, and Personal Growth Initiative

Step / Predictor	R^2	ΔR^2	В	SEB	β
Step 1	.00	.00			
Emotion-focused coping			.03	.05	.07
Problem-focused coping			03	.05	07
Step 2	.02	.02			
Personal growth initiative			05	.05	11

*p < .05. **p < .01. [†]p < .06

Individuals with high personal growth initiative reported higher problem-focused and emotion focused coping than individuals with low personal growth initiative. However, personal growth initiative was more strongly linked to problem-focused coping than emotion-focused coping.

There was a significant difference found between first-years and seniors with respect to rational decision-making style and between 21+ year-olds and 18-year-olds. Specifically, seniors and 21+ year-olds scored higher on rational decision-making style than first-year students and 18-year-olds. Another significant difference with respect to decision-making and demographic variables was that sophomores scored higher than seniors on avoidant decision-making style. The only gender differences found in the

current study pertained to dependent decision-making style, with females endorsing higher scores on decision-making style than males.

Findings of the current study revealed that the propensity to use rational and intuitive decision-making styles increase as personal growth initiative increases. Results indicated that the propensity to use avoidant decision-making decreases as personal growth initiative increases.

CHAPTER V

CONCLUSIONS

This chapter includes a review of the study, a summary of findings, and implications for practice. Limitations and suggestions for future research and implications for counselors, faculty, student affairs practitioners, and career development programs are discussed.

Review of the Study

Previous research has examined decision-making styles, personal growth initiative, and coping separately, with minimal attention paid to the ways in which these constructs interact. The current study sought to examine the relationships among the aforementioned constructs.

Decision-making style involves the gathering and processing of information, but tends to represent internal, psychological processes rather than actual behavior (Johnson, 1978). Given that individuals differ in their approach to decision-making, a closer examination of what influences the process of gathering information and processing information seems to be an important step in understanding decision-making. One's ability to manage psychological distress is likely to impact how he or she perceives and responds to choices. Therefore, coping is considered an important variable in understanding ones approach to decision-making. It is relevant to decision-making because individuals vary in their approach to managing stress and resolving problems. Personal growth initiative is introduced as a variable relevant to decision-making because individuals who are actively engaged in personal growth are intentional in the process of growth, and thus more likely to perceive and utilize experiences as opportunities for growth. In terms of coping, individuals who are actively engaged in the personal growth process are better able to perceive choices in the midst of environmental stressors (DeCarvalho, 1990). Lazarus and Folkman (1984) suggested that individuals appraise stress from three possible perspectives: harm or loss, threat, or challenge. Based on research related to personal growth initiative, individuals with a higher orientation toward personal growth are more likely to quickly recognize distress and alleviate distress in an adaptive, intentional manner. By definition, personal growth initiative is an active, intentional process, which lends way to a possible connection to coping strategies that are problem-focused.

Furthermore, personal growth initiative is composed of both cognitive and behavioral components, which speaks to one's ability to behaviorally execute actions that match cognitions. In other words, the activities that an individual chooses to engage in are purposeful and somehow related to goals or awareness of the striving toward one's full potential.

Summary of Findings

Seniors in the current study showed higher personal growth initiative than firstyear students. This finding corresponds with the traditional aged college students in terms of age; specifically, individuals 21 and over scored significantly higher on personal growth initiative than 18 and 19-year-olds. Openness to life experience may play a role in this outcome, given that experience is an important component of personal growth.

Specifically, younger individuals who are just beginning college may have a less developed sense of trust in their own judgments and perceptions than older students or seniors. Furthermore, younger students who have recently left home may be less involved in values clarification and behaviors that foster self-awareness than seniors, as first-year students can still be immersed in the individuation process. Family environments or cultures differ in the degree of support they offer in individuation, sometimes discouraging development of personal lifestyle and impacting the extent to which young individuals can establish their own unique identity (Wechter, 1983).

Differences in personal growth initiative with respect to age may also reflect differences stages of identity development. Erikson's theory of psychosocial development states that the fifth stage, identity versus identity diffusion, occurs between ages 12-20 (Erikson, 1968). According to Witmer (1985), identity is an important aspect of personal growth. Specifically, he postulates that stability and direction are grounded in values and personal philosophy that provide a sense of meaning. Given that identity is formed as one examines belief systems, meaning, and purpose, it is likely that seniors may have had more opportunities to examine these areas than first-year students.

The current study revealed that individuals with high personal growth initiative reported higher problem-focused coping and emotion-focused coping than individuals with low personal growth initiative. The finding that problem-focused coping correlates with high personal growth initiative is not surprising given what is stated in existing research on each of these constructs. Problem-focused coping includes action and planning components (Carver, Scheier, & Weintraub, 1989), and theorists have often classified this style as adaptive because of it's effectiveness in reducing stress (Lazarus &
Folkman, 1984). Characteristics associated with high personal growth initiative involve active, intentional engagement in identifying choices while adopting adaptive methods for alleviating distress and create avenues for continued development (Whittaker & Robitschek, 2001).

The finding that high personal growth initiative correlates with emotion-focused coping is somewhat unexpected because much of existing research considers emotion-focused coping to be maladaptive (Stanton, Danoff-Burg, Cameron, & Ellis, 1994). Perhaps the finding in the current study can be explained by research suggesting that stressors often elicit both styles of coping (Carver, Weintraub, & Scheier, 1989), as well as recent developments in the field of emotion that gives credence to the functionality of emotion in coping (Campos, Campos, & Barrett, 1989).

