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The role of exploration and critical decision making and problem solving in making life choices

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

**THE ROLE OF EXPLORATION AND CRITICAL DECISION MAKING AND
PROBLEM SOLVING IN MAKING LIFE CHOICES.**

**A dissertation submitted in partial satisfaction of the
requirements for the degree of**

DOCTOR OF PHILOSOPHY

IN

PSYCHOLOGY

by

Ondina Arrufat

1997

To: Dean Arthur W. Herriott
College of Arts and Sciences

This dissertation, written by Ondina Arrufat, and entitled The Role of Exploration and Critical Decision Making and Problem Solving in Making Life Choices, having been approved in respect to style and intellectual content, is referred to you for judgement.

We have read this dissertation and recommend that it be approved.

Patricia Telles-Irvin

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Wendy K. Silverman

William M. Kurtines, Major Professor

Date of Defense: November 18, 1997

The dissertation of Ondina Arrufat is approved.

Dean Arthur W. Herriott
College of Arts and Sciences

Dr. Richard Campbell
Dean of Graduate Studies

Florida International University, 1997

I dedicate this dissertation to the memory of my father, who supported my decisions even if he did not agree with them and to my mother, who never questioned my potential.

But my special love and thanks go to my daughter Laine, who put up with many hardships and never let me give up.

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ABSTRACT OF THE DISSERTATION
THE ROLE OF EXPLORATION AND CRITICAL DECISION
MAKING AND PROBLEM SOLVING IN MAKING LIFE CHOICES

by

Ondina Arrufat

Florida International University, 1997

Miami, Florida

Professor William M. Kurtines, Major Professor

Although the literature on the types of abilities and processes that contribute to identity formation has been growing, the research has been mainly descriptive/correlational. This dissertation conducted an experimental investigation of the role of two theoretically distinct processes (exploration and critical problem solving) in identity formation, one of the first to be reported. The experimental training design (pre-post, training versus control) used in this study was intended to promote identity development by fostering an increase in the use of exploration and critical problem solving with respect to making life choices. Participants included 53 psychology students from a large urban university randomly assigned to each group. The most theoretically significant finding was that the intervention was successful in inducing change in the ability to use critical skills in resolving life decisions, as well as effecting a positive change in identity status.

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INTRODUCTION

There is a growing body of literature on the types of abilities and processes that contribute to the formation of an identity, but the character of most of this research has been either descriptive or correlational. This dissertation conducted one of the first experimental investigations of the role of exploration and critical problem solving in identity formation reported in the literature. The experimental training design (pre-post, training versus control) used in this study was intended to promote identity development by fostering an increase in the use of exploration and critical problem solving with respect to making life choices.

The hypotheses tested with respect to outcome of the experimental manipulation were that the direct effects of training : 1) would increase the quality and quantity of exploration in the experimental condition relative to the control condition, 2) would increase the use of critical decision making and problem solving skills in the experimental condition relative to the control condition, 3) would result in positive movement in identity status, reduce identity distress, and increase identity satisfaction for the experimental condition relative to the control condition, and 4) that within the experimental condition, increases in the use of exploration and critical problem solving skills would predict positive movement in identity status, reduce identity distress, and increase identity satisfaction.

Identity Formation: A Psychosocial Developmental Perspective

Adolescence is a time of many changes, both physical and psychological, and possibly the most important task of this period is that of developing a sense of identity. The concept of identity used in this project derives from the work of Erikson. Erikson proposed that all humans progress through life in an invariant sequence of eight stages (Erikson, 1963) in their quest for ego growth. Each stage consists of a psychosocial crisis that must be successfully resolved in order to attain this growth. Erikson believed that this quest comes to a peak during adolescence, the stage of Identity vs. Role Confusion.

According to Erikson (1968), with the attainment of sexual maturity the young person re-examines and questions his or her prior experiences and evaluates his or her physical abilities as well as the opportunities for growth offered by society. The crisis during this stage is that of exploration, out of which arises a new sense of identity, seen as the commitment to new roles. He has identified specific domain areas that people explore: personal, occupational, sexual, and ideological commitments (Erikson, 1968).

Exploration and Commitment

Identity statuses. Although Erikson's theory has generated much research in the area of identity formation, his work was mostly descriptive, and therefore difficult to research. Marcia (1966) operationalized Erikson's theory into four identity statuses that could be studied empirically by using

the original dichotomy of Identity vs Role Confusion (which Marcia has termed identity confusion) and adding the processes by which identity is developed: exploration and commitment. Marcia (1992) defines exploration as the process of how and how much the individual has looked at alternative directions and beliefs, sometimes questioning earlier beliefs and sometimes departing from them. Commitment is defined as reaching a decision among several alternatives generated by exploration.

Typically, three content areas are used to assess identity styles: occupation, ideology, and interpersonal values. These areas were derived from Erikson's original proposed domains. The combination of the original dichotomy and the two processes results in four identity statuses. Identity Diffusion describes persons who have at best cursorily explored a content area and who remain uncommitted. A Foreclosed identity status denotes individuals who have made a commitment in a content area without prior exploration. Those in the Moratorium status are in the process of exploring, but have not yet made a commitment. Identity Achievement defines those individuals who have made commitments after undergoing a period of exploration. This status is theorized to have successfully resolved the crisis of Identity vs. Role Confusion (Marcia, 1992).

Identity Formation: A Process Perspective

Grotevant (1992) has proposed a move from the description of the statuses to research seeking to discover the processes necessary to identity

development. He has proposed a model that considers the continuities of identity over the life-span, as well as considering the influences of society, school and work environments, and interpersonal relationships on identity formation. He theorizes that the process of exploration, not commitment, is the primary activity of the adolescent years and states that the process of exploration may be regarded as problem-solving behavior focusing on extracting information about the self or the environment “in order to make an important life choice” (Grotevant, 1987, p. 204).

According to Grotevant (1992), the capacity to explore may be different for each individual. Each person brings in their own personality, ability, and self-concept. The exploration process may also be constrained or enhanced by the current historical and cultural context. A third proposition is that exploration, commitment and identity development in one domain can affect the process in other domains. Grotevant (1992) also differentiates between assigned and chosen identity components. Assigned components are those particular to the person, such as gender, ethnicity, and adoptive status. He proposes that both types of components interact to determine the types of choices available for exploration as well as the final decision and strength of the commitment.

In addition to the above assigned and chosen components of personality, other factors may mediate the process of identity formation. In a review of the literature, Markstrom-Adams (1992) has identified social

contextual factors, such as family relationships, ethnic and racial group membership, and religiosity that may constrain a person's ability or willingness to explore as well as the ability to make a commitment. Cognitive factors, such as development of formal operations, the ability for assimilation and accommodation, and perspective-taking, are also involved in the individual's ability to explore available choices.

Pulkkinen & Ronka (1994) have criticized the tendency of researchers to focus attention on identifying one overall status, while moving away from Erikson's original conceptualization of identity as a sense of inner wholeness. Using Nurmi's (1991) concept of the development of future-oriented motivation that consists of a period of exploration, goal-setting, and commitment, they found that a positive life orientation arises from a person's perception of personal control over development, expectations of the future, and identity achievement.

One specific domain, that of career development and decision-making, has been often studied by researchers. Blustein and Phillips (1990) have looked at the relationship between identity status and decision making styles in career decision making. They have identified three styles related to identity formation and exploration. People using a rational or systematic style tend to use logical or planful strategies. Others use strategies that are intuitive or spontaneous, while individuals evidencing a dependent style projects responsibility for decisions to others.

Research by these theorists has shown that differences in decision-making styles are associated with differences in ego identity status. Achieved individuals tend to rely on rational decision making, which reflect autonomous exploration and commitment, while foreclosures are associated with the dependent decision-making style, shown by a tendency to adopt parental values and attitudes. Diffusions are associated with intuitive and dependent styles, and were shown to be inversely related to the rational style. The use of dependent decisional strategies may be due to the need to reduce the ambiguity characteristic of exploration. Interestingly, the moratorium status was not associated with rational decision making, but was modestly associated with intuitive and dependent decisional strategies.

In a second study, Blustein and Phillips (1990) used Johnson's (1978) conceptualization of decision making. This theory proposes that information gathering and processing vary along two bipolar dimensions, from systematic to spontaneous. Systematic persons use deliberate, planful, and logical decisional strategies, while spontaneous individuals are global, affectively oriented and nondeliberate in making decisions.

For information processing, the continuum extends from the use of internal means of analyzing information to those who prefer to think out loud in an external fashion. This study found that there was a strong relationship between achievements and more planful and logical decision making strategies of the systematic style. Foreclosures and diffusions were related

to the absence of systematic information-gathering activities. Achievements tend to have internal means of assessing decisional data, while diffusion and foreclosure statuses tend not to engage in internal information-processing strategies.

Identity Formation: A Constructivist Perspective

Berzonsky (1990) has proposed a social-cognitive model of identity that perceives identity as a self-constructed representation that the individual uses to interpret information and to cope with personal problems and life events, thus providing direction and purpose to life, as proposed by Erikson. The four identity statuses may reflect different cognitive processing orientations. This model focuses on differences in the mechanisms by which information about experiences is analyzed, therefore focusing on the process of exploration.

The model proposes that individuals possess three different styles of personal decision making. Information-oriented individuals are self-explorers; they actively seek out and evaluate relevant information before making a commitment. Marcia's moratoriums and identity achievers will follow this process. Norm-oriented individuals focus on the normative expectations held for them by family, society, or other significant figures. Those with a diffuse orientation tend to delay decision-making until the situation calls for action, and will avoid confronting problems as long as possible.

Berzonsky believes that individuals differ in their openness to experience, on their use of deliberate reasoning, on how they elaborate decision-relevant information, and on how they exercise ego control. Openness to experience, (McCrae, 1987) is marked by intellectual curiosity, awareness of private feelings, a rich fantasy life, liberal values, and aesthetic sensitivity.

For the reasoned action dimension, Berzonsky formulates that behavioral intentions are a joint function of personal attitudes and normative beliefs. A person with a norm-orientation would be concerned with the beliefs of relevant others, while an information-orientation would prompt a personal search for information about the desirability of a decision. Elaboration has been defined as the extent to which an individual expends deliberate cognitive effort in evaluating relevant arguments. The quality of the information is the major determinant of attitudinal change, and it is enhanced by moderate repetition, personal relevance, and the individual responsibility for the decision.

According to this view, an objective processor is motivated to evaluate the validity of the argument, while a biased processor is motivated to defend preexisting views. For ego control, Berzonsky has used the concept of self-control and regulation (Block & Block, 1980). Under control is seen as a vulnerability to environmental distraction and an inability or unwillingness to inhibit impulses. Overcontrol involves inflexible, stereotypical behavioral

responding. Adaptation is seen as the flexible use of accommodative coping and problem-solving strategies. In regards to environmental constraints, Berzonsky refers to Mead (1970). A postfigurative culture, a stable traditional setting, will result in a normative approach. Those living in an unstable culture will find their values and expectations changing as the person matures.

Identity Formation: A Co-constructivist Perspective

The co-constructivist perspective, (Kurtines, Berman, Ittel, & Williamson, 1995; Kurtines, 1997) views the human species as a self-directed, goal oriented biopsychosocial organism that, like other species, is confronted with the task of successfully adapting to continuously changing conditions. Human beings, however, not only respond to changes in their environment, they also have the capacity to shape and influence the conditions to which they respond. Humans are organisms with complex, higher order cognitive and communicative capacities that enable them to engage in decision making and problem solving activities that affect the quality of their lives (Berman, 1996). From this co-constructivist perspective, the formation of a sense of identity involves development in three broad domains, 1) personal development, 2) interpersonal development, and 3) world view (Schmaltz, 1995).

The personal development domain is defined by the self's relation to its own inner, subjective reality. In the process of personal development, the

individual searches for, explores, and investigates available life goals and values, both actual and potential. With the development of a full range of competencies that allow the development of modes of personal expressiveness and higher order critical decision making and problem solving skills, the individual's needs and interests become increasingly more defined in terms of long range goals and values, eventually including life goals and values.

The formation of a sense of identity involves an extended period of exploration with the goal of making a commitment to the life goals and values that give our personal history its direction and purpose. A commitment to the self-chosen life goals and values that are internalized during the formation of an identity facilitates the process of making the decisions that shape and influence personal change (Schmaltz, 1995).

The second domain is that of interpersonal development, defined by the self's relation to others and integrates the subjective experiences of the self with others. This domain is concerned with the quality of the individual's interpersonal life - the quality of our relations with others. Identity formation is not envisioned as a purely subjective process; it does not take place in a social vacuum. Individuals choose, and are responsible for, the goals and values that provide the direction for their life, but they do not choose them in isolation.

The third domain of identity formation is the individual's world view, and it enables the individual to define the self in relation to objective reality. The development of a world view integrates the subjective experiences of the self with the external world of natural phenomena. It encompasses not only the factual information represented by our scientific, academic, intellectual, and technical beliefs and knowledge, but also the ideological information that is encompassed by our religious, political, moral, economic, etc. beliefs, to the extent that we consider such phenomena to be "mind independent" (Schmaltz, 1995).

Like the other perspectives, the co-constructivist approach also considers exploration and commitment to be an important process in the achievement of an identity, in this case in each of the three domains. To the view of the importance of exploration, however, the co-constructivist approach also adds the view that critical decision making and problem solving are also important processes that the individual brings to bear on the process of identity formation.

Critical decision making and problem solving. The conceptualization of critical decision making and problem solving described in this project was derived from an ongoing program of psychosocial theory and research (Kurtines, 1984; 1987; Kurtines et al, 1995; Kurtines, Mayock, Pollard, Lanza, & Carlo, 1991; Pollard, Kurtines, Carlo, Dancs, & Mayock, 1991). It provides a framework for understanding the role that critical

problem solving skills play in human decision making and problem solving. This framework views critical skills as involving specific types or categories of decision making and problem solving operations and actions human beings use in individual and group decision making and problem solving activities.

Critical processes are conceptualized as involving complex, higher order types of decision making and problem solving operations and actions that occur relatively infrequently in ordinary decision making and problem solving. Although they occur infrequently, they are important in human decision making and problem solving because of the role they play when ordinary decision making and problem solving activities fail. The conceptualization of critical skills in problem solving and decision making used in this project draws on the consensus that has begun to emerge in the literature with respect to the general features of a broader, more practical conception of critical thinking.

First, critical thinking is generally recognized as a higher order cognitive capacity and, thus, similar to other types of higher order cognitive abilities (Glasser, 1984). Critical thinking, for example, includes the capability of monitoring and evaluating one's own performances, i.e., thinking about thinking (Greeno, 1989), and is thus a type of meta-cognition (Bransford, Sherwood, Vye, & Rieser 1986). Critical thinking, however, involves more than meta-cognitive processes.

