THE INFLUENCE OF SEPARATION, ATTACHMENT AND FAMILY PROCESSES ON THE CAREER EXPLORATORY BEHAVIOR OF LATE ADOLESCENTS

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Anne-Marie Moreault, B.A., M.S.S.W.
Denton, Texas
December, 1992
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The purpose of this study was to examine the idea that a late adolescent’s career exploration activities may be influenced by levels of attachment to and psychological separation from family, family health, and family structure. It was proposed that higher levels of self and environmental exploration would be associated with positive family relationships and adequate levels of psychological separation and attachment. Cognitive and demographic variables were included as control measures. Measures of family health, attachment, separation, family structure, career exploration, career decision making self efficacy, and beliefs in the usefulness of engaging in self and environmental exploration were administered to 304 undergraduates from intact families. Multiple regression analyses were employed to examine the contribution of the independent variables measuring family processes to the variability in the dependent variables of self and environmental exploration, after controlling for the variability associated with the control measures. The
demographic variables were age, gender, class standing, and decision status about a major. Results indicated that the best predictors of career exploration in late adolescence were the cognitive variables. Beliefs in the usefulness of self exploration were the best predictor of self exploration, whereas career decision making self efficacy was the best predictor of environmental exploration. Measures of attachment and psychological separation were not substantially related to career exploration. A weak relationship between family structure and self exploration was found, however contrary to theoretical predictions, it suggested that problems in the parent child relationship may facilitate rather than inhibit this career development activity. Findings also suggested a relationship between variables of family processes and career decision making self efficacy. Future research might explore the idea that separation, attachment and family variables influence cognitive beliefs, which in turn effect career development. The demographic variables emerged as minimally important in predicting exploratory behavior. Results were discussed with regard to theory and research in career exploration.
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CHAPTER I

INTRODUCTION

The purpose of this study is to explore the hypothesis that family relationships and experiences involving separation-individuation and attachment are important influences on an individual’s career exploratory activities. Late adolescence and young adulthood is a crucial developmental period during which the individual crosses a bridge from childhood into budding adult. This transition is marked by many significant tasks such as separation-individuation from parents (Blos, 1967, 1979; Hoffman, 1984), ego identity development (Erikson, 1956, 1968), and developing one’s career (Super, 1957). The successful completion of these tasks allows the adolescent to move into adulthood in a healthy and productive way.

The vocational literature related to career development has a substantial empirical base. The importance of career development lies in the fact that most adolescents perceive this choice as a major determinant of their future lifestyle (Rubinton, 1980). Several comprehensive models of career development have been developed (e.g. Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Harren, 1979; Super, 1957) however, Super’s (1957) model and Jordaan’s (1963) work will be
highlighted in this study, since they specifically focus on the task of career exploration. These theorists laid the foundation for the study of career exploration by highlighting several important factors including the delineation of self and environmental exploration and potential antecedent influences as motivating factors to engage in this process.

Most models of career development agree that career exploration is the first step toward successful negotiation of the task of career development, and lays the foundation for adequate development of one's self concept and identity. Despite this consensus, it is only recently that studies have begun to empirically examine potential antecedent influences on career exploratory behavior which might hinder or facilitate engaging in this activity. Previously, studies involving career exploration mainly focused on the outcome of engaging in such activities.

Recently several writers have suggested that the role of the family and the process of psychologically separating from the family may be an important influence in the career development process (Bratcher, 1982; Lopez & Andrews, 1987; Zingaro, 1983). In line with this Grotevant and Cooper (1988) have suggested an important role for family in influencing career exploratory behaviors. In addition, Lopez and Andrews (1987) suggest that since separation from family, identity development and career development occur
within the same developmental period, one cannot ignore the potential relationship among these processes.

The role of psychological separation from parents in adolescent development has been studied from a number of different theoretical perspectives including psychoanalytic theory (Blos, 1967, 1979;) developmental theory (Erikson, 1956; 1968) and family systems theory (Bowen, 1966, 1978; Farley, 1979; Meyer, 1980). Each of these different theoretical perspectives offers a unique contribution to the understanding of this process with varying emphasis on different components such as the role of early childhood experiences, family, society and the individual.

Of particular importance for this study is the theoretical relationship postulated between early experiences of attachment and separation and the development of adequate exploratory behavior. Bowlby's attachment theory (1977, 1988) highlights the critical nature of attachment for the development of exploratory behavior in the developing child. Mahler and her associates (Mahler, Pine, & Bergman, 1975) emphasize separation and subsequent individuation from parental figures rather than attachment as primary for adequate development of exploratory behavior. Building on this theoretical foundation, Blos (1967) postulated that the adolescent undergoes a second phase of separation and individuation from family, and compared the toddler's task of exploring the outside world as analogous
to that of the adolescent's movement into the adult world. Thus, theory suggests that an adolescents' exploratory behavior may be influenced by their experiences of attachment to and separation from the family.

Similarly, family systems theorists suggest that an adolescent's ability to adequately separate from the family is intricately tied to the family's overall health and ability to facilitate this process. This body of literature describes the context within which the adolescent negotiates the developmental task of separation-individuation, and provides a framework to describe dysfunctional patterns which may interfere with this process. Thus, theory suggests that family patterns which may be disruptive to the separation-individuation process may also be influential in career development.

In sum, the purpose of this study is to examine the idea that an adolescent's career exploration activities may be influenced by experiences of attachment, separation and family relationships. Although these processes have a substantial theoretical base, it is only recently that empirical efforts have been directed toward examining the potential relationship among these developmental tasks. These recent efforts will be examined along with the theoretical and empirical literature related to these constructs in an effort to clarify the potential relationship among these important developmental processes.
Literature Review

Career Exploration Theory

Career exploration is a critical task in many career development models (Ginzberg, et al., 1951; Harren, 1979; Jordaan, 1963; Super, 1957; Super & Hall, 1978). It's importance lies in the fact that it provides the individual with crucial information about self and the world of work from which the individual can begin to formulate ideas and plans for their choice of a career. Completion of the task is considered a precursor for successful negotiation of later phases in the process of vocational development such as career choice crystallization (Jordaan, 1963; Super & Hall, 1978), identity and self concept development (Super, 1957, 1963) and career decision making (Harren, 1979; Pitz & Harren, 1980).

Super's model (1957) and Jordaan's work (1963) specifically focus on the task of career exploration and provide a theoretical base from which to make predictions about career exploration in relationship to separation-individuation and family processes. Of particular importance for this study are Super's ideas about the relationship between exploratory behavior and the development of a self concept. According to his model, the period of adolescence is defined as one of exploration and development of a self concept not only in vocational areas but in all aspects of life such as relationships with
others, and developing one’s place in the world as an adult. This adolescent exploration phase serves as a foundation for identity and self concept which will later guide the individual toward adulthood.

Of additional importance for this study are Super’s (1957) ideas about the nature of exploratory behavior which can take two major forms. First, self exploration involves gaining awareness of oneself, including one’s skills, abilities, and values. This type of exploration facilitates the development of a self concept. Second, environmental exploration serves to provide the individual with knowledge of the outside world, including the world of work. Through the process of exploration one attempts to fit one’s self concept into the real world, modifying and changing behavior as the need arises.

Adequate exploration in Super’s (1957) framework will subsequently lead to self differentiation, a process which allows the individual to see differences between himself and important others such as his family and peers. Exploration will also provide the individual with a means to identify similarities between significant figures in his life and himself, thereby allowing the individual to retain significant identification, and modify or reject others (Super, 1963).

Jordaan (1963) expanded on Super’s ideas about the nature and purpose of exploratory behavior and provided a
comprehensive theoretical framework for describing and analyzing adolescent exploration. Two themes emerged from Jordaan's work which are of particular importance for this study. One is Jordaan's theoretical notion about extending child developmental models of exploratory behavior to adolescents, and the other is his discussion of factors which might serve to influence exploratory behavior. These themes highlight the importance of earlier developmental experiences in the formation of exploratory behavior.

Jordaan's (1963) model included suggestions about possible motivations to engage in exploration, including uncertainty about a plan of action, a need to meet other's expectations, anxiety, boredom, or a need for more information about self or environment to make decisions about future career activities. This highlighted the contextual nature of the exploratory process by suggesting that outside influences or life circumstances would be an important determinant of the salience of engaging in career exploratory activities. Jordaan also suggested factors which might facilitate, hinder, or inhibit exploratory activities in an individual. The role of the family was seen as particularly important in providing support and encouragement in the exploratory process. Jordaan hypothesized that individuals who came from homes which did not encourage independence and exploratory behaviors would be unlikely to engage in fruitful exploration.
Although not specifically addressing separation-individuation, many of Jordaan's (1963) notions about potential influences in the development of exploratory behavior are suggestive of the importance of parent-child relationships. In particular Jordaan's ideas suggest that problematic parent-child relationships which do not encourage exploratory behavior, or the development of self confidence and independence will prevent adequate exploratory behavior.

Recently, Grotevant and Cooper (1988) expanded on the developmental nature of exploratory behavior and the role of the family in facilitating engaging in it. Families are believed to facilitate exploratory behavior by providing an optimum balance of closeness to foster support and separateness to foster independence (Grotevant & Cooper, 1988). Additionally, career exploratory activities most likely occur within a developmental framework of cycles with the first "round" probably occurring in high school, and continuing at various times throughout college and into adulthood (Grotevant & Cooper, 1988). Contextual and developmental factors such "task immanence" (i.e. entering the world of work or an approaching graduation), would determine when career exploration would be an important activity for the individual to engage in (Grotevant & Cooper, 1988).
The danger imbedded in the lack of attention to the contextual and developmental nature of career exploration, according to Grotevant and Cooper (1988), is that researchers will proceed under the assumption that all adolescents experience and undergo the process of engaging in career exploratory activities in the same way regardless of the individual's psychological resources or relevance for their current life circumstances. One of the implications for research is the idea that one cannot adequately examine the process of exploratory activity without first taking into account whether the process is developmentally or contextually salient for that individual.

Adequate assessment of developmental and contextual salience requires defining task salience for both self and environmental exploration. To date, most of the existing theory and research has more adequately defined this salience for environmental exploration, whereas the salience of self exploration is less clearly defined. For example, the idea of "task immanence" such as proximity to graduation appears to be more closely identified with the need to explore one's environment in order to address an upcoming decision point in one's career.

A starting point in defining task salience for self exploration is to examine its theoretical base. Theory emphasizes the importance of self exploration in terms of self concept and identity development. It implies that
environmental information is subsequently utilized in the process of fitting one's self concept into the existing realities of the world. Embedded in this idea is that self exploration occurs earlier in the process of career development, and sets the stage for later exploration of the environment.

Theory also suggests that an individual who has not made any decisions regarding career alternatives may be more likely to engage in self exploration as a function of being unable to explore the world efficiently without some inner guidance regarding what one would like to explore. For adolescents who are early in the process of career development, and who have not committed to a career choice, the task of self exploration may be more salient than environmental exploration. Conversely, adolescents who have already engaged in substantial self exploration may be ready to explore the outside world in order to complete the process of fitting their budding self concept into the real world.

In sum, the theoretical literature related to career exploratory behavior highlights the importance of this behavior for successful negotiation of the career development process. Imbedded in this model is the delineation of the separate nature of self and environmental exploratory behavior. Self exploration is viewed as crucial to the development of a self concept and self knowledge,
whereas environmental exploration provides the individual with knowledge of the outside world, and a way to fit one's self concept into the existing realities of the work world. Further, there are suggestions that these two tasks may be salient at different points in the career development process, and that developmental and contextual variables are important factors to consider in the study of this behavior.

Career Exploration—Empirical Literature

The importance of career exploration for successful negotiation of later career development tasks has been well documented in research which has addressed the outcome of engaging in such activities. For example, career exploratory activities have been shown to be important in acquiring knowledge about the world of work (Otte & Sharpe, 1979; Stumpf, Colarelli, & Hartman, 1983; Taylor, 1985), development of a self concept (Stumpf, 1981; Taylor, 1985), achievement motivation, self esteem (Otte & Sharpe, 1979), matching career choice to one's personality (Grotevant, Cooper & Kramer, 1986) and readiness for job interviewing (Stumpf, Austin, & Hartman, 1984).

Recently studies have addressed antecedent factors which might influence or account for differences in exploratory activities among individuals. The majority of studies in this area have focused on cognitive and personality variables to understand how they may motivate individuals to engage in this behavior. Results have often
been mixed and selectively related to either self or environmental exploration, producing a rather confusing picture of the potential sources of variations in career exploration.

In contrast, a few studies have examined exploratory behavior from a developmental perspective, with more consistent results. These studies have provided empirical support for the theoretical ideas about the importance of developmental and contextual variables in determining the salience of engaging in exploratory behavior at different points in the career developmental process. Results of these studies suggest that one factor which may account for varying results with respect to cognitive and personality variables is the lack of attention to the unique contribution of developmental and contextual factors in these studies. A relationship between exploratory behavior and other variables may have been obscured by the fact that the subjects in the study were not developmentally ready to engage in this behavior. This methodological limitation may account for inconsistent findings in empirical studies to date.

The following review will first highlight the relevant findings in the empirical literature which support the importance of contextual and developmental factors in the study of career exploratory behavior. Secondly, other studies will be examined within the framework of potential
limitations imposed by the omission of these factors in the study of exploratory behavior.

**Contextual and developmental influences on career exploratory behavior.** Career development theories postulate that this process occurs in developmental stages with exploratory behavior being the first stage which lays the foundation for later stages of crystallization, identity development and career choice (Super, 1957; Tiedman & O’Hara, 1963). The particular vocational behavior that an individual engages in at any point is determined by the person’s stage of development and changing life circumstances (Super, 1957). Self exploratory behavior is believed to occur early in the career development process, providing the foundation for the development of one’s self concept. Subsequently, environmental exploration provides the information which allows the individual to fit their self concept into the demands of reality.

Recently a number of authors have explored these ideas by examining situational factors which might influence an individual to engage in different types of exploratory behavior. Results of these studies have provided support for the notion that different developmental and contextual factors play a role in motivating the type of exploratory behavior that an individual may engage in at any point in time. For example, the frequency of engaging in self and environmental exploration has been shown to vary as a
function of the proximity of graduation and entering the world of work (Stumpf, et al., 1983). Students closer to graduation report higher levels of environmental exploration than nongraduating students, and nongraduating students report higher levels of self exploration than students who were graduating (Stumpf, et al., 1983). Similarly, individuals who are in later stages of the career development process, characterized by having made a commitment to a set of career plans, tend to be engaged in environmentally focused exploratory behavior (Blustein, 1989a; Blustein, Ellis, & Devenis, 1989), whereas individuals who are in the planning phases of decision making expressed stronger beliefs about the usefulness of engaging in self exploratory behavior (Blustein, 1989a). Contextual anxiety, defined as anxiety generated by the stress of having to make a career decision, is a more powerful motivator of environmental exploration than self exploration (Blustein & Phillips, 1988). Finally, younger undecided college students tend to be more involved in exploratory behavior than older more advanced students who have already committed to a set of career plans (Blustein et al., 1989).

In sum, several studies have provided empirical support for the theoretical idea that self and environmental exploration are separate developmental tasks which are salient at different points in time in the career
developmental process. More specifically, contextual and developmental factors such as age, career decidedness, anxiety about upcoming decision points, proximity to graduation, and entering the world of work provide the framework which set the stage for the salience of engaging in these behaviors at any point in time.

The influence of personality and cognitive variables in career exploration. While situations have been shown to influence the salience of engaging in self and environmental exploration, it is also likely that individual differences exist in the extent to which career exploration is engaged in. Although theory makes few suggestions about potential sources of individual differences, several authors have explored personality variables as one possible source of this variability. Results of these studies have been contradictory and/or selectively related to either self or environmental exploration, producing a confusing picture of the potential sources of individual variability. The fact that the salience of engaging in career exploratory behavior varies according to developmental and contextual circumstances suggests that it might be difficult to assess other variables which may account for individual differences in these behaviors without first determining if the behavior is relevant for the person at that point in time. Most studies have not taken this into account and this methodological limitation has made it difficult to
interpret or assess the significance of a lack of a relationship with other variables.

One aspect of individual functioning that has been suggested as an important factor which may influence the extent to which one engages in exploratory behavior is an individual's ability to function independently (Blustein, 1988; Grotevant & Cooper, 1988; Norman, 1989; Polk, 1990). Three studies have addressed different facets of this question by examining the conceptually similar variables of autonomy, individuation and psychological separation in relationship to career exploration. Results have been contradictory. Blustein (1988) found that feelings of autonomy and the ability to engage in self initiated behavior were only facilitative of self exploration, whereas Norman (1989) and Polk (1990) found no relationship between career exploration and measures of separation and individuation.

One explanation for the apparent inconsistency of these results may be that these studies did not address the developmental or contextual salience of self and environmental exploration for the populations they sampled. Blustein's (1988) sample was relatively young and early in their college career. Theory would predict that self exploration would be a more salient task at this stage of development, which may partially account for the positive relationship of autonomy to self exploration for this group
of subjects. The lack of developmental salience for environmental exploration may have obscured any relationship of autonomy to this type of exploration. In a similar vein, the populations sampled by Norman (1989) and Polk (1990) were relatively older, later in their college career, and had already made tentative career plans. This suggests that exploratory behavior may not have been a salient task for these populations, potentially obscuring a relationship between separation and individuation and career exploration.

Other researchers have suggested that cognitive variables in the form of beliefs about one's abilities to perform tasks related to career decision making and beliefs about the usefulness of engaging in exploratory behaviors may be important sources of influence in motivating individuals to engage in career exploration (Blustein, 1988, 1989a; Polk, 1990). These studies have produced more consistent results, suggesting that cognitive variables may play a more predictable role in influencing exploratory behavior. For example, career decision making self efficacy has been consistently related to higher levels of career exploratory behavior (Blustein, 1989b; Polk, 1990). Similarly, beliefs about the usefulness of engaging in exploratory behavior was found to be predictive of engaging in environmental exploration, however similar beliefs about self exploration were not as strongly related to actually engaging in these behaviors (Stumpf & Lockhart, 1987). The
latter findings may be partially a function of the life circumstances of the population in this study. These subjects were all enrolled in formal career programs which required them to engage in specific tasks such as job interviewing and contacting prospective employers. Since these tasks are clearly more related to environmental exploration, the positive relationship of beliefs to engaging in these behaviors is not surprising for this population, nor is the lack of relationship between beliefs and self exploration, since this behavior was not as salient.

Authors have also examined the relationship of career decision making self efficacy and psychological separation. Theory suggests that the ability to make career decisions and engage in the necessary tasks associated with this process, would be indicative of an individual who was able to think and function independently (Blustein, Walbridge, Friedlander, & Palladino, 1991). This assumption has led researchers to examine the relationship of this aspect of career behavior in relationship to psychological separation, which is believed to underlie the growth toward independent functioning. Results of these studies have not supported this assumption. Although career decision making self efficacy has been positively related to engaging in career exploratory behavior, it has not been shown to be related to psychological separation (Blustein, et al., 1991; Polk,
1990), nor to anxiety about career planning or avoidance of career exploratory behavior (Polk, 1990). One conclusion which can be drawn is the possibility that engaging in career tasks may be more a function of beliefs about one’s ability to perform the necessary skills, rather than a function of one’s sense of autonomy or independence. The current methodological limitations of the studies related to autonomy, independence and psychological separation, suggests however that further research is needed to assess this question more adequately.

Summary

In sum, the empirical literature related to the specific task of career exploration suggests that developmental and contextual factors such as "task immanence" or proximity to graduation or decision point status, age, stage of college development, and career decidedness, are all important factors in determining the salience of engaging in self or environmental exploration. In particular, research suggests that for individuals who are younger, early in their college career, and undecided about a major, the task of self exploration is likely to be more salient than environmental exploration (Blustein, 1988, 1989a; Blustein et al., 1989). Conversely, for older students, who are approaching graduation and entering the world of work, the task of environmental exploration is
likely to be more salient, than self exploration (Blustein, 1989a; Blustein et al., 1989; Stumpf, et al., 1983).