Research suggests that emotion-focused coping is effective under certain conditions and when it pertains to certain mechanisms. For example, emotion-focused coping may be beneficial when used as an avenue for goal-clarification and means for taking action in managing a stressor as opposed use in rumination (Snyder, 1999). Context is another important condition, as studies have revealed that emotion-focused coping is most effective when applied to contexts outside of one's control (Snyder). Emotion-focused coping is found to be effective when it serves to: "(a) promote habituation to the stressor; (b) serve a signaling function to the individual; (c) engender cognitive reappraisal; (d) direct action; and (e) regulate the social environment" (Snyder, 1999, p. 104). Perhaps this finding lends support for previous research which suggests a negative relationship between personal growth initiative and psychological distress

(Whittaker & Robitschek, 2001). Conversely, if emotions are used to protect and defend oneself, they can become major blocks to growth (Witmer, 1985).

The finding that the relationship between high personal growth initiative and problem-focused coping is stronger than the relationship between high personal growth initiative and emotion-focused coping is consistent with previous research that suggests an association between personal growth initiative and problem-focused coping (Robitschek, 1999). This finding corresponds with Folkman and Lazarus' (1984) research suggesting that problem-focused coping predominates when the individual feels that something constructive can be done to alter the source of the stress. Perhaps this reflects the behavioral component of personal growth initiative that puts cognitions about change into action. It also speaks to one's appraisal of the stressful event. If an individual is able to appraise the stressful situation as challenge as opposed to threat, he or she can bring about a different physiological and emotional response that may minimize distress.

Upon examination of decision-making style differences with respect to age and class standing, rational decision-making represented the only significant variable. The current study revealed that seniors scored significantly higher on rational decision-making than first-year students. Likewise, 21+ year-olds showed stronger rational decision-making than 18-year-olds.

According to Harren (1979), persons engaging in rational career decision-making anticipate and prepare for decision-making by seeking pertinent information about self and environment. It is likely that seniors are involved in job search or graduate school planning and first-year students are not. Seniors may also be in a better position to access internal and external resources than first-year students. Singh and Greenhaus (2004)

postulated that "individuals who engage in rational decision-making are believed to tap into themselves and other sources for generative relevant information that help them better understand themselves and their situations and enable them to make an effective decision" (p. 202).

Sophomores showed significantly more avoidant decision-making than seniors in the current study. This finding is somewhat unexpected given that sophomore year is generally when students are expected to declare a major field of study. Perhaps this reflects a maladaptive approach to uncertainty, particularly if the student has not taken appropriate measures with regards to information gathering about possible majors and self-exploration of interests and values.

The only gender differences found in the current study were with respect to dependent decision-making style. Females utilized dependent decision-making more than males, based on the present findings. Previous research examining gender differences in career decision-making also found that women engage in more support-seeking behavior than men when making decisions (O'Hare, 1987).

Results of the current study indicate that the propensity to use rational decisionmaking and intuitive decision-making increases as personal growth initiative increases. The positive relationship between personal growth initiative and rational decision-making is indicative of the information processing component central to each of these constructs. According to DeCarvalho (1990), individuals who approach the growth process with a high degree of intentionality are those most prepared to deal with change across a lifespan. This is likely because such individuals encounter environmental pressures with

the ability to perceive choices and identify methods for actively selecting avenues for growth.

The finding that personal growth initiative also related positively with intuitive decision-making was not anticipated. Specifically, while the reliance on feelings or gut responses is present in intuitive decision-making, personal growth initiative seems to have a more strategic feel which involves intentional self-change. Perhaps intuitive decision-making corresponds with personal growth initiative because the individual engaged in this style of decision-making listens and responds to internal reaction, which is an important aspect of personal growth.

Results also indicate that the propensity to use avoidant decision-making decreases as personal growth initiative increases. Personal growth involves an element of self and environmental awareness. The person who is more active in the process of becoming and utilizes experiences to aid in this endeavor, is less likely to shirk experiences that could provide him or her with the valuable information being sought out. The individual is purposeful and deliberant in his or her actions, therefore facing challenges head on as opportunities to learn and grow in a desired direction.

Personal growth initiative failed to predict unique variance in dependent decision-making style above and beyond coping style. Based on the current findings, only emotion-focused coping accounted for significant variance in dependent decisionmaking. Perhaps individuals who are engaged in the process of personal growth assume a more autonomous stance, operating to fulfill a need for detachment. Maslow (1968, 1970), identified autonomy and resistance to enculturation by the environment as a characteristic of self-actualizing individuals. He postulated that such individuals are

driven by an inner growth motivation and are not dependent upon others for their main satisfactions. However, it is important to note that certain cultures, family upbringing, religion, or spiritual beliefs may impact this type of motivation.

Personal growth initiative did not predict unique variance in spontaneous decision-making style above and beyond coping style. This finding is consistent with the foundation of personal growth initiative which rests upon intentional engagement in the growth process. Spontaneous decision-making involves the use of impulsive decisions, an approach that is not intentional in nature.

Implications for Practice

The findings revealed in the current study have implications for those who work with college students such as instructors, academic advisors, student affairs practitioners, program directors, and counselors. An important aspect of meeting the needs of college students involves an understanding of issues facing such individuals and application of methods and programming that help foster personal growth.

College campuses can attempt to diversify programming in an effort to broaden the college student experience and create opportunities for growth and learning that extends beyond academics. Perhaps practitioners could incorporate the importance of students' involvement in diversified learning opportunities into the parent orientation, enlisting parents to take part in encouraging their children to take part in campus activities as they transition from home to college. This form of education during orientation would also help parents learn the value of varied learning experiences that their children may consider.