Critical thinking is a complex, higher order type of cognitive process that facilitates problem solving activities in contexts of disequilibrium. Under conditions of equilibrium, human goal-oriented behavior is oriented toward goals actually or potentially attainable under existing conditions and toward maintaining the equilibrium necessary for achieving those goals. Goal-oriented behavior involves both means and ends. Ends refer to goals, aims, outcomes, etc. and means refer to the plans, procedures, methods, strategies, etc. by which goals, aims, or outcomes are achieved or accomplished. Problems arise with respect to human goal-oriented behavior when changing organismic and/or environmental conditions create a disequilibrium that disturbs, interrupts, or disrupts goal-oriented behavior.

The disequilibrium created by changing conditions results in two basic types of problems with respect to human goal-oriented behavior: instrumental and normative. A problem is instrumental when it involves the means or method by which goals or ends are (or can be) achieved. A problem is normative when it involves the desirability (goodness, rightness, usefulness, etc.) of the goals or ends themselves. Successful problem solving involves establishing or reestablishing an equilibrium that restores successful goal-oriented behavior. The three basic types of activities involved in successful problem solving are briefly described next.

First, successful problem solving involves recognizing when a problem exists. Recognizing when a problem exists includes not only recognizing that

goal-oriented behavior has been disturbed, interrupted, or disrupted, but also identifying and rendering explicit the nature of the problem. This includes identifying whether the problem is instrumental, normative, or both and identifying and rendering explicit the problematic means or methods and/or goals or ends.

Successful problem solving, however, requires more than recognizing that a problem exists and what the problem is. Successful problem solving also involves generating potential alternatives (instrumental or normative) for resolving the problem and restoring equilibrium. If the problem is instrumental, generating alternatives involves either transforming or reconstructing and/or inventing or creating new or novel means or methods for achieving goals and ends. If the problem is normative, generating alternatives involves either transforming or reconstructing and/or inventing or creating new or novel goals and ends themselves.

Finally, successful problem solving also involves evaluating, selecting, and implementing the most adaptive alternatives from among the competing means or methods and/or goals or ends. Successful problem solving thus involves three basic activities: 1) recognizing when a problem exists and identifying what the problem is, 2) generating or creating alternatives for solving the problem, and 3) selecting the most adaptive alternative.

Now that the types of activities involved in successful problem solving have been outlined, we can turn to the role that critical decision making and

problem solving skills play in these activities. This view of the role that these skills have to play in problem solving activities draws on the consensus that has emerged in the literature with respect to a more practical conception of critical thinking. As Greeno (1989) has noted, critical thinking is reflective thinking rather than simply accepting statements and carrying out procedures without significant understanding and evaluation. Critical thinking involves being able to recognize circumstances when reflection and evaluation might be useful in overcoming some difficulty that has emerged in the normal course of activity and taking steps to resolve the difficulty. Critical thinking is thus a complex, higher-order type of cognitive process that should not be expected to occur at all times (Greeno, 1989).

As it applies to individual problem solving, critical thinking involves two basic processes: suspension of judgment and critical evaluation. These two processes have an important role to play in all three types of problem solving activities. Suspension of judgment involves treating the problem hypothetically and entertaining the possible utility and/or validity of all potential interpretations with respect to what the problem is, what the alternatives are, and what the best solution is. Critical evaluation involves challenging, questioning, and subjecting to critical examination all potential interpretations as to what the problem is, what the alternatives are, and what the best solution is. Critical thinking is, thus, thinking that involves adopting a critical (i.e., skeptical or questioning) stance with respect to the problem to

be solved, including all activities related to successfully solving the problem.

The use of critical skills in problem solving has an important role to play in successfully solving problems that arise with respect to human goal-oriented behavior because it facilitates the resolution of challenges to the utility or validity of the goal-oriented behavior. With the development of the capacity for critical problem solving and decision making, the individual acquires the capacity for a type of problem solving that is unique to the human species. The capacity for critical skills enables human beings to do more than solve problems that arise with respect to goal-oriented behavior.

This capacity enables human beings to challenge or question the utility of the means or methods by which goals are achieved and to transform or reconstruct them and/or to invent or create new ones when necessary. More importantly, the capacity for critical decision making and problem solving enables human beings to challenge or question the value or validity of goals or ends themselves and to transform or reconstruct them and/or to invent or create new ones when necessary. The development of the capacity for critical decision making and problem solving thus enables the individual to engage in complex forms of problem solving. It is also one of the complex, higher-order capacities that enable human beings to transform or reconstruct and/or to invent or create the goals and values that shape and influence the direction of personal change.

Thus, there is a large and growing literature on the types of abilities and orientations that contribute to identity formation but most of the research on the role of these processes in identity formation have been of a descriptive or correlational nature. The main aim of this project was to conduct an experimental study that addressed two complimentary research aims: a) an investigation of the efficacy of the direct effects of the experimental training condition on the development of critical decision making and problem solving skills and the increase of exploration during identity formation, and b) the direct effects of the experimental training condition in reducing distress and increasing satisfaction in identity status. The specific research questions and hypotheses are as follows:

Research Questions

Research question 1. The first question tested the effectiveness of the training condition in promoting the quality and quantity of exploration used during the process of identity formation.

Hypothesis 1: The experimental training condition will increase the quality of exploration and the quantity of exploration relative to the control group.

Research question 2. The second research question in this study addressed whether it was possible to experimentally manipulate the use of critical skills in making life choices.

Hypothesis 2: Participants in the experimental training group would demonstrate a significant increase in the use of critical decision making and problem solving skills.

Research question 3. The third question tested the relative effectiveness the experimental training condition in reducing identity distress and/or increasing identity satisfaction as well as effecting a positive change in identity status.

Hypothesis 3: The experimental condition would effect a change in levels of identity distress or satisfaction as well as on identity status.

Research question 4. The fourth research question investigated the mechanisms of change within the experimental condition. More specifically, it examined the relative effectiveness of critical decision making and problem solving skills and exploration as mediators for change in identity status as well as increasing identity satisfaction and/or decreasing identity distress.

Hypothesis 4: Increased use of critical skills and exploration would result in a positive change in identity status as well as increasing identity satisfaction and/or decreasing identity distress.

METHOD

Participants

Participants recruited for this study were 73 undergraduate students from psychology classes at a large urban university. The students were offered extra credit in class in exchange for participating in the study. Students who had already taken part in a previous experimental training study and those who expressed objections about participating in research projects were offered alternative extra credit opportunities.

Of the 73 participants initially recruited, 20 dropped out prior to completion of the study, resulting in a total of 53 participants taking part in the study. The attrition breakdown was as follows: 8 participants in the wait-list condition and 4 participants in the experimental training condition did not complete the study. Data were discarded for 5 participants in the wait-list condition and 3 participants in the experimental condition because of incomplete information. The breakdown of participants by ethnicity, gender, marital status, grade level, and age is presented in Table 1.

Inclusion criteria. To be included in the project, participants must have expressed an interest in participating in the experimental training study as well as a willingness to attend all training sessions and complete pre-assessment and post-assessment batteries.

Exclusion criteria. Participants were assessed using the Symptom Check List (SCL-90; Derogatis, 1983). Those students reporting thoughts of

hurting themselves or others, either during assessment or during the course of the training, were excluded from participation. In addition, participants with any indication of psychopathology were referred to the faculty laboratory supervisor, who was responsible for further evaluation.

Measures

Identity Style Inventory (ISI). The ISI (Berzonsky, 1989) is a self-report paper and pencil instrument consisting of 40 items rated on a 5-point Likert scale. The measure yields results for three styles (Information-Oriented, Norm-Oriented, Diffuse-Oriented) as well as a separate index of commitment. The scores are derived as follows: a) Informational Style, 11 items, resulting in a minimum score of 11 and a maximum score of 55, b) Normative Style, 9 items resulting in a minimum score of 9 and a maximum score of 45, and c) Diffuse Style, 10 items resulting in a minimum score of 10 and a maximum score of 50.

The measure also yields a Commitment Score derived from 10 questions. This score was not used in the study. Scores on the measure are significantly correlated with other measures of identity status (Berzonsky, 1992b). The Identity Style Inventory was developed for the purpose of disentangling commitment components from the exploration processes, a fault found in other measures of identity status. Cronbach's alpha coefficients for the ISI scales are as follows: Informational style, .62; Normative style, .66; Diffuse/avoidant style, .73; and Commitment, .77. Test-

retest reliabilities over a five-week interval were: Informational style, .75; Normative style, .74; Diffuse/avoidant style, .71; and Commitment, .84 (See Appendix A for a sample copy of the measure).

Ego Identity Process Questionnaire (EIPQ). Balistreri, Busch-Rossnagel, & Geisinger (1995) have developed a measure of ego identity that is intended to focus on the processes of commitment and exploration during identity formation. This is a 32 item self-report instrument rated on a 5-point Likert scale designed to look at four identity domains (occupation, religion, politics, and values) within the ideological realm and at four domains (family, friendships, dating, and sex roles) within the interpersonal domain. Scores for this questionnaire are derived as follows: a) Interpersonal Domain Exploration and Ideological Domain Exploration, 8 items each, resulting in a minimum score of 8 and a maximum score of 40 per domain, b) Interpersonal Domain Commitment and Ideological Domain Commitment, 8 items each resulting in a minimum score of 8 and a maximum score of 40 per domain. The Total Exploration and Total Commitment scores are derived from the combination of the exploration and commitment domain scores, with a minimum score of 16 and a maximum score of 80 respectively.

This measure has tended to classify individuals into the same statuses as Marcia's interview. Values of Cronbach's alpha for exploration and commitment were .76 and .75, respectively. Test-retest coefficients were .91

for exploration and .78 for commitment (See Appendix A for a sample copy of the measure).

Critical Problem Solving Scale (CPSS). The CPSS (Bussell & Kurtines, 1996) is a competence-based self-report questionnaire that is designed to assess the use of critical problem solving and decision making skills in making life choices. The CPSS was adapted from an interview measure of critical cognitive style reported by Williamson (1992) and developed by Arrufat (1995). The measure draws on work in the area of problem solving (Spivack, Platt, & Shure, 1976; Spivack & Shure, 1982) as well as work on critical thinking (Glaser 1984) and extends it to include the use of critical skills in solving problems and making choices that affect the quality of individuals' lives and the lives of others (Kurtines, et al. 1995).

The CPSS is designed to assess individual differences in three processes that underlie critical problem solving and decision making: creativity, suspension of judgement, and critical evaluation. The version of the CPSS used in this project presents participants with two life choice dilemmas (a personal and an interpersonal dilemma). In administering the CPSS participants are first asked to generate as many alternative solutions as possible for each dilemma.

In addition to generating alternatives, participants are also asked to choose the "best" alternative for solving or resolving the dilemma. After selecting the "best" alternative, participants are asked to describe as many

positive and negative aspects of this alternative (i.e., to provide as many pros and cons for this choice) as they can. In addition, participants are asked to indicate what they consider to be the "worst" alternative and provide as many pros and cons for this choice as they can. Finally, after having made their choice and provided pros and cons for what they consider the best and the worst choice, participants are asked once again what their choice (final opinion) is about the best solution to the dilemma and why they feel it is the best option.

Responses to the CPSS are coded by raters trained in using the CPSS codes. Interrater reliability for this measure in past studies has been 89% (Ferrer Wreder, 1996). Because the CPSS is an open-ended production measure, item analyses were not conducted for psychometric purposes. (See Appendix A for a sample copy of the measure).

The CPSS yields four scale scores that tap the three basic critical processes. The Generation of Alternatives score is the sum of the different and distinct alternatives generated in response to both of the dilemmas. The Suspension of Judgment score is the sum, across the two dilemmas, of the different and distinct alternatives generated by evaluating the "good things" about the "worst" choice. The Challenge score is the sum, across the two dilemmas, of the different and distinct alternatives generated by evaluating the "bad things" about the "best" choice. The Modification score consists of the number of modifications given across both of the dilemmas if the

participant changes or modifies the original best choice after evaluating other alternatives.

Identity Domain Scale (IDS). The IDS (Schmaltz, 1995) is a self-report measure of identity status and identity distress and satisfaction in three basic domains. The Personal Development Domain consists of Career Goals, Long Term Life Goals, and Sense of Self content areas. The content areas for the Interpersonal Development Domain include Friendships, Gender and Sexuality, and Group Involvement. Lastly, the World View Domain contains items relating to Religion, Morality, and Politics areas. Participants are asked to identify the most positive and distressful experiences from a list of features on each domain. In addition, the participant is asked to provide an open-ended written description of both the positive and distressful experiences in each area, and asked to rate on a 5-point Likert scale the degree to which the positive experiences were positive and the troublesome experiences distressful.

The IDS yields status scores and satisfaction and distress scores for each of the nine content areas and for the three domains. The nine Content Area Satisfaction Scores (Career Goals, Friendships, Gender & Sexuality, Religion, Morality, Group Involvement, Long Term Life Goals, Politics and Sense of Self) consist of the satisfaction rating for each of the nine content areas. The three Domain Satisfaction Scores (Personal, Interpersonal, World View) consist of the average of the satisfaction ratings for each of the

content areas within the domains. The Total Satisfaction Score consists of the average of the satisfaction ratings for all of the three identity domains.

The nine Content Area Distress Scores (Career Goals, Friendships, Gender & Sexuality, Religion, Morality, Politics Group Involvement, Long Term Life Goals, and Sense of Self) consist of the distress rating for each of the nine content areas. The three Domain Distress Scores (Personal, Interpersonal, World View) consist of the average of the distress ratings for each of the content areas within the domains. The Total Distress Score consists of the average of the distress ratings for all of the three identity domains.

In addition, the IDS yields Identity Status scores for each of the nine content areas, an Identity Domain Status score for each of the identity domains (Personal, Interpersonal, World View), and a Total Status Score. The Content Area Status scores are based on the participant's responses to two dichotomous "yes or no" questions that target the individual's exploration and commitment in each area. The Identity Domain Status Scores are based on the individual's modal status score for the three content areas within each domain. More specifically, if a participant has the same status value for all three content areas (e.g., 4, 4, 4, or 3, 3, 3, etc.), then that value is the Identity Domain Status Score. If a participant has two of the same values for the three content areas (e.g., 4, 4, 2, or 2, 2, 3, etc.), then the modal value is the Identity Domain Status Score. Finally, if the individual has three different

status values (e.g., 4, 1, 3, or 2, 4, 1, etc.) then the Identity Domain Status Score is coded as Undifferentiated.