The fact that the salience of engaging in career exploratory behavior varies according to developmental and contextual circumstances suggests that it might be difficult to assess other variables which may account for differences in these behaviors without first determining if the behavior is occurring at that point in time. This has presented a methodological limitation which may have obscured the nature of the relationship between other variables and exploratory behavior, making it difficult to interpret findings related to personality and cognitive variables with confidence.

For example, results of empirical studies have produced contradictory results about the role of autonomy, individuation and psychological separation in relationship to career exploration (Blustein, 1988; Norman, 1989; Polk, 1990). While autonomy was shown to be positively associated with self exploration but not environmental exploration (Blustein, 1988), two other studies found the conceptually similar concepts of individuation and psychological separation to be unrelated to career exploration (Norman, 1989; Polk, 1990). Contextual anxiety (Blustein & Phillips, 1988) and beliefs about the usefulness of engaging in exploratory behavior (Stumpf & Lockhart, 1987) have been positively related to environmental exploration, but not self exploration. One plausible
explanation for these differential findings was the lack of attention paid to the salience of the different types of exploratory behavior for the populations sampled.

In contrast, one consistent finding suggests that having self efficacious beliefs about one's ability to engage in career tasks is positively related to engaging in both self and environmental exploration (Blustein, 1989b; Polk, 1990). In addition, career self efficacy has been shown to be unrelated to psychological separation (Blustein, et al., 1991; Polk, 1990) and unrelated to anxiety associated with career planning and avoidance of career exploratory behavior (Polk, 1990). It is possible given these results that engaging in career tasks is not related to issues of autonomy and psychological separation, however additional research is needed given the methodological limitations of the studies in this area.

Psychological Separation and Family Influences on Career Exploratory Behavior

Theoretical overview. The influence of family relationships and parent-child interactions in career development has long been recognized in the vocational literature. For example, early theorists such as Roe and Siegelman (1964) suggested that early childhood experiences and the nature of the relationship with one's parents were primary determinants of an individual's occupational orientation in adulthood. Other theorists such as Crites
(1962) suggested that identification with one's parents would be a strong determinant of occupational interest patterns. Super (1957) noted the importance of parental role models in developing one's identity and self concept, whereas Jordaan (1963) focused on the role of the family in encouraging their offspring to explore their environment. Recently several writers have suggested that the ability of the adolescent to psychologically separate and individuate from the family would be an important influence in the career development process (Bratcher, 1982; Lopez, 1989; Lopez & Andrews, 1987; Meyer, 1980; Zingaro, 1983).

Although the specific task of career exploration is believed to be a crucial first step in the career development process, little theoretical and empirical attention has been devoted to the role of psychologically separating from the family in accounting for individual differences in engaging in these behaviors. The theoretical support for the interrelationship between career exploration and the process of separation-individuation from the family is substantial and comes from several different perspectives, including psychoanalytic theory (Blos, 1967, 1979; Mahler, et al., 1975) family systems theory (Bowen, 1966, 1978) and developmental theory (Bowlby, 1977, 1988; Erikson, 1956, 1968). Each of these perspectives offers a unique contribution to the understanding of this process with varying emphasis on different components such as early
childhood experiences, identity development, current family relationships, and social influences.

These perspectives offer several important themes which elucidate the theoretical foundation for the notion that the process of separation-individuation may be an important influence in the adolescent's ability to fruitfully engage in the task of career exploration. The themes also provide a framework to examine important methodological issues in the study of the process of psychological separation, and means to understand the empirical literature to date. The review which follows will first highlight the themes which provide support for the interrelationship of psychological separation and career exploration. Secondly, the empirical literature will be reviewed within the framework and methodological considerations suggested by theory.

There are three major themes which have emerged from these diverse perspectives. First, the process of psychological separation in adolescence is viewed as having its roots in early infant development and the nature of the relationship between the primary caregivers and the child (Ainsworth, 1989; Blos, 1967, 1979; Bowlby, 1977, 1988; Mahler, et al., 1975). There is general agreement that this process also forms the foundation for later psychological health and adaptation (Bloom-Feshbach & Bloom-Feshbach, 1987; Sroufe & Waters, 1977). These early childhood models provide the blueprint for understanding the process of
separation and individuation in adolescence, and provide the theoretical structure to link the development of exploratory behavior to this process.

Second, the process of separation-individuation is tied to the development and maintenance of attachment behavior, and healthy psychological functioning in adolescence requires a balance of attachment and separation, rather than separation alone (Allison & Sabatelli, 1988; Ainsworth, 1979, 1989; Bowlby, 1977, 1988; Franz & White, 1985; Josselson, 1988; Rice, 1990). In addition, attachment and separation-individuation experiences are integrally related to the development of exploratory behavior (Ainsworth, 1979; Bowlby, 1977, 1988; Mahler, et. al., 1975) identity development (Erikson, 1956, 1968; Josselson, 1980; Sabatelli & Mazor, 1985), and family functioning (Bowen, 1966, Farley, 1979; Meyer, 1980; Sabatelli & Mazor, 1985). Thus, in order to fully understand the interrelationship of separation-individuation and its' complimentary process of attachment to exploratory behavior, it is important to consider each of these integral components.

Finally, the process of separation-individuation in adolescence is a complex, multidimensional, developmental task which has behavioral and intrapsychic components (Blos, 1967; Hoffman, 1984). This complexity has resulted in a number of instruments being developed to measure these constructs, however it remains unclear whether these
instruments are measuring similar constructs (Rice, Cole, & Lapsley, 1990). This issue has presented a methodological concern, which has made it difficult to interpret and compare results across studies. In addition, since it is intricately linked to other processes, one must address this complexity in empirical research. Each of these themes will be reviewed along with the empirical literature related to them in the following sections.

**Psychological separation and attachment.** There are two major childhood models which form the foundation of the theory of psychological separation in adolescence. Of particular importance for this study is Bowlby’s (1977) theory of attachment behavior, which most clearly delineates the importance of attachment for the development of adequate exploratory behavior. Bowlby’s theory postulates that strong bonds of attachment form between an infant and primary caregiver in the earliest days of life. Through the process of attachment the child develops an inner working representation of self and others (Sroufe, 1986) and a secure base, which allows the child to explore and move freely in his environment, secure in the knowledge that a reliable caretaker is available if needed. In the absence of this attachment and a secure base, feelings of anxiety will be experienced, and the individual will have difficulty exploring their environment, hence exploratory behavior will be severely curtailed. Exploratory behavior in Bowlby’s
theory is seen as essential for proper growth and development.

Bowlby (1988) delineates three patterns of attachment, with each form of attachment developing from different parenting responses, and having differing consequences for later development. Secure attachment is described as facilitative of growth, whereas the other two forms describe the development of deviant attachment behavior involving anxiety, fear, and lack of a secure base. This results in inadequate or distorted mental representations which can lead to maladaptive behavior in later years (Bowlby, 1988).

In sum, Bowlby’s theory clearly indicates that the development of adequate attachment is facilitative of exploratory behavior, and that in the absence of both attachment and the ability to explore one’s environment without fear and anxiety, maladaptive functioning in later developmental periods is likely. Based on this theoretical foundation, one prediction which could be made in terms of adolescent functioning and adaptation is that the quality of an adolescent’s attachment to parental figures would be an important influence on the adolescent ability to engage in exploratory behavior.

In contrast to Bowlby’s emphasis on attachment, Mahler and her associates (Mahler, et al., 1975), focus on the impact of the separation-individuation process in healthy development. Mahler’s theory describes the process by which
a toddler is able to move out into the environment to explore the world after developing an internalized (introjected) representation of the mother which serves to comfort the child during times of separation. This internal representation, if properly formed, will allow the child to tolerate the separation while exploring and mastering the outside world without undue stress (Bloom-Feshbach, et al., 1987). Thus, similar to Bowlby’s theory, Mahler and her associates also postulate that there is a need for a connection or bond with a caregiver to facilitate the separation-individuation phase of development and the exploration of the outside world. This bond is conceptualized in the form of an internalized representation or introject, which will serve to soothe anxious feelings and provide comfort and security.

Building on Mahler’s theory, Blos (1967, 1979) introduced the notion that adolescence could be viewed as a second phase of individuation, suggesting a direct extension of this earlier phase of development to that of adolescence. Blos (1979) compared the toddler’s movement into the outside world to the task of adolescence whereby the individual must loosen family ties and move into the adult world. Of primary importance is the development of a separate sense of self, with a shedding of dependency needs, and an increasing ability to function autonomously. One aspect of this separation-individuation process is the task of
experimenting with new roles and forms of behavior in an
effort to find one’s place in the world, including one’s
choice of a career. Thus, although not specifically
addressing the task of exploration in terms of career
development, Blos does suggest that the ability of the
adolescent to successfully negotiate the career development
process is conditional on adequate separation from parental
figures.

Although the development of exploratory behavior is
less of a central focus in Mahler et al., (1975) and Blos’
(1967, 1979) theoretical ideas, there is nevertheless, a
clear suggestion of the importance of adequate separation
from parental figures as facilitative of exploratory
behavior which enables the adolescent to move into the
outside world and master new roles. In addition, Mahler’s
work also suggests that some form of connection or bond is
necessary as well, similar to Bowlby’s work.

In terms of adolescent development, Rice (1990) notes
that there is a growing literature which is beginning to
examine predictions based on Bowlby’s theoretical ideas
regarding the continued importance of attachment in
facilitating healthy functioning during this period of
development. The general theme which pervades this
literature is the idea that parent - adolescent
relationships which are reflective of a secure attachment
will be most facilitative of adaptive functioning in a variety of other areas (Rice, 1990).

Similarly, there is growing awareness of the importance of a balance between attachment and separation as facilitative of adaptive functioning, with many writers suggesting that they are complimentary rather than opposing forces in development (Allison & Sabatelli, 1988; Franz & White, 1985; Josselson, 1988). Thus, the adolescent who perceives his relationships with his parents as caring and supportive, will be able to move through the process of growing up and separating in a more adaptive and productive fashion, and should be able to negotiate the tasks associated with this process with less difficulty.

In line with this, Grotevant and Cooper (1988) suggest that a healthy balance between attachment and separation would be important in facilitating an adolescent’s career exploratory behavior. More specifically, adequate attachment would provide the "secure base," similar to that of Bowlby’s infants, so that the anxiety associated with the exploration of new and unfamiliar roles and ideas could be tolerated. Adequate separation would also be facilitative of exploratory behavior, since this would allow the adolescent to explore differing beliefs from their parents, and thus allow for exploration of wider range of areas.

A major implication of these theoretical notions in terms of empirical studies and methodological issues is the
idea that both attachment and separation-individuation experiences are integrally related, and hence both components need to be incorporated and assessed in examining adolescent adjustment. It is only quite recently however, that empirical work has incorporated this idea.

**Empirical literature.** Although theory suggests that an adequate balance between attachment and separation would be most facilitative of exploratory behavior, the empirical literature related to this idea is almost non-existent. Only one study has attempted to directly assess this relationship (Norman, 1989), and one study has examined aspects of psychological separation in relationship to exploratory behavior (Polk, 1990). Additionally, the relationship of psychological separation and attachment to related areas of career development has been examined (Blustein, et al, 1991), and there are two studies that have examined either attachment or psychological separation in relationship to some aspect of career development (Kenny, 1990; Lopez, 1989).

Most studies which have examined the process of psychological separation in adolescence have utilized the Psychological Separation Inventory (PSI), a self report instrument developed by Hoffman (1984). This instrument purports to measure four aspects of this process with four different subscales. Conflictual Independence (CI) is a subscale which assesses the degree to which the adolescent
perceives freedom from excessive guilt, resentment and anger in relationship to parents; Emotional Independence (EI) assesses the degree to which the individual reports freedom from excessive needs for approval, emotional support and closeness with parents; Attitudinal Independence (AI) assesses the extent to which the adolescent reports holding beliefs, attitudes and values which are different from those held by parents; and Functional Independence (FI) assesses the degree to which the individual reports the ability to manage their personal affairs without parental help.

Another instrument which has been used to assess psychological separation is the Separation Anxiety Test (SAT), a semi-projective measure developed by Hansburg (1972). This scale assesses the construct of individuation, which attempts to measure the extent to which an individual is comfortable with a sense of separateness from parental figures in times of stress. The SAT also measures the need for attachment to parental figures in anxiety provoking situations.

In the first study which attempted to explore the potential relationship between the career exploration process and separation-individuation, Norman (1989) used the SAT (Hansburg, 1972) to examine patterns of individuation and attachment as potential sources of influence in engaging in self and environmental exploration. No support was found however, for the hypothesis that career exploratory behavior
would be facilitated by adequate levels of attachment and separation. Similarly, a later study by Polk (1990), using the PSI (Hoffman, 1984) also did not find support for the notion that psychological separation was related to career exploratory behavior. Both studies however, had methodological flaws which may have prevented the hypotheses from being tested adequately. In particular, neither study addressed the developmental and contextual salience of engaging in exploratory behavior for the populations they sampled. These studies were found to have subjects who had already chosen a college major, and who had also made tentative choices regarding a career. Thus, the potential relationship among the variables studied may have been obscured by the fact that engaging in exploratory behaviors may not have been salient for these subjects.

Additionally, the use of the SAT (Hansburg, 1972) in the study by Norman (1989), to measure the constructs of attachment and individuation was also problematic. This instrument is a clinical tool which was not designed to assess nonclinical populations. It was also normed on a younger population than was used in this study, and the measure was also found to perform inconsistently across different samples in other research projects (Norman, 1989). Similarly, Wilhite (1990) found that the attachment and individuation scales of the SAT were moderately correlated, suggesting that they may not be measuring separate
constructs. Taken together, these findings suggest that the results of studies using this instrument should be interpreted with caution.

In sum, it is difficult to interpret the findings of these two studies as suggestive of no relationship between attachment and separation-individuation to career exploratory behavior, given the limitations in design and instrumentation. Future studies will need to address the methodological concerns described above, in order to more adequately assess the question of whether these variables are related in some meaningful way as predicted by theory.

The remainder of the studies which will be reviewed here, although not addressing the specific task of career exploration, have addressed other aspects of career development in relationship to some aspect of separation-individuation and/or attachment. In contrast to the studies by Polk (1990) and Norman (1989), these studies provide some empirical support for the notion that attachment and psychological separation are related to the career development process in adolescence.

Several authors have examined the idea that the quality of an adolescent’s attachment to parental figures would be an important factor in easing the transition into the world of work. Recent studies by Blustein et al. (1991), and Kenny (1990) provide support for this idea. Blustein et al. (1991) found that a moderate level of attachment was
positively related to progress in committing to a career. Similarly, Kenny (1990) found that among college seniors, attachment (measured with a questionnaire assessing such factors as perceived parental availability, understanding, acceptance, and respect for individuality) was positively related to maturity in career planning, but not to assertion or dating competence. When viewed from a developmental perspective, the task which is most prominent for college seniors is that of moving into the outside world, a transition which is often anxiety provoking, and can be conceptualized as leaving a familiar and secure environment. Although not specifically addressing career exploration, it is plausible to suggest that one task which would be facing these college seniors in leaving the familiar world of college life would be that of environmental exploration. Seen in this light, these results are consistent with theoretical predictions of Bowlby, that attachment relationships are of most value in situations which are threatening to one’s sense of security.

Other authors have focused on the importance of the separation experience for the career development process. Theory suggests that the ability to psychologically separate from parents and function independently is a central task whose resolution is preconditional to successful functioning in other areas such as career development (Bios, 1967; Erikson, 1968). Several studies have examined this idea,
however in contrast to the support for the importance of attachment, the results related to psychological separation and other career tasks are mixed. For example, Blustein et al. (1991) found that psychological separation was unrelated to career indecision and career self efficacy. In contrast, a study by Lopez (1989), which utilized the conflictual and emotional independence scales of the PSI (Hoffman, 1984), indicated that conflictual independence (defined as freedom from guilt, anger and resentment in relationship to parents) from the opposite sex parent was the most powerful predictor of vocational identity development in college students.

Vocational identity is generally defined as a clear and stable sense of self in relationship to personality, work goals, interests and abilities. In the vocational literature, this identity is typically viewed as an outcome of engaging in self and environmental exploration. One implication of these findings is the suggestion that one aspect of the process of psychological separation, that of freedom from conflictual relationships, is positively related to career exploratory behavior. Interestingly, the findings of this study indicated that emotional independence, defined as freedom from excessive need for closeness and approval from parents, did not contribute significantly to vocational identity scores, suggesting that not all aspects of psychological separation contribute to all aspects of development or function in the same way.
While attachment and some aspects of separation have been shown to contribute to aspects of career development, several authors have suggested that it is not the influence of adequate attachment or separation alone that is important, but rather an adequate balance of the two which is most facilitative of growth (Grotevant & Cooper, 1988; Blustein, et al., 1991). In an important methodological shift, Blustein, et al. (1991) combined measures of both attachment and psychological separation in an effort to understand the potential relationship of these two processes in the career development of college students. Attachment in this study was measured with the Inventory of Parent and Peer Attachment (IPPA), a self report instrument developed by Armsden and Greenberg (1987), and psychological separation was measured using Hoffman’s PSI (1984).

Blustein and his colleagues (Blustein, et al., 1991) hypothesized that positive feelings of attachment in conjunction with adequate separation from parents would be most facilitative of progress in committing to a career choice. Their results indicated that for females a combination of conflictual independence (defined as freedom from resentful angry feelings) from both parents and a moderate degree of attachment to both parents was positively related to progress in committing to a career. For males the nature of the relationship with their father emerged as a more powerful predictor of progress in committing to a
career. Relationships that were characterized by a lack of guilt, anger and resentment, with moderate degree of attachment and attitudinal dependence (holding similar beliefs and values) were positively associated with progress in committing to a career choice. Thus for both males and females, adequate attachment to parents coupled with a lack of resentment, guilt and anger (conflictual independence) towards parents was most facilitative of progress in the developmental task of making a commitment to a career.

While these results appear to support the theoretical ideas about the importance of both attachment and separation, the fact that only one aspect of separation has been consistently related to career tasks suggests that this relationship may not be as clear as theory would predict. Although parent child relationship characterized by low levels of guilt, anger and resentment have been defined as one aspect of psychological separation, it may also be indicative of the style of family functioning rather than psychological separation. In addition, contrary to theoretical predictions, other indices of separation such as emotional independence (freedom from need for approval, emotional support and closeness) and functional independence (ability to function in daily activities without parental help) have not found to be related to be positively related to progress in career tasks. Similarly, rather than attitudinal independence (holding beliefs, attitudes and
values that are different from parents) being facilitative of progress, results indicate that attitudinal dependence (holding similar beliefs) is positively related to progress in committing to a career. These results suggest that the relationship of psychological separation may be more complex than originally predicted, such that less separation in certain aspects may be more facilitative rather than less facilitative in certain areas of adolescent development.

In sum, the empirical support for the notion that psychological separation and attachment are important contributors to the career development process in adolescents is mixed. Two studies found no relationship between separation variables and career exploration (Norman, 1989; Polk, 1990). Similarly, attachment was also found to be unrelated to exploratory behavior (Norman, 1989). Both these studies, however, had serious methodological flaws.

Psychological separation has also been found to be unrelated to career indecision and career self efficacy (Blustein, et al., 1991). In contrast, Kenny (1990) and Blustein et al. (1991) found support for a positive relationship between attachment and aspects of career development such as career maturity and making a commitment to a career. Similarly, conflictual independence has been found to be facilitative of progress in committing to a career (Blustein, et al., 1991) and developing a vocational identity (Lopez, 1989). Results also suggest that not all aspects of psychological
separation function in a similar manner, and that in some areas less separation rather than more may be most facilitative for other developmental tasks.

Taken together, these findings suggest that the role of attachment and psychological separation in career development is a complex process which is as yet not well understood. Current results support the importance of including measures of both attachment and separation. Additionally, results suggest the importance of assessing different aspects of attachment and separation in an effort to clarify the nature of the relationship of each of these aspects to other tasks of adolescent development. In terms of career exploratory behavior, it would be also be important to assess the developmental and contextual salience of these behaviors to ensure that these variables do not obscure the potential relationship to other variables studied.