According to Witmer (1985), enthusiastic instructors can convey a sense of excitement and involvement that fosters intrinsic motivation, a key component to personal growth. By attending to students with enthusiasm or quiet intrigue in a student's work, stimulates the student to search alternatives. Witmer describes education used in this manner as an holistic approach to learning and growth.

Furthermore, counselors can provide psychoeducation for residence hall advisors about adaptive coping strategies for managing stress, emphasizing that residence hall programming address such issues and inform students about counseling services offered to address these needs. Colleges and universities may want to consider requiring campuswide programming for all first-year students in order to ensure that key topics like stress management and information about campus activities and opportunities for involvement is disseminated.

Faculty that are involved in teaching courses geared toward self-exploration, career development, or decisions about majors, can enhance their curricula by incorporation education on decision-making styles and help students strengthen their skills in thoroughly searching for and logically evaluating alternatives. It may be useful for instructors to create classroom activities or assignments that require students to actively engage in practicing such skills.

Limitations and Recommendations for Future Research

The current study answered a number of questions, while creating a number of unanswered questions based on the data provided. Perhaps existing literature on the personal growth initiative, decision-making, and coping can be enhanced with additional research that further examines the relationships among these constructs.

The current study was primarily composed of individuals who identified as White, which limits the generalizability of the findings. Future research in this area should attempt to utilize a more diverse sample and explore the impact of various cultural beliefs, attitudes, and values, on an individual's approach to personal growth. Social economic status of participants was not assessed in the current study and may be an important factor to examine in future research. Future research might also examine how economic conditions play a role in an individual's beliefs about freedom to take risks or amount of challenge he or she receives from family or society. Other problems such as injustice, exploitation, or abuse can dampen a person's spirit and inhibit his or her striving toward full potential.

Early life experiences were not assessed in the current study. Future research might examine how such experiences play a role in shaping an individual's philosophy about life, particularly if trauma or emotional abandonment is part of the experience. The current study was conducted on college students, which suggests similarities with regards to educational preparation. Future research might examine the impact of differential educational experiences on strive for personal growth; particularly if the individual's primary concern was to avoid danger and seek safety as opposed to focus on learning. Mental and physical disabilities were not accounted for in the current study, but research examining the impact of coping on one's adjustment to disability would likely prove beneficial

Chapter Summary

The relationship among decision-making styles, coping, and personal growth initiative in college students was examined in this investigation using the *GDMS*, the

COPE Inventory, and the *PGIS*. Analyses of the data revealed that students in the sample differed with respect to class standing and age in their degree of personal growth initiative and endorsement of rational decision-making style. Further, this study suggests that individuals with high personal growth initiative reported higher problem-focused coping and emotion-focused than individuals with low personal growth initiative. The finding that the relationship is stronger between problem-focused coping and high personal growth initiative is supported by existing research on coping that emphasizes the action and planning components inherent in problem-focused coping. The correlation between emotion-focused coping and high personal growth initiative can be explained by recent developments in the field of coping that suggest functionality and in emotion-focused coping under certain circumstances.

The current study also revealed that use of rational decision-making style and intuitive decision-making style tends to increase as personal growth initiative increases. The connection between personal growth initiative and rational decision-making style is congruent with the intentionality component of both constructs, as persons possessing this characteristic could more effectively and actively select avenues for growth when faced with environmental stressors than individuals who are less intentional in their approach to life and decision-making. The relationship between intuitive decision-making style and high personal growth initiative can perhaps be explained by the utility associated with listening and responding to internal reactions, a behavior that involves self-awareness and is critical to personal growth. Results also indicated that the propensity to use avoidant decision-making decreases as personal growth initiative increases.

The findings described in the current study have implications for counselors, student affairs practitioners, and faculty who work with college students. They also have implications for career development, decision-making, and coping literature. Practitioners can utilize information gained from this study to help individuals perceive choices and actively seek avenues for growth. Furthermore, an understanding of human strengths and possibilities for effecting positive change through life stages may be enhanced by considering the influence of personal growth initiative on appraisal of life experiences and approach to decision-making. These findings serve as a reminder of the importance of attending to the development of psychologically healthy behaviors and viewing healthy personality as more than the absence of mental illness.

REFERENCES

- Allport, G. W. (1955). *Becoming: Basic considerations for a psychology of personality*. New Haven: Yale University Press.
- Bauer, J. J., & McAdams, D. P. (2004). Growth goals, maturity, and well-being. Developmental Psychology, 40, 114-127.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Beach, L. R., & Mitchell, T. R. (1978). A contingency model for the selection of decision strategies. Academy of Management Review, 3, 439-449.
- Blustein, D. L. (1988). The relationship between motivational processes and career exploration. *Journal of Vocational Behavior*, *32*, 345-357.
- Blustein, D. L. & Phillips, S. D. (1990). Relation between ego identity statuses and decision-making styles. *Journal of Counseling Psychology*, 37, 160-168.
- Brown, D., & Crace, R. C. (1995). Values and life role decision-making. *Career Development Quarterly*, 44, 221-223.
- Callahan, G. A., & Greenhaus, J. H. (1992). The career indecision of managers and professionals: An examination of multiple subtypes. *Journal of Vocational Behavior, 41*, 212-231.
- Calliotte, J. A. (1994). Testing a level versus an interactional view of career indecision. Journal of Career Assessment, 2, 55-69.