The Total Status score is derived in a similar fashion from the Identity Domain Status Scores. Alpha coefficients for the Domain Satisfaction Scores were: Personal Development .53; Interpersonal Development .30; and World view .50. For the Domain Distress Scores, alpha coefficients were: Personal Development, .69; Interpersonal Development, .65; and World View, .46. Test-retest reliabilities over a two-week interval were: a) Domain Satisfaction Scores, Personal Development, $r = .31$, Interpersonal Development, $r = .69$, World View, $r = .47$ and Total Domain Satisfaction, $r = .61$. Test-retest reliabilities for Distress scores were not reported (Schmaltz, 1995) (See appendix A for a sample copy of the measure).

The Training Intervention

The Making Life Choices (MLC) workshops (Berman, 1996) have been developed as an identity intervention aimed at facilitating the process of making the type of difficult life choices (e.g. career choices, decisions about relationships, political and religious beliefs) individuals normatively experience during identity development. These workshops are administered in a group format. The goals of the MLC workshops are to foster the development and use of critical skills and foster identity exploration as part of the process of promoting identity development. The two primary change producing procedures that are used to achieve these goals are skills training

for critical skills and perspective taking for identity exploration. Finally, group process are also used to facilitate the change producing process.

Skills training. The first key change producing procedure utilized in the MLC workshops is that of training in the use of decision making and problem solving skills. The utility of training in interpersonal problem solving has been documented in a variety of settings with diverse populations (Spivack, Platt, & Shure, 1976; Spivack & Shure, 1982). Training exercises used in the workshops target the development of generic problem solving skills that have been identified in the literature (identifying the nature of the problem, generating possible alternatives for solution, and selecting the best alternative).

In addition, the MLC workshops extend this previous work in two important ways. They add a “critical” thinking and “critical” decision making component, as described in the introduction, as a vehicle for making difficult life choices. The critical component includes exercises designed to facilitate the use of suspension of judgment and the use of critical examination. Critical decision making and problem solving skills have been adapted for use in making group decisions and is therefore useful in the context of a group format. The critical skill components (suspension of judgment and critical examination) are used to facilitate exploration and the resolution of difficult life choices.

Perspective taking. The second key change producing procedure in MLC is that of perspective taking. Perspective taking is intended to facilitate identity exploration. As used in the workshops, perspective taking involves adopting a point of view that is different from a person's own point of view. As participants interact with other group members who possess different world views and ideas, they may develop or increase their understanding of the limitations of looking at the world from one perspective. Piaget (1932/1965) suggests that peers have an important influence on diminishing one another's self-centered outlook because they interact as equals.

A substantial body of evidence demonstrates that the behavior of well-adjusted, competent youth is maintained in part by a number of social cognitive abilities, including social perspective taking and interpersonal problem solving (Enright, Ganiere, Buss, Lapsley, & Olson, 1983; Enright, Olson, Ganiere, Lapsley, & Buss, 1984). The exercises used in the MLC workshops (e.g., role play, switching roles, etc.) focus on taking alternative perspectives for the life dilemmas that emerge in the group sessions.

Because the MLC perspective taking exercises help participants develop decentering skills, the exercises promote the individuals' distancing themselves from the limited range of alternatives available from a single perspective. Perspective taking thus facilitates generating alternatives for successfully resolving life dilemmas.

Group Processes

In addition to skills training and perspective talking, the training intervention makes use of available "natural" group processes to facilitate the effects of the key change producing procedures (Ettin, 1992). The MLC workshops use two "group" facilitative strategies (e.g., shared experiences and positive feedback) to foster skills training and identity exploration.

Shared experiences. Interactions among the group members contribute to the experience of group cohesion and trust as members of the group begin to feel more comfortable sharing life experiences related to personal life dilemmas. This sharing process facilitates exploration, since the sharing of personal experiences can serve as the medium to increase the exposure of other group members to a broader range of experiences. Thus, this exposure can be used to derive additional information, as well as an increased number of alternatives that can be used in exploring personal life choices (Ettin, 1992).

Positive feedback. Positive feedback is used to facilitate skills training as well as exploration. Observation of one group member successfully using a critical skill may offer the opportunity for positive modeling for the whole group. It also provides an opportunity for the other group members, as well as the group facilitator, to positively reinforce the individual's use of the skill. The group setting can be used to provide corrective or instructive feedback. Another function of the group is to provide

a setting for social comparison, such as the evaluation of an individual's choice relative to consensual peer standards of appropriate behavior (Ettin, 1992).

Experimental Design

The research design for the MLC workshops is a pre-post experimental design with a wait-list control group. Participants in the wait-list group were afforded the opportunity to participate in the workshops after the second assessment. Participants were randomly assigned to one of the two groups.

Pre- and post-assessments were conducted for both groups. The assessments consisted of a battery of measures, as described above, designed to evaluate the participant's quality and quantity of exploration, critical problem solving skills, and position on issues of identity distress and satisfaction, as well as identity status. All participants were provided with, and signed, informed consent forms.

The workshops used for this project are a revised version of the MLC workshops developed by Berman, 1996, and closely followed the format provided by the Leader's Manual developed for the above (See Appendix B). The number of sessions was decreased from five to four sessions, while the amount of time per session was increased to two and one-half hours. These changes were made at the suggestion of previous workshop participants, who indicated that longer sessions would have been more productive. The

workshops were conducted using a group format with each group consisting of four to six participants.

Prior to the first session, participants were provided with a Workshop Study Guide and Workbook (see Appendix C) to be completed prior to the first meeting. The first session provided an introduction to the overall rationale for the program and included skill practice with a hypothetical dilemma included in the Study Guide and Workbook. The remaining sessions focused on reviewing change producing skills and their application to a real life dilemma for each group member.

Session 1: Group introduction and discussion of the workshop goals. Presentation of workshop intervention rationale, emphasize the importance of practice and skills training, benefits of group process and the importance of sharing experiences, perspective taking, and receiving feedback. Discuss the concepts of Making Life Choices and Responsibility. Explain the steps in problem solving and the role of critical thinking and discussion in decision making. Explain group "rules", and practice critical and problem solving skills using a hypothetical dilemma.

Succeeding sessions: Review treatment rationale and goals, and related concepts discussed in previous session. Have each subject identify the specific personal life choice dilemma that will be addressed. Group discusses each dilemma using the steps to problem solving and providing positive feedback for the use of critical skills. Group members encouraged to

share experiences and take varying perspectives to enhance the process of exploration.

Control condition (CC). The control condition consisted of a wait-list group. Participants were given a pre-assessment battery at the same time as the experimental group. The post-assessment (or wait-list) battery was given at the time that the experimental group was given the post-assessment battery, approximately four to five weeks later.

Outcome measures

The outcome measures used were as follows:

Hypothesis 1: The score on the CPSS.

Hypothesis 2: Scores on the ISI and the EIPQ.

Hypotheses 3 and 4: Status and satisfaction/distress scores on the IDS.

RESULTS

Group comparability

Comparisons of sociodemographic variables across conditions were examined using chi-square tests and included age, gender, ethnicity, grade level, and marital status. There were no significant differences on any of the sociodemographic variables.

First research question

The first research question concerned the effects of the experimental training condition in increasing the quality and quantity of exploration used during the process of identity formation.

Hypothesis 1: The experimental training condition will increase the quality of exploration as measured by the ISI and the quantity of exploration as measured by the EIPQ.

The statistical analyses used to test Hypothesis 1 consisted of Repeated Measures Analyses of Variance (RMANOVA). The analyses were specified as a mixed design (between and within) where Time (pre, post) was the within group (repeated) factor and Condition (Experimental versus Control) was the between group factor. The first set of RMANOVAs used to test this hypothesis focused on the quality of exploration employed as measured by the ISI. The dependent variables for this measure were the three identity exploration styles: Informative, Normative, and Diffuse. Table 2 shows the results of these analyses. As can be seen, there were no

significant main effects or interactions for any of the ISI variables.

The second set of RMANOVAs focused on the amount of exploration employed as measured by the EIPQ. The dependent variables for the EIPQ were Total Exploration, Interpersonal Exploration, and Ideological Exploration. Table 3 shows the results of these analyses. As can be seen in Table 3, there were no significant main effects or interaction effects for any of the EIPQ variables.

Second research question

The second research question concerned the effects of the experimental training condition in increasing the use of critical skills in making life choices.

Hypothesis 2: The experimental training condition will produce a significant increase in the use of critical decision making and problem solving skills as measured by improvement in Generation Scores, Suspension of Judgment scores, Challenge scores, and Modification scores on the CPSS relative to the control condition.

The statistical analyses used to test Hypothesis 2 consisted of Repeated Measures Analyses of Variance (RMANOVA). The analyses were specified as a mixed design (between and within) where Time (pre, post) was the within group (repeated) factor and Condition (Experimental versus Control) was the between group factor. The dependent variables for

Hypothesis 2 consisted of the Generation, Suspension of Judgement, Challenge and Modification scores on the CPSS.

Table 4 presents the results of these analyses. As can be seen in Table 4, the results indicated that the experimental training condition was successful in increasing the use of critical skills in making life choices. More specifically, the results indicated that there were significant interactions for three of the four critical problem solving scores. Participants in the experimental training condition showed a significant increase in the Generation of Alternatives score $F(1,51) = 17.41, p = .05$, the Suspension of Judgement score, $F(1,51) = 5.45, p = .05$, and the Challenge score, $F(1,51) = 9.72, p = .05$. There was no significant main effect or interaction for the Modification score, although the interaction effect approached significance, $F(1,51) = 3.45, p = .06$.

Third research question

The third question tested the relative effectiveness the experimental training condition in reducing identity distress and/or increasing identity satisfaction and producing a positive change in identity status.

Hypothesis 3: The experimental condition will have a significant effect on levels of identity distress or satisfaction as well as identity status.

The statistical analyses used to test for differences between conditions in changes in levels of identity distress or satisfaction from pre- to post-treatment consisted of Repeated Measures Analyses of Variance

(RMANOVA). The analyses were specified as a mixed design (between and within) where Time (pre, post) was the within group (repeated) factor and Condition (Experimental versus Control) was the between group factor. This set of RMANOVAs focused on the change in identity distress and/or satisfaction as measured by the IDS. The dependent variables for this measure were the changes in the Satisfaction in General, Satisfaction Now, Distress in General, and Distress Now scores on the IDS.

Table 5 presents the results of these analyses. The results indicate that two of the four interactions were significant, but the direction of the effects were opposite to those predicted. As can be seen in Table 5, there was a significant interaction effect for Condition (Experimental vs Control) by Satisfaction in General, $F(1,51) = 4.10, p = .05$, with the experimental group decreasing in satisfaction while the control group increased. There was also a significant interaction effect for Condition (Experimental vs Control) by Distress in General, $F(1,51) = 4.57, p = .05$, again with distress increasing slightly in the experimental group and decreasing in the control group. There were no significant main effects or interaction effects for Satisfaction Now and Distress Now.

Because identity status is a categorical variable, non-parametric statistics were used to test for differences between conditions in changes in levels of identity status from pre to post treatment. More specifically, because the focus was on within-subject change in identity status, the

Wilcoxon Matched-Pairs Signed-Ranks Tests was used to test for significant trends in the directionality of change from pre to post (i.e., positive versus negative change in status). Tests were run on Total Status, Personal Domain Status, Interpersonal Domain Status, and World View Status for both the Experimental and Control groups. Table 6 shows the results of these tests. As can be seen from Table 6, There was significant movement in the predicted direction in the experimental group for two of the status domains, Interpersonal Domain Status, $z = -2.6656$, $p = .05$; and World View Domain Status, $z = -2.3664$, $p = .05$. In addition, there was a significant effect for Total Status, $z = -2.3664$, $p = .05$. The test for Personal Domain Status was not significant. None of the tests were statistically significant for the Control group.

Fourth research question

The fourth research question investigated the mechanisms of change within the experimental condition. Because the experimental training condition was only effective in producing change in the critical problem solving skills, a within-group regression analytic strategy was used examine the relationship between changes on the CPSS variables and changes on the identity status indices.

Hypothesis 4: Increased use of critical skills will be predictive of positive change in identity status formation as well as increasing identity satisfaction and/or decreasing identity distress. In order to identify those

CPSS variables that were most predictive of identity formation change, Hypothesis 4 was tested using Stepwise Multiple Linear Regression analyses. Separate analyses were conducted for distress/satisfaction and for identity status. The independent variables for all of the regression analyses were change scores on the CPSS; the dependent variables for each analyses were, respectively, change scores in IDS Satisfaction in General, Distress in General, Interpersonal, World View, and Total Status scores, the variables that showed statistically significant results for the first three hypotheses. The results indicated that none of the CPSS variables predicted change in the indices of status.

Because the direction of effects for these variables were opposite to those predicted, additional preliminary exploratory analyses were conducted to identify potential differential moderators of the effects. More specifically, because a high proportion (80%) of the participants increased in their use of critical problem solving while approximately only half of the participants increased in satisfaction and decreased in distress, the step-wise regression analyses were repeated using only those participants in the experimental condition that had shown an increase in identity satisfaction and a decrease in distress from pre to post assessment. Table 7 displays R , R^2 , adjusted R^2 and $Beta$ for the regression.

As can be seen in Table 7, only the regression analysis using Satisfaction in General as the dependent variable was significant. The R for

this regression was significantly different from zero, $F(1,11) = 12.83, p = .05$, indicating that the CPSS variable that contributed significantly to the prediction of Satisfaction in General was Suspension of Judgement. Thus, increased use of suspension of judgment was predictive of differential levels of identity satisfaction among those participants in the experimental training condition who increased in identity satisfaction from pre- to post-assessment. Suspension of Judgement, then, appears to be a potential mediator of identity satisfaction when the intervention is successful in increasing Satisfaction in General.

Participants' evaluation of training condition

In addition, participants were asked to complete anonymous evaluation forms (see Appendix A for a copy of the evaluation form as well as sample responses) adapted from the Continuing Education and Workshop Evaluation Form used by the Department of Psychiatry at the University of Miami. Thirty-nine participants returned the evaluation forms. Qualitative inspection of the forms indicated that the participants responded enthusiastically to both the content and the process of the training intervention. Only one participant of the 39 returned a form which reported negative comments.

More specifically, questions targeting the process of the training intervention (e.g. "What was your opinion of the Study Guide and Work Book?", "Was the workshop useful to you in dealing with the life issues which

you brought in for discussion? If yes, in what ways? If no, why not?") received enthusiastic responses, with many of the respondents indicating that the materials and the training were helpful and relevant in increasing their problem solving abilities. Questions targeting the content of the training intervention (e.g. "Do you believe that the skills that were emphasized I this workshop will be useful in facing other issues in your life? Why or why not?") were also answered in very positive terms.