Methodological issues. The number of studies examining the theoretical predictions about the importance of psychological separation and attachment in facilitating healthy adolescent development has grown tremendously in recent years. Most of these studies have not addressed the career process per se, but have focused on the parallel task of college adjustment (e.g. Hoffman & Weiss, 1987; Kenny, 1987; Kenny & Donaldson, 1991; Lapsley, Rice & Shadid, 1989; Lopez, Campbell & Watkins, 1986, 1988). Results of these
studies have been mixed, presenting a confusing picture of the relationship of psychological separation and attachment to adolescent adjustment. One plausible explanation for these inconsistent results is the measurement of the constructs of separation-individuation and attachment. Although there have been several instruments which have been developed to study these constructs, each instrument has emphasized a different aspect of the process. Until recently the relationship of these instruments to each other was unexplored, hence a comparison of results across studies was hampered by difficulties inherent in lack of consistency in measurement.

In a recent study Rice, Cole and Lapsley (1990) used multiple measures of separation-individuation in an effort to determine if these measures were actually tapping into the same underlying dimension. This study utilized three measures of separation: 1) the Separation Anxiety Test (SAT) by Hansburg (1972), which is a semi-projective technique that was devised as a clinical instrument to measure attachment and individuation difficulties in a young adolescent clinical population; 2) the Psychological Separation Inventory (PSI) by Hoffman (1984) designed to measure functional, attitudinal, emotional and conflictual independence from parents; and 3) two subscales of the Separation-Individuation Test of Adolescence (SITA)
developed by Levine, Green and Millon (1986), which assessed healthy separation and separation anxiety.

A factor analysis of the results of this study suggested that the three measures of separation-individuation actually tapped into two underlying dimensions which the researchers labeled independence from parents and positive separation feelings. The dimension of independence from parents appeared to describe the adolescents' ability to manage their own affairs without the assistance of parents, an ability to maintain distinct beliefs and values, and to be free from excessive need for approval. In contrast, the dimension of positive separation feelings reflected an affective dimension defined by the adolescents' emotional reaction to the separation experience from parents as a positive and hopeful experience, dominated by nonanxious and nonresentful reactions.

Results also revealed that these two dimensions were not related to college adjustment in the same way. The ability to function independently, manage one's affairs without parental help, and to be free from the need for approval were not found to be related to college adjustment. In contrast, the factor which reflected the adolescents' positive emotional reactions to the separation experience was related to the ability of the individual to adjust to college. These researchers concluded that inconsistent results in previous research which attempted to study the
role of separation-individuation and attachment in college adjustment could be attributed to the lack of clarity of the constructs measured. Their results highlighted the need for research studies to incorporate measures designed to assess the influence of both attachment and separation experiences in order to more fully understand the nature of influence of these processes on adolescent adjustment.

In sum, the empirical research related to separation-individuation, attachment and adolescent adjustment has been hampered by methodological difficulties of construct measurement. Recent efforts by Rice et al. (1990) to clarify this issue has highlighted the need for future research to incorporate measures of the adolescent’s affective experiences related to the separation experience, as well as measures of independence and family relationships in order to more adequately assess the nature of these processes in relation to some aspect of adolescent adjustment.

Family systems theory. Family systems theorists have long recognized the ability of the family to facilitate or hinder an adolescent’s progress through the developmental period of growing up and leaving home. In this framework, the family is viewed as a unit which goes through developmental stages and transitions, similar to those of it’s individual members (Carter & McGoldrick, 1988). The ability of the family to adjust and reorganize itself during
transition periods provides the emotional context within which individual development takes place (Goldenberg & Goldenberg, 1991). This context can be growth enhancing or growth inhibiting depending on the health of the family. One critical stage in a family's development is associated with a young adult leaving home. This transition is often marked by the adolescent's need to address career issues, which is symbolic of budding independence from the family (Lopez & Andrews, 1987). Family systems theorists assume that individual difficulties associated with these tasks are best understood within the framework of the family since the negotiation of the tasks occur within this emotional environment (Goldenberg & Goldenberg, 1991).

Systems theory has defined several constructs which describe the functioning of the family and offer a means to conceptualize the family as healthy or dysfunctional. Many of the constructs are conceptually similar to constructs used to describe the individual process of separation-individuation. For example, several theorists describe constructs which refer to a family's ability to regulate closeness and distance among its members (Beavers, 1977; Bowen, 1966, 1978; Minuchin, 1974). A consistent theme is the idea that families which are well "differentiated" can maintain an optimum balance between closeness and separateness (Bowen, 1966). These families are described as healthy and able to provide the individual with the
necessary support and nurturance needed to promote the individual growth and development of its members (Beavers, 1977). Conceptually, these ideas are similar to psychoanalytic and developmental theories which suggest that a balance between attachment and separation is most facilitative of healthy functioning.

Other family systems theorists (Beavers, 1977; Haley, 1979; Minuchin, 1974; Teyber, 1981) describe structural components of the family and patterns of functioning among these components which identify healthy and dysfunctional families. One important construct is that of boundaries which delineate individuals, subsystems and generations in a family, and their relationship to each other (Minuchin, 1974). Boundaries enable individuals to define themselves as separate individuals with distinct beliefs and values. Boundaries also define members of subsystems and help clarify the tasks of each subgroup which enable the entire system to divide labor in an efficient manner. Healthy families are described as maintaining clear interpersonal boundaries with proper hierarchical structure. This enables individual members to function within an organized structure, with prescribed roles and duties. Proper boundaries in healthy families also function to maintain an optimum balance of separateness to foster individuality and connectedness to foster a sense of belonging (Beavers, 1977).
In contrast, unhealthy families are described as those in which hierarchical boundaries are violated so that cross generational coalitions between parent and child are formed (Haley, 1979). These families are characterized by unclear role structure, and/or role reversals, with the adolescent being placed in the position of assuming parental responsibilities inappropriately. Additionally, these families often have difficulty regulating distance and closeness. Families can be overly close and enmeshed (Minuchin, 1974) with boundaries that are blurred, which often hamper an individual’s effort to move into the outside world or to express differing beliefs from family members. These families are believed to foster dependency and fears about leaving home. In contrast, families can be overly distant and disengaged (Minuchin, 1974) so that they are unable to provide sufficient closeness and emotional support to tolerate the anxiety associated with leaving home (Haley, 1979). Subsequently, the adolescent’s ability to adequately develop an identity and negotiate the task of moving into adulthood in a healthy and productive way will be hampered.

Although the constructs of enmeshment and disengagement appear analogous to the individual constructs of attachment and separation-individuation, the degree of correspondence between these two sets of constructs is unclear. For example, an adolescent with a high level of attachment may be in a family which is enmeshed, or one which is merely
supportive and caring and able to encourage independence within this nurturing environment. Similarly, a high degree of separateness may signal a disengaged family, or conversely a healthy family which has fostered independence and facilitated growth in the outside world. It also remains unclear whether the constructs describing family health and those which describe individual processes function in a similar manner, or impact developmental tasks in a similar way. It is possible that family processes may be unrelated to career behavior, or conversely that individual experiences of separateness and attachment may be unrelated. One way to begin to assess this is to look to theory for predictions about the relationship of these family processes to exploratory behavior, which would hopefully enhance our understanding of the relationship among these processes.

Several family theorists have suggested that an individual’s ability to negotiate career development tasks is related to the families ability to differentiate and allow the adolescent to formulate their own identity (Bratcher, 1982; Lopez, 1989; Lopez & Andrews, 1987; Meyer, 1980; Zingaro, 1983). This will determine whether they can pursue career choices based on their own sense of self rather than the expectation of their parents (Meyer, 1980). Families can either inhibit the adolescent’s exploratory process of self discovery or facilitate the development of a
unique self based on the family's ability to differentiate. In the absence of differentiation in the family, an adolescent's ability to formulate an occupational choice based on self knowledge would be hampered.

Current dysfunctional family relationships in the adolescent's family may hinder vocational development, contributing to career indecision (Lopez & Andrews, 1987), and difficulty with adequate vocational identity development (Lopez, 1989). Dysfunctional patterns such as parent-child overinvolvement and cross generational coalitions serve to derail the adolescent's progress in separating from the family, developing their own identity and in choosing a career. Rather than encouraging the adolescent to explore on their own, the parents' own needs, beliefs and ideas are thrust upon the adolescent, suggesting that the boundary between the parents and the child as separate individuals is weak and diffuse. One implication is that the adolescent's family patterns are influential in the early stages of career development, via the identity development process.

Grotevant and Cooper (1988) suggest that adequate connectedness or attachment allows the adolescent to explore the outside world from the position of a secure base, which is consistent with the work of Bowlby. Similarly, in order for an adolescent to think about making a career decision, they must first see themselves as capable of being separate and independent from the family (Lopez & Andrews, 1987).
One implication is if an adolescent is to engage in exploratory behavior of both the outside world and the inner world of their beliefs, both attachment and separation are necessary to provide the optimal environment for the exploration of differing beliefs and opinions within the framework of mutual respect and support.

In sum, family systems theory offers several important theoretical constructs which can be utilized in assessing the influence of family dynamics on an adolescent's ability to adequately explore self and environment. A consistent theme throughout this literature is the need for clear boundaries, and an adequate balance between closeness and distance in order for the adolescent to move towards independent functioning. Exploratory behavior can be conceptualized as the first step towards gaining this independence by examining inner beliefs and the outside world. Theory suggests that this is best facilitated by families which offer support and encouragement from a nurturing and secure family base, while at the same time encouraging and accepting the emerging separateness of the adolescent.

Empirical literature. While theory suggests that healthy families, characterized by clear boundaries and an ability to balance forces of closeness and distance, are most likely capable of providing the optimal environment for exploratory behavior to occur, there are no studies to date
which have examined this hypothesis. Additionally, there are only a handful of studies which have explored the nature of the relationship between family dynamics and career development. Results have been mixed, providing an unclear picture of the role of family dynamics in career development.

The hypothesis that problems in career decision making may be related to a family's ability to regulate closeness and distance has received little empirical support (Eigen, Hartman & Hartman, 1987; Kinnier, Brigman & Noble, 1990). Eigen et al., (1987) found no support for the idea that individuals from families with dysfunctional patterns of interaction characterized by difficulties regulating cohesion (emotional bonding) and adaptability (ability to adapt and change as a result of stress) would be more likely to be chronically or developmentally undecided about a career. Similarly, Kinnier et al., (1990) found only weak support for the hypothesis that career indecision was related to difficulties with family enmeshment. A lack of individuation (one aspect of enmeshment) was only a weak predictor of career indecision, whereas the best predictors of decision status were age and class standing, providing support for the notion that developmental and contextual factors are important in the career development process.

In contrast, a study by Lopez (1989) suggested that current dysfunctional family relationships characterized by
conflict appear to play an important role in the adolescent’s ability to develop a vocational identity. Adolescents who reported a lack of angry, resentful feelings (conflictual independence) in their relationship with their parents, which has been labeled as an aspect of psychological separation, appeared to make the most progress in vocational identity development. Marital conflict also emerged as a significant predictor of vocational identity for males. Taken together, these results suggest that conflict, both within the marital dyad and between parent and child, is an important variable to assess in relationship to adolescent career development. It remains unclear however, whether the results related to conflict are indicative of a lack of psychological separation difficulties or a style of family dysfunction.

In sum, the scant empirical results available regarding the role of family dynamics in career development of adolescents are inconsistent. In terms of career decision making difficulties, empirical studies have failed to support the theoretical notion that difficulties regulating closeness and distance are related to these problems. In contrast, when assessing a developmental task such as developing a vocational identity, the role of conflict among family members, particularly parent-child and marital conflict, emerges as an important predictor. Given the theoretical link between vocational identity and exploratory
behavior, it is plausible to hypothesize that current family
dynamics in the form of conflictual relationships may be an
important factor to consider in facilitating or hindering
engaging in career exploration.

Identity Development

Another aspect of the psychological separation process
that is intricately related to career development is the
task of identity development. Achievement of a clear and
stable identity is considered a major developmental task of
adolescence, and is viewed as a necessary precursor to
healthy adaptation in a variety of adult roles, including
career choice (Erikson, 1956, 1968). The basic task of the
adolescent according to Erikson is to consolidate and
reformulate a new sense of self by disengaging from parental
ties and identifications. In essence, this new sense of
self and identity is an outgrowth of the separation-
individuation process in adolescence (Blos, 1979; Erikson,
1968; Josselson, 1980; Marcia, 1966). One significant
aspect of identity development according to Erikson’s
framework is the exploration of career alternatives with
subsequent commitment to a career choice. Thus, the process
of career exploration is intricately linked to the
achievement of a clear and stable identity, and hence to the
more global developmental process of separation-
individuation.
Erikson (1956, 1968) delineates the task of identity development as a process which has behavioral components of exploration and commitment. The adolescent experiences an "identity crisis" during which exploration of self occurs and culminates in a reformulation of a sense of self. One outcome of the "identity crisis" is related to occupational choice and commitment, which is viewed as a central aspect of an individual's identity. Adequate identity development in Erikson's theory is labeled "identity achievement" and leads to occupational commitment. In contrast, difficulty with identity development could lead to identity diffusion, which is evidenced by a lack of self exploration and a resulting inability to make occupational choices. Thus, Erikson's theory of identity development provides a close theoretical bridge between career exploratory behaviors and the process of separation-individuation.

Empirical literature—overview. The construct of identity development captured the interest of both vocational and developmental researchers, who believed that this construct provided a means to understand problems in adolescent development. Vocational researchers believed that inadequate identity development offered much potential in explaining career decision making problems. Similarly, developmental researchers examined personality traits in an effort to understand differences among individuals who had achieved varying levels of identity development.
The majority of studies related to identity development have utilized the framework developed by Marcia (1966) which delineated four ego identity statuses based on Erikson's theory. The identity statuses described an individual's progress in the tasks of exploration and commitment to beliefs and values in a variety of domains, including occupational choice. Identity achievers were defined as individuals who had undergone a period of exploration and subsequent commitment to a set of ideals and beliefs. Individuals in the moratorium status were in the process of exploring, and had not made any commitments yet. Foreclosures were described as individuals who had made premature commitments to a set of beliefs without undergoing a period of exploration. These individuals were believed to have uncritically accepted parental beliefs and values. Lastly, individuals classified in the diffusion status were unable to form commitments, regardless of whether they had engaged in exploratory behavior.

Identity development and vocational research. In terms of vocational research, the major hypothesis which has been explored has focused on the idea that problems in career development may be a function of inadequate vocational identity development, and this has received much support (Holland & Holland, 1977; Holland, Gottfredson, & Power, 1980; Savickas, 1985). For example, empirical support has been found for the idea that identity development is a
crucial aspect of career decision making (Holland & Holland, 1977; Holland, et al., 1980), crystallization of career preferences and career exploration activity (Savickas, 1985). Support has also been found for the idea that progress in committing to a career is related to the broader task of ego identity development in other ideological domains (Blustein, Devenis, & Kidney, 1989; Savickas, 1985).

While some authors focused on the more global question of the relationship between career indecision and poor identity development, other authors speculated about personality characteristics which may contribute to difficulties in exploratory behavior and identity development. Blustein, Ellis, and Devenis (1989) found that a tendency to foreclose (a construct which is similar to foreclosure status), defined as a tendency to commit to a career choice without a period of exploration, was related to a lack of autonomy and an intolerance for ambiguity, and was unrelated to career exploratory behavior. These researchers suggested that this tendency to foreclose may be a function of the individual's inability to tolerate the discomfort, anxiety and/or ambiguity associated with the exploration of one's beliefs and values. Similar to Bowlby's and Mahler's ideas about the anxiety provoking nature of exploratory behavior in childhood, Blustein and his colleagues suggested that anxiety may interfere with
one's ability to engage in exploratory behavior in career matters.

In sum, the vocational literature related to identity development has provided a consistent picture of the importance of adequate identity development for career decision making. These results are not surprising however, since most instruments which assess identity development incorporate progress in career development as part of their criteria. There is some support for the idea that avoidance of exploratory behavior is related to a lack of autonomy and an inability to tolerate ambiguity (Blustein, Ellis, & Devenis 1989), suggesting a link between independent functioning and the ability to explore.

Identity development and psychological separation. Identity development theory also generated interest among researchers who were interested in the psychological rather than vocational aspects of this construct. Numerous studies examined the relationship of this construct to individual personality variables in an attempt to delineate characteristics of each identity status (Marcia, 1980). In reviewing this research, Bourne (1978) suggested that it did not contribute to an understanding of the process of identity development, but was simply descriptive in nature. What was lacking was an investigation of the "intrapsychic developmental processes that contribute to the young person's consolidation of an identity" (Bourne, 1978, p.
S. Bourne suggested that the process of separation-individuation could provide a useful framework from which to conceptualize the "process" of identity formation. This critique led a few researchers to incorporate identity development within the framework of separation-individuation.

Several authors have investigated the idea that adequate attachment to and separation from parental figures would be facilitative of progress in ego identity development. Most studies have attempted to link the different identity statuses with progress in the task of psychological separation. Theory would predict that identity achievement, indicative of successful resolution of an identity crisis through exploration and commitment, would best be facilitated by a balance of attachment and separation. Similarly, progress toward identity achievement, defined as the moratorium status and marked by current exploratory activity, should also be positively associated with adequate levels of separation and attachment. Foreclosure status, which is indicative of premature commitment to parental values without a period of questioning or exploration, would theoretically be associated with excessive need for attachment with inadequate separation. Lastly, the diffusion status, which is believed to represent the most serious identity
disturbance, would theoretically be associated with a lack of attachment, and excessive disengagement or separateness.

Studies which have investigated one or more of these hypotheses have produced mixed results. For example, using Bowlby’s model of attachment and Hansburg Separation Anxiety Test (SAT, Hansburg, 1972), Kroger (1985) found only partial support for the idea that identity status was a function of the quality of one’s attachment. Although identity achievers were more likely to be securely attached, no significant differences in attachment styles were found for other statuses. Similarly, Kroger and Haslett (1988) were unable to predict identity status two years later given the earlier attachment style. This follow up study revealed that attachment style varied over time, suggesting that this was not a stable quality of relationships, and was not useful in predicting future adjustment. In accounting for these results, Kroger and Haslett (1988) suggested that the use of the SAT was problematic, since it was designed to assess problems with attachment, not developmental transitions such as ego identity development. Similarly, Norman (1989) found that this instrument performed inconsistently across samples, and Wilhite (1990) found that the individuation and attachment scales were not measuring independent constructs. Taken together, these results indicate that studies using this instrument should be interpreted with caution.
Other aspects of attachment and separation have been investigated in relationship to identity achievement, also with mixed results. Campbell, Adams and Dobson (1984) found that college students who were classified as identity achievers and moratoriums, were rated high on independence from parents as well as high in affection, constructs which are conceptually similar to separation and attachment. In contrast, although foreclosures were also rated high on affection, they were rated low on independence. These results suggested that a balance between affection and independence was most facilitative in the development of an identity. Similarly, Lapsley, Rice and Fitzgerald (1990) found that communication with parents, defined as one aspect of attachment, was positively related to progress in identity development in personal and social domains, and to academic adjustment for freshman.

In contrast, Quintana and Lapsley (1987) did not find support for the idea that attachment was related to the identity formation process, but rather parenting style was more important. Perceptions of parental control contributed to difficulty in identity formation and to weaker attachment to parents. Attachment however, was not found to be directly related to identity development. These results suggest a more indirect relationship between attachment and identity formation, and indicate the need to study family dynamics in addition to attachment and separation-
individuation in order to clarify the nature of the relationships of these constructs to the career development process.