Campos, J. J., Campos, R. G, & Barrett, K. (1989). Emergent themes in the study of

emotional development and emotion regulation. *Developmental Psychology*, 25, 393-402.

- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267-283.
- Chartrand, J. M., Martin, W. F., Robbins, S. B., McAuliffe, G. J., Pickering, J. W., & Chickering, A. W., & Reisser, L. (1993). Education and identity, 2nd ed. Jossey-Bass Publishers, San Francisco.
- Chartrand, J. M., Rose, M. L., Elliott, T. R., Marmarosh, C., & Caldwell, S. (1993).Peeling back the onion: Personality, problem solving, and career decision-making style correlates of career indecision. *Journal of Career Assessment, 1*, 66-82.
- Chickering, A. W., & Reisser, L. (Eds.). (1993). *Education and Identity*. San Francisco,CA: Jossey-Bass Publishers.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cook, S. W., & Heppner, P. P. (1997). A psychometric study of three coping measures. *Educational and psychological measurement*, 57, 906-923.
- Crites, J. O. (1969). Vocational psychology. New York: McGraw Hill.
- Dawis, R. V., & Lofquist, L. H. (1984). A psychological theory of work adjustment. Minneapolis, MN: University of Minnesota Press.
- DeCarvalho, R. J. (1990). The growth hypothesis and self-actualization: An existential alternative. *The Humanistic Psychologist*, 18, 252-258.

Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. In M.

R. Rosenweig & L. W. Porter (Eds.), *Annual review of psychology*. Palo Alto,CA: Annual Reviews, Inc.

- Driver, M. J. (1979). Individual decision-making and creativity. In S. Kerr (Ed.), *Organizational Behavior*. Columbus, OH: Grid Publishing.
- Driver, M. J., Brausseau, K. E., & Hunsaker, P. L. (1990). *The dynamic decision maker*. San Francisco: Jossey-Bass Publishers.
- Endler, N. S., & Parker, J. D. A. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality & Social Psychology*, 58, 844-854.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York: Norton.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219-239.
- Gelso, C. J., & Fassinger, R. E. (1992). Personality, development, and counseling psychology: Depth, ambivalence, and actualization. *Journal of Counseling Psychology*, 39, 275-298.
- Gelso, C. J., & Fretz, B. R. (1992). *Counseling Psychology*. San Diego, CA, US: Harcourt Brace Jovanovich
- Germeijs, V. & Boeck, P. D. (2002). A measurement scale for indecisiveness and its relationship to career indecision and other types of indecision. *European Journal* of Psychological Assessment, 18, 113-122.
- Goodstein, L. D. (1965). Behavior theoretical views of counseling. In B. Streffle (Ed.), *Theories of counseling*. New York: McGraw-Hill.
- Greenhaus, J. H., Callanan, G. A., & Godshalk, V. M. (2000). *Career management* (third ed.). Fort Worth TX: Dryden Press.

- Haggins, S. E., & Cooper, D. L. (2003). Values clarification in college upper-class students: Implications for coping with transition. *Unpublished manuscript*.
- Harmon, L. W. & Farmer, H. S. (1983). Current theoretical issues in vocational psychology. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology* (Vol. 1, pp. 39-77). Hillsdale, NJ: Erlbaum.
- Harren, V. A. (1979). A model of career decision making for college students. *Journal* of Vocational Behavior, 14, 119-133.
- Heppner, P. P., Reeder, B. L., & Larson, L. M. (1983). Cognitive variables associated with personal problem-solving appraisal: Implications for counseling. *Journal of Counseling Psychology*, 30, 537-545.
- Holland, J. L., & Holland, J. E. (1977). Vocational indecision: More evidence and speculation. *Journal of Counseling Psychology*, *24*, 404-414.
- Hunt, R. G., Krzystofiak, F. J., Meindl, J. R., & Yousry, A. M. (1989). Cognitive style and decision-making. Organizational Behavior and Human Decision Processes, 44, 436-453.
- Jepsen, D. A. (1974). Vocational decision-making strategy types: An exploratory study. *Vocational Guidance Quarterly*, 23, 17-23.
- Jepsen, D. A., & Dilley, J. S. (1974). Vocational decision making models: A review and comparative analysis. *Review of Educational Research*, 44, 331-349.
- Johnson, R. H. (1978). Individual styles of decision making: A theoretical model for counseling. *Personnel and Guidance Journal*, 56, 530-536.
- Josselson, R. (1987). Finding Herself: Pathways to Identity Development in Women. San Fransisco: Jossey-Bass.

- Jung, C. G. (1976). *Typologi: Till fragan om de psykologiska typerna* (Typologie-Zur Frage der Psychologischen Typen. Olten: Walter-Verlag AG, 1972). Stockholm: Berghs Forlag (translated from German).
- Kinnier, R. T. (1995). A reconceptualization of values clarification: Values conflict resolution. *Journal of Counseling and Development*, *74*, 18-74.
- Kleindorfer, P. R., Kunreuther, H. C., & Schoemaker, P. J. H. (1993). Decision *sciences: an integrative perspective*. Cambridge NY: University Press.
- Knefelkamp, L., Widick, C., & Parker, C. (Eds.). *Applying New Developmental Findings*.New directions for Student Services, no. 4. San Francisco: Jossey-Bass.
- Larson, L. M., Heppner, P. P., Ham, T., & Dugan, K. (1988). Investigating multiple subtypes of career indecision through cluster analysis. *Journal of Counseling Psychology*, 35, 439-446.
- Larson, L. M., Piersel, W., Imao, R., & Allen, S. (1990). Significant predictors of problem-solving appraisal. *Journal of Counseling Psychology*, *37*, 482-490.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Levy, L. L. (1983). Trait approaches. In M. Hersen, A. E. Kazdin., & A. S. Bellack (Eds.), *The clinical psychology handbook* (pp. 123-142). Elmsford, NY: Pergamon Press.
- Loo, R. (2000). A psychometric evaluation of the general decision-making style inventory. *Personality and Individual Differences*, *29*, 895-905.