DISCUSSION

This dissertation reports the results of an experimental investigation involving two processes (exploration and critical problem solving) that have been identified as possible mechanisms of change in identity development. The study used of an experimental training design (training condition versus control condition) to evaluate the direct effects of the experimental training condition on identity development and the hypothesized mechanisms of change. The overall findings make a general contribution to the advancement of our knowledge of the operation of the processes that may serve as mechanisms of change in identity development and procedures that may be used in interventions designed to produce change in these processes. More specifically, the findings from the study help to clarify the complex interaction between process, population, and outcome that is involved in the process of identity development as well as procedures for intervening in this process.

The findings with respect to the impact on training on identity development illustrate the difficulty that effecting change in identity development presents. Thus, even though the intervention was specifically designed as an "identity" intervention, its direct impact identity development was modest and mixed. However, although not all of the results turned out as hypothesized, these findings appear to make a contribution to furthering our understanding of operation of mechanisms of change.

The findings with respect to the impact on training on hypothesized mechanisms of change also illustrate the challenge of effecting change in identity related processes. The direct impact of the intervention on hypothesized mechanisms of change was also modest and mixed, with some effects more significant than others.

More specifically, the experimental training condition was not effective in increasing the quality and quantity of exploration. Although not expected, these findings do help to clarify the complex interaction between process, population, and outcome that is involved in the process of identity development and procedures for intervening in this process. In the case of this particular experimental intervention, the findings illustrate the importance of matching the intervention to the population.

The composition of this particular sample, for example, consisted of advanced university students at a large urban university. These individuals tended to be older than university students at rural campuses (average age = 26), and most had full-time jobs. The participants may have also already developed and consolidated exploration styles of their own. The identity statuses of most of the participants in this study were among the "committed" status (achieved or foreclosed). Exploration, consequently, was less relevant to them than career-related issues.

An important implication of these findings for the development of identity interventions is that it may be useful in maximizing the effectiveness

of the intervention if the focus of the change producing procedures is adapted to the particular population that the intervention targets. In the case of older, urban university students, for example, it may be beneficial to recognize that interventions have to be tailored in specific ways to match the needs of the populations. That is, because such individuals have already made commitments, it may be useful to focus on increasing the use of critical problem solving skills in the area of career development, for example, rather than in the exploration of generic life choices.

The second research question examined the effectiveness of the experimental training condition as a means of increasing the use of critical problem solving skills. In this case, the results confirmed the hypothesis. The experimental training condition was successful in effecting a significant increase in three of the critical skills (i.e. Generation of Alternatives, Suspension of Judgement, and Challenges). The fourth critical skill, Modification, was also increased, although it was not statistically significant.

The intervention was also successful in having an impact on identity formation. A significant number of participants in the experimental training condition showed a positive move in identity status. Four of the five participants from the Undifferentiated group moved to the Achieved group, one of the two individuals in Moratorium moved to Achieved, and one of the 18 participants in the Foreclosed group moved to Achieved while one participant moved to Moratorium. These results indicate that the

experimental training condition appears have the potential for being a useful tool in promoting identity development.

Moreover, the intervention succeeded in having an impact on identity satisfaction, but not as initially hypothesized. For the satisfaction variable that yielded a significant effect, there was a tendency for the participants in the training condition to experience less satisfaction while participants in the control condition showed an increase in satisfaction. Though unexpected, this finding may reflect the complex and interactive processes involved in the process of identity formation. This finding also appears to have the potential for advancing our theoretical understanding of how to develop effective interventions for promoting identity development. That is, this finding suggests that perhaps interventions designed to foster identity development have to start by getting the individual to question or examine his or her current status.

In addition, in the case of this particular intervention, this finding may also be a result of the way the intervention is conducted. As part of the intervention, each participant brings in and discusses some unresolved life dilemma. Consequently, one possible explanation for the results is that participating in the experimental training condition may enhance the process of challenging the individual's current status by bringing to the forefront pending issues regarding life choices, resulting in a decrease in satisfaction.

Also counter to prediction, participants in the experimental condition stayed stable with respect to distress, but participants in the control condition decreased in distress. This finding also appears to have the potential for advancing our theoretical understanding of how to develop effective interventions for promoting identity development for the same reasons as the findings with respect to satisfaction. This finding again suggests that perhaps interventions designed to foster identity development have to start by getting individuals to question or examine their current status, only in this case, the critical difference may have been that the control participants, who were the ones who *decreased* in distress, were *not* provided the opportunity to question or examine systematically their current status. Consequently, at the post-test, participants in the control condition may have been even more content with their current status.

Finally, the findings with respect to the exploratory analyses of the processes that may serve as mechanisms of change provide some insight with respect to the type of processes that affect identity development and how these processes operate in the context of interventions. For this study, for example, the intervention had a very strong impact on critical problem solving. The direct effects of the intervention on identity development, however, were less strong. Nevertheless, a more fine-grained analyses of the relationship between critical problem solving skills and identity satisfaction and distress helped to shed some light into the potential

mediators of change. More specifically, among those participants in the experimental training condition who had some increase in identity satisfaction, willing to suspend of judgment (i.e., to question and examine) was predictive of greater satisfaction.

Although the findings reported in this dissertation have made a contribution to the literature on the processes theorized to contribute to the formation of an identity, the results regarding the specific hypotheses were moderate to mixed. The less than satisfactory results may be explained by some limitations of the present study. The first limitation is related to the nature of the training condition. The as noted above, the study consisted of lengthy pre- and post-assessment batteries requiring about two hours each to complete, as well as four two-hour workshop sessions. Although participants were offered extra credit for taking part in the study, the number of students that completed the project was not large ($n = 53$).

A second limitation was related to sample composition. Participants in this study tended to be older than typical university populations, as well as there being a disproportionate ratio of males ($n = 9$) to females ($n = 44$). Although this population was predominantly female and older than the average university population, it is similar in gender-ratio composition to other studies conducted in the area of identity (i.e., Berzonsky, 1990, 1992). Identity research targeting older university students has also been reported in the literature (i.e., Pulkkinen & Ronka, 1994).

Caution should be used in generalizing these results to other populations, although the findings reported here are in agreement with findings reported by Freilino and Hummel (1985). This study compared identity statuses in two samples of traditional-age college women and adult-returnee college women. Returnee college women were more likely to be in the Identity Achieved status while traditional students were more likely to be Identity Diffused. Further analyses revealed that in the group of women returning to college, the identity crises (and thus exploration) occurred prior to their resuming their education (Freilino & Hummel, 1985). Thus, the results of the current study may reflect a similar pattern that may account for the very small number of participants in Moratorium.

A third limitation, also related to this particular population, is that of ethnic composition. Of the 53 participants in the study, 68% ($n=36$) were Hispanic-American. In this case, the results ran contrary to those reported by Markstrom-Adams (1992), who found that ethnicity may be a constraining factor in a person's ability to explore and make a commitment, thus resulting in a greater number of Foreclosed and Diffused identity statuses. The current study, although predominantly Hispanic-American and female resulted in an almost equal number of individuals in the Identity Achieved status and the Foreclosed status, while no participants were Identity Diffused. Again, caution should be exercised in generalizing these findings, since other factors, such as degree of acculturation and country of origin

need to be taken into account.

Future research in the area of identity formation, particularly training studies or interventions aimed at investigating the mechanisms involved in identity development should focus on the different populations to be targeted. More specifically, research on quality and quantity of exploration may be more productive with participants who have not completed the process of exploration, such as high school students or very young university students.

Also, the relationship between critical problem solving skills and the degree of identity satisfaction and distress should be explored further. Future training interventions need to be redesigned to include debriefing and termination sessions to reduce the distress produced by the participant's use of newly-acquired problem solving skills in resolving current life dilemmas.

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TABLES

Table 1***Demographic information***

	Training Intervention	Wait-list
Male	6 (19.4%)	3 (13.6%)
Total Participants	31	22
Gender		
Female	25 (80.6%)	19 (86.4%)
Ethnicity		
European-American	7 (22.6%)	4 (18.2%)
African-American	3 (9.7%)	2 (9.1%)
Hispanic-American	20 (64.5%)	16 (72.7%)
Other	1 (3.2%)	0
Marital Status		
Single	21 (67.8%)	17 (77.3%)
Married	5 (16.1%)	2 (9.1%)
Other	5 (16.1%)	3 (13.6%)
Grade Level		
Sophomore	3 (9.7%)	3 (13.6%)
Junior	17 (54.8%)	15 (68.2%)
Senior	11 (35.5%)	4 (18.2%)
Mean Age	27	24
Dropouts	13	7

Table 2***Means, Standard Deviations and F-ratios for Pre to Post-assessment Changes on Identity Exploration Styles on the ISI***

	Pre		Post		RMANOVA		
	Mean	(sd)	Mean	(sd)	F-ratio	df	p
Informational:					.60	1,51	.441
Experimental	39.26	(5.18)	39.35	(5.33)			
Control	36.82	(5.59)	36.05	(5.54)			
Normative:					.14	1,51	.714
Experimental	29.19	(5.88)	30.23	(6.64)			
Control	30.45	(4.46)	31.14	(4.68)			
Diffuse:					.13	1,51	.723
Experimental	21.00	(5.80)	21.10	(5.47)			
Control	21.18	(7.91)	21.86	(6.82)			

Table 3***Means, Standard Deviations and F-Ratios for Pre t- Post-assessment Changes on Exploration Scores on the EIPQ***

	Pre		Post		RMANOVA		
	Mean	(sd)	Mean	(sd)	F-ratio	df	p
Interpersonal Dom:					.01	1,51	.935
Experimental	28.65	(5.15)	27.68	(5.26)			
Control	25.32	(6.15)	24.23	(6.22)			
Ideological Dom:					.59	1,51	.444
Experimental	25.87	(5.22)	25.77	(5.33)			
Control	22.86	(3.37)	21.91	(4.80)			
Total Exploration:					.22	1,51	.643
Experimental	54.52	(9.22)	53.45	(9.01)			
Control	48.18	(8.27)	46.14	(9.52)			

Table 4

***Means, Standard Deviations and F-ratios for Pre to Post-assessment
Changes on Critical Problem Solving Skills on the CPSS***

	Pre		Post		RMANOVA		
	Mean	(sd)	Mean	(sd)	F-ratio	df	p
Generation:					17.41	1,51	.000
Experimental	8.13	(3.41)	9.94	(3.74)			
Control	9.45	(3.95)	8.45	(3.56)			
Suspension:					5.45	1,51	.024
Experimental	2.81	(1.89)	4.13	(2.68)			
Control	3.27	(3.12)	3.18	(2.99)			
Challenge:					9.72	1,51	.003
Experimental	3.68	(2.40)	5.19	(3.02)			
Control	4.27	(2.93)	4.00	(2.71)			
Modify:					3.45	1,51	.069
Experimental	.58	(1.06)	.81	(1.22)			
Control	.50	(1.06)	.09	(.29)			

Table 5***Means, Standard Deviations, and F-ratios for Pre to Post-assessment Changes on Satisfaction and Distress Scores on the IDS***

	Pre		Post		RMANOVA		
	Mean	(sd)	Mean	(sd)	F-ratio	df	p
Satisfaction in General:					4.10	1,51	.048
Experimental	3.65	(.57)	3.60	(.63)			
Control	3.50	(.42)	3.68	(.37)			
Satisfaction Now:					1.96	1,51	.168
Experimental	3.61	(.68)	3.61	(.64)			
Control	3.43	(.43)	3.61	(.47)			
Distress in General:					4.57	1,51	.037
Experimental	1.79	(.44)	1.78	(.49)			
Control	1.74	(.49)	1.51	(.39)			
Distress Now:					1.35	1,51	.250
Experimental	1.80	(.45)	1.76	(.56)			
Control	1.73	(.46)	1.58	(.44)			

Table 6

Wilcoxon Matched-Pairs Signed Ranks Test z-values for Pre to Post-assessment Changes on Identity Status on the IDS

	z	2-tailed p
Personal Domain:		
Experimental	-.4077	.684
Control	-.1529	.8785
Interpersonal Domain:		
Experimental	-2.6656	.008
Control	-.2353	.814
World View Domain:		
Experimental	-2.0226	.043
Control	-1.1531	.249
Total Status:		
Experimental	-2.3664	.018
Control	-.4080	.683

Table 7

Results of Stepwise Multiple Regression of Critical Problem Solving Variables on Satisfaction in General for Experimental Condition Participants Who Experienced Increased Satisfaction

	Mean (sd)	Beta	T	Sig	T
<hr/>					
Variables in the Equation:					
Suspension of Judgement	1.15	(1.82)	.734	.734	.0043
Variables not in the Equation:					
Generation	2.69	(2.69)	.699	.5006	
Challenge	1.15	(1.82)	.140	.8914	
Modify	-.08	(1.38)	-.464	.6526	
Multiple R	.73378				
R ²	.53843				
Adjusted R ²	.49647				

APPENDICES

APPENDIX A
MEASURES

IDENTITY STYLE INVENTORY - ISI

Using the scale below, please indicate how much do you agree or disagree with each statement.

- | 1 | 2 | 3 | 4 | 5 |
|-----------------------|-----------------------|---------|--------------------|----------------------|
| Not at all
like me | Not really
like me | Neutral | Kind of
like me | Very much
like me |
1. Regarding religious beliefs I know basically what I believe and don't believe.
 2. I've spent a great deal of time thinking about what I should do with my life.
 3. I'm not really sure what I'm doing in school; I guess things will work themselves out.
 4. I've more or less always operated according to the values with which I was brought up.
 5. I've spent a good deal of time reading and talking to others about religious ideas.
 6. When I discuss an issue with someone I try to assume his or her point of view and see the problem from his or her perspective.
 7. I know what I want to do with my future.
 8. It doesn't pay off to worry about values in advance; I decide things as they happen.
 9. I'm not really sure what I believe about religion.
 10. I've always had purpose in my life: I was brought up to know what to strive for.
 11. I'm not sure which values I really hold.
 12. I have some consistent political views; I have a definite stand on where the government and country should be headed.
 13. Many times, by not concerning myself with personal problems, they work themselves out.
 14. I'm not sure what I want to do in the future.
 15. I really know what I want to do with my life, and I won't change my mind.
 16. I've spent a lot of time reading and trying to make sense out of political issues.
 17. I'm not really thinking about my future now; it's still a long way off.
 18. I've spent a lot of time and talked to a lot of people trying to develop a set of values that make sense to me.
 19. Regarding religion. I've always known what I believe and don't believe. I never really had any serious doubts.
 20. I'm not sure what I want to do when I get out of school.
 21. I've known since junior high school what I'm going to do with my life.
 22. I have a definite set of values that I use in order to make personal decisions.
 23. I think it's better to have a firm set of beliefs than to be open-minded.
 24. When I have to make a decision, I try to wait as long as possible in order to see what will happen.