In sum, the empirical literature related to identity development provides mixed support for the idea that identity development and hence exploratory behavior may be influenced by family dynamics, attachment and separation-individuation. Vocational research has provided support for the notion that the broader task of ego identity development is related to the more specific task of career exploration and vocational identity development (Blustein, Ellis, & Kidney, 1989; Savickas, 1985), however these results are not surprising given the intercorrelation among instruments of ego identity development and career exploration. In terms of the relationship between identity and psychological separation, progress in ego identity development has been found to be positively related to independence from and affection for parents (Campbell, et al., 1984). Similarly, Lapsley et al., (1990) found support for the idea that attachment was positively related to identity development and college adjustment. In contrast, Kroger (1985) only found partial support for the notion that identity development and attachment were related (Kroger, 1985), and one study found that parental style was a more important predictor of identity development than attachment (Quintana & Lapsley, 1987).
In a cogent review of the literature related to attachment in adolescence Rice (1990) suggests that the inconsistent findings related to identity development and attachment may be a function of how constructs were defined and measured. Each study utilized different measures of identity development and attachment, making it difficult to compare results across studies (Rice, 1990). Despite these methodological concerns, Rice concludes that the quality of attachment relationships in late adolescence is an important component of emotional and social adjustment. He suggests that attachment may be an important influence in some aspects of identity development, however the nature of these relationships is less clear given the lack of correspondence among the different instruments used in the research to date.

Summary and Conclusions

The empirical literature related to career exploration suggests that there are numerous factors which should be considered in assessing the variability in the extent to which individuals engage in this behavior. Of particular importance for this study are the findings related to the developmental and contextual variables which may determine the salience of engaging in exploratory behavior. Results suggest that "task immanence" or proximity to graduation may be an important motivational factor for environmental exploration (Stumpf, et al., 1983, Stumpf, & Lockhart,
1987). In contrast being undecided, young, and at an early stage in one’s college career appear to be more important in motivating self exploration (Blustein, 1988). To date there are no studies which have incorporated these variables when assessing other factors which may be related to career exploratory behavior, although their importance has been recognized as a potential means to account for unexpected or inconsistent results.

While situations have been shown to influence the salience of engaging in exploration, there are a number of other factors which have been found to influence an individual’s exploratory behavior including feelings of autonomy (Blustein, 1988), contextual anxiety (Blustein & Phillips, 1988), and beliefs about the usefulness of engaging in exploratory behavior (Stumpf & Lockhart, 1987). The results however, have often been selectively related to either self or environmental exploration. One plausible explanation for the mixed results could be that self and environmental exploration may function differently and may be influenced by different factors. Another plausible factor to consider however, is that it has been difficult to assess the exact nature of the relationship of self and environmental exploration to the variables studied because little attention has been paid to the salience of engaging in these variables. Results may partly have been a function of the sample used and the salience of the task being
measured, potentially obscuring the nature of the relationship being studied. This problem was particularly evident in studies by Polk (1990) and Norman (1989) which did not find any relationship between exploratory behavior and attachment or individuation.

Recent empirical studies relating to separation-individuation, attachment and family variables to the career development process have produced mixed results. In general, family variables and separation-individuation have been found to be unrelated to career indecision (Eigen, et al., 1987; Kinnier, et al., 1990). In contrast, when developmental aspects of career decision making are considered, what emerges is support for the idea that progress in career development may be influenced by family relationships. Lack of conflict in the parental subsystem, and freedom from angry, resentful feelings in parent-child relationships have been found to be positively related to progress in committing to a career (Blustein, et al., 1991) and to developing a vocational identity (Lopez, 1989).

Although freedom from guilt, anger and resentment in parent-child relationships has been labeled an aspect of psychological separation, it is unclear whether this variable represents progress in separation or a style of family functioning. This suggests that it would be important to assess family dynamics as well as attachment
and separation in order to better understand the nature of these complex relationships.

The empirical literature related to identity development provides mixed support for the idea that identity development and exploratory activity may be influenced by family dynamics, attachment and separation-individuation. Vocational research provides support for the idea that the broader task of ego identity development is related to the more specific task of career exploration and vocational identity development (Blustein, et al., 1989). Studies which have explored the influence of attachment on the development of identity however, have produced contradictory results (Kroger, 1985; Kroger & Haslett, 1988; Lapsley, et al., 1990; Quintana & Lapsley, 1987). Rice (1990) suggests that one explanation for the mixed results is that studies have utilized different measures of identity development and attachment, and hence were likely sampling different aspects of the constructs.

Another obstacle which has hampered efforts to empirically study the nature of the relationship among separation-individuation, attachment and various indices of adolescent adjustment has been the difficulties associated with the measurement of these constructs. Although there have been several instruments which have been developed to study the process of separation-individuation and attachment, each instrument has emphasized a different
aspect of the process. Until recently that the relationship of these instruments to each other has been unexplored, hence a comparison of results across studies was hampered by difficulties inherent in lack of consistency in measurement. Recent efforts by Rice et al. (1990) to clarify this issue has highlighted the need for future research to incorporate measures of attachment, separation-individuation and family variables in research in order to more adequately assess the nature of these processes in relation to some aspect of adolescent adjustment.

Statement of Problem and Rationale

There is considerable agreement among vocational theorists that career exploratory behavior is the first step toward successful negotiation of the task of career development. Despite this consensus, it is only recently that studies have begun to examine potential antecedent influences which may hinder or facilitate engaging in this behavior. In addition, although career development is viewed as a developmental process, it is only recently that efforts have been made to link this process to the broader framework of adolescent development.

There is some indication from recent studies that difficulties in career development may be related to the developmental process of psychological separation from parents. In addition, there is mixed support for the idea that family relationships which provide the context for
separation from family may also contribute to the negotiation of career issues. Thus, a better understanding of the relationship of these processes to career exploration may assist counselors in choosing appropriate interventions for clients presenting with career concerns.

The purpose of this study is to examine the hypothesis that family relationships and experiences involving separation-individuation and attachment may be important influences on an individual's self and environmental career exploratory activities. The specific question of whether these variables are related has only been directly addressed in one study to date, however there were many methodological difficulties with this study which may have interfered with it being investigated adequately. The empirical support for the view that the process of career development is related to separation, attachment and family variables is mixed.

Several methodological concerns have been identified which have hampered the empirical study of this area. In terms of the study of career exploration, one major methodological concern has been the lack of a delineation of what contextual and developmental factors may influence the need to engage in this behavior at a particular point in time. Without controlling for these factors the nature of the relationship between self and environmental exploration to other variables may be obscured. Thus a study which would assess the salience of the behavior for the population
being studied may offer a way to obtain more interpretable results by controlling for these factors, so that the independent contribution of separation-individuation, attachment and family variables could be assessed.

There is evidence to suggest that engaging in self exploration is more salient for younger, undecided college students, who are at an early point in their college careers. Environmental exploration, in contrast, appears to be more salient at the point where the individual is approaching graduation and entering the world of work. There is also evidence to suggest that self efficacy and beliefs about the usefulness of engaging in exploratory behavior are cognitive factors which play a motivational role, independent from factors related to separation and attachment.

This study addressed the question of the impact of contextual and developmental salience of engaging in career exploratory behaviors, so that the independent contribution of the separation variables, attachment and family variables can be assessed. Age and proximity to a decision point as signified by class standing and whether an individual has decided on a major were included as control variables in order to account for the variance attributable to these developmental and contextual factors separately. Gender was also included in this set of control variables in order to control for any variance associated with this factor. Two
additional measures were included in order to control for the cognitive variables of career self efficacy and beliefs about the utility of engaging in exploratory behavior which have been found to be related to career exploration.

The definition and measurement of the construct of separation - individuation is also a significant methodological concern, which may have contributed to the lack of consistent findings in the empirical literature. The most recent theoretical work suggests that this process is multidimensional and includes components of both separation and attachment. It is only recently however, that studies have begun to include measures of more than one component of this process. In addition, the importance of the family context in the separation process has only recently been incorporated as a potential variable as well.

The intent of the present study was to study the relationship of separation, attachment and family variables to career exploration, utilizing a design and methodology which would take into account the above mentioned methodological concerns. The multidimensional nature of the separation process was assessed using a measure of separation which assesses four components of the process of separation from parents (attitudinal, conflictual, emotional and functional independence). Attachment was assessed using a separate measure, as were family relationships and family health.
In sum, this study addressed the role of separation, attachment, family relationships and family health in influencing exploratory behavior. In order to account for the variance associated with developmental, contextual and cognitive factors these variables were incorporated as control measures.
CHAPTER II

METHOD

Subjects and Procedure

The subjects for this study were 304 undergraduate college students from the University of North Texas, recruited primarily from psychology classes. Participation was voluntary with extra credit offered for their involvement in the study when allowable. Since this study was focusing on the career exploratory behaviors of late adolescent college students, participation was limited to subjects between the ages of 18 and 23. Subject participation was also be limited to individuals who came from intact homes, in order to control for any variability in separation and attachment due to the impact of parental divorce. Approximately 300 subjects were needed in order to adequately test the hypotheses of this study.

A demographic questionnaire was used to assess the developmental and contextual variables which may influence engaging in self and environmental exploration. Items included information about gender, age, class standing, and decision status about a major to assess these factors. The questionnaire and all instruments were distributed, administered and collected during an arranged time with the
researcher. The packet of materials contained a letter of introduction with instructions, an Informed Consent form, and the instruments described below. Confidentiality was maintained by instructing participants to not write their names on any testing material.

**Instruments**

**Career Exploration Survey.** The Career Exploration Survey (CES) developed by Stumpf, Colarelli and Hartman (1983) was used to assess career exploration behaviors. This is a 55 item, self report measure which assesses three broad aspects of career exploratory behavior: the exploration process, reactions to exploration and beliefs about exploration. The exploration domain has seven subscales: environmental exploration, self exploration, number of occupations considered, intended versus systematic exploration, frequency of exploration, amount of information acquired, and the focus of exploration which assesses how sure one feels about his/her preference. The reactions to exploration domain has three subscales: satisfaction with exploration, explorational stress and decisional stress. The third domain is beliefs about the exploration process and has six subscales: employment outlook, certainty of career exploration outcomes, external search instrumentality, internal search instrumentality, method instrumentality, and importance of obtaining your preferred position.
For purposes of this study four scales from the Career Exploration Survey (CES; Stumpf, et. al., 1983) with modifications by Blustein (1988) were used to assess self and environmental exploratory activities, and beliefs about the usefulness of engaging in self and environmental exploration. The self and environmental scales asks respondents about the extent to which they have engaged in various exploratory activities within the past three months. The internal and external search instrumentality scales ask about their beliefs about the probability that engaging in these activities will lead to obtaining their career goals. Responses are provided on a five point Likert-type scale, with mean values calculated for subscale scores. Self exploration (SE) was assessed using a nine item scale (five items were on the original CES developed by Stumpf, et al., 1983, and four items were added in the revision by Blustein, 1988). Environmental exploration (EE) was assessed using a six item scale in the original form as developed by Stumpf, et al., (1983). Beliefs in the utility of environmental and self exploration was assessed using a three item external search (ES) instrumentality scale and a four item internal search (IS) instrumentality scale. The revised self exploration scale has a range of scores from 9 to 45, with mean values ranging from 27.73 (Norman, 1989) to 28.34 (Blustein, 1988). The environmental exploration scale has a range of 6 to 30, with mean scores ranging from 13.15
(Norman, 1989) to 13.47 (Blustein, 1988). The internal search instrumentality scale has a range of scores from 4 to 20, with mean scores ranging from 14.25 (Blustein, 1989) to 14.82 (Blustein, 1988). The external search instrumentality scale has a range of 3 to 15, with mean scores ranging from 9.87 (Blustein, 1989) to 10.29 (Blustein, 1988).

Stumpf et al. (1983) reported internal consistency reliabilities of .83 for the environmental scale, .88 for the self exploration scale, .67 for the external search instrumentality scale, and .89 for the internal search instrumentality scale. Similarly Blustein (1988) reported a .83 internal consistency coefficient of reliability for the revised self exploration scale, .85 for the environmental exploration scale, .70 for the external search instrumentality scale, and .76 for the internal search instrumentality scale.

The construct validity of the self report environmental exploration scale was assessed by Stumpf et al. (1983) using behavioral indices of change over time as a function of participation in career development programs. An increase in environmental exploratory activity was found to be positively correlated with changing careers. In addition a comparison of patterns between graduate students and undergraduate students, revealed similar patterns of responding, providing validity generalizations to undergraduates as well.
In addition to the above validity studies, Stumpf et al. (1983) provided information regarding discriminant validity using several correlates which were expected to be unrelated to career exploratory activities. A measure of social desirability demonstrated an insignificant correlation with the CES subscales. In addition gender, age and work experience accounted for less than 4% of the variance in the undergraduate sample, with no significant relationships for self and environmental exploration scales.

**Psychological Separation Inventory.** The Psychological Separation Inventory (PSI) developed by Hoffman (1984) was used as a measure of psychological separation. The PSI is a 138 item self report instrument with four subscales that are believed to represent four dimensions of the separation process from parents. Functional Independence (FI) is a 26 item scale designed to assess the adolescent’s ability to manage his or her own practical and personal affairs without parental help. Attitudinal Independence (AI) is a 28 item scale which assesses the adolescent’s image of self as maintaining separate attitudes, beliefs and values from parents. Conflictual Independence (CI) is a 50 item scale which reflects freedom from excessive guilt, anxiety, and resentment in relation to one’s parents. Emotional Independence (EI) is a 34 item scale which assesses freedom from excessive needs for closeness, approval and emotional support from parents. In each subscale half of the items
are devoted to the adolescent's relationship to his or her mother, and half of the items are devoted to the relationship with his or her father. The items are worded in a 5 point Likert format ranging from "not at all true of me" (1) to "very true of me" (5). Scores are obtained by adding the ratings for each item and then subtracting that from the highest total possible. Higher scores are believed to represent greater psychological separation from parents. In this study the scores on the mother and father scales were combined for several reasons. First, the hypotheses of this study are not based on predictions related to each parent individually, but rather the focus is on separation from parents together. Second, although there may be differences between parents, there is also evidence to suggest that the scores for mother and father scales are highly correlated (Hoffman & Weiss, 1987). Third, Blustein et al., (1991) reports improvement in internal consistency coefficients when combining the scales.

Estimates of internal consistency for the PSI range from .84 to .92 using Cronbach's coefficient alpha (Hoffman, 1984)). Similarly, Lapsley, Rice and Shadid (1989) report reliability coefficients ranging from .80 to .89. Hoffman (1984) also reported pearson product-moment test-retest correlations ranging from .69 to .96, with a median correlation of coefficient of .83 after a 2-3 week interval before retesting. Evidence for construct validity presented
by Hoffman (1984) included positive relationships between conflictual and emotional independence and academic adjustment, and a positive relationship between conflictual independence and love relationships. Similarly, Lapsley et al. (1989), and Lopez (1989) provided evidence to support positive relationships between conflictual independence and college adjustment, individuation and vocational identity.

**Inventory of Parent and Peer Attachment.** The Inventory of Parent and Peer Attachment (IPPA) developed by Armsden and Greenberg (1987) was used to assess the affective and cognitive dimensions of the adolescents' relationships with their mother and father. The IPPA measures three different dimensions of attachment: degree of mutual trust which refers to felt security in the parents' responsiveness to the adolescents' emotional needs; quality of communication which reflects the extent and quality of verbal communication with parents; and extent of anger and alienation which refers to anger toward or emotional detachment from parents. The instrument is a self report questionnaire with a total of 75 items. Attachment to mother, father and close friends is assessed separately with 25 items devoted to each respectively. The items are worded in a 5 point Likert format ranging from "almost always true" (1) to "almost never true" (5). The IPPA is scored by reverse-scoring the negatively worded items and then summing the response values in each section. For
purposes of this study the mother and father scores were combined to form one variable labeled parental attachment, since this study was primarily interested in attachment to parents, rather than each individually.

Internal consistency coefficients of .87 and .89 have been reported for the mother and father scales respectively (Armsden & Greenberg, as cited in Blustein et al., 1991). A three-week test-retest reliability of .93 was reported for an earlier version of the IPPA which combined the scales for parents. Construct validity of the IPPA is evidenced by positive relationships with family coping and communication, and lower parental conflict (Armsden & Greenberg, 1987). In addition negative correlations with loneliness, depression and resentment/alienation, and positive relationships with self concept, self esteem and life satisfaction have been reported (Armsden & Greenberg, 1987).

**Family Structure Survey.** The Family Structure Survey (FSS) was developed by Lopez (1986) as a means to assess family structure and interactions. It is composed of four subscales which describe current family processes: parent-child role reversal (12 items) which describes a process wherein the adolescent has assumed a parental role or entered into a coalition with one parent against the other; parent-child overinvolvement (12 items) describes interactions that reflect excessive involvement, overconcern and absence of autonomy; marital conflict (13 items) asks
the adolescent to rate the level of tension and conflict in the parental relationship; and fear of separation (13 items) assesses the family's anxiety regarding the separation-individuation process and its impact on the family. The items are worded in a 5 point Likert format with higher scores reflecting greater frequencies of the dysfunctional family interactions.

A Cronbach's alpha coefficient of .84 has been reported for the internal consistency of the total scale (Lopez, Campbell and Watkins, 1988). The subscales coefficients range from .51 for the Fear of Separation scale; .56 for Parent-Child Overinvolvement; .71 for Parent-Child Role Reversal; and .90 for Marital Conflict (as reported in Polk, 1990). Evidence for construct validity comes from negative correlations between the FSS and a global measure of family health (Lopez, 1986; as cited in Lopez et al., 1988) and negative correlations between the subscales and college adjustment (Lopez, et al., 1988).

Since this study was primarily interested in a measure of difficulties in the parent-child relationship, rather than specific problems, the three subscales of parent-child role reversal, fear of separation and parent child overinvolvement were combined to form one variable labeled parent child problems. Additionally, since the reliability coefficients of these subscales are low in comparison to the total scale reliability, combining these scales should
improve this. The marital conflict subscale was used separately, since previous research (Hoffman & Weiss, 1987; Lopez, 1989) has provided evidence to support the idea that this variable functions independently from parent-child relationship variables. This subscale also has the highest reliability coefficients.

Self-Report Family Inventory. The Self-Report Family Inventory - II (SFI), developed by Beavers, Hampson and Hulgus (1990) is a 36 item, self report inventory with five subscales, designed to assess an individual’s perceptions of his or her family’s health. The health/competence is a 19 item subscale which assesses the individual’s perceptions of happiness, optimism, problem-solving and negotiation skills, family love, strength of parental coalitions, and autonomy-individuality. The conflict subscale has 12 items which assess the individual’s perceptions of level of conflict within the family. Low scores, indicating low levels of unresolved conflict are believed to represent family health. The cohesion subscale has 5 items that tap into an individual’s perceptions of family happiness and satisfaction through togetherness and closeness. The leadership subscale has 3 items designed to assess the individual’s perception of strong and consistent adult leadership patterns in the family, with higher scores indicating strong leadership and healthier family functioning. The last scale is emotional expressiveness
with 5 items. This scale taps into the individual's perceptions about feelings of closeness, warmth and caring, and the comfort with verbally and physically expressing these feelings. The items are worded in 5 point Likert scale format ranging from yes (this fits our family very well) to no (this does not fit our family). The SFI is scored by reverse scoring the negatively worded items and then summing the response values in each section. For purposes of this study only the subscale score for Health/Competence was used since this study was primarily interested in a measure of family health. Additionally, Beavers & Hampson (1990) report this scale corresponds most closely with their observational scale ratings, and it also has the highest test-retest reliability coefficients. Higher scores (raw score of 57 or above) are viewed as indicating a less healthy family.

Internal consistency for the scale has been reported to be between .84 and .88 using Cronbach's Alpha (Beavers, Hampson & Hulgus, 1990). Test-retest reliability coefficients have been reported for all subscales (Beavers & Hampson, 1990). The average factor stability ratings for one and three month retest intervals were: .85 for Family Health; .54 for Conflict; .60 for Cohesion; .44 for Leadership; and .81 for Emotional Expressiveness. Evidence for construct validity is evidenced by a high degree of consistency (.62) in discriminating clinical from
nonclinical families, and positive correlations between the SFI health/competence scale and the cohesion scales of Family Adaptability and Cohesion Evaluation Scale (FACES II) (Beavers & Hampson, 1990).