- Lunneborg, P. W. (1978). Sex and career decision-making styles. *Journal of Counseling Psychology*, 25, 299-305.
- Marcia, J. E. (1966). Development and validation of ego identity status. *Journal of Personality and Social Psychology*, *3*, 551-558.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.) Handbook of adolescent psychology (pp. 159-187). New York: Wiley.
- MacNair, R. R., & Elliott, T. R. (1992). Self-perceived problem-solving ability, stress appraisal, and coping over time. *Journal of Research in Personality*, *26*, 150-164.
- Maslow, A. H. (1954). Motivation and personality. New York: Harper & Row.
- Maslow, A. H. (1962). Toward a psychology of being. New York: D. Van Nostrand.
- Maslow, A. H. (1968). Toward a psychology of being (2nd ed.). New York: D. Van Nostrand.
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harper & Row.
- Maslow, A. H. (1971). *The farther reaches of human nature*. New York: The Viking Press.
- McCrae, R. R., & Costa, P. T., Jr. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, *54*, 385-405.
- McKenny, J., & Keen, P. (1974). *How managers' minds work*. Harvard Business Review, 52, 79-90.
- Miller, G. A., Galanter, E., & Pribram, K. H. (1960). Plans and the Structure of Behavior. Troy, Mo.: Holt, Rinehart, & Winston, 1960.

Miller-Tiedeman, A. (1980). Explorations of decision making in the expansion of

adolescent development. In V. L. Erickson, & J. M. Whiteley (Eds.), *Developmental counseling and teaching (pp. 158-187)*. Monterey, CA: Brooks/Cole.

- Miller, A. L., & Tiedeman, D. V. (1972). Decision making for the 70's: The cubing of the Tiedeman paradigm and its applications in career education. *Focus on Guidance*, 5, 1-15.
- Mitroff, I. I. (1983). *Stakeholders of the organizational mind*. San Francisco: Jossey-Bass.
- O'Hare, M. M., & Beutell, N. J. (1987). Sex differences in coping with career decisionmaking. *Journal of Vocational Behavior*, *31*, 174-181.
- Osipow, S. H. (1999). Assessing career indecision. *Journal of Vocational Behavior*, 55, 147-154.
- Payne, J. W., Bettman, J. R., & Johnson, E. J. (1992). Behavioral decision research: A constructive processing perspective. *Annual Review of Psychology*, 43, 87-131.
- Payne, J. W., Bettman, J. R., & Johnson, E. J. (1993). *The adaptive decision maker*. Cambridge, NY: University Press.
- Phillips, S. D., Friedlander, M. L., Pazienza, N. J., & Kost, P. (1985). A factor analytic investigation of career decision-making styles. Journal of Vocational Behavior, 26, 106-115.
- Phillips, S. D., Pazienza, N. J., & Ferrin, H. H. (1984). Decision making styles and problem solving appraisal. *Journal of Counseling Psychology*, 31, 497-502.

Phillips, S. D., Pazienza, N. J., & Walsh, D. J. (1984). Decision making styles and

progress in occupational decision making. *Journal of Vocational Behavior*, 25, 96-105.

- Prochaska, J. O., & DiClemente, C. C. (1986). The transtheoretical approach. In J. C. Norcross (Ed.), *Handbook of eclectic psychotherapy* (pp. 163-200). New York: Brunner/Mazel.
- Prochaska, J. O., & DiClemente, C. C. (1992). Stages of change in the modification of problem behaviors. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.), *Progress in behavior modification* (pp. 184-218). Sycamore, IL: Sycamore Press.
- Robitschek, C. (1998). Personal growth initiative: The construct and its measure. *Measurement and Evaluation in Counseling and Development, 30*, 183-198.
- Robitschek, C. (1999). Further validation of the personal growth initiative scale. *Measurement and Evaluation in Counseling and Development, 31*, 197-211.
- Robitschek, C., & Cook, S. W. (1999). The influence of personal growth initiative and coping styles on career exploration and vocational identity. *Journal of Vocational Behavior, 54*, 127-141.
- Robitschek, C., & Kashubeck, S. (1999). A structural model of family functioning and psychological health: The mediating effects of hardiness and personal growth orientation. *Journal of Counseling and Psychology*, *46*, 159-172.

Rokeach, M. (1973). The nature of human values. New York: Free Press.

Rogers, C. R. (1951). Client-centered therapy. Boston: Houghton Mifflin.

Salamone, P. R. (1982). Difficult cases in career counseling: II. The indecisive client. *The Personnel and Guidance Journal, 60,* 496-500.

Salomone, P. R. & Mangicaro, L. L. (1991). Difficult cases in career counseling: IV-

floundering and occupational moratorium. The Career Development Quarterly, 39, 325-336.

- Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure. Educational and Psychological Measurement, 55, 818-831.
- Singh, R., & Greenhaus, J. H. (2004). The relation between career decision-making strategies and person-job fit: A study of job changers. *Journal of Vocational Behavior, 64,* 198-221.
- Snyder, C. R. (1999). *Coping: The psychology of what works*. New York: Oxford University Press.
- Snyder, C. R., & Ford, C. E. (Eds.). (1987). *Coping with negative life events*. New York: Plenum.
- Stanton, A. L., Danoff-Burg, S., Cameron, C. L., & Ellis, A. P. (1994). Coping through emotional approach: Problems of conceptualization and confounding. *Journal of Personality and Social Psychology*, 66, 350-362.
- Super, D. E. (1957). *The psychology of careers*. New York: Harper & Row.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16, 282-298.
- Super, D. E., & Sverko, B. (1995) *Life roles, values, and careers: International findings* of the work importance study. San Francisco CA: Jossey-Bass.
- Tiedman, D. V. (1961). Decisions and vocational development: A paradigm and its implications. *Personnel and Guidance Journal*, 40, 15-21.

Tiedman, D. V., & O'Hara, R. P. (1963). Career development: Choice and adjustment.

New York: College entrance Examination Board.

- Thunholm, P. (2004). Decision-making style: habit, style or both? *Personality and Individual Differences, 36,* 931-944.
- Tyler, L. E. (1961). Research explorations in the realm of choice. *Journal of Counseling Psychology*, 8, 195-201.
- Witmer, J. M., Rich, C., Barcikowski, R. S., Mague, J. C. (1983). Psychological characteristics mediating the stress response: An exploratory study. Personnel and Guidance Journal, 62, 73-77.
- Weyhing, R. S., Bartlett, W. S., & Howard, G. S. (1984). Career indecision and identity development. *Journal of Psychology and Christianity*, *3*, 74-78.
- Whittaker, A. E., & Robitschek, C. (2001). Multidimensional family functioning:
 Predicting personal growth initiative. *Journal of Counseling Psychology*, 48, 420-427.
- Wicklund, R. A., & Brehm, J. W. (Eds.). (1976). *Perspectives on cognitive dissonance*.Hillsdale, NY: Lawrence Earlbaum Association.
- Young, M. E., & Witmer, J. M. (1985). Values: Our internal guidance system. In J. M.
 Witmer (Ed.), *Pathways to personal growth. Developing a sense of worth and competence: A holistic education approach* (pp. 275-289). Muncie, IN:
 Accelerated Development, Inc., Publishers.
- Wechter, S. L. (1983). Separation difficulties between parents and young adults. *Journal* of Contemporary Social Work, 64, 97-104.
- Witmer, J. M. (1985). Becoming a more fully functioning person. IN J. M. Witmer (Ed). Pathways to personal growth. Developing a sense of worth and

competence: A holistic education approach (pp. 7-42). Muncie, IN: Accelerated Development, Inc., Publishers.

APPENDICES

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL



84

Institutional Review Board Human Subjects Office 612 Boyd GSRC Athens, Georgia 30602-7411 (706) 542-3199 Fax: (706) 542-5638 www.ovpr.uga.edu/hso

APPROVAL FORM

Date Proposal Received: 2004-09-21

The University of Georgia

Office of The Vice President for Research

DHHS Assurance ID No. : FWA00003901

Project Number: 2005-10181-0

	Name	Title	Dept/Phone	Address	Email
Ms. Shern Haggins	y Elizabeth	PI	Counseling & Human Development 402 Aderhold Hall +7142	2380 River Run Trace Columbus Ohio, 43235 614-932-9082	shaggins@uga.edu
Dr. Diane	L. Cooper	со	Counseling & Human Development Services 408 Aderhold Hall +7142 542-4120/5542-1518		dlcooper@coe.uga.edu

Title of Study: Individual Differences in Decision-Making Styles: An Examination of Personal Growth Initiative and Coping in College Students.

45 CFR 46 Category: Administrative 2	Change(s) Required for Approval and Date Completed: 2004-10-28
Parameters:	Revised Application;
None;	Revised Consent Document(s);

Approved : 2004-10-29 Begin date : 2004-10-29 Expiration date : 2005-10-28

NOTE: Any research conducted before the approval date or after the end data collection date shown above is not covered by IRB approval, and cannot be retroactively approved.

Number Assigned by Sponsored Programs:

Form 310 Provided: No

.

Your human subjects study has been approved.

Please be aware that it is your responsibility to inform the IRB:

... of any adverse events or unanticipated risks to the subjects or others within 24 to 72 hours;

... of any significant changes or additions to your study and obtain approval of them before they are put into effect;

.... that you need to extend the approval period beyond the expiration date shown above;

we that you have completed your data collection as approved, within the approval period shown above, so that your file may be closed.

For additional information regarding your responsibilities as an investigtor refer to the IRB Guidelines Use the attached Researcher Request Form for requesting renewals, changes, or closures. Keep this original approval form for your records.

Christina K. Joseph, Ph.D.

Funding Agency:

Chairperson, Institutional Review Board

APPENDIX B

CONSENT AGREEMENT

Dear Colleague:

You are invited to participate in a research study entitled: "Individual Differences in Decision-Making Styles: An Examination of Personal Growth Initiative and Coping in College Students" that is being conducted by Sherry Haggins, Department of Counseling & Human Development at University of Georgia, phone 614-932-9082 under the direction of Dr. Diane Cooper, Department of Counseling & Human Development at University of Georgia, phone 706-542-1812.