25. When I have a personal problem, I try to analyze the situation in order to understand it.
26. I find it's best to seek out advice from professionals (e.g., clergy, doctors, lawyers) when I have problems.
27. It's best for me not to take life too seriously; I just try to enjoy it.
28. I think it's better to have fixed values than to consider an alternative value systems.
29. I try not to think about or deal with problems as long as I can.
30. I find that personal problems often turn out to be interesting challenges.
31. I try to avoid personal situations that will require me to think a lot and deal with them on my own.
32. Once I know the correct way to handle a problem, I prefer to stick with it.
33. When I have to make a decision, I like to spend a lot of time thinking about my options.
34. I prefer to deal with situations where I can rely on social norms and standards.
35. I like to have the responsibility for handling problems in my life that require me to think on my own.
36. Sometimes I refuse to believe a problem will happen, and things manage to work themselves out.
37. When making important decisions; I like to have as much information as possible.
38. When I know a situation is going to cause me stress, I try to avoid it.
39. To live a complete life, I think people need to get emotionally involved and commit themselves to specific values and ideals.
40. I find it's best for me to rely on the advice of close friends or relatives when I have a problem.

EGO IDENTITY PROCESS QUESTIONNAIRE

- | 1 | 2 | 3 | 4 | 5 |
|----------------------|----------------------|---------|-------------------|-------------------|
| Strongly
Disagree | Slightly
Disagree | Neutral | Slightly
Agree | Strongly
Agree |
1. I have definitely decided on the occupation I want to pursue.
 2. I don't expect to change my political principles and ideals.
 3. I have considered adopting different kinds of religious beliefs.
 4. There has never been a need to question my values.
 5. I am very confident about what kinds of friends are best for me.
 6. My ideas about men's and women's roles have never changed as I became older.
 7. I will always vote for the same political party.
 8. I have firmly held views concerning my role in my family.
 9. I have engaged in several discussions concerning behaviors involved in dating relationships,
 10. I have considered different political views thoughtfully.
 11. I have never questioned my views concerning what kind of friend is best for me.
 12. My values are likely to change in the future.
 13. When I talk to people about religion, I make sure to voice my opinion.
 14. I am not sure about what type of dating relationship is best for me.
 15. I have not felt the need to reflect on the importance I place on my family.
 16. Regarding religion, my views are likely to change in the near future.
 17. I have definite views regarding the ways in which men and women should behave.
 18. I have tried to learn about different occupational fields to find the best one for me.
 19. I have undergone several experiences that made me change my views on men's and women's roles.
 20. I have constantly re-examined many different values in order to find the ones which are best for me.
 21. I think what I look for in a friend could change in the future.
 22. I have questioned what kind of date is right for me.
 23. I am unlikely to alter my vocational goals.
 24. I have evaluated many ways in which I fit into my family structure.
 25. My ideas about men's and women's roles will never change.
 26. I have never questioned my political beliefs.
 27. I have had many experiences that led me to review the qualities that I would like my friends to have.
 28. I have discussed religious matters with a number of people who believe differently than I do.
 29. I am not sure that the values I hold are right for me.
 30. I have never questioned my occupational aspirations.
 31. The extent to which I value my family is likely to change in the future.
 32. My beliefs about dating are firmly held.

CRITICAL PROBLEM SOLVING SCALE (CPSS)- COLLEGE VERSION

Dilemma I

Alex and TJ have been friends for most of their lives. They grew up in the same neighborhood and they went to the same elementary and junior high school together. They are now in their freshman year of college and are as close friends as ever. Lately they have been hanging out with a group of people they met when they first started the university. Their new friends are a lot of fun to hang out with so Alex and TJ found themselves going out with them more and more.

One night Alex and TJ went to a party with their friends. Alex was surprised to see that everybody there was drinking and doing drugs. For the most part they were smoking pot, but some of them were also doing acid. She felt a little uncomfortable trying anything, but finally TJ and their friends convinced her. After that she smoked pot once in a while, but TJ and the others do it on a regular basis now. As a matter of fact, they are now experimenting with more hard core drugs. She wants to go along with them but she knows that doing drugs on a regular basis is not good for her. Yet, she is afraid that if she tries to stop it will be difficult: she'll be left out or her friends will make fun of her. She is also afraid of doing anything that will ruin her friendship with TJ. Alex doesn't know what she should do.

Dilemma II.

Tony has just entered his sophomore year in college and is working hard to keep up with school so that he can graduate on time. He doesn't like school very much but he knows that he wants to go to other places and see new things. Tony has been working part time at a local supermarket ever since he graduated from high school. He doesn't make much money, but it is enough to pay for gas and going out with his friends and Kate, his girlfriend.

Tony and Kate have been dating since their sophomore year in high school. They have only recently become sexually active, but they both feel that they are mature enough for the commitment. Tony feels that he loves Kate very much and would like to marry her in the future.

However, Tony just found out that Kate has become pregnant and neither of them know what to do. He wants to make a decision that is good for both of them. Tony knows that he must consider all of the alternatives because this decision will have a great impact on both of their lives.

CPSS ANSWER SHEET

Make sure that you answer the questions for Dilemma I and Dilemma II separately.

Question #1: What are the different choices or alternatives in this situation? Describe them.

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____

Question #2: From the list of choices that you came up with in the first question, write what you think is the **best** choice and **why** you made the choice.

Best choice _____

Why is this the best choice? _____

Question #3: Describe below **all** of the **good things** about your **best choice**.

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____

Question #4: Describe below all of the **bad things** about your **best choice**.

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____

Question #5: Describe what you would definitely **not do** in this situation or what you consider to be the worst choice.

Worst choice _____

Question #6: List all of the **good things** about your **worst choice**. Why your worst choice could still be a good or better alternative than your best choice.

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____

Question #7: What are the **bad things** about the **worst choice**?

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____

Question #8: Considering all the choices available, describe what you think is the best choice now and why.

Best choice? _____

Why did you make this choice? _____

IDENTITY DOMAIN SCALE

DOMAIN I: PERSONAL DEVELOPMENT

Part A asks about career goals.

PART A: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your career goals.

Examples of positive thoughts/feelings about your career goals include:

- I know what career I want to try*
- I want to be a teacher*
- I believe I can accomplish my career goals*
- I am currently in a job that will help me in the future*
- I will be able to help children in my career*

1. How positive is this issue to you at this moment?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

2. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART A: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful and troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your career goals.

Examples of distressful thoughts/feelings about your career goals include:

- I don't know what I want to be*
- I am confused about my future*
- I may not be able to get the experience that will help me in the future*
- I may not be challenged and happy in my career*
- I may not be able to have the money I want with this career*

3. How distressful is this issue to you at this moment?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

4. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

5. Have you had distress about this issue for longer than three months?

- (A) Yes (B) No

6. Have you had distress about this issue which significantly interfered with your daily living?
 (A) Yes (B) No
7. I have really questioned and thought about my career goals.
 (A) Yes (B) No
8. I have established a clear sense of my career goals.
 (A) Yes (B) No

Part B asks about your sense of self

PART B: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your sense of self (e.g., sense of who you are).

Examples of positive thoughts/feelings about your sense of self include:

- I feel good about myself
- I think I am very attractive and I like the way I look
- I am physically fit which makes me feel good about how I look
- I am a positive person and I know what I want in life
- I am a caring and loving person

9. How positive is this issue to you **at this moment**?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

10. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART B: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your sense of self.

Examples of distressful thoughts/feelings about your sense of self include:

- I sometimes feel powerless
- I feel that I may not be strong enough to achieve my goals
- I am overweight for the way I would like to look
- I am easily pushed to do things I don't agree with
- I am negative and I usually see the bad side of situations

11. How distressful is this issue to you **at this moment**?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

12. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

13. Have you had distress about this issue for longer than three months?

(A) Yes (B) No

14. Have you had distress about this issue which significantly interfered with your daily living?

(A) Yes (B) No

15. I have really questioned and thought about my sense of self.

(A) Yes (B) No

16. I have established a clear sense of my self.

(A) Yes (B) No

Part C asks about long-term life goals.

PART C: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your long-term life goals.

Examples of positive thoughts/feelings about your long-term life goals include:

-I feel I have made a positive decision about my long-term life goals

-I think I have the ability to achieve my goals

-I am trying to be a complete person

-I want to make a difference in the world

-I want to be on my own and feel safe

17. How positive is this issue to you **at this moment**?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

18. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART C: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your long-term life goals.

Examples of distressful thoughts/feelings about your long-term goals include:

-I have not decided what I want to do with my life

-I am not sure if my choice is the right thing for me

-I feel I won't be able to achieve my goals

-I worry that I may never get married

19. How distressful is this issue to you **at this moment**?

Not Distressful A	A little Distressful B	Distressful C	Very Distressful D	Extremely Distressful E
-------------------------	------------------------------	------------------	--------------------------	-------------------------------

20. In general, how distressful is this issue in your life?

Not Distressful A	A little Distressful B	Distressful C	Very Distressful D	Extremely Distressful E
-------------------------	------------------------------	------------------	--------------------------	-------------------------------

21. Have you had distress about this issue for longer than three months?

(A) Yes (B) No

22. Have you had distress about this issue which significantly interfered with your daily living?

(A) Yes (B) No

23. I have really questioned and thought about my long-term life goals.

(A) Yes (B) No

24. I have established a clear sense of my long-term life goals.

(A) Yes (B) No

DOMAIN II: INTERPERSONAL DEVELOPMENT

Part D asks about friendships.

PART D: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your friendships.

Examples of positive thoughts/feelings about your friendships include:

-My friends understand me

-My friends are loyal

-We know we can count on each other

-My friend gives me good advice when I need it most

-I enjoy sharing my feelings and experiences with my friends

25. How positive is this issue to you **at this moment**?

Not Positive A	A little Positive B	Positive C	Very Positive D	Extremely Positive E
----------------------	---------------------------	---------------	-----------------------	----------------------------

26. In general, how positive is this issue in your life?

Not Positive A	A little Positive B	Positive C	Very Positive D	Extremely Positive E
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PART D: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your friendships.

Examples of distressful thoughts about your friendships include:

- My friends can be secretive and sneaky sometimes with me
- My friends and I have a lot of differences that cause a lot of conflict
- It is hard to have friendships with people of the opposite sex
- It is not fair that one of us is giving more than the other
- Sometimes lying interferes with the ability for friends to share secrets

27. How distressful is this issue to you **at this moment**?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

28. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

29. Have you had distress about this issue for longer than three months?

(A) Yes (B) No

30. Have you had distress about this issue which significantly interfered with your daily living?

(A) Yes (B) No

31. I have really thought and questioned myself about this issue a lot.

(A) Yes (B) No

32. I have established a clear sense of what type of friendships I want.

(A) Yes (B) No

Part E asks about belonging to groups.

PART E: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your group involvement.

Examples of positive thoughts/feelings about your group involvement include:

- The group I belong to backs me up and is very understanding
- The group I belong to gives me a sense of family
- The people in my group and myself like the same things
- My group gives me a place to talk about what is important to me
- We work well together as a team and get along well

33. How positive is this issue to you **at this moment**?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

34. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART E: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your group involvement.

Examples of distressful thoughts/feelings about your group involvement include:

- Sometimes my group is too extreme and wild*
- Sometimes I do not like what we do as a group*
- Some people in the group do not belong*
- Sometimes I feel alone even though I am apart of this group*
- I like one person has all the power in the group*

35. How distressful is this issue to you at this moment?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

36. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

37. Have you had distress about this issue for longer than three months?

- (A) Yes
- (B) No

38. Have you had distress about this issue which significantly interfered with your daily living?

- (A) Yes
- (B) No

39. I have spent a lot time questioning and thinking about what type of groups I should belong to.

- (A) Yes
- (B) No

40. I have established a clear sense of what type and level of group involvement would be best for me.

- (A) Yes
- (B) No

Part F asks about gender and sexuality issues.

PART F: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your gender and sexuality.

Examples of positive thoughts/feelings about your gender and sexuality include:

- I feel positive about being a man or a woman*
- Society gives me things because I am a man or a woman*
- I understand my sexuality and I am comfortable with myself*
- I feel positive about my decision to become sexually active*
- I have had very positive sexual experiences*

41. How positive is this issue to you at this moment?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

42. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART F: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your sexuality and gender.

Examples of distressful thoughts/feelings about your gender and sexuality include:

- I hate the physical limitations of being a man or a woman*
- I am worried about the social consequences of being a homosexual*
- I am not sure about my sexual preference*
- I feel I am too occupied by sexual thoughts*
- I'm not sure I want to become sexually active*

43. How distressful is this issue to you at this moment?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

44. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

45. Have you had distress about this issue for longer than three months?

(A) Yes (B) No

46. Have you had distress about this issue which significantly interfered with your daily living?

(A) Yes (B) No

47. I have really questioned and thought about my gender role or my sexuality.

(A) Yes (B) No

48. I have defined the gender role I will take.

(A) Yes (B) No

DOMAIN III: BELIEFS ABOUT THE WORLD

Part G asks about religious issues.

PART G: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your religion.

Examples of positive thoughts/feelings about your religion include:

- I believe in God
- Due to my choice, I don't have to depend on religion or God for strength
- My religion teaches me how to live my daily life
- My religion gives me an idea about what is important in life
- I feel free from rules laid down by religions

49. How positive is this issue to you at this moment?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

50. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART G: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your religion.

Examples of distressful thoughts/feelings about your religion include:

- My religion makes me feel guilty
- I often feel judged by my lack of religion
- It is difficult for me to live up to the rules laid down by my religion
- My parent's religion means nothing to me
- I think that certain religious rules are silly

51. How distressful is this issue to you at this moment?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

52. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

53. Have you had distress about this issue for longer than three months?

- (A) Yes (B) No

54. Have you had distress about this issue which significantly interfered with your daily living?

- (A) Yes (B) No

55. I have spent a lot of time questioning and thinking about my religious beliefs.

(A) Yes (B) No

56. I am sure about my religious beliefs

(A) Yes (B) No

Part H asks about moral issues.

PART H: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your morality.

Examples of positive thoughts/feelings about your morality include:

-I consider myself a moral person

-My moral values make me proud

-When I live up to my moral values I feel happy

-I do not steal because it is wrong

-I always try to do the right thing

57. How positive is this issue to you **at this moment?**

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

58. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART H: SECTION I - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about your morality.