Career Decision-Making Self-Efficacy Scale. The Career Decision-Making Self-Efficacy Scale (CDMSES) was developed and validated by Taylor and Betz (1983). It is designed to assess an individual’s level of confidence with respect to specific career decision making tasks. It was included in this study as a control measure since it has been found to be positively related to career exploratory behavior but unrelated to separation-individuation and attachment (Blustein, 1989; Blustein, et al., 1991; Polk, 1990). The CDMSES is a 50 item scale, which assesses self efficacy for five areas of decision making (accurate self appraisal; gathering occupational information; goal selection; making plans for the future; problem solving). The items are worded in a 10 point Likert format with subjects being asked to rate their confidence in their ability to successfully complete each of the tasks. The responses range from "no confidence at all" (0) to "complete confidence" (9). High scores reflect greater levels of self efficacy for career decision making tasks. In this study the total CDMSES score was used as an index of the individual’s level of self confidence.
The internal consistency of the total CDMSES has ranged from .88 to .95 (Robbins, 1985; Taylor & Betz, 1983). Evidence for construct validity is derived from the expected negative relationship between CDMSES scores and measures of career indecision (Taylor & Betz, 1983), and positive relationships with occupational self efficacy beliefs (Taylor & Pompa, 1990) and self esteem (Robbins (1985).

**Extended Objective Measure of Ego Identity Status.** The Extended Objective Measure of Ego Identity Status (EOM-EIS) was developed by Bennion and Adams (1986) to measure ego identity status in both ideological (occupation, politics, religion, and philosophical lifestyle) and interpersonal domains (friendship, dating, sex roles and recreation). It was included in this study as an exploratory instrument since it includes other areas of exploratory behavior besides career exploration. It is a 64 item self report instrument which uses a 6 point Likert scale format. Each of the 8 domains is measured by 8 items, with 2 items for each identity status as defined by Marcia (1966), i.e. achievement status, moratorium, foreclosure, and diffusion. Briefly, each identity status is defined by the criteria of whether or not an individual has undergone a period of questioning and exploration called a "crisis," and whether the individual has made a commitment to a set of values in each domain. The achievement status is defined as having explored and made commitments; moratorium is defined as
being in the state of "crisis" or exploration; foreclosure describes an individual who has made commitments to various values and ideas without undergoing a period of exploration, but has rather uncritically adopted a set of values, usually that of their parents; and lastly moratorium describes an individual who may or may not have experienced a period of "crisis" but nevertheless has not made any commitments or choices regarding values, ideas and beliefs.

Adams and Bennion (1986) report Cronbach’s alpha internal consistency correlation coefficients ranging from .60 to .80 for the 8 subscales (i.e. each status for the two broad domains of interpersonal and ideological items). Blustein (1989) combined the two domain areas and reported internal consistency coefficients ranging from .66 to .90 for the four statuses. Blustein (1989) also reports a personal communication from G.R. Adams citing excellent stability for a two week test-retest interval with correlation coefficient’s ranging from .82 to .90. Evidence for content validity is based on the fact that the scale items were derived directly from identity formation theory. Concurrent and predictive validity were established with expected positive relationships with other measures of identity (Adams & Bennion, 1986). In addition, there was no significant relationship between this scale and a measure of social desirability (Adams & Bennion, 1986).
Research Design

The general model of this study was a correlation design, looking at the predictive power of the independent variables after the variability of the control variables is accounted for. A multiple regression format was used with the variables of psychological separation, attachment, family health, marital conflict, and parent-child relationship as the independent variables used to predict variability in the dependent variables of self and environmental exploration. Two sets of control variables were included in the model in order to control for the independent contribution of demographic and cognitive variables.

Research Questions and Hypotheses

This study addressed the following major research question: Do family variables have an impact on self and environmental exploratory behavior of late adolescents? The specific hypotheses tested to address this question were:

1. It was hypothesized that attachment, separation, family health, marital conflict, and dysfunctional family patterns would account for a significant amount of variance in self exploration in freshmen. Self exploration would be positively related to attachment, separation, and family health, and negatively related to marital conflict, and dysfunctional family patterns.
2. It was hypothesized that attachment, separation, family health, marital conflict, and dysfunctional family patterns would account for a significant amount of variance in environmental exploration in graduating seniors. Environmental exploration in graduating seniors would be positively related to attachment, separation, and family health, and negatively related to marital conflict and dysfunctional family patterns.

Analyses

The hypotheses were tested using a combination of hierarchical and standard multiple regression procedures to examine the extent to which the eight independent variables accounted for variance in each of the two dependent variables. In order to control for variability attributable to demographic and cognitive factors, two blocks of control variables were entered first. The first set of variables comprised the demographic variables of age, gender, class standing and decidedness about a major. The second block of control variables was comprised of three cognitive variables which measured beliefs in the usefulness of engaging in self and environmental exploration, and beliefs in one's ability to perform career tasks. The order of entry for the blocks of control variables was suggested by several findings in the literature which suggested that demographic variables such as age and proximity to decision making point signified by class standing and whether one had chosen a major were
salient issues which may impact one's exploratory behavior. Similarly, the cognitive variables entered in the second block were found to be related to the dependent variable. On the next step the predictor variables of separation, attachment, family health, marital conflict and parent child relationship were entered simultaneously so as to determine their combined and relative contributions.
CHAPTER III

RESULTS

Description of the Sample

Table 1 presents a description of the characteristics of the subject sample. This sample consisted of 304 students, the majority of whom were enrolled in undergraduate psychology classes at the University of North Texas, during the spring and summer sessions of 1992. Participation was voluntary, and extra credit was offered when allowable. The sample was predominately white (78%), female (75.3%), ranging in age from 18 to 23 years, and from intact homes with both parents living. There was a fairly even distribution of subjects across class groups, and the majority of subjects had already decided on a major (82.6%). Overall this sample performed well academically, with 84% reporting a grade point average of 3.0 or higher. More than half of the subjects lived independently, about one third lived in campus housing, and only a small number lived at home with their parents (15%).

Description of the Independent, Control and Dependent Measures

Table 2 presents means, standard deviations, and range of scores for the eight independent measures for the entire
sample. A comparison of the present data with previous use of these instruments indicates that the sample as a whole is describing their families and family relationships in typical ways for a college sample. Only Blustein et al. (1991) reported directly comparable means and standard deviations for the PSI, however, their group included students from divorced families. The Blustein sample evidenced somewhat higher levels of independence and somewhat lower levels of conflictual independence than the present sample. Two studies reported data for men and women separately (Lopez, 1989; Lopez et al., 1986) and one study reported scores for freshmen and upperclassmen separately (Lapsley et al., 1989). Scores from all of these studies ranged from 69.25 to 97.32 for emotional independence, 142.68 to 164.02 for conflictual independence, 45.88 to 62.30 for attitudinal independence, and 57.33 to 74.91 for functional independence. In terms of attachment scores, Blustein et al. (1991) report slightly lower means and standard deviations for the mother and father scales of the IPPA. The present study obtained a mean of 100.33 and a standard deviation of 17.27 for the same scale. The mean and standard deviation for the IPPA father scale in the present study were 91.91 and 20.75 respectively, as compared to 89.91 and 18.68 in Blustein et al. (1991). A comparison of the present data indicates that the degree of separation and attachment for the current sample is within a typical
range for college students. Means and standard deviations for the other independent measures were not available for comparison.

Two sets of control variables were used in the present study. The first set of control measures, described in Table 1, were descriptive and provided developmental information about the subjects such as age, class standing and decidedness about a major field of study. The second set of control measures were the cognitive variables of beliefs in the utility of engaging in self (self-bel) and environmental (env-bel) exploration, and career decision making self efficacy (CDMSE). The means, standard deviations and ranges of these scores is presented in Table 3.

Blustein (1989a) reports slightly lower means (14.25 and 9.87) and higher standard deviations (3.32 and 2.47) for the scales measuring the beliefs in the utility of engaging in self and environmental exploration respectively. The measurement of self confidence in one's ability to engage in career tasks yielded very similar results to that of Taylor and Betz (1983) who obtained a mean of 337.7 in their sample of undergraduate students.

There were two dependent measures used in this study, self exploration and environmental exploration. The means, standard deviations and range of scores for these scales, which are presented in Table 4, are very consistent with
Table 1

Subject Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>34</td>
<td>11.2</td>
</tr>
<tr>
<td>19</td>
<td>52</td>
<td>17.1</td>
</tr>
<tr>
<td>20</td>
<td>56</td>
<td>18.4</td>
</tr>
<tr>
<td>21</td>
<td>70</td>
<td>23.0</td>
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<td>22</td>
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<tr>
<td>23</td>
<td>26</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>75</td>
<td>24.7</td>
</tr>
<tr>
<td>Female</td>
<td>229</td>
<td>75.3</td>
</tr>
<tr>
<td><strong>Class Standing</strong></td>
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<td></td>
</tr>
<tr>
<td>Freshman</td>
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<td>21.5</td>
</tr>
<tr>
<td>Sophomore</td>
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<td>17.2</td>
</tr>
<tr>
<td>Junior</td>
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<td>26.4</td>
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<tr>
<td>Senior</td>
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<td>18.5</td>
</tr>
<tr>
<td>Graduating Senior</td>
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<td>16.5</td>
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<tr>
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<tr>
<td>Decided</td>
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<tr>
<td>Decided but Changing</td>
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</tr>
<tr>
<td>Undecided</td>
<td>28</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Table Continues
previous studies. Norman (1989) reported a mean of 27.73 for self exploration, and 13.15 for environmental exploration. Similarly, Blustein (1988) reported means of 28.34 and 13.47 for the self and environmental scales respectively. Thus it appears that this sample performed in a similar manner to previous samples of undergraduate students.

In order to better understand the interrelationship among the variables in this study, a correlational analysis was completed, the results of which are presented in Table 5. This analysis reveals that there is considerable overlap among many of the independent measures, suggesting that many of the scales which purport to measure different aspects of family functioning, health, attachment and separation to parents may actually be tapping into similar
Table 2

Means, Standard Deviations, and Range of Scores for the Independent Measures

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>Possible Range</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td>78.42</td>
<td>25.58</td>
<td>0-170</td>
<td>11-133</td>
</tr>
<tr>
<td>CI</td>
<td>159.27</td>
<td>26.43</td>
<td>0-250</td>
<td>63-195</td>
</tr>
<tr>
<td>AI</td>
<td>49.04</td>
<td>22.44</td>
<td>0-140</td>
<td>0-106</td>
</tr>
<tr>
<td>FI</td>
<td>63.27</td>
<td>19.98</td>
<td>0-130</td>
<td>4-104</td>
</tr>
<tr>
<td>IPPA-PAR</td>
<td>192.25</td>
<td>34.43</td>
<td>50-250</td>
<td>71-250</td>
</tr>
<tr>
<td>HEALTH</td>
<td>42.77</td>
<td>13.71</td>
<td>19-95</td>
<td>20-91</td>
</tr>
<tr>
<td>MC</td>
<td>26.20</td>
<td>10.59</td>
<td>13-65</td>
<td>13-58</td>
</tr>
<tr>
<td>PCP</td>
<td>91.51</td>
<td>13.77</td>
<td>37-185</td>
<td>57-128</td>
</tr>
</tbody>
</table>

Note. PSI = Psychological Separation Inventory. EI = emotional independence. CI = conflictual independence. AI = attitudinal independence. FI = functional independence. IPPA-PAR = Inventory of Parental and Peer Attachment. HEALTH = family health. MC = marital conflict. PCP = parent child problems.

Constructs. In particular there is considerable overlap among the scales which measure attachment, family health and separation. Similarly, the scales which measure some aspect of conflict and problem relationships within the family
(parent child problems, conflictual independence and marital conflict) are also highly related. Also noteworthy are the significant correlations among the cognitive scales and the dependent measures of self and environmental exploration.

The correlation matrix also indicates that for the dependent variable of self exploration, the only significant relationships noted among the family variables are those related to some aspect of conflict within the family. Surprisingly, these relationships are in the unexpected direction, and suggest that engaging in self exploration is positively related to conflict rather than inhibited by conflict. There were no significant correlations noted among any of the family, separation or attachment variables and the dependent variable of environmental exploration. Interestingly, although environmental exploration is unrelated to the independent variables, career decision making self efficacy, which is the strongest predictor of environmental exploration, is related to the family health, attachment and conflict scales.

**Principal Analyses**

The major hypotheses of this study were tested using a combination of hierarchical and standard multiple regression procedures to examine the extent to which the eight independent variables accounted for variance in each of the two dependent variables. In order to control for variability attributable to other factors which have been
Table 3

Means, Standard Deviations, and Ranges of the Control Measures

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>Possible Range</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF-BEL</td>
<td>14.77</td>
<td>2.66</td>
<td>4-20</td>
<td>6-20</td>
</tr>
<tr>
<td>ENV-BEL</td>
<td>10.06</td>
<td>2.29</td>
<td>3-15</td>
<td>3-15</td>
</tr>
<tr>
<td>CDMSE</td>
<td>339.42</td>
<td>57.92</td>
<td>0-450</td>
<td>144-450</td>
</tr>
</tbody>
</table>

Note. CES = Career Exploration Survey. SELF-BEL = beliefs in the usefulness of self exploration. ENV-BEL = beliefs in the usefulness of environmental exploration. CDMSE = Career Decision-Making Self Efficacy Scale.

associated with self and environmental exploration in previous research, two blocks of control variables were entered first. The three blocks of variables were entered hierarchically, with variables in each block then entered in a standard procedure. The first set of variables comprised demographic variables of age, sex, class standing, and decision status about a major. The second block of variables was comprised of three cognitive variables which measured beliefs in one's ability to perform career tasks, and beliefs in the usefulness of engaging in self and environmental exploration. The eight independent variables
Table 4
Means, Standard Deviations, and Ranges of the Dependent Measures

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>Possible Range</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF</td>
<td>27.56</td>
<td>6.40</td>
<td>9-45</td>
<td>11-45</td>
</tr>
<tr>
<td>ENVIR</td>
<td>14.70</td>
<td>5.40</td>
<td>6-30</td>
<td>6-29</td>
</tr>
</tbody>
</table>

Note. CES = Career Exploration Survey. SELF = Self Exploration. ENVIR = Environmental Exploration.

were then entered simultaneously to determine their contribution to the variability in each dependent variable. Separate analyses were run for each dependent variable.

Results of Regression Analysis for Self Exploration

Table 6 presents a summary of the final regression model for the dependent variable of self exploration. The results of this analysis did not provide support for the hypotheses that family relationships and experiences involving separation and attachment would be predictive of self exploration. Overall, the strongest predictor of self exploratory behavior was the cognitive variable of beliefs in the utility of engaging in self exploration. Only one independent variable, that of parent child problems, was strong enough to emerge as significant in the final model,
Table 5

Correlation Matrix for All Variables in the Regression Model

<table>
<thead>
<tr>
<th></th>
<th>AGE</th>
<th>SEX</th>
<th>CLASS</th>
<th>MAJOR</th>
<th>ENV BEL</th>
<th>SELF BEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEX</td>
<td>-0.003</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLASS</td>
<td>0.792***</td>
<td>0.022</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAJOR</td>
<td>-0.344***</td>
<td>-0.012</td>
<td>-0.379***</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV-BEL</td>
<td>-0.131*</td>
<td>0.087</td>
<td>-0.135*</td>
<td>0.077</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>SELF-BEL</td>
<td>-0.084</td>
<td>0.163**</td>
<td>-0.080</td>
<td>0.018</td>
<td>0.344***</td>
<td>1.000</td>
</tr>
<tr>
<td>CDMSE</td>
<td>-0.077</td>
<td>0.076</td>
<td>0.059</td>
<td>-0.215***</td>
<td>0.088</td>
<td>0.181**</td>
</tr>
<tr>
<td>PSI-CI</td>
<td>0.069</td>
<td>0.031</td>
<td>0.117*</td>
<td>-0.081</td>
<td>-0.030</td>
<td>-0.103</td>
</tr>
<tr>
<td>PSI-FI</td>
<td>0.209***</td>
<td>-0.202***</td>
<td>0.107</td>
<td>-0.025</td>
<td>-0.179**</td>
<td>-0.096</td>
</tr>
<tr>
<td>PSI-EI</td>
<td>0.081</td>
<td>-0.301***</td>
<td>0.023</td>
<td>0.011</td>
<td>-0.171**</td>
<td>-0.141*</td>
</tr>
<tr>
<td>PSI-AI</td>
<td>0.153***</td>
<td>-0.160**</td>
<td>0.108</td>
<td>-0.031</td>
<td>-0.168**</td>
<td>-0.132*</td>
</tr>
<tr>
<td>IPPA-PAR</td>
<td>-0.033</td>
<td>0.185**</td>
<td>0.050</td>
<td>-0.111</td>
<td>0.099</td>
<td>0.060</td>
</tr>
<tr>
<td>HEALTH</td>
<td>-0.015</td>
<td>-0.094</td>
<td>-0.093</td>
<td>0.087</td>
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<tr>
<td>MC</td>
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<td>0.037</td>
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<td>-0.009</td>
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<tr>
<td>PCP</td>
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<td>0.005</td>
<td>-0.148*</td>
<td>0.031</td>
<td>-0.038</td>
<td>-0.038</td>
</tr>
<tr>
<td>SELF</td>
<td>0.017</td>
<td>-0.091</td>
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<td>-0.028</td>
<td>0.241***</td>
<td>0.463***</td>
</tr>
<tr>
<td>ENVIR</td>
<td>0.022</td>
<td>-0.015</td>
<td>0.104</td>
<td>-0.097</td>
<td>0.152**</td>
<td>0.201***</td>
</tr>
</tbody>
</table>

Table Continues
<table>
<thead>
<tr>
<th></th>
<th>CDMSE</th>
<th>PSI-CI</th>
<th>PSI-FI</th>
<th>PSI-EI</th>
<th>PSI-AI</th>
<th>IPPA-PAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMSE</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>PSI-CI</td>
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<tr>
<td>PSI-FI</td>
<td>-0.084</td>
<td>-0.050</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSI-EI</td>
<td>-0.101</td>
<td>-0.036</td>
<td>0.757***</td>
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<tr>
<td>PSI-AI</td>
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<td>-0.240***</td>
<td>0.613***</td>
<td>0.574***</td>
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</tr>
<tr>
<td>IPPA-PAR</td>
<td>0.331***</td>
<td>0.670***</td>
<td>0.528***</td>
<td>-0.556***</td>
<td>-0.598***</td>
<td>1.000</td>
</tr>
<tr>
<td>HEALTH</td>
<td>-0.293***</td>
<td>-0.558***</td>
<td>0.408***</td>
<td>0.514***</td>
<td>0.514***</td>
<td>-0.781***</td>
</tr>
<tr>
<td>MC</td>
<td>-0.151**</td>
<td>-0.461***</td>
<td>0.307***</td>
<td>0.290***</td>
<td>0.367***</td>
<td>-0.564***</td>
</tr>
<tr>
<td>PCP</td>
<td>-0.284***</td>
<td>-0.496***</td>
<td>-0.159**</td>
<td>-0.255***</td>
<td>0.073</td>
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<tr>
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<td>-0.067</td>
<td>0.007</td>
<td>-0.089</td>
</tr>
<tr>
<td>ENVIR</td>
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<td>-0.050</td>
<td>-0.055</td>
<td>-0.100</td>
<td>0.033</td>
</tr>
<tr>
<td>HEALTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
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<td>PCP</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. CLASS = class standing. MAJOR = decision status about a major. ENV-BEL = beliefs in usefulness of environmental exploration. SELF-BEL = beliefs in usefulness of self exploration. CDMSE = career decision making self efficacy. PSI-CI = conflictual independence from parents. PSI-FI = functional independence from parents. PSI-EI = emotional independence from parents. PSI-AI = attitudinal independence from parents. IPPA-PAR = attachment to parents. HEALTH = perceptions of family health. MC = marital conflict. PCP = parent child problems. SELF = self exploration. ENVIR = environmental exploration.