The general purpose of this research is to examine the ways in which individuals approach decisions depending on their orientation toward growth and exploration, as well as method for coping with problem resolution.

If you should choose to participate in this study, your participation will involve the following:

- Completing an online survey that includes basic demographic questions.
- Completing three questionnaires online.

Completion of the survey is expected to take approximately fifteen to twenty minutes. Please note that Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, once I receive the completed surveys, the dataset will be cleaned, edited, and then analyzed, at which point all participants' names will be taken out of the data base. The database will be removed from the online computer server every 1-2 days. The data will be archived in electronic format in the long term without the participants' names and only the researcher will have access to the database and will take all reasonable precautions to protect your identity until your name is removed permanently from the database. Any information that is obtained in connection with this study and that can be identified with you will remain confidential except as required by law. If you are not comfortable with the level of confidentiality provided by the Internet, please feel free to print out a copy of the survey, fill it out by hand, and mail it to me at the address given below, with no return address on the envelope.

You may receive extra credit by doing an alternative assignment that does not involve participation in research but involves comparable effort and duration to research participation. This alternative assignment is available if your instructor is offering extra credit for participation in this research study.

Your participation in this study is completely voluntary. You may skip any questions that you are not comfortable answering. You may withdraw at any time without penalty and decline to submit responses to the questionnaire that follows. Closing the survey window will erase your answers without submitting them.

If you have any questions do not hesitate to ask now or at a later date. You may contact Sherry Haggins at 614-932-9082 and <u>shaggins@uga.edu</u>. Thank you for the invaluable help that you are providing by participating in this research study.

Sincerely, Sherry Haggins Department of Counseling and Human Development Services The University of Georgia 402 Aderhold Hall Athens, GA 30602 614-932-9082 Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 606A Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu. APPENDIX C

GENERAL DECISION-MAKING STYLES SCALE

Listed below are the statements describing how individuals go about making important decisions. Please respond to each of the following items by selecting from the response choices listed below.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I use the advice of other people in making	1	2	3	4	5
my important decisions.					
2. I generally make snap decisions.	1	2	3	4	5
3. My decision making requires careful thought.	1	2	3	4	5
4. I often need the assistance of other people	1	2	3	4	5
when making important decisions.					
5. I generally make decisions that feel right to	1	2	3	4	5
me.					
6. I often procrastinate when it comes to making important decisions.	1	2	3	4	5
7. When I make a decision, I trust my inner feelings and reactions.	1	2	3	4	5
8. When making a decision, I consider various options in terms of a specific goal	1	2	3	4	5
9. When making decision, I do what seems natural at the moment.	1	2	3	4	5
10. I like to have someone to steer me in the right direction when I am faced with important decisions.	1	2	3	4	5
11. I avoid making important decisions until the pressure is on.	1	2	3	4	5
12. When I make decisions, I tend to rely on my intuition.	1	2	3	4	5
13. I double-check my information sources to be sure I have the right facts before making decisions.	1	2	3	4	5
14. When I make a decision, it is more important for me to feel the decision is right than to have a rational reason for it.	1	2	3	4	5
15. I make quick decisions.	1	2	3	4	5
16. I postpone decision making whenever possible.	1	2	3	4	5
17. If I have the support of others, it is easier for me to make important decisions.	1	2	3	4	5
18. I make decision in a logical and systematic way.	1	2	3	4	5
19. I put off making many decisions because thinking about them makes me uneasy.	1	2	3	4	5

20. I often make impulsive decisions.	1	2	3	4	5
21. I plan my important decisions carefully.	1	2	3	4	5
22. When making decisions, I rely upon my	1	2	3	4	5
instincts.					
23. I rarely make important decisions without	1	2	3	4	5
consulting other people.					
24. I generally make important decisions at the	1	2	3	4	5
last minute.					
25. I often make decisions on the spur of the	1	2	3	4	5
moment.					

APPENDIX D

COPE INVENTORY

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Respond to each of the following items by circling one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU—not what you think "most people" would say or do. **Indicate what you usually do when YOU experience a stressful event.**

- **1= I usually don't do this at all**
- 2= I usually do this a little bit
- **3= I usually do this a medium amount**
- **4= I usually do this a lot**

	I usually don't do this at all	I usually do this a little bit	I usually do this a medium amount	I usually do this a lot
1. I try to grow as a person as a result of the experience.	1	2	3	4
2. I turn to work or other substitute activities to take my mind off things.	1	2	3	4
3. I get upset and let my emotions out.	1	2	3	4
4. I try to get advise from someone about what to do.	1	2	3	4
5. I concentrate my efforts on doing something about it.	1	2	3	4
6. I say to myself "this isn't real."	1	2	3	4
7. I put my trust in God.	1	2	3	4
8. I laugh about the situation.	1	2	3	4
9. I admit to myself that I can't deal with it.	1	2	3	4
10. I restrain myself from doing anything to quickly.	1	2	3	4
11. I discuss my feelings with someone.	1	2	3	4
12. I use alcohol or drugs to make myself feel better.	1	2	3	4
13. I get used to the idea that it happened.	1	2	3	4
14. I talk to someone to find out more about the situation.	1	2	3	4
15. I keep myself from getting distracted by other thoughts or	1	2	3	4
activities.				
16. I daydream about things other than this.	1	2	3	4
17. I get upset, and am really aware of it.	1	2	3	4
18. I seek God's help.	1	2	3	4
19. I make a plan of action.	1	2	3	4
20. I make jokes about it.	1	2	3	4
21. I accept that this has happened and that it can't be changed.	1	2	3	4
22. I hold off doing anything until the situation permits.	1	2	3	4
23. I try to get emotional support from friends and relatives.	1	2	3	4
24. I just give up trying to reach my goal.	1	2	3	4