Examples of distressful thoughts/feelings about your morality include:

-Sometimes I do things that go against my moral values

-I am uncertain about my moral values

-It is hard live up to my moral values

-I am not sure what role morality should play in my life

-It is hard to live with people who do not have similar moral values as me

59. How distressful is this issue to you **at this moment?**

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

60. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

61. Have you had distress about this issue for longer than three months?
 (A) Yes (B) No
62. Have you had distress about this issue which significantly interfered with your daily living?
 (A) Yes (B) No
63. I have spent a lot of time questioning and thinking about my moral issues and values.
 (A) Yes (B) No
64. I have established a clear sense of the moral guidelines on how to live my life.
 (A) Yes (B) No

Part I asks about political issues.

PART I: SECTION I - Positive Content Features

We would like you to describe what, if anything, you consider good or positive about your thoughts, feelings, practices, experiences, or any other issues that are important to you about political issues.

Examples of positive thoughts/feelings about politics include:

- my political beliefs make me feel proud
- I am open to different opinions
- I feel my political beliefs help me to live my life
- I feel honored that I am able to vote
- I like what my political leaders do

65. How positive is this issue to you **at this moment**?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

66. In general, how positive is this issue in your life?

Not	A little		Very	Extremely
Positive	Positive	Positive	Positive	Positive
A	B	C	D	E

PART I: SECTION II - Distressful Content Features

We would like you to describe what, if anything, you consider distressful or troublesome about your thoughts, feelings, practices, experiences, or any other issues that are important to you about political issues.

Examples of distressful thoughts/feelings about politics include:

- I am confused about my ideas on politics
- I am not sure what political party I believe in
- It is difficult to guide my life through my political beliefs
- I am not sure if my political beliefs will fit with my family's beliefs
- It upsets me when politicians take advantage of their power and manipulate the law

67. How distressful is this issue to you at this moment?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

68. In general, how distressful is this issue in your life?

Not	A little		Very	Extremely
Distressful	Distressful	Distressful	Distressful	Distressful
A	B	C	D	E

69. Have you had distress about this issue for longer than three months?

(A) Yes (B) No

70. Have you had distress about this issue which significantly interfered with your daily living?

(A) Yes (B) No

71. I have spent a lot of time questioning and thinking about my political ideas.

(A) Yes (B) No

72. I have established a clear sense of the political ideals that I believe in.

(A) Yes (B) No

Version: MLC MAKING LIFE CHOICES WORKSHOP

Evaluation Form

Group Leader _____

Directions: *To better help our workshop participants, we would appreciate your taking a moment to fill out this evaluation form: This evaluation will remain anonymous.*

1. What did you like best about the workshop?
 - All the possible choices that the group listed.
 - Sharing personal concerns with members of the group.
 - It gave me the opportunity to think critically about my dilemma.

2. What did you like least about the workshop?
 - Filling out the questionnaires.
 - The workshop was not long enough.
 - Too long, very repetitive.

3. What was your opinion of the Study Guide and Work Book?
 - Provided useful tools and techniques for problem solving.
 - Can apply the skills at any time after the workshop.
 - Helpful in understanding the concepts.

4. Was the workshop useful to you in dealing with the life issues which you brought in for discussion? If yes, in what ways? If no, why not?
 - Yes, having others look at your dilemma and offering their opinions.
 - Yes, it challenged me to look at problems from all angles.
 - Yes, opened my mind to new ideas.

5. Do you believe that the skills that were emphasized in this workshop will be useful in facing other issues in your life? Why or why not?
 - Yes, I solved my dilemma.
 - The skills learned in the workshop are practical for use in the future.
 - Yes, they help as a system to improve making hard choices.

6. How do you think the workshop could be improved?
 - Should be conducted for a longer period of time.
 - More writing assignments, like making lists of own choices.
 - It worked well, leave it alone.

7. Do you have any other comments or feedback about any aspect of this workshop?
 - I'll miss the meetings, they were very helpful.
 - I left each time in a better mood that when I started.
 - Fun and helpful, can't believe it was extra credit!

APPENDIX B
MAKING LIFE CHOICES LEADER'S MANUAL

LEADER'S MANUAL

for

Making Life Choices

Work Shop

This Manual was developed for the Making Life Choices Workshop at the Psychosocial Development Laboratory, Child and Family Research Center, Department of Psychology, Florida International University, Miami, Florida, 33199. The materials were developed by Steven L. Berman, Alan M. Berman, Laura Ferrer, Ondina Arrufat and William M. Kurtines. Any comments or suggestions regarding the material should be directed to authors at the above address.

Revised: 1/10/97

Background and Significance

The stage in the life cycle called adolescence confronts the individual with a complex and difficult challenge (and responsibility), namely, that of choosing and fulfilling the goals and values that give the individual's life direction and purpose. In the psychological literature this process has come to be called the formation of an identity. As modern society has become increasingly more complex, diverse, and pluralistic, making the life choices that define the individual's identity (and living up to the responsibility for these choices) has become increasingly more difficult (Erikson, 1968). As a consequence, for most youth in modern culture the transition to adulthood poses a formidable challenge, and many experience considerable distress as part of this transition. For some, the experience of distress becomes overwhelming and disrupts the normal course of development rendering the individual dysfunctional. Indeed, the Diagnostic and Statistical Manual of Mental Disorders, third edition, revised (DSM-III-R) (American Psychiatric Association, 1987); contained a diagnostic category for a disorder, termed Identity Disorder, whose essential feature is severe subjective distress regarding the inability to integrate aspects of the self into a relatively coherent and acceptable sense of self. As defined by DSM-III-R, an Identity Disorder encompasses uncertainty about a variety of issues relating to identity, including long-term goals, career choice, friendship patterns, sexual orientation and behavior, religious identification, moral value systems, and group loyalties. Thus, for many people the severity and pervasiveness of distress associated with the process of defining a sense of direction and purpose for their lives presents a serious problem that affects the quality of their lives.

The DSM-IV (American Psychiatric Association, 1994) Fourth Edition has now reclassified Identity Disorder as Identity Problem and listed it under the heading of Other Conditions That May Be a Focus of Clinical Attention. This change reflects a recognition that the process of defining one's sense of identity is one of several normal and healthy developmental challenges of life, particularly at adolescence (Erikson, 1968). As a consequence, the experience of distress during this psychosocial crisis is to be expected. Although distress related to identity exploration is no longer considered a mental disorder, that does not mean that the distress cannot be severe and disruptive to normal functioning. Thus, although the DSM category for this type of distress has changed, the problem itself has not changed or gone away. In modern society, identity distress still represents a serious problem for many young people.

The Life Choices Workshop (LCW) draws on an ongoing program of research being conducted at the Center for Child and Family Psychosocial

Research. This program of research uses a pragmatic contextualist orientation in the development of interventions that target youth. This pragmatic contextualist orientation seeks to expand our scientific understanding of a wide range of problems in youth, and to use this knowledge to develop effective methods for alleviating the distress and suffering that these problems present. That is, this pragmatic contextualist orientation seeks to integrate and combine the most efficacious methods of prevention, assessment and intervention of psychosocial research, and to modify and adapt these methods for use with specific problems and populations.

1. Conceptualization of MLC.

The effectiveness of the Making Life Choices Workshop (MLC) in the treatment of identity distress associated with the uncertainty of making the type of difficult life choices that late adolescents normatively experience will be evaluated in this dissertation. This work is part of growing recognition of the need to develop effective interventions with this population (Archer, 1994). The Life Choices Workshop to be tested in this dissertation is a multifaceted intervention designed to be adaptable for use with a wide range of age populations (e.g., early adolescent identity distress, identity issues in mid-life etc.). The multifaceted format of MLC to be evaluated in this project is designed to combine the most beneficial features of a group format that uses cognitive and behavioral facilitative strategies for implementing the intervention's two primary change producing procedures: teaching/learning critical decision making and problem solving skills and fostering identity exploration.

When an intervention is to be evaluated, one critical feature that needs to be carefully specified is the conceptual basis of the treatment (Kazdin, 1988). The first section of this part will discuss the conceptualization of the issue of personal responsibility that provides the background for the implementation of the intervention's change producing procedures and facilitative strategies. This second section of this part will describe the rationale and conceptualization of the two key change producing procedures -- skill training and exploration. The third section will describe the intervention's facilitative strategies -- shared experiences, perspective taking, positive feedback. Although the components of MLC will be described separately in this dissertation for purposes of explanation, they are conceptually interrelated and integrated for purposes of implementation.

Personal Responsibility

The conceptualization of the issue of personal responsibility described

in this section draws on the existential pragmatic tradition in modern thought. From the existential tradition we adopt the view that human beings, unlike other things or objects in the world, are responsible for their decisions and actions. From the pragmatic tradition we adopt a view of deciding what is the right thing to do as a type of problem solving activity. This existential-pragmatic tradition provides the foundation for our view that human beings not only have the type of cognitive and communicative problem solving and decision making capacities that enable them to make choices that affect the quality of their lives, but also that they are responsible for their choice.

Therefore, the background introduction to the workshop exercises provides an overview of the concept of personal responsibility. The purpose of this overview is to educate the participants concerning personal responsibility and to "set the stage" for the use of the change producing procedures to foster skills development and identity exploration. The overview of personal responsibility thus stresses that although the purpose of the workshop is to teach skills in making life choices, it is the workshop participants who are ultimately responsible for the choices they make.

Change Producing Procedures

1) *Skills Training*. One of the key change producing procedures in MLC is that of training in the use of decision making and problem solving skills. The utility of training in interpersonal problem solving has been documented in a variety of settings with diverse populations (Camp & Bash, 1985; Spivack, Platt, & Shure, 1976; Spivack & Shure, 1982). Training adolescents in interpersonal problem solving and social competence has also been adopted in most states (e.g., New York, New Jersey, California, etc.) (Rotheram-Borus & Wyche, 1994). The form of decision making and problem solving that will be used in this project draws on this and includes exercises that target the development of generic problem solving skills.

More specifically, the generic problem solving skills which the workshop focuses on are ones that have been identified in the literature. These include: identifying what the problem is, generating alternatives for solving the problem, and selecting the best alternative. The form of decision making and problem solving that will be used in MLC thus draws on previous work but extends it in two important ways. First, it extends it by adding a "critical" thinking component, which makes it more useful for making difficult life choices. The critical component includes exercises designed to facilitate the use of suspension of judgment and the use of critical examination. Second, critical decision making and problem solving has been adopted for use in making group decisions and is therefore useful in the context of a group format.

2) *Perspective taking*. The second key change producing procedure in MLC is that of perspective taking. Perspective taking is intended to facilitate identity exploration. As used in the workshops, perspective taking involves adopting a point of view that is different from a person's own point of view. As participants interact with other group members who possess different world views and ideas, they may develop or increase their understanding of the limitations of looking at the world from one perspective. Piaget (1932/1965) suggests that peers have an important influence on diminishing one another's self-centered outlook because they interact as equals. A substantial body of evidence demonstrates that the behavior of well-adjusted, competent youth is maintained in part by a number of social cognitive abilities, including social perspective taking and interpersonal problem solving (Enright, Ganiere, Buss, Lapsley, & Olson, 1983; Enright, Olson, Ganiere, Lapsley, & Buss, 1984). The exercises used in the MLC workshops (e.g., role play, switching roles, etc.) focus on taking alternative perspectives for the life dilemmas that emerge in the group sessions.

Because the MLC perspective taking exercises help participants develop decentering skills, the exercises promote the individuals' distancing themselves from the limited range of alternatives available from a single perspective. Perspective taking thus facilitates generating alternatives for successfully resolving life dilemmas.

Group Processes

In addition to skills training and perspective talking, the training intervention makes use of available "natural" group processes to facilitate the effects of the key change producing procedures (Ettin, 1992). The MLC workshops use two "group" facilitative strategies (e.g., shared experiences and positive feedback) to foster skills training and identity exploration.

1) *Shared experiences*. Interactions among the group members contribute to the experience of group cohesion and trust as members of the group begin to feel more comfortable sharing life experiences related to personal life dilemmas. This sharing process facilitates exploration, since the sharing of personal experiences can serve as the medium to increase the exposure of other group members to a broader range of experiences. Thus, this exposure can be used to derive additional information, as well as an increased number of alternatives that can be used in exploring personal life choices (Ettin, 1992).

2) *Positive feedback*. Positive feedback is used to facilitate skills training as well as exploration. Observation of one group member successfully using a critical skill may offer the opportunity for positive

modeling for the whole group. It also provides an opportunity for the other group members, as well as the group facilitator, to positively reinforce the individual's use of the skill. The group setting can be used to provide corrective or instructive feedback. Another function of the group is to provide a setting for social comparison, such as the evaluation of an individual's choice relative to consensual peer standards of appropriate behavior (Ettin, 1992).

Intervention Phases

The specific phases in which the components of MLC are implemented are described next, followed by a summary of the sessions.

MLC will consist of four sessions. Each session will be 2 ½ hours in length, and will take place once a week for four consecutive weeks. The first session provides an introduction to the overall rationale for the program and skill practice with a hypothetical dilemma. In the second and following sessions, the skills are reviewed and applied to personal real life dilemmas of the group members. The fourth sessions involves review and termination, and is used as follow up to continue practicing the skills in reference to personal life dilemmas.

a) *MLC Sessions.* **Session 1:** Group introduction and discussion of the workshop goals. Presentation of workshop intervention rationale, emphasize the importance of practice and skills training, benefits of group process and the importance of sharing experiences, perspective taking, and receiving feedback. Discuss the concepts of Life Choices and Responsibility. Explain the steps in problem solving and the role of critical thinking and discussion in decision making. Outline the concept of I.C.E. as a tool for problem solving (I=identify the problem, C=create alternatives, E=evaluate the alternatives) Explain group "rules", and practice using critical and problem solving skills using a hypothetical dilemma. **Session 2 & 3:** Review treatment rationale and goals, and related concepts discussed in previous session. Have each subject identify the specific personal life choice dilemma that will be addressed. Group discusses each dilemma using the steps to problem solving and providing positive feedback for the use of critical skills. Group members encouraged to share experiences and take varying perspectives to enhance the process of exploration. **Session 4:** Review concepts. Continue to practice decision making and problem solving skills by further discussion of personal life choice dilemmas from previous session. Review progress, the need for continued practice on their own, and termination. Complete Workshop Evaluation Form and schedule Follow-up assessments.

Subjects

Subject Selection. Because this is a psychosocial intervention rather than a psychotherapeutic intervention, all subjects seeking help in making life choices will be admitted to the study.

Inclusion criteria. To be included in the study the subjects must express a willingness to complete all of the assessments, including the follow-up. They must also be willing to provide informed consent and to be videotaped during the workshop sessions.