* = p<.05. ** = p<.01. *** = p<.001.
however it was in an unexpected direction. The expectations related to the contribution of demographic variables were not supported.

The first block of control variables did not yield any significant predictors for the dependent variable of self exploration and accounted for only 1.2% of the variance. Thus, contrary to expectations, the control variables of age, class standing and decision status about a major did not contribute to the variability in self exploration. The addition of the second block of control variables significantly improved the prediction (change in $R^2 = .2522$), with 26.4% of the variance accounted for by the two blocks of control variables, $F(7, 295) = 15.15$, $p < .001$. Three variables emerged as important contributors, beliefs in the usefulness of engaging in self exploration ($p < .001$), feelings of self efficacy in relationship to career tasks ($p < .05$) and gender ($p = .001$). Consistent with previous studies, the motivation to engage in exploratory behaviors is related to one's beliefs in the usefulness of these behaviors, and one's self confidence in the ability to engage in these behaviors. There were no expectations regarding the influence of gender, however the present results suggest that women in this group of subjects engage in more self exploratory behavior than men.

The eight independent variables were then entered simultaneously as the third block to examine the major
hypotheses related to family and separation/attachment variables and determine if they could enhance the prediction of self exploration. The addition of this block improved the prediction by 5% (change in $R^2 = .055$) with 31.9% of the variance accounted for by the total model, $F(15, 287)= 8.98$, $p < .001$. One variable, parent child problems ($p < .05$) emerged as an important contributor to the variability in the model. The direction of this finding however was unexpected, and suggested that as parent child problems increase so does exploration of self.

Results of Regression Analysis for Environmental Exploration

Table 7 provides a summary of the regression analysis of the final model for the dependent variable of environmental exploration. The results of the regression analysis did not provide support for the hypothesis that family relationships and experiences involving separation and attachment would be predictive of engaging in environmental exploration. The strongest predictor of this exploratory behavior was the cognitive variable of feelings of self efficacy in relationship to career tasks. The expectation that demographic variables would influence engaging in this behavior was only minimally supported. In the final model, class standing emerged as a weak but significant contributor, and suggested that environmental exploration increased as one approached graduation.
Table 6

Summary of Regression Analyses Predicting Scores on the Self Exploration Scale

<table>
<thead>
<tr>
<th>Block</th>
<th>R</th>
<th>R^2</th>
<th>Change in R^2</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Variables</td>
<td>.1107</td>
<td>.0122</td>
<td></td>
<td>.924 ns</td>
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<tr>
<td>Cognitive Variables</td>
<td>.5142</td>
<td>.2644</td>
<td>.2522</td>
<td>15.154***</td>
</tr>
<tr>
<td>Family Variables</td>
<td>.5653</td>
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<td>.0552</td>
<td>8.987***</td>
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</table>

**Demographic Variables**

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>t</th>
<th>R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJOR</td>
<td>.025</td>
<td>.469</td>
<td></td>
</tr>
<tr>
<td>SEX</td>
<td>-.173</td>
<td>-3.315***</td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-.021</td>
<td>-.253</td>
<td></td>
</tr>
<tr>
<td>CLASS STANDING</td>
<td>.162</td>
<td>1.951</td>
<td>.0122 ns.</td>
</tr>
</tbody>
</table>

**Cognitive Variables**

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>t</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV-BEL</td>
<td>.101</td>
<td>1.906</td>
<td></td>
</tr>
<tr>
<td>CDMSE</td>
<td>.139</td>
<td>2.414*</td>
<td></td>
</tr>
<tr>
<td>SELF-BEL</td>
<td>.446</td>
<td>8.223***</td>
<td>.2644***</td>
</tr>
<tr>
<td>Variable</td>
<td>β</td>
<td>t</td>
<td>R²</td>
</tr>
<tr>
<td>----------------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>MC</td>
<td>.054</td>
<td>.700</td>
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</tr>
<tr>
<td>PSI-EI</td>
<td>-.009</td>
<td>-.096</td>
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</tr>
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<td>PSI-CI</td>
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<td>-.791</td>
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</tr>
<tr>
<td>PSI-AI</td>
<td>.052</td>
<td>.751</td>
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<tr>
<td>PSI-FI</td>
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<td>-.592</td>
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</tr>
<tr>
<td>PCP</td>
<td>.143</td>
<td>2.032*</td>
<td></td>
</tr>
<tr>
<td>HEALTH</td>
<td>-.098</td>
<td>-1.023</td>
<td></td>
</tr>
<tr>
<td>IPPA-PAR</td>
<td>-.108</td>
<td>-.945</td>
<td>.3196***</td>
</tr>
</tbody>
</table>

**Note.** MC = marital conflict. PSI-EI = emotional independence from parents. PSI-CI = conflictual independence from parents. PSI-AI = attitudinal independence from parents. PSI-FI = functional independence from parents. PCP = parent child problems. HEALTH = health of family. IPPA-PAR = attachment to parents. MAJOR = decision status about a major. CLASS = class standing. ENV-BEL = beliefs in usefulness of engaging in environmental exploration. CDMSE = self efficacy for engaging in career tasks. SELF-BEL = beliefs in usefulness of engaging in self exploration.

* p ≤ .05. ** p ≤ .01. *** p ≤ .001.
Table 7

Summary of Regression Analysis Predicting Scores on the Environmental Exploration Scale

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>R</th>
<th>$R^2$</th>
<th>Change in $R^2$</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Variables</td>
<td>.1606</td>
<td>.0258</td>
<td>.975 ns</td>
<td></td>
</tr>
<tr>
<td>Cognitive Variables</td>
<td>.3744</td>
<td>.1404</td>
<td>.1143</td>
<td>6.871***</td>
</tr>
<tr>
<td>Family Variables</td>
<td>.3998</td>
<td>.1598</td>
<td>.0197</td>
<td>3.641***</td>
</tr>
</tbody>
</table>

Demographic Variables

<table>
<thead>
<tr>
<th></th>
<th>$\beta$</th>
<th>t</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJOR</td>
<td>-.005</td>
<td>-.092</td>
<td></td>
</tr>
<tr>
<td>SEX</td>
<td>-.059</td>
<td>-1.026</td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-.061</td>
<td>-.665</td>
<td></td>
</tr>
<tr>
<td>CLASS STANDING</td>
<td>.188</td>
<td>2.042*</td>
<td>.0258 ns.</td>
</tr>
</tbody>
</table>

Cognitive Variables

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV-BEL</td>
<td>.092</td>
<td>1.570</td>
<td></td>
</tr>
<tr>
<td>SELF-BEL</td>
<td>.127</td>
<td>2.119*</td>
<td></td>
</tr>
<tr>
<td>CDMSE</td>
<td>.298</td>
<td>4.648***</td>
<td>.1598***</td>
</tr>
</tbody>
</table>

Table Continues
<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>t</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC</td>
<td>.039</td>
<td>.454</td>
<td></td>
</tr>
<tr>
<td>PSI-EI</td>
<td>.040</td>
<td>.387</td>
<td></td>
</tr>
<tr>
<td>PSI-CI</td>
<td>-.052</td>
<td>-.560</td>
<td></td>
</tr>
<tr>
<td>PSI-AI</td>
<td>-.080</td>
<td>-1.037</td>
<td></td>
</tr>
<tr>
<td>PSI-FI</td>
<td>-.019</td>
<td>-.201</td>
<td></td>
</tr>
<tr>
<td>PCP</td>
<td>.069</td>
<td>.883</td>
<td></td>
</tr>
<tr>
<td>HEALTH</td>
<td>-.060</td>
<td>-.562</td>
<td></td>
</tr>
<tr>
<td>IPPA-PAR</td>
<td>-.088</td>
<td>-.696</td>
<td>.1598***</td>
</tr>
</tbody>
</table>

**Note.** MC = marital conflict. PSI-EI = emotional independence from parents. PSI-CI = conflictual independence from parents. PSI-AI = attitudinal independence from parents. PSI-FI = functional independence from parents. PCP = parent child problems. HEALTH = health of family. IPPA-PAR = attachment to parents.

* p ≤ .05. ** p ≤ .01. *** p ≤ .001.

The first block of control variables did not yield any significant predictors for the dependent variable of environmental exploration, and accounted for only 2.5% of the variance. Contrary to expectations, the set of demographic variables did not contribute significantly to the variability in environmental exploration, however class
standing individually emerged as a weak predictor ($p < .05$). The addition of the second block of control variables significantly improved the prediction (change in $R^2 = .1143$) with 14% of the variance accounted for by the two sets of control variables, $F(7, 295) = 6.87$, $p < .001$. Two variables emerged as significant predictors, career decision making self efficacy ($p < .001$) and beliefs in the usefulness of engaging in self exploration ($p < .05$). The third group of variables were then entered simultaneously to determine if the variables related to family relationships could significantly add to the prediction of the dependent variable of environmental exploration. None of the variables in this block emerged as significant predictors of the dependent variable, with only an additional 1.9% of the variance accounted for in the total model (change in $R^2 = .0197$).

**Additional Analyses**

**Demographic variables.** In order to gain a better understanding of the impact of the demographic variables on the dependent variables, means were calculated for self and environmental exploration for each age, class standing and major status group. This analysis was completed since it was possible that curvilinear relationships existed which would not be able to be assessed in a correlation model. These results are presented in Table 8. It was expected that younger students, in freshman status would be most
### Table 8
Means and Standard Deviations for Self and Environmental Exploration for Each Class Status and Decision Status

<table>
<thead>
<tr>
<th>Class Status</th>
<th>Self Exploration</th>
<th>Environmental Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>1st Semester Freshman</td>
<td>5</td>
<td>30.00</td>
</tr>
<tr>
<td>2nd Semester Freshman</td>
<td>55</td>
<td>26.49</td>
</tr>
<tr>
<td>3rd Semester Freshman</td>
<td>5</td>
<td>19.00</td>
</tr>
<tr>
<td>Sophomore</td>
<td>52</td>
<td>28.90</td>
</tr>
<tr>
<td>Junior</td>
<td>80</td>
<td>27.35</td>
</tr>
<tr>
<td>1st Semester Senior</td>
<td>46</td>
<td>27.32</td>
</tr>
<tr>
<td>Graduating Senior</td>
<td>49</td>
<td>28.32</td>
</tr>
<tr>
<td>3rd Semester Senior</td>
<td>10</td>
<td>28.00</td>
</tr>
<tr>
<td>Decision Status About A Major</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decided</td>
<td>251</td>
<td>27.57</td>
</tr>
<tr>
<td>Decided but Changing</td>
<td>25</td>
<td>28.68</td>
</tr>
<tr>
<td>Undecided</td>
<td>28</td>
<td>26.46</td>
</tr>
</tbody>
</table>
likely to engage in self exploration, and older students, in
senior status, approaching graduation would be engaging in
environmental exploration. Students who were in their
sophomore or junior years were not expected to be engaging
in as much exploratory behavior as freshman or seniors.
Visual inspection of the data suggested that there was very
little variability among the groups, suggesting that overall
the demographic variables assessed in this study did not
contribute to the variability in the dependent variables as
expected.

**Multicollinearity.** One problem which can occur in
multiple regression is that of multicollinearity.
Multicollinearity is said to exist when two or more
independent variables are highly correlated in a study
(Tabachnick & Fidel, 1983). Although independent variables
in social science research are often correlated (Lewis-Beck,
1980) the problem of multicollinearity can present several
problems in interpreting results. When this situation
occurs the statistical techniques used are not capable of
sorting out the independent contributions of each
independent variable (Schroeder, Sjoquist, & Stephan, 1986).
As Wampold and Freund (1987) indicate, one important result
of multicollinearity is that none of the highly correlated
independent variables may demonstrate a significant
relationship to the variability in the dependent variable.
Further, the standardized partial regression coefficients
can become highly unstable (Wampold & Freund, 1987). This instability can render the results difficult to interpret, since values may shift with the addition or deletion of other variables in the equation.

Tabachnick and Fidel (1983) suggest two methods of detecting multicollinearity in a data set. Initially, the correlation matrix of a set of variables can be examined to determine if any two variables are highly correlated. Lewis-Beck (1980) suggests that when using this method, any bivariate correlation which reaches .80 is most likely affecting the data set. Although this method can detect two nearly redundant variables, it is unable to tap into the more subtle difficulty of a combination of variables which may share a significant amount of common variance. To investigate this problem, Tabachnick and Fidel (1983) suggest the use of multiple regression procedures where each independent variable serves as the dependent variable with the other independent variables regressed onto it. This method should be able to detect a linear combination of variables which nearly perfectly predicts another variable (Tabachnick & Fidel, 1983). According to Lewis-Beck (1980) if the $R^2$ or proportion of variance accounted for in these equations reaches 1.0 the problem of multicollinearity is present. This study utilized the second method of analysis, with a more conservative approach. If $R^2$ reached .50 or
greater then it was assumed that multicollinearity may have been present. Appendix K presents these results.

The results of these analyses indicated that several of the independent and control variables were at least moderately to strongly related to some combination of other variables. In terms of the first two groups of control variables, age and class standing were found to overlap considerably, which suggested that they were tapping into the same dimension. The independent variables related to family relationships, separation and attachment were also found to be highly related, with many of these variables being strongly predicted by a combination of the others. Considerable overlap was noted among the variables of health, attachment to parents, marital conflict, parent child problems, and emotional independence from parents. These results suggested that these variables were most likely tapping into similar dimensions, which may have presented some difficulty with multicollinearity in the regression analyses. Thus the influence of the family relationship variables on self and environmental exploration may not have been adequately assessed.

Exploratory Multiple Regression Analysis

Although there are several ways to deal with the problem of multicollinearity in a data set, Tabachnick and Fidel (1983) suggest that the most straightforward way to deal with this situation is to eliminate the variables which
are presenting the most difficulty. This procedure should render the interpretation of the data more manageable by deleting the redundant information. Based on the results of the multicollinearity analyses, it was decided that one control variable and three independent variables would be eliminated from the regression analyses since these variables were highly correlated with other variables. Due to the significant overlap between age and class standing, age was removed from further analyses. In addition, since the variables of attachment to parents, marital conflict and emotional independence from parents were highly related to the other separation and family relationship variables, they were also eliminated in the exploratory analyses.

Another set of hierarchical regression analyses were performed for each dependent variable. The same procedure was used as in the initial analyses. In terms of self exploration, the results of this analysis, although not dramatically different from the initial analyses, did allow some variables to emerge more strongly as predictors. Most notably in the variables of class standing and parent child problems shifted in value. In this analysis class standing emerged as a significant predictor in the final model ($p < .01$), however it was in the unexpected direction, and suggested that self exploratory behavior increased the closer one approached graduation. Similarly, parent child problems accounted for a greater proportion of the variance
as well (p < .01). Overall, there was no change in the proportion of variance accounted for by the entire model, with 31.6% of the variance accounted for in this revised model, and 31.9% accounted for in the original model. As in the original model, beliefs in the usefulness of engaging in self exploration was the strongest predictor of self exploratory behavior.

The results of the analysis for environmental exploration were consistent with the initial analyses. Small differences were noted in partial regression coefficients and significance levels for class standing, however no new predictors emerged. Thus the strongest predictors of environmental exploration remained to be feelings of self efficacy related to career tasks, class standing and beliefs in the usefulness of engaging in self exploration.
CHAPTER IV

DISCUSSION

The purpose of this study was to examine the hypotheses that family relationships and experiences of separation-individuation and attachment, would be important influences in the self and environmental career exploratory behavior of late adolescents. This study also sought to address the methodological issue of the developmental nature of the career process by controlling for the contribution of demographic variables, which have been related to career exploratory behaviors in previous research. The contribution of cognitive variables was included to control for this important source of influence in exploratory behavior as well. Specific research questions focused on whether engaging in self and environmental exploration could be predicted by knowledge of subjects' relationships to their parents, and their separation-individuation and attachment experiences, after controlling for the contribution of cognitive and demographic variables.

The results of this study did not provide support for the hypothesis that career exploration would be facilitated
by a balance of adequate separation and attachment to parents. These findings support previous studies which did not find a relationship between exploratory behavior and psychological separation or attachment (Norman, 1989; Polk, 1990;), and suggest that the concurrent developmental processes of career exploration and psychological separation are not directly related to a substantial degree. The hypothesis that exploratory behavior would be facilitated by family relationships that were relatively free of dysfunctional patterns was also not supported. In fact, unexpectedly, the one family variable which emerged as a weak but significant predictor of self exploration, was in the opposite direction than expected. This outcome suggested that contrary to theory, problems in parent child relationships may facilitate rather than inhibit self exploratory behavior. Further, the subjects' developmental status unexpectedly emerged as only minimally important in the variability of exploratory behavior.

In contrast, the results of this study clearly support the importance of cognitive beliefs in influencing career exploratory behavior. The strongest predictors of exploratory behavior were an individual's beliefs in the usefulness of engaging in exploratory behaviors and beliefs in one's ability to perform career related tasks. Thus, adolescents who have strong beliefs in the usefulness of self exploration, and who feel self confident in their
ability to perform career tasks are more likely to engage in exploratory behavior. In fact, knowing about beliefs in the usefulness of engaging in self exploratory behavior allowed the prediction of the major proportion of the variance accounted for in self exploration. There was only minimal improvement in predictive capability with the addition of knowledge of family relationships or separation-individuation and attachment experiences. Similarly, knowledge of individuals’ beliefs about their ability to perform career tasks was the best predictor of environmental exploration, with no improvement in prediction with the addition of the family variables. Thus the influence of family experiences is very minor in comparison to cognitive factors, and adds little substantive information to the understanding of influences on exploratory behavior.

Several issues emerged with regard to these findings which need to be addressed. First, in terms of the influence of family variables in career development, a primary question is whether the type of career variable being assessed influences that relationship. Secondly, the definition and measurement of family variables may play a role with regard to these findings. Third, the impact and meaning of the lack of findings related to the importance of the demographic variables needs to be assessed. Finally, the importance of cognitive variables will be addressed. A discussion of these issues follows.
Influence of Family Variables

Despite the relatively minor role for family variables, the results of this study did present some intriguing findings which deserve further consideration. Although fairly weak in comparison to the influence of cognitive variables, one aspect of family functioning, that of parent child problems, emerged as important in self exploration. This relationship however, was in the opposite direction to that predicted, and suggested that problems in parent child relationships were associated with higher levels of self exploration.

This outcome contrasts with the expectation that self exploration would be associated with fewer parent child problems, and with results of two previous studies which suggested that family relationships which were relatively free of problems were facilitative of career development. Lopez (1989) found that freedom from angry, resentful feelings in relationship to one’s parents was associated with progress in vocational identity development. Similarly, progress in committing to a career was found to be associated with a moderate level of attachment to parents and lower levels of angry, resentful feelings (Blustein et al., 1991). In this study however, difficulties in the adolescent’s relationship to parental figures appeared to facilitate rather than inhibit self exploration. Plausible
explanations for this surprising finding may be rooted in several different issues.

**Type of Career Variable.** A comparison of Lopez (1989), Blustein et al. (1991) and the current study indicates that one difference is the type of career variable assessed. The current study examined self and environmental exploration, whereas Lopez (1989) studied vocational identity development, and Blustein et al. (1991) examined progress in committing to a career. Although these tasks share a common theoretical base, they are different aspects of the career development process. Vocational identity and commitment to a career are two expected outcomes of the career development process. Self and environmental exploration are activities which help an individual move towards the identity and commitment outcomes. Further, since these two types of exploratory behavior were not related to the same variables in this study, this suggested that they are distinct aspects of career development as well.

Self exploration is a task which involves a reevaluation of past experiences in relation to one's current career focus. Theory suggests that this task would be facilitated by a supportive relationship with parents which was relatively free from problems. However, it is also plausible that difficulties in the parent child relationship may stimulate self questioning, as a means to understand and resolve one's discomfort. Although self
exploration is believed to be a precursor to adequate identity development and career commitment, it is very likely that the development of vocational identity and progress towards committing to a career involves many tasks. Similarly, there may be many other psychological and motivational processes which mediate the final outcome of each. Because parent child difficulties stimulate self questioning, it does not necessarily mean that it is helpful in moving towards the next step in identity development or career commitment.