25. I take additional action to try to get rid of the problem.	1	2	3	4
	I usually	L Usually	I usually	4 I usually
	don't do	do this a	do this a	do this a
	this at all	little bit	medium	lot
			amount	
26. I try to lose myself for a while by drinking alcohol or taking drugs.	1	2	3	4
27. I refuse to believe that it has happened.	1	2	3	4
28. I let my feelings out.	1	2	3	4
29. I try to see it in a different light, to make it seem more positive.	1	2	3	4
30. I talk to someone who could do something concrete about the problem.	1	2	3	4
31. I sleep more than usual.	1	2	3	4
32. I try to come up with a strategy about what to do.	1	2	3	4
33. I focus on dealing with this problem, and if necessary let other things slide a bit.	1	2	3	4
34. I get sympathy and understanding from someone.	1	2	3	4
35. I drink alcohol or take drugs, in order to think about it less.	1	2	3	4
36. I kid around about it.	1	2	3	4
37. I give up the attempt to get what I want.	1	2	3	4
38. I look for something good in what is happening.	1	2	3	4
39. I think about how I might best handle the problem.	1	2	3	4
40. I pretend that it hasn't really happened.	1	2	3	4
41. I make sure not to make matters worse by acting too soon.	1	2	3	4
42. I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
43. I go to movies or watch TV, to think about it less.	1	2	3	4
44. I accept the reality of the fact that it has happened.	1	2	3	4
45. I ask people who have had similar experiences what they did.	1	2	3	4
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.	1	2	3	4
47. I take direct action to get around the problem.	1	2	3	4
48. I try to find comfort in my religion.	1	2	3	4
49. I force myself to wait for the right time to do something.	1	2	3	4
50. I make fun of the situation.	1	2	3	4
51. I reduce the amount of effort I'm putting into solving the problem.	1	2	3	4
52. I talk to someone about how I feel.	1	2	3	4
53. I use alcohol or drugs to help me get through it.	1	2	3	4
54. I learn to live with it.	1	2	3	4
55. I put aside other activities to concentrate on this.	1	2	3	4
56. I think hard about what steps to take	1	2	3	4
57. I act as though it hasn't even happened.	1	2	3	4
58. I do what has to be done, one step at a time.	1	2	3	4
59. I learn something from the experience.	1	2	3	4
60. I pray more than usual.	1	2	3	4
- · ·				

APPENDIX E

PERSONAL GROWTH INITIATIVE SCALE

Using the scale below, select the response that best describes the extent to which you agree or disagree with each statement.

	 1 = Definitely disagree 2 = Mostly disagree 3 = Somewhat disagree 4 = Somewhat agree 5 = Mostly agree 6 = Definitely agree 						
1.	I know how to change specific things that I want to change in my life.	1	2	3	4	5	6
2.	I have a good sense of where I am headed in my life.	1	2	3	4	5	6
3.	If I want to change something in my life, I initiate the transition process.	1	2	3	4	5	6
4.	I can choose the role that I want to have in a group.	1	2	3	4	5	6
5.	I know what I need to do to get started toward reaching my goals.	1	2	3	4	5	6
6.	I have a specific action plan to help me reach my goals.	1	2	3	4	5	6
7.	I take charge of my life.	1	2	3	4	5	6
8.	I know what my unique contribution to the world might be.	1	2	3	4	5	6
9.	I have a plan for making my life more balanced.	1	2	3	4	5	6

APPENDIX F

DEMOGRAPHIC INFORMATION

Your First and Last Name:

Name of Instructor:

Your instructor does not see your responses)

Class Standing:

Freshman Sophomore Junior Senior

How do you describe yourself?

American Indian or Alaska Native Asian Black or African American Hispanic or Latino Native Hawaiian or Other Pacific Islander White

Gender:

Male Female

Age:

APPENDIX G

DEBRIEFING STATEMENT

Debriefing Statement

Thank you for your participation in the study. The purposes of this research have been to: (a) examine the relationship between the degree of personal growth initiative and coping style in college students; and (b) examine how the degree of personal growth initiative relates to differences in decision-making style and coping strategies employed by college students. Personal growth initiative is defined as "active, intentional engagement in the process of personal growth (Robitschek, 1998, p. 184). Intentionality involves being skilled in "consciously choosing priorities, in aligning action with purpose, in motivating oneself consistently toward goals, and in persevering despite barriers or setbacks" (Chickering & Reisser, 1993, p. 212). The instruments used in this investigation were: the General Decision-Making Styles scale (GDMS), COPE Inventory (COPE), and Personal Growth Initiative Scale (PGIS).

The results of this study should have uses in many areas, including treatment programs that (a) address the process of change and growth in order to prepare individuals for challenges associated with making career and other life decisions; (b) prepare individuals for coping with and adapting to new circumstances that result from decisions; and (c) enable individuals to perceive choices and actively choose avenues for growth.

The findings can have positive implications for helping professionals who work with a variety of individuals who present different approaches to career decision-making. Examining the degree of personal growth orientation in college students is likely to contribute to a better understanding of the person's sense of direction, purpose in life, tendency to set life goals, and likelihood of intentionally engaging in behaviors that effect

movement in a chosen direction. If you have any further questions contact: Sherry Haggins (<u>shaggins@uga.edu</u> or 614-932-9082).