Exclusion criteria. Any subject who reports thoughts of hurting themselves or others on any of the measures or during any of the sessions or during any contact with the lab will be excluded from participation in the intervention. In addition, any subject who gives any obvious indication of psychopathology (e.g., thought disorders, symptoms of major depression, etc.) will also be excluded from participation. Subjects who meet either criteria will be handled according to the standard lab policy. The standard lab policy is for the subject to be referred to Dr. Kurtines, the faculty supervisor of the lab. Dr. Kurtines will be responsible for making the appropriate referral for evaluation and services.

Workshop Procedural Outline

Session 1: (approximately 2 1/2 hours)

1. Collect *completed* workbooks.

(They may keep the study guides.)

2. Introductions.

(Begin with yourself. Say your name and a little personal background, then ask each subject to do the same.)

3. Review session structure.

-1st session: review study guide material, steps to problem solving and decision making, practice using those skills on the hypothetical dilemma mentioned in the workbook

-2nd session: practice using problem solving and decision making skills on your own personal dilemmas.

-3rd session: follow up on personal dilemmas.

-4th session: follow up on personal dilemmas.

4. Talk about workshop's purpose.

(We will not make decisions for you; our focus is on developing your critical skills as a way to help you make difficult life choices)

5. Review basic concepts from the Study Guide

(Instead of lecturing have each subject answer questions such as: What is a life choice? What do we mean by responsibility?)

(Use Poster Charts [Appendix A] in room and/or detailed outline [Appendix B])

6. Group Exercise 1: Discuss Hypothetical Dilemma (from Workbook)

(What should he do?, Why?, Use ICE, positively reinforce any critical statements)

(Everyone should participate; They do most of the talking - you facilitate!)

A. Role play

(Have them play "devil's advocate" - argue against their own opinions)

Session 2: (approximately 2 ½ hours.)

1. Review workshop's purpose.

(We will not make decisions for you; our focus is on developing your critical skills as a way to help you make difficult life choices)

2. Review basic concepts from the Study Guide

(Instead of lecturing have each subject answer questions such as: What is a life choice? What do we mean by responsibility?)

(Follow the outline on the Poster Charts [Appendix A] in the room and/or use the outline in Appendix B for assistance.)

3. Group Exercise 2: Discuss Real Personal Life Choice Dilemmas

A. Discuss ground rules for group exercise

(See Poster Charts or Appendix A)

B. Discuss individual's role

(See Poster Charts or Appendix A)

C. Discuss group's role

(See Poster Charts or Appendix A)

D. Discuss each person's life choice dilemma

(Use ICE, positively reinforce any critical statements)

(Everyone should participate; They do most of the talking - you facilitate!)

(Spend equal time on everyone's dilemma; You do not have to complete the discussion or solve the problem during this session)

E. Role Playing -- perspective taking

(Have them play "devil's advocate" - argue against their own opinions, and/or have other members of group advocate for different perspectives)

Session 3: (approximately 2 ½ hours)

1. Review workshop's purpose.

(We will not make decisions for you; our focus is on developing your critical skills as a way to help you make difficult life choices)

2. Review basic concepts from the Study Guide

(Instead of lecturing have each subject answer questions such as: What is a life choice? What do we mean by responsibility?)

(Use Poster Charts [Appendix A] and/or outline in Appendix B for assistance.)

3. Follow up on each person's life choice dilemma

(Use ICE, positively reinforce any critical statements)

(Everyone should participate; They do most of the talking - you facilitate!)

(Spend equal time on everyone's dilemma; You do not have to complete the discussion or solve the problem during this session)

A. Role Playing -- perspective taking

(Have them play "devil's advocate" - argue against their own opinions, and/or have other members of group advocate for different perspectives)

Session 4: (approximately 2 ½ hours)

1. Review workshop's purpose.

(We will not make decisions for you; our focus is on developing your critical skills as a way to help you make difficult life choices)

2. Review basic concepts from the Study Guide

(Instead of lecturing have each subject answer questions such as: What is a life choice? What do we mean by responsibility?)

(Use Poster Charts [Appendix A] and/or outline in Appendix B for assistance.)

3. Follow up on each person's life choice dilemma

(Use ICE, positively reinforce any critical statements)

(Everyone should participate; They do most of the talking - you facilitate!)

(Spend equal time on everyone's dilemma; You do not have to complete the discussion or solve the problem during this session)

A. Role Playing -- perspective taking

(Have them play "devil's advocate" - argue against their own opinions, and/or have other members of group advocate for different perspectives)

4. Closure and termination

A. Action and personal responsibility

(Now you have all these things to consider but it is your own personal decision to make. Need for follow through.)

B. Maintenance

(if these skills are not practiced they will be lost)

5. Give work shop evaluation form

6. Set up individual post assessment appointments

BASIC CONCEPTS OUTLINE

Basic Concepts Outline

I. Life choices

(A life choice is a choice or decision that an individual makes that affects the quality of his/her life and/or the lives of others.)

II. Human responsibility

(One of the most important things that we want you to learn in this workshop is that human beings make decisions that affect the quality of their lives and they are responsible for those decisions -- that you cannot even choose not to choose. In this workshop we want you to learn better ways for making these decisions or choices. However, in the end you are the one who is responsible for those choices.)

III. Solving problems with ICE

A. Standard problem solving strategies

(steps don't always go in order)

1. I: Identify problem

(recognizing that a problem exists and defining the problem, i.e. an addict might not admit to having a problem, or you think you have a problem of which classes to take but your real problem is that you do not know what you want to do with your life)

2. C: Create alternatives

(Be creative; more alternatives increase chances for good solution)

3. E: Evaluate alternatives

(evaluating the alternatives and selecting the best solution)

IV. Beyond ICE: using critical decision making and problem solving skills in making life choices

(what we add to the basic problem solving steps is a critical dimension)

A. What does critical mean?

(goes beyond ordinary problem solving; critical = skeptical, challenging, questioning)

1. Adopting a critical stance

a. suspend judgment (entertainment)

(being able to step back; consider all options fully, reject nothing initially)

b. critical examination (challenge)

(objectively evaluate all alternatives including your own goals, choices and preconceptions)

B. Critical thinking and critical discussion

(we need critical discussion because if we just think critically alone, it is still easy to fool oneself)

a. self-deception

(can avoid by opening up your own choices to critical examination with other affected and neutral parties; other people can bring different perspectives to the problem and suggest alternatives not previously considered.)

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APPENDIX C
MAKING LIFE CHOICES
STUDY GUIDE AND WORKBOOK

Study Guide
for
Making Life Choices
WORK SHOP

This Workshop was developed at the Psychosocial Development Laboratory, Child and Family Research Center, Department of Psychology, Florida International University, Miami, Florida, 33199. The materials were developed by Steven L. Berman, Alan M. Berman, Ondina Arrufat, and William M. Kurtines. Any comments or suggestions regarding the material should be directed to authors at the above address.

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Making Life Choices WORK SHOP

Many times we are confronted with making difficult life choices such as choosing a career, life style choices, making relationship decisions, personal belief choices, etc.. The aim of the exercises that we will be covering in this workshop is to develop your skills in making these types of difficult life choices.

Format for the Workshop

- 1) The workshop that you will be participating in will consist of four sessions. It is important that you attend all the sessions and complete all of the homework assignments.
- 2) This study guide contains lessons that will be covered in the workshop. In order to get the most out of this workshop, it will be necessary to read and complete the lessons in the study guide and the workbook exercises that accompany the study guide before the first workshop meeting.
- 3) Prior to beginning the workshop you will be asked to sign a Consent form and fill out several questionnaires. These must be completed before beginning the workshop.
- 4) Bring your Study Guide and Workbook to the workshop sessions.

Now, turn to the Workbook that accompanies this Study Guide, and complete Exercise #1 before you begin the Lessons in this Study Guide.

Lesson #1

Human Responsibility

The young man in this story was indeed faced with a difficult set of alternatives. Deciding what is the right thing to do is not an easy choice to make. Part of his dilemma was that he had to evaluate the consequences of his decision. If he continued to work as an accountant he would most likely become a partner in the firm that he was working at and be even more successful. If he gave up his accounting career to write, he was very uncertain that he could succeed. He was faced with making a decision that had serious consequences and he had to evaluate those consequences (e.g., the probability that he would succeed or not succeed in each career, the extent of success in each career, etc.). However, his decision was more difficult than simply evaluating consequences. It was more difficult because it involved evaluating consequences in the context of conflicting or competing goals or values, and he also had to evaluate these goals and values. In this case, how much each of these careers meant to him, i.e., how much he "valued" each of them. His dilemma was that he had to decide what was the right thing to do in the context of complex and conflicting consequences *and* goals and values, and it was not clear what was the best or most useful method for making this decision.

Moreover, the young man could not even choose not to choose, because that would be a choice with the full consequences of any other choice. If he tries to avoid making a choice by putting off the decision and continuing to work as an accountant, he will in effect have made a choice -- he will probably spend his life as an accountant. In addition, we cannot even avoid our responsibility by shifting it somewhere else. We can, for example attempt to avoid responsibility by attributing it to other things, qualities, or characteristics such as our environment, our culture, or genetics. Our decisions and actions *are* shaped and influenced by other individuals, by the social groups to which we belong, by the environment, by culture, and by biology. In the end, however, the decision to attempt to shift our responsibility is itself a choice, a choice we are as responsible for as any other choice. Although there are many ways of attempting to escape responsibility, we can no more escape our responsibility than we can escape our freedom. The idea that human beings are responsible for their decisions and actions is central to the decision making and problem solving methods that you will be learning in this workshop.

Quality of Life

This workshop is about making the type of life choices that affect the quality of our personal lives -- it is about deciding what is the right thing to do with our lives and accepting the responsibility for our decisions. In the workshop Lessons and Exercises we will provide you tools that will be helpful in making these difficult life choices, but we won't be making the life choices for you. It will be up to you to decide what is the right thing to do with your life. The concepts and skills that we will be discussing are ones that have proved helpful to many people faced with the types of decisions that you face. They have proved helpful in the past, but they don't always work. Some problems that you face won't have any good solutions; some choices you have to make will not be easy choices, but you are ultimately responsible for your choices.

The focus of this workshop will be on using critical problem solving in making the life choices that affect the quality of your personal life, and accepting responsibility for your choices.

Using Critical Decision Making and Problem Solving in Making Life Choices

Although we recognize that resolving life dilemmas is sometimes complex and difficult, the most basic guidelines that we have to offer are relatively simple. Difficult life choices arise when things happen to challenge our goals and values and the means for reaching them. When this happens, the problem that arises is deciding what is the right thing to do and how to do it.

In describing the young man's dilemma, we pointed out that he had to decide what was the right thing to do, and it was not clear to him what was the best or most useful method for making this decision. Our goal in these exercises is to share with you what we consider to be the best or most useful *means or method* of deciding what is the right thing to do and how to do it, namely, the use of critical decision making and problem solving. As we will describe in more detail below, we consider critical decision making to be the best means or method for making these decisions. In providing you with some guidelines for decision making and problem solving, our goal is not to tell you *what* is the right thing to do when faced with a life dilemma. That decision is up to you. Our goal is to provide some guidelines for using critical decision making in helping to make the right choice and in helping to live up to our responsibility for our choices.

Solving Problems with ICE

In this section we will introduce you to what we mean by critical decision making and problem solving. The concepts that we outline in this section (and other sections of the Study Guide) are pretty general, and we will discuss them a lot more in the workshop.

Solving the problem of what to do with your life may seem to be complex, but it is basically no different than solving any other type of problem. Using critical decision making and problem solving in making life choices begins with the same basic types of activities as solving any other type of problem. People who work in the area of problem solving have identified three basic elements in successful problem solving. First, successful problem solving involves recognizing when a problem exists and identifying what the problem is. Second, successful problem solving also involves creating or generating potential alternatives for solving the problem. Finally, successful problem solving involves evaluating the alternatives and selecting the best solution.

To aid in our use of these three elements when faced with a problem, we use the word ICE to remind us of what is involved in successful problem solving: **I**dentifying what the problem is, **C**reating constructive alternatives, and **E**valuating the alternatives. In other words, successful problem solving involves answering the following questions: What is the problem? What are the alternatives? What is the *best* alternative?

Now turn back to the Workbook and complete the Questions and Exercise for Lesson #1 (Workbook p.4).

Lesson #2 Deciding What is The Right Thing to Do

Now that we have reviewed the basic types of problem solving activities that are helpful in resolving life dilemmas, we will illustrate how the use of "critical" decision making and problem solving is useful in making the *right* decision in resolving a life dilemma. It will be helpful in illustrating why we consider critical decision making to be the most useful means or method for making the right choice if we describe in more detail what we mean by "critical" thinking and discussion.

One thing that critical means is to be skeptical, to be willing to question and challenge. At the individual level, to be critical means to engage in critical thinking. *Critical thinking* in the resolution of life dilemmas is thinking that

involves adopting a "critical" (i.e., skeptical or questioning) stance. Adopting a critical stance involves both suspension of judgment and critical evaluation. It involves suspending judgment with respect to the consequences of our choices (both actual and potential) and our personal goals and values, and subjecting them to critical examination. It involves "stepping back" or "distancing yourself" from the problem. To be critical (i.e., to think critically) means to be skeptical or at least willing to question not only the consequences of your decision but also your own personal goals and values.

Critical discussion is similar to critical thinking in that it involves being willing to suspend judgment and being willing to be skeptical, to question, and to challenge. *Critical discussion* is "discussion" that critically examines or questions your choices and your goals and values. Critical discussion is important in making individual life choices because, as we will discuss next, it helps in accepting the responsibility for your choices.

In making life choices, it is relatively easy to suspend judgment and to be critical or skeptical of the choices of others. It is frequently much more difficult to adopt a critical stance with respect to one's own choices. Thus, although it is important in life to know how to recognize deception in others, it is also important (perhaps even more important) to be aware of and be able to recognize an extremely subtle form of deception, namely, *self*-deception. Self-deception occurs when you are uncritical of your own choices. Being uncritical of your own choices promotes or encourages shifting responsibility from yourself to other people, things, or qualities. Thus, one of the most important methods for insuring that you live up to the responsibility for your choices is to guard against self-deception, and one way to guard against self-deception in individual decision making is to open your choices to critical discussion. That is, to not only subject your choices to critical examination by yourself, but also to subject them to critical examination *and* discussion by others.

The best way to insure that you are making the right choice in an individual life dilemma, then, is to actively participate in the decision making process (i.e., to not just let them "happen") and to be willing to subject your choices and your goals and values to critical *thinking* and *discussion*. The same is true for accepting the responsibility for your choices. The best way to insure living up to the responsibility for your choices is to actively participate in the decision making processes and to be willing to subject all the potential choices to critical examination by yourself and others.