Thus, the fact that this study did not appear to support Lopez (1989) and Blustein et al. (1991), suggests that although seemingly related, the tasks of self exploration, environmental exploration, vocational identity development and commitment to a career may not respond to family influences in the same way. Further, since the present study suggested a rather weak role for conflict in motivating self exploration, the initial role of parent child difficulties in stimulating self questioning may not emerge as important in the more encompassing process of vocational identity development and commitment. The identification of what factors motivate various career tasks will need to be explored in future research.

Definition of Family Variable. Several studies have suggested that family relationships are important in career development. What remains unclear however, is exactly what
aspects of family relationships are important. This is in part a difficulty with the definition and measurement of these constructs. Recent studies which have examined family processes such as separation-individuation and attachment in relationship to other aspects of adolescent development suggest that, although these instruments measure aspects of closeness and separation to parental figures, they also measure other dimensions of adolescent and family functioning as well. For example, Rice et al. (1990) presented a factor analysis of several separation scales which suggested that these scales were tapping into two distinct dimensions. One dimension appeared to describe the functional aspects of psychological separation, and the other appeared to focus on emotional aspects of the parent child relationship. Further, these two dimensions were not related to adolescent college adjustment in the same way, although they were both labeled as indicators of psychological separation from parents. Similarly, in the present study there was a significant overlap between the scale which purported to measure attachment and one which supposedly measured the relative health of the adolescent’s family structure. Findings such as this lead to speculation about exactly what is being measured, and how each of these constructs relate to other aspects of adolescent functioning.
In past studies conflictual independence has been the only aspect of psychological separation which has been consistently related to career development tasks (Blustein, et al., 1991; Lopez, 1989). In the present study, although conflictual independence did not emerge as a significant predictor of exploratory behavior, there was a substantial correlation between conflictual independence and the parent child problem scale, and both were related to self exploration in the same way. Although the parent child scale purports to measure structural components of family relationships, and conflictual independence is labeled as an aspect of psychological separation, these two instruments were clearly tapping into some common dimension of functioning. This dimension appears to reflect some problematic component of the adolescents' relationship to parental figures, however the exact nature of this component is unclear. The fact that conflictual independence correlates highly with a measure of parent child problems, suggests that it is not a pure measure of the normative task of psychological separation, but also a measure of dysfunctional family relationships.

This lack of purity in instrumentation leads to questions about whether findings related to conflictual independence represent an aspect of psychological separation or dysfunctional parent child relationships. This limits the ability to interpret and compare findings related to
conflictual independence across studies, since it is difficult to tell what aspect is being reflected in the results. Thus, one question which remains unclear is how to compare the seemingly contradictory findings of Lopez (1989) and Blustein et al. (1991) to the present study. Did the findings of those two studies reflect the impact of family dynamics or the normative process of psychological separation? Given this lack of clarity, is it possible that what may be most important in influencing different aspects of career development is family dynamics and the structure of parent child relationships, rather than progress in the concurrent developmental task of psychological separation? A specification of exactly what aspects of family relationships are being measured in these instruments will be important for future research.

Developmental Nature of Career Exploration

Another issue which may have influenced the current findings is the failure of the demographic variables to perform as expected. Based on previous results it was expected that individuals would engage in higher levels of self exploration in early stages of college, and higher levels of environmental exploration as they approached graduation. The fact that these variables did not emerge as important contributors to the variability in self or environmental exploration poses several questions. Did the present design provide an appropriate methodology to assess
and control for the importance these variables? What explanations may account for the lack of consistent findings with theory and previous studies which have shown demographic variables to be related to exploratory behavior? Lastly, did the unexpected findings related to the lack of importance of the demographic variables impede the adequate assessment of the relationship of family variables to exploratory behavior?

Assessment of Developmental Process in Career Exploration. In addressing the unexpected lack of findings related to the influence of demographic variables, the first issue considered was the possibility that the variability associated with developmental and contextual circumstances was curvilinear or bimodal in nature, and thus could not be adequately assessed within the present linear framework. This possibility was examined by comparing the exploratory behavior of different subject groups defined by demographic criteria. Surprisingly, little variability was noted in exploratory behavior when comparing groups of different ages, class standing and decision status about a major. Thus contrary to theoretical expectations, the level of self and environmental exploration was fairly consistent across groups, suggesting that both types of behavior were salient for different ages, classes and decision statuses.

Comparability of Studies. Although theory strongly suggests that career exploratory behavior is motivated by
developmental and contextual circumstances, support for this proposition has not been tested within a developmental framework in a college population. There are no studies which have examined relative amounts of engagement in career exploration across age and class status groups. Further, a closer examination of the studies which interpreted findings as supportive of the importance of developmental variables reveals that the data was quite weak.

For example, Stumpf et al., (1983) studied a population of undergraduate students, 85% of whom were approaching graduation within three months. This study found that this population was more heavily involved in environmental exploration as theory would predict as compared to a different sample of graduate business students who were not approaching graduation. Unfortunately, there were many other characteristics which these samples differed on, including undergraduate and graduate status, academic major (business verses liberal arts), self esteem, beliefs in the favorability of employment outlook, and feelings of stress related to exploration. Thus, it is conceivable that these findings were related to other variables rather than simply the developmental circumstance of proximity to graduation.

In a similar vein, Blustein (1988) utilized a sample of subjects who were young and early in their college career (72% freshman). His research suggested a relationship between autonomy and self exploration but not environmental
exploration. The unexpected lack of relationship between environmental exploration and autonomy was explained as a function of the lack of developmental salience for environmental exploration for his subjects. Although consistent with theory, an alternative explanation may be that self and environmental exploratory behavior are distinct tasks, which are not influenced by the same psychological dimensions. Thus, findings that were attributed to the developmental nature of the career process were not based on specific information, and may have actually been a function of the different nature of the two types of exploratory behavior.

The possibility that other developmental and contextual factors serve to motivate exploratory behavior at various points in time cannot be ignored, and may need to be considered in future studies. However, the fact that this sample appeared consistently engaged in exploratory behavior suggests that the lack of salience for the task of career exploration did not likely impact the current results with respect to family process variables.

The Role of Cognitive Variables in Career Exploration

Finally, the current study also provides substantial support for the importance of cognitive variables in influencing career exploratory behavior. These results are consistent with previous findings (Blustein, 1989a; Polk, 1990; Stumpf & Lockhart, 1987), and suggest that these
factors play a significant role in this aspect of career development. Knowledge of an individual’s beliefs in the usefulness of engaging in self exploration predicted the largest proportion of the variance accounted for in self exploration. Similarly, knowledge of an individual’s beliefs in their ability to perform career tasks predicted the greatest proportion of variance accounted for in environmental exploration. Interestingly, self and environmental exploration were related to different sets of beliefs. This suggested that these two behaviors are distinct, are influenced by different factors, and need to be considered as separate tasks in career development research. Despite the importance of these cognitive variables in this study, a relatively small proportion of the overall variance in both self and environmental exploration was accounted for, suggesting that there are other sources of influence which are likely more important.

Interestingly, although environmental exploration was not related to the family process variables, career decision making self efficacy, which was the strongest predictor of environmental exploration, was related to parent child problems, family health, attachment and two aspects of psychological separation, conflictual independence and attitudinal independence. Further, these relationships were in the direction that would be predicted by theory. These results suggested that higher levels of self efficacy were
associated with perception of family health, freedom from angry resentful feelings towards parents, moderate attachment, fewer problems in the parent child relationship, and attitudinal similarity with parents. Although the individual correlations were low to moderate (ranging from .247 to .331) they were unexpected given the previous findings of Blustein et al. (1991) and Polk (1990), who did not report support for a relationship between career decision making self efficacy and psychological separation. The reason for this discrepancy is unclear, however it suggests that the role of family variables in career development may be more complex and less direct than theory would predict. Thus, it is conceivable that the impact of family relationships in career development is in the form of a mediating role which influences an individual’s beliefs and feelings of self confidence.

Limitations of the Study

There are a number of limitations to this study which need to be recognized. First, because this study utilized a correlational design, no statements can be made regarding causality. For example, findings were interpreted to suggest that cognitive beliefs were facilitative of engaging in exploratory behavior, however clearly the direction of the influence could be reversed. It is just as plausible to suggest that engaging in exploratory behavior could
influence one’s beliefs in the usefulness of this activity and one’s self confidence to perform the activity.

Secondly, several difficulties were apparent in the definition and measurement of the family process variables utilized in this study. In particular, problems were noted in the overlap between the parent child problems scale which was intended to measure family structure, and the conflictual independence scale which supposedly assessed psychological separation. The lack of clarity in the measurement of these variables diminished the confidence in the interpretability of findings, and the comparability of these findings to previous studies, since it was not always clear what was being measured. Additionally, since the findings related to the family variables were very weak, this further reduced the level of confidence in the meaning of the results in relationship to career exploration.

Lastly, this study’s design limited the ability of the project to completely address the impact of developmental factors. A longitudinal design which could track subjects’ progress over time would be the most appropriate methodology. Changes in exploratory behavior as a function of developmental and contextual influences could be assessed without the confound of uncontrolled sources of variance.

Recommendations for Future Research

The results of this study suggest several areas for future research in order to clarify the role of family
variables in the career development process. Of primary importance are the difficulties associated the definition and measurement of the family variables. It is only recently that studies have begun to incorporate multiple measures of these variables which is allowing researchers to examine the interrelationship of the different instruments. As the results of this study suggest many of the instruments which purport to measure various aspects of structural family relationships, attachment and psychological separation may actually be tapping into similar content. Efforts to clarify the relationship of these instruments to each other would be extremely helpful in comparing results of studies which are attempting to understand the relationship of family variables to other developmental processes. Factor analysis with multiple measures of family variables may be useful technique to clarify these relationships.

Secondly, the results of this study raised the possibility of a mediating role for family variables in influencing career exploratory behavior. Although highly speculative, it is conceivable that some career tasks are influenced by family variables through a more indirect route via cognitive beliefs. Thus, the current correlational design may not have been adequate to assess this indirect function. It may be that a path analysis may provide a more appropriate framework to study this possibility.
Lastly, this study raised some questions about the viability of assessing the influence of developmental and contextual factors within a linear correlational framework. Although cumbersome and time consuming, a longitudinal study which would be able to assess changes in career exploratory behavior over time, taking into account the many possible sources of influence, would be the most appropriate design to clarify the role of these factors in influencing exploratory behavior.

**Summary and Conclusions**

In sum, the results of the current study do not provide support for the hypothesis that career exploration would be facilitated by a balance of adequate separation and attachment. Further, it does not appear that the lack of findings related to the importance of demographic variables impacted the ability of this study to adequately assess the influence of family variables. Thus, it is plausible to conclude that psychological separation and attachment are not directly related to exploratory behavior. Indeed, this conclusion provides support for two previous studies which have not shown a relationship between separation-individuation and attachment to career exploratory behavior in late adolescence (Norman, 1989; Polk, 1990).

In contrast, the current study does provide some evidence, albeit weak, that family structure may be important in relationship to career development. This may
point to a different type of family variable than psychological separation and attachment, which have been researched in the past. In particular, difficulties in the parent child relationship may be important, however it may not influence all aspects of career development in similar ways. In this study, difficulties in the parent child relationship appeared to facilitate rather than inhibit self exploration. In other studies, which focused on vocational identity development and commitment to a career, more positive aspects of the parent child relationship appeared facilitative. Unfortunately the lack of clarity among the various instruments which measure aspects of family structure, psychological separation and attachment made it difficult to interpret these findings with much confidence, and to easily compare findings across studies. In addition, since the present findings were so weak, additional research is needed to clarify the potential role of dysfunctional family relationships in career development.

The results of this study also provided support for the importance of cognitive variables in the career development process. Beliefs in the usefulness of engaging in self exploration was the strongest predictor of this activity, whereas beliefs in one's ability to perform career tasks was the best predictor of environmental exploration. The current results are consistent with previous studies (Blustein, 1989a; Polk, 1990; Stumpf & Lockhart, 1987) and
suggest that these variables play a significant role in this aspect of career development. The results of this study also suggest that self and environmental exploration are distinct tasks which are not influenced in the same way. Further, there are some indications, albeit weak, that family variables may play a mediating role via feelings of self efficacy in relationship to environmental exploration, however these findings are clearly speculative and will require additional research.
APPENDIX A

LETTER TO PARTICIPANTS
LETTER TO PARTICIPANTS

Dear Participant:

In recent years there has been a great deal of interest in how college students go about making career choice decisions. In particular, researchers have been interested in how many of the attitudes and beliefs which we learn in our own families while growing up may affect the way we go about getting information to make career decisions. It is the purpose of this study to investigate how our early beliefs and attitudes affect us in choosing a career.

If you choose to participate in this study, your answers will be kept confidential. There are no right or wrong answers to any of the questions in the surveys. I am interested in how a group as a whole responds, not your individual scores. Please do not put your names on any of the questionnaires.

The questionnaires each contain instructions which are self explanatory. Please answer as quickly and honestly as you can, and please ANSWER EVERY QUESTION. If you choose to do so, you may withdraw from the study at any time. There will be no risks or discomforts involved in the study, and it is hopes that the results will aid counselors and researchers in their understanding of how college students go about making career choices.

A consent form is attached to the packet. Please read it and sign if you wish to participate. If you have any questions please ask the researcher who is present.

THANK YOU FOR YOUR PARTICIPATION

Anne-Marie Moreault
Vicki L. Campbell, Ph.D.
University of North Texas
Department of Counseling Psychology
APPENDIX B

INFORMED CONSENT
INFORMED CONSENT

The purpose of this research is to study how beliefs and attitudes about relationships may affect the way students go about making a career choice. The study will involve the following:

Completing questionnaires about activities related to gathering information about careers, and about my family relationships.

To receive a summary of the results of this study please send your request and a self-addressed, stamped envelope to Ms. Anne-Marie Moreault in the Psychology Department.

If you are willing to participate please read and sign below. This form will be separated from the questionnaires upon receipt.

Thank you for your participation.

Anne-Marie Moreault  
Doctoral Candidate  
Counseling Psychology Department  
University of North Texas

I have read/heard a clear explanation and understand the nature of the study. I understand that the study is for research purposes, and that I may withdraw my consent for my participation at any time.

With my understanding of this, having received this information and satisfactory answers to the questions I have asked, I voluntarily consent to participate in the study.

Name (print)__________________________________________________________

Signature____________________________________________________________

Social Security #_______________________________________________________

Date_________________________________________________________________

Phone Number_________________________________________________________
APPENDIX C

PERSONAL DATA QUESTIONNAIRE
PERSONAL DATA QUESTIONNAIRE

INSTRUCTIONS: In the space next to the items below, please enter the number that best answers the question. Fill in information when requested in the spaces provided. Please answer every item.

____

AGE

____

YEAR OF BIRTH (e.g., 70 if born in 1970)

____

SEX
1. male
2. female

____

CLASS
1. 1st semester freshman
2. 2nd semester freshman
3. 3rd semester freshman
4. sophomore
5. junior
6. 1st semester senior
7. senior - graduating
8. graduate student
9. other
   (specify) ______________________

____

MAJOR
1. I have declared a major.
2. I have declared a major but am thinking of changing it.
3. I am undecided about a major.

Answer the next question only if you are a graduating senior this semester.

____

AFTER I GRADUATE MY PLANS ARE:
1. I already have a job.
2. I do not plan to go to work for the first three months.
3. I want to be employed within three months, but have no job lined up at this time.
4. I have been accepted to a graduate program and plan to attend.
5. Other - please explain in the space provided.
GRADE POINT AVERAGE (e.g. 3.0)

ETHNIC/RACIAL BACKGROUND
1. African American
2. Native American
3. Caucasian
4. Asian
5. Hispanic
6. other

RELATIONSHIP STATUS
1. currently married
2. currently separated
3. divorced
4. widowed
5. single, long-term relationship
6. single, actively dating
7. single, not actively dating

CURRENT LIVING SITUATION
1. with both parents at parents' home
2. with one parent at parent's home
3. alone in house/apt.
4. with other(s) in house/apt.
5. in residence hall

MY PARENTS ARE:
1. married, living together
2. married, living apart
3. divorced, not remarried
4. divorced, one remarried
5. divorced, both remarried
6. both parents deceased
7. mother deceased
8. father deceased

Answer the next two questions only if your parent are divorced.

WHAT YEAR DID YOUR PARENTS DIVORCE?
(e.g. 75 if 1975)

HOW OLD WERE YOU AT THE TIME OF YOUR PARENT'S DIVORCE?
HOW CLOSE IS YOUR RELATIONSHIP WITH YOUR FATHER?
1. extremely
2. very
3. somewhat
4. not very
5. not at all
6. does not apply - father deceased

IF YOU DO NOT LIVE WITH YOUR FATHER HOW OFTEN DO YOU SEE HIM?
1. about once a week
2. about once a month
3. about once every few months
4. about once a year
5. about once every few years
6. never
7. does not apply - father deceased

HOW CLOSE IS YOUR RELATIONSHIP WITH YOUR MOTHER?
1. extremely
2. very
3. somewhat
4. not very
5. not at all
6. does not apply - mother deceased

IF YOU DO NOT LIVE WITH YOUR MOTHER HOW OFTEN DO YOU SEE HER?
1. about once a week
2. about once a month
3. about once every few months
4. about once a year
5. about once every few years
6. never
7. does not apply - mother deceased

WHAT PERCENT OF YOUR LIVING EXPENSES DO YOU PAY?
1. 0 %
2. 0 - 25%
3. 26 - 50%
4. 51 - 75%
5. 76 - 100%

HOW MUCH TIME DO YOU WORK AT A JOB EACH WEEK?
1. more than 35 hours a week
2. 25-35 hours
3. 15-24 hours
4. less than 15 hours
5. not employed
1. professional
2. managerial
3. sales
4. trained worker
5. laborer
6. does not work outside the home

1. professional
2. managerial
3. sales
4. trained worker
5. laborer
6. does not work outside the home

For the next two questions use the scale below to indicate highest year of education completed in numbers

<table>
<thead>
<tr>
<th>High School</th>
<th>College</th>
<th>Master’s</th>
<th>Doctoral</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

FATHER’S EDUCATIONAL LEVEL
MOTHER’S EDUCATIONAL LEVEL
APPENDIX D

PSYCHOLOGICAL SEPARATION INVENTORY
**INSTRUCTIONS:** The following list of statements describes different aspects of students' relationships with both their mother and father. Imagine a scale ranging from 1 to 5 that tells how well each statement applies to you. In the space next to the statement, please enter a number from "1" (Not at all true of me) to "5" (Very true of me). If the statement does not apply enter a "*". Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