What does all of this mean for you as an individual when faced with making a life choice or decision in a particular context? How can you know what is right? How can you insure living up to your responsibility for your

choices? What it means is that you have to be willing to actively participate in decision making processes and to subject your life choices (and the goals and values that give them direction and purpose) to critical examination by yourself and to open them up to critical examination by others. Thus, one test of whether an individual choice is right is whether it can withstand your own critical examination. If a choice is personally acceptable, then the next step is to consider opening it up to critical examination by others. This includes not only people who are affected by your choices, but also people who are neutral and in the position to give you realistic feedback. Thus, if you are uncertain about your choice, our advice is to open it up to critical discussion. If your choice cannot stand up to critical thinking *and* critical discussion, then maybe you should reconsider it. Maybe it needs to change. If, on the other hand, you have actively and fully participated in the decision making process and your choice (and the goals and values that give it direction and purpose) pass the test of critical examination by yourself and others (and all that implies) then for all practical purposes, in that particular context, you have acted responsibly and have made the right choice.

Now turn back to the Workbook and complete the Questions and Exercises for Lesson #2 (Workbook pp. 4 & 5).

Lesson 3

Using Your Critical Skills

In this lesson we will begin to work with you to get you to use critical skills in making life choices. We will begin with the problem of choosing a career or identifying one's career goals. Choosing career goals is a challenge that all young people face. For many people it is a difficult challenge, but most young people successfully resolve it. Our interest in this workshop is in helping people who are faced with challenges such as this to successfully solve them. As we noted above, successfully solving the problem of making life choices is basically no different than solving any other problem. Therefore, we will show you how the use of each of the three problem solving activities can be helpful in making difficult choices such as a career choice. We will also illustrate the role that the use of critical skills can play in making the best choice. We will begin with recognizing when a problem exists.

Identifying the problem is an important step in resolving it because although most people can tell when they are not happy or satisfied with their career choices, but knowing you are not happy is not the same as knowing *why* you are unhappy and *what* to do about it. For example, some people develop very focused career goals early in life and are satisfied with their

choice until they get some actual, "hands-on" experience with the career. At this point, an important part of solving this problem is to recognize that a problem exists and to begin to identify why this career choice was not as satisfying as expected. Some people, on the other hand, do not really give much thought to their career goals. Consequently, they might end up working a something they find unsatisfying. Once again, at this point an important part of solving this problem is to recognize that a problem exists and to begin to identify why this career choice was not as satisfying as expected. Recognizing when a problem exists is an important part of solving the problem, and the use of critical thinking and discussion can facilitate success in this type of problem solving activity. For example, successfully recognizing that it is your career goals that you are unhappy with sometimes requires you to "step back" from the flow of your daily life and adopt a critical perspective -- that is, to be willing to question and challenge your own interpretation of what the problem is. Sometimes it can also be helpful to talk the issue over with someone, and it will more likely be useful if the discussion is "critical". By critical we mean that the other person also challenges or questions your interpretation of what the problem is.

Successfully resolving the challenge of choosing one's career goals, however, involving more than recognizing when a problem exists; it also involves coming up with potential solutions to the problem. In the case of making careers choices, this involves not only beginning to identify why a career choice is not satisfying, but also what alternative career choices are potentially or actually available. This involves creativity. Creativity in this context means being able to come up with new and different choices or alternatives. It means being open minded and not limiting yourself in your choices. For example, many young people experiment with a variety of jobs and careers before making a commitment. This process of role experimentation allows you to shift perspectives and also allows you to reflect critically on the alternatives that you have generated.

Finally, successfully resolving the challenge of choosing one's career goals also involves *deciding* what is the best alternative. With respect to life goals and values, this involves evaluation. Evaluations can be either uncritical or critical. The use of critical evaluation involves adopting a "critical" (i.e., skeptical or questioning) stance with respect to all possible life choices. This means subjecting your choices to critical examination, by self and others. In evaluating your choices remember it is important to be aware of and able to recognize that extremely subtle form of being uncritical, namely, *self-deception*. As you remember, self-deception occurs when you are unwilling to suspend judgment and subject your choices to critical examination. If you recollect, being uncritical of your choices promotes or encourages shifting responsibility from yourself to other people, things, or

qualities. Thus, one of the most important safeguards against being uncritical is to guard against self-deception, and the best way to guard against self-deception is to be willing to subject your choices to critical *thinking* and *discussion*.

One of the most important skills you can learn from these exercises is what the different types of problem solving activities and critical skills are and how to apply them to making life choices. It is through the use of these skills that we are most likely to make satisfactory life choices.

Now turn back to the Workbook and complete the Questions and Exercise for Lesson #3 (Workbook p. 6).

Workbook
(to accompany study guide)
for
Making Life Choices
WORK SHOP

This Workshop was developed at the Psychosocial Development Laboratory, Child and Family Research Center, Department of Psychology, Florida International University, Miami, Florida, 33199. The materials were developed by Steven L. Berman, Alan M. Berman, Ondina Arrufat, and William M. Kurtines. Any comments or suggestions regarding the material should be directed to authors at the above address.

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Workbook Unit 1

The exercises in this workbook are designed to accompany the Study Guide for Making Life Choices. If you have not already done so, turn now to the Study Guide and read page one *before* you read any further in this Workbook.

You will be asked to turn these exercises in at the first workshop meeting.

Name: _____ Date: _____

Getting Started

Life Choices/Life Dilemmas

A high school teacher told her class the story of a former student. The student had graduated several years earlier and had come back to her for advice.

The young man was faced with a difficult choice. He had gone to school and studied to become an accountant. However, since he had finished college and had been working as an accountant, he felt that maybe he had not made the right choice. When he was young, one of the things that he had thought about doing with his life was to become a writer, but he wasn't sure he could make a living at it. He had tried writing in high school and he enjoyed it, but now he had a family and could not pursue more than one career at a time. His problem, then, was deciding what's the right thing to do? Should he continue to work as an accountant or should he consider changing careers. He had worked as an accountant for a number of years, he was making a good salary, would probably become a partner in the firm over time and had many friends at work. On the other hand, because he had never attempted to make a living by writing, he was not sure he could do it.

The young man was indeed confronted with a difficult life choice -- a choice that had created a dilemma. The type of dilemma that he faced is what we call a life dilemma. A life dilemma occurs when you have to make a choice that will have an important impact on your life, and you are uncertain about what is the right thing to do. We want you to begin the workbook exercises by describing what you think is the right thing for the young man to do? Because we will be asking you to share your response to this dilemma

with the group during the workshop sessions, your first exercise will be to take a few minutes to write down what you think about it. In answering this question, we want you to not only say what you think is the right thing to do, but also *why* you think its the right thing to do. Don't worry if you are not sure exactly what to say. Just try to be honest and frank about saying what you think is the right thing to do. That's all we need for now.

The two things we want you to write down are briefly described next followed by specific instructions for completing the exercise.

1) What do you think is the right thing to do?

_____continue to work as an accountant

or

_____change careers

2) Why do you think it's the right thing to do?

Questions:

1) Do you feel that this was an easy decision to make?

Yes or No.

2) How long did it take you to make a decision? _____

3) How confident are you that you made the best decision?

Very Confident or Not Very Confident

Your Life Choices

Now that you have thought about what the young man should do to resolve his life dilemma, we want you to continue the exercise by describing one of your own difficult life choices (**Use one of the two dilemmas that you reported in the Personal Responsibility measure**). The type of difficult life choices that we are talking about include not only choices involving careers, but also choices involving issues such as getting married, having children, relocating, going to college, etc. We would like you to think about what is the most important life dilemma or choice that you would like to try to resolve. The next thing we would like you to do is describe this life dilemma. Remember a life dilemma or choice is not only a decision that you feel will have a major impact on your life, but also one that you feel uncertain about.

Because we will also be discussing this dilemma with the group during the workshop session, we would like you to take a few minutes to write down some things about it. The three things we want you to write down are briefly described next followed by specific instructions for completing the exercise. The first thing we want you to do is write down what the choice is and a description of the events and/or circumstances which led up to the dilemma. The second thing we want you to do is to describe your current thoughts and feelings about the choice. The third thing we want you to write down is how you think the dilemma will be resolved or how you think it will turn out. Specific directions for each of the phases of the exercise follow:

1) Briefly describe what you consider the most important life dilemma or life choice that you have to resolve, and what led up to it.

2) Describe your current thoughts (thinking) and feelings (emotions) about this dilemma.

3) Now briefly summarize how you think the dilemma will resolve itself or is going to turn out.

Now, go back to the Study Guide and read Lesson # 1 (Study Guide pages 2 through 4), entitled "Human Responsibility."

Questions for Lesson #1

Human Responsibility

1) Responsibility includes the recognition that simply not making a choice is still a choice.

True or False.

2) Difficult life choices arise when things happen to challenge our goals and values and the means for reaching them.

True or False.

3) What do the letters stand for in the acronym ICE?

I= _____

C= _____

E= _____

Exercise for Lesson #1

Human Responsibility

Look back over your response to the young man's dilemma and see if you made any reference to the responsibility for his choices. If you did, write what you said on the space below.

Now go back to the Study Guide and read Lesson # 2 (Study Guide pages 5 & 6), entitled "Deciding What is the Right Thing to Do."

Questions for Lesson #2

What is critical thinking?

1) Critical thinking involves suspending judgement and evaluating our own goals and values with respect to their consequences.

True or False.

2) Critical discussion involves critically examining and questioning your choices and your goals and values with people who are affected by them as well as people who are neutral.

True or False.

3) One of the best ways to guard against self-deception is to open your choices to critical examination by yourself and others.

True or False.

Exercise for Lesson #2

Developing your skills.

Look back over your narrative. Did you apply critical thinking to your life choice. Do you recognize any instance of self-deception, write down what it was (Be honest. That's what critical thinking is, being honest with yourself). If there is no example in your narrative, think of one good example from your personal experience when you were less than honest with yourself. Write down what happened. (This is one exercise that everyone can complete because no one is guilty of having always been completely honest)

Exercise for Lesson #2

What is critical discussion?

Do you think there was an example of critical discussion in your narrative? Write down what you think it was. If there wasn't, describe a discussion from your personal experience in which you feel critical discussion was involved. Write down what happened. During the discussion, did you come to question your choices and your goals and values?

Now go back to the Study Guide and read Lesson # 3 (Study Guide pages 7 & 8), entitled "Using Your Critical Skills"

Questions for Lesson #3

Developing your skills.

- 1) Critical thinking is not different from critical discussion.
True or False.
- 2) Self-deception is an important part of critical thinking.
True or False.
- 3) It is easy to think critically, especially about one's own positions and principles.
True or False.

Exercise for Lesson #3

For this last exercise we want you to rewrite your description of how you might arrive at your decision or choice. This time write it the way you might decide to resolve the problem now.

CURRICULUM VITA

PERSONAL INFORMATION

Born Havana, Cuba, 1946
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EDUCATION

1995-Present Doctoral program - Developmental Psychology
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1993-1995 Master of Science in Psychology
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1991-1992 Bachelor of Arts in Psychology
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PROFESSIONAL EXPERIENCE

1993-1994 Lab Coordinator
Psychosocial Development Laboratory, Child and
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1992-1993 Research Assistant
Luis Escovar, Ph.D., Florida International University

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1993-Present Research assistant
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Courses taught:
Introduction to Psychology (2 units)
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Theories of Personality
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Psychology of Adolescence

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Courses Assisted:
Child Psychopathology
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PRESENTATIONS

Adams, M., Ferrer Wreder, L. A., Arrufat, O., & Kurtines, W. M. (1996, November). *Resolving Moral Life Dilemmas: The Critical Problem Solving Scale-Revised Life Choices*. Presented at the Association for Moral Education's annual convention, Ottawa, Canada.

Arrufat, O., Berman, S., Ferrer Wreder, L., Saavedra, L., Adams, M., Martinez, M., Kurtines, W. (1997, March). *Identity: Working with late-adolescent college students*. Symposium presented at Society for Research on Identity Formation, Miami Beach, FL.

Arrufat, O., Berman, S., & Kurtines, W. (1995, April). *The development of a measure of the use of critical thinking and problem solving in moral dilemmas*. Roundtable session accepted at the American Educational Research Association's annual convention, San Francisco, CA.

Arrufat, O., Ferrer, L., Briones, E., & Kurtines, W. (1994, November). *Assessing critical skills in resolving moral dilemmas*. Poster session presented at the Association for Moral Education, annual convention, Banff, Canada.

Berman, S. L., Arrufat, O., & Berman, A. M. (1995). *Moral Identity Scale*. Poster session submitted to the American Psychological Association's annual convention, New York, NY, August, 1995.

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Berman, S., Arrufat, O., Lorente, C. C., Ferrer, & L., Kurtines, W. (1997, April). *Making life choices: An intervention program for adolescent identity development*. Poster presented at the Society for Research in Child Development's bi-annual convention, Washington, D. C.

Berman, S., Berman, A., Lorente, C., Ferrer, L., Arrufat, O. & Kurtines, W. (1996, April). *Making life choices: Facilitating identity formation in young adults*. Presented at the Society for Research on Adolescence's bi-annual convention, Boston, MA.

Berman, S., Ferrer, L., Arrufat, O., Briones, E., Schmaltz, J., & Kurtines, W. (1995, February). *Making life choices: Facilitating identity formation in young adults*. Poster session presented at the Society for Research on Identity Formation's first conference, Dog Island, FL.

Brown, K., Arrufat, O., & Ferrer Wreder, L. (1997, November). *Personal responsibility and control measure*. Presented at the Association for Moral Education, Atlanta, GA.

Escovar, L., Roth, W., & Arrufat, O. (1995, March). *Cognitive-Behavioral training to reduce children's externalizing behavior in a recreational setting*. Poster session presented at the Southeastern Psychological Association's annual convention, Savannah, GA.

Ferrer Wreder, L., Cass Lorente, C., Briones, E., Bussell, J., Berman, S., Arrufat, O., Schlessinger, K., & Kurtines, W. (1997, November). *Making life choices: Encouraging critical and responsible decision making and problem solving in American high school adolescents*. Symposium presented at Association for Moral Education, Atlanta, GA.

MANUSCRIPT IN PROGRESS

Ferrer Wreder, L., Cass Lorente, C., Briones, E., Bussell, J., Kurtines, W., Berman, S., & Arrufat, O. *Making life choices workshop: A classroom-based workshop for promoting identity development in adolescents at risk for problem behaviors*. Manuscript under preparation.