<table>
<thead>
<tr>
<th>Not at all true of me</th>
<th>A little bit true of me</th>
<th>Moderately true of me</th>
<th>Quite a bit true of me</th>
<th>Very true of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I like to show my friends pictures of my mother.
2. Sometimes my mother is a burden to me.
3. I feel longing if I am away from my mother for too long.
4. My ideas regarding racial equality are similar to my mother's.
5. My mother's wishes have influenced my selection of friends.
6. I feel like I am constantly at war with my mother.
7. I blame my mother for many of the problems I have.
8. I wish I could trust my mother more.
9. My attitudes about obscenity are similar to my mother's.
10. When I am in difficulty I usually call upon my mother to help me out of trouble.
11. My mother is the most important person in the world to me.
12. I have to be careful not to hurt my mother's feelings.
13. I wish that my mother lived nearer so I could visit her more frequently.
14. My opinions regarding the role of women are similar to my mother’s.
15. I often ask my mother to assist me in solving personal problems.
16. I sometimes feel like I’m being punished by my mother.
17. Being away from my mother makes me feel lonely.
18. I wish my mother wasn’t so overprotective.
19. My opinions regarding the role of men are similar to my mother’s.
20. I wouldn’t make a major purchase without my mother’s approval.
21. I wish my mother wouldn’t try to manipulate me.
22. I wish my mother wouldn’t try to make fun of me.
23. I sometimes call home just to hear my mother’s voice.
24. My religious beliefs are similar to my mother’s.
25. My mother’s wishes have influenced my choice of major at school.
26. I feel that I have obligations to my mother that I wish I didn’t have.
27. My mother expects too much from me.
28. I wish I could stop lying to my mother.
29. My beliefs regarding how to raise children are similar to my mother’s.
30. My mother helps me to make my budget.
31. While I am home on vacation I like to spend most of my time with my mother.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.</td>
<td>I often wish that my mother would treat me more like an adult.</td>
</tr>
<tr>
<td>33.</td>
<td>After being with my mother for vacation I find it difficult to leave her.</td>
</tr>
<tr>
<td>34.</td>
<td>My values regarding honesty are similar to my mother's.</td>
</tr>
<tr>
<td>35.</td>
<td>I generally consult with my mother when I make plans for an out-of-town weekend.</td>
</tr>
<tr>
<td>36.</td>
<td>I am often angry at my mother.</td>
</tr>
<tr>
<td>37.</td>
<td>I like to hug and kiss my mother.</td>
</tr>
<tr>
<td>38.</td>
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<tr>
<td>39.</td>
<td>My attitudes about solitude are similar to my mother's.</td>
</tr>
<tr>
<td>40.</td>
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</tr>
<tr>
<td>41.</td>
<td>I decide what to do according to whether my mother will approve of it.</td>
</tr>
<tr>
<td>42.</td>
<td>Even when my mother has a good idea I refuse to listen to it because she made it.</td>
</tr>
<tr>
<td>43.</td>
<td>When I do poorly in school I feel like I'm letting my mother down.</td>
</tr>
<tr>
<td>44.</td>
<td>My attitudes regarding environmental protection are similar to my mother's.</td>
</tr>
<tr>
<td>45.</td>
<td>I ask my mother what to do when I get into a tough situation.</td>
</tr>
<tr>
<td>46.</td>
<td>I wish my mother wouldn't try to get me to take sides with her.</td>
</tr>
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1. My mother is my best friend.
2. I argue with my mother over little things.
3. My beliefs about how the world began are similar to my mother's.
4. I do what my mother decides on most questions that come up.
5. I seem to be closer to my mother than most people my age.
6. My mother is sometimes a source of embarrassment to me.
7. Sometimes I think I am too dependent on my mother.
8. My beliefs about what happens to people when they die are similar to my mother's.
9. I ask for my mother's advice when I am planning my vacation time.
10. I am sometimes ashamed of my mother.
11. I care too much about my mother's reactions.
12. I get angry when my mother criticizes me.
13. My attitudes regarding sex are similar to my mother's.
14. I like to have my mother help me pick out the clothing I buy for special occasions.
15. I sometimes feel like an extension of my mother.
16. When I don't write my mother often enough I feel guilty.
17. I feel uncomfortable keeping things from my mother.
18. My attitudes regarding national defense are similar to my mother's.
19. I call my mother whenever anything goes wrong.
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<tr>
<th>Not at all</th>
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<th>Very true</th>
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_66. I often have to make decisions for my mother._
_67. I'm not sure I could make it in life without my mother._
_68. I sometimes resent it when my mother tells me what to do._
_69. My attitudes regarding mentally ill people are similar to my mother's._
_70. I like to show my friends pictures of my father._
_71. Sometimes my father is a burden to me._
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_73. My ideas regarding racial equality are similar to my father's._
_74. My father's wishes have influenced my selection of friends._
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</tr>
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106. I like to hug and kiss my father.

107. I hate it when my father makes suggestions about what I do.

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111. Even when my father has a good idea I refuse to listen to it because he made it.

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113. My attitudes regarding environmental protection are similar to my father's.

114. I ask my father what to do when I get into a tough situation.

115. I wish my father wouldn't try to get me to take sides with him.

116. My father is my best friend.

117. I argue with my father over little things.
118. My beliefs about how the world began are similar to my father's.

119. I do what my father decides on most questions that come up.

120. I seem to be closer to my father than most people my age.

121. My father is sometimes a source of embarrassment to me.

122. Sometimes I think I am too dependent on my father.

123. My beliefs about what happens to people when they die are similar to my father's.

124. I ask for my father's advice when I am planning my vacation time.

125. I am sometimes ashamed of my father.

126. I care too much about my father's reactions.

127. I get angry when my father criticizes me.

128. My attitudes regarding sex are similar to my father's.

129. I like to have my father help me pick out the clothing I buy for special occasions.

130. I sometimes feel like an extension of my father.

131. When I don't write my father often enough I feel guilty.

132. I feel uncomfortable keeping things from my father.

133. My attitudes regarding national defense are similar to my father's.

134. I call my father whenever anything goes wrong.

135. I often have to make decisions for my father.
<table>
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</thead>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

136. I'm not sure I could make it in life without my father.  
137. I sometimes resent it when my father tells me what to do.  
138. My attitudes regarding mentally ill people are similar to my father's.
APPENDIX E

INVENTORY OF PARENT AND PEER ATTACHMENT
RELATIONSHIPS QUESTIONNAIRE

This questionnaire asks about your relationships with important people in your life—your mother, your father, and your close friends. Please read the directions to each part carefully.

**Part I**

Each of the following statements asks about your feelings about your *mother*, or the woman who has acted as your mother. If you have more than one person acting as your mother (e.g., a natural mother and a stepmother) answer the questions for the one you feel has most influenced you.

Please read each statement and in the blank next to each one, write in the number of the answer that tells how true the statement is for you now.

<table>
<thead>
<tr>
<th>Almost Never or Never</th>
<th>Not Very Often</th>
<th>Sometimes True</th>
<th>Often True</th>
<th>Almost Always or True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. My mother respects my feelings.

2. I feel my mother does a good job as my mother.

3. I wish I had a different mother.

4. My mother accepts me as I am.

5. I like to get my mother's point of view on things I'm concerned about.

6. I feel it's no use letting my feelings show around my mother.

7. My mother can tell when I'm upset about something.

8. Talking over my problems with my mother makes me feel ashamed or foolish.
<table>
<thead>
<tr>
<th>Almost Never or Never</th>
<th>Not Very Often</th>
<th>Sometimes True</th>
<th>Often True</th>
<th>Almost Always or True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. My mother expects too much from me.  
10. I get upset easily around my mother.  
11. I get upset a lot more than my mother knows about.  
12. When we discuss things, my mother cares about my point of view.  
13. My mother trusts my judgment.  
14. My mother has her own problems, so I don’t bother her with mine.  
15. My mother helps me to understand myself better.  
16. I tell my mother about my problems and troubles.  
17. I feel angry with my mother.  
18. I don’t get much attention from my mother.  
19. My mother helps me to talk about my difficulties.  
20. My mother understands me.  
21. When I am angry about something, my mother tries to be understanding.  
22. I trust my mother.  
23. My mother doesn’t understand what I’m going through these days.  
24. I can count on my mother when I need to get something off my chest.  
25. If my mother knows something is bothering me, she asks me about it.
Part II.

This part asks about your feelings about your father, or the man who has acted as your father. If you have more than one person acting as your father (e.g., natural father and step father) answer the questions for the one you feel has most influenced you.

<table>
<thead>
<tr>
<th>Almost Never or Never</th>
<th>Not Very Often</th>
<th>Sometimes True</th>
<th>Often True</th>
<th>Always or True 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. My father respects my feelings.
2. I feel my father does a good job as my father.
3. I wish I had a different father.
4. My father accepts me as I am.
5. I like to get my father's point of view on things I'm concerned about.
6. I feel it's no use letting my feelings show around my father.
7. My father can tell when I'm upset about something.
8. Talking over my problems with my father makes me feel ashamed or foolish.
9. My father expects too much from me.
10. I get upset easily around my father.
11. I get upset a lot more than my father knows about.
12. When we discuss things, my father cares about my point of view.
13. My father trusts my judgment.
14. My father has his own problems, so I don't bother him with mine.
<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Not Very Often</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always or True</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. My father helps me to understand myself better.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>16. I tell my father about my problems and troubles.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>17. I feel angry with my father.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>18. I don't get much attention from my father.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>19. My father helps me to talk about my difficulties.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>20. My father understands me.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>21. When I am angry about something, my father tries to be understanding.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>22. I trust my father.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>23. My father doesn't understand what I'm going through these days.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>24. I can count on my father when I need to get something off my chest.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
<tr>
<td>25. If my father knows something is bothering me, he asks me about it.</td>
<td>True</td>
<td>2</td>
<td>True</td>
<td>3</td>
<td>True</td>
</tr>
</tbody>
</table>
Part III.

This part asks about your feelings about your relationships with your close friends. Please read each statement and write the ONE number that tells how true the statement is for you now.

<table>
<thead>
<tr>
<th>Almost Never or Never</th>
<th>Not Very Often</th>
<th>Sometimes True</th>
<th>Often True</th>
<th>Almost Always or True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

_____ 1. I like to get my friend's point of view on things I'm concerned about.

_____ 2. My friends can tell when I'm upset about something.

_____ 3. When we discuss things, my friends care about my point of view.

_____ 4. Talking over my problems with my friends makes me feel ashamed or foolish.

_____ 5. I wish I had different friends.

_____ 6. My friends understand me.

_____ 7. My friends help me to talk about my difficulties.

_____ 8. My friends accept me as I am.

_____ 9. I feel the need to be in touch with my friends more often.

_____ 10. My friends don't understand what I'm going through these days.

_____ 11. I feel alone or apart when I'm with my friends.

_____ 12. My friends listen to what I have to say.

_____ 13. I feel my friends are good friends.

_____ 14. My friends are fairly easy to talk to.

_____ 15. When I am angry about something, my friends try to be understanding.
<table>
<thead>
<tr>
<th></th>
<th>Almost Never</th>
<th>Not Very Often</th>
<th>Sometimes True</th>
<th>Often True</th>
<th>Almost True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>5</td>
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</tbody>
</table>

16. My friends help me to understand myself better.
17. My friends care about how I am.
18. I feel angry with my friends.
19. I can count on my friends when I need to get something off my chest.
20. I trust my friends.
22. I get upset a lot more than my friends know about.
23. It seems as if my friends are irritated with me for no reason.
24. I can tell my friends about my problems and troubles.
25. If my friends know something is bothering me, they ask me about it.
APPENDIX F

FAMILY STRUCTURE SURVEY
DIRECTIONS: Using the scale below, respond to each item below by indicating how true each item is of you and/or your parents.

PLEASE NOTE: This questionnaire seeks to clarify family process in the home environment with which you are currently most closely associated. Therefore, if your biological parents are divorced and remarried and you either (a) live with a parent and a stepparent or (b) have closer contact with one parent-stepparent pair than the other, refer to the closer parental pair when answering these questions. Otherwise, answer all questions by referring to your biological parents.

<table>
<thead>
<tr>
<th>Completely False</th>
<th>Mostly False</th>
<th>Not Sure</th>
<th>Mostly True</th>
<th>Completely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

1. My mother depends on me for emotional support.
2. Once I’m on my own, things in my family won’t be the same.
3. My parents argue a lot.
4. I spend more time with my family than with my friends.
5. I worry about my parents’ future.
6. My father seeks me out for advice.
7. Time is passing too quickly.
8. I think I’ve been sheltered from the real world.
9. My parents let me make my own decisions.
10. I’m anxious about leaving home.
11. I wonder if my parents will divorce.
12. I don’t keep any secrets from my mother.
13. My father tells me things he won’t tell my mother.
14. I consider my mother to be a mature adult.
15. I want to live close to my parents’ home.
16. My mother expects to know everything I’m doing.
<table>
<thead>
<tr>
<th>Completely False</th>
<th>Mostly False</th>
<th>Not Sure</th>
<th>Mostly True</th>
<th>Completely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. My father respects my rights as an individual.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18. I feel secure that my parents can work out their differences.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19. I can't wait to be totally on my own.</td>
<td></td>
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<tr>
<td>20. My mother often acts like a child.</td>
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</tr>
<tr>
<td>21. My parents seem to be drifting apart.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>22. My father will be very hurt if I don't live near him.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I worry about my family's future.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. My father depends on me for emotional support.</td>
<td></td>
<td></td>
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<tr>
<td>25. I'm prepared to move wherever I can find a good job.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>26. My parents are in love with one another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. My folks look forward to their kid(s) growing up.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I consider my father to be a mature adult.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. My mother worries too much about me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. My father expects to know everything I'm doing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. There are matters my parents won't discuss with each other.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. My parents seem happier than they really are.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I want to stay close to my family.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. My mother seeks me out for advice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. My father often acts like a child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. The family seems to be breaking apart.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. My parents stay together for the children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. My father worries too much about me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
39. I worry about the rest of the family more than my parents do.

40. There is tension in my parents' relationship.

41. My parents usually consult me before making household decisions.

42. I'm not sure why my parents are together.

43. My mother respects my rights as an individual.

44. I don't keep any secrets from my father.

45. My mother tells me things she won't tell my father.

46. My mother will be very hurt if I don't live near her.

47. My parents can handle stress.

48. I wish I were younger.

49. My parents' marriage is solid.

50. My parents know what is best for me.
FAMILY QUESTIONNAIRE

INSTRUCTIONS: For each question, use the scale below and mark the answer in the space provided that best fits how you see your family now. If you feel that your answer is between two of the labeled numbers (the odd numbers), then choose the even number that is between them.

<table>
<thead>
<tr>
<th>Yes: fits our family very well</th>
<th>Some: fits our family some</th>
<th>No: Does not fit our family</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

__ 1. Family members pay attention to each other’s feelings.
__ 2. Our family would rather do things together than with other people.
__ 3. We all have a say in family plans.
__ 4. The grownups in this family understand and agree on family decisions.
__ 5. Grownups in the family compete and fight with each other.
__ 6. There is closeness in my family but each person is allowed to be special and different.
__ 7. We accept each other’s friends.
__ 8. There is confusion in our family because there is no leader.
__ 9. Our family members touch and hug each other.
__ 10. Family members put each other down.
__ 11. We speak our minds, no matter what.
__ 12. In our home, we feel loved.
__ 13. Even when we feel close, our family is embarrassed to admit it.
__ 14. We argue a lot and never solve problems.
__ 15. Our happiest times are at home.
__ 16. The grownups in this family are strong leaders.
17. The future looks good to our family.
18. We usually blame one person in our family when things aren't going right.
19. Family members go their own way most of the time.
20. Our family is proud of being close.
21. Our family is good at solving problems together.
22. Family members easily express warmth and caring towards each other.
23. It's okay to fight and yell in our family.
24. One of the adults in this family has a favorite child.
25. When things go wrong we blame each other.
26. We say what we think and feel.
27. Our family members would rather do things with other people than together.
28. Family members pay attention to each other and listen to what is said.
29. We worry about hurting each other's feelings.
30. The mood in my family is usually sad and blue.
31. We argue a lot.
32. One person controls and leads our family.
33. My family is happy most of the time.
34. Each person takes responsibility for his/her behavior.
35. On a scale of 1 to 5, I would rate my family as:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family functions very well together.</td>
<td>My family does not function well together at all. We really need help.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36. On a scale of 1 to 5, I would rate the independence in my family as:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No one is independent. There are no open arguments. Family members rely on each other for satisfaction rather than on outsiders.)</td>
<td>(Sometimes independent. There are some disagreements. Family members find satisfaction both within and outside of the family.)</td>
<td>(Family members usually go their own way. Disagreements are open. Family members look outside of the family for satisfaction.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX H

CAREER EXPLORATION SURVEY
Career Questions

There are 22 items in this questionnaire. They are descriptions of activities which college students might do in the process of making a decision about a career. Using the scale provided, please indicate to what extent you have behaved in the following ways during the last three months. Write the appropriate number to the left of each item in the space provided.

"During the last three months, I have______________________________"

<table>
<thead>
<tr>
<th>Little</th>
<th>Somewhat</th>
<th>A moderate amount</th>
<th>A substantial amount</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Investigated career possibilities.
2. Gone to various career orientation programs.
3. Obtained information on specific jobs or companies related to my anticipated career area.
4. Initiated conversations with knowledgeable individuals in my anticipated career area.
5. Obtained information on the labor market and general job opportunities in my anticipated career area.
6. Sought information on specific areas of career interest.
7. Reflected on how my past integrates with my future career.
8. Focused my thoughts on me as a person.
10. Been retrospective in thinking about my educational background and career options.
11. Understood a new relevance of past behavior for my future career plans.
12. Reflected on my career and educational options in relation to my family's expectations.
"During the last three months, I have___________________"

<table>
<thead>
<tr>
<th>Little (1)</th>
<th>Somewhat (2)</th>
<th>A moderate amount (3)</th>
<th>A substantial amount (4)</th>
<th>A great deal (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Reflected on my career and educational options in relation to the expectations of my friends and peers.

14. Thought of myself as a separate and autonomous person.

15. Thought of myself in various career roles that I have been considering.

These are descriptions of ideas which college students might have about the process of making a decision about a career. Using the scale provided please indicate your belief about the probability that each of the following activities will result in obtaining your career goal. Write the appropriate number to the left of each item in the space provided.

What is the probability that each of the following activities will result in obtaining your career goals?

<table>
<thead>
<tr>
<th>very low probability (1)</th>
<th>low probability (2)</th>
<th>moderate probability (3)</th>
<th>high probability (4)</th>
<th>very high probability (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Obtaining information on the labor market and general job opportunities in my career area.

17. Initiating conversations with friends and relatives about careers.

18. Initiating conversations with several other students about their career interviews.

19. Assessing myself for the purpose of finding a job that meets my needs.

20. Learning more about myself.

21. Understanding a new relevance of past behavior for my future career.

22. Focusing my thoughts on me as a person.
APPENDIX I

EGO IDENTITY SCALE
Read each item and indicate to what degree it reflects your own thoughts and feelings. If a statement has more than one part, please indicate your reaction to the statement as a whole.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

1. I haven't chosen the occupation I really want to get into, and I'm just working at whatever is available until something better comes along.

2. When it comes to religion, I just haven't found anything that appeals and I don't really feel the need to look.

3. My ideas about men's and women's roles are identical to my parents. What has worked for them will obviously work for me.

4. There's no single "life style" which appeals to me more than another.

5. There are a lot of different kinds of people. I'm still exploring the many possibilities to find the right kind of friends for me.

6. I sometimes join in recreational activities when asked, but I rarely try anything on my own.

7. I haven't really thought about a "dating style." I'm not too concerned whether I date or not.

8. Politics is something that I can never be too sure about because things change so fast. But I do think it's important to know what I can politically stand for and believe in.

9. I'm still trying to decide how capable I am as a person and what jobs will be right for me.

10. I don't give religion much thought and it doesn't bother me one way or the other.
<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>There's so many ways to divide responsibilities in marriage, I'm trying to decide what will work for me.</td>
<td>1-6</td>
</tr>
<tr>
<td>12</td>
<td>I'm looking for an acceptable perspective for my own &quot;life style&quot; view, but I haven't really found it yet.</td>
<td>1-6</td>
</tr>
<tr>
<td>13</td>
<td>There are many reasons for friendship, but I choose my close friends on the basis of certain values and similarities that I've personally decided on.</td>
<td>1-6</td>
</tr>
<tr>
<td>14</td>
<td>While I don't have one recreational activity I'm really committed to, I'm experiencing numerous leisure outlets to identify one I can really get involved in.</td>
<td>1-6</td>
</tr>
<tr>
<td>15</td>
<td>Based on past experiences, I've chosen the type of dating relationship I want now.</td>
<td>1-6</td>
</tr>
<tr>
<td>16</td>
<td>I haven't really considered politics. It just doesn't excite me much.</td>
<td>1-6</td>
</tr>
<tr>
<td>17</td>
<td>I might have thought about a lot of different jobs, but there's never really any question since my parents said what they wanted.</td>
<td>1-6</td>
</tr>
<tr>
<td>18</td>
<td>A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.</td>
<td>1-6</td>
</tr>
<tr>
<td>19</td>
<td>I've never really seriously considered men's and women's roles in marriage. It just doesn't seem to concern me.</td>
<td>1-6</td>
</tr>
<tr>
<td>20</td>
<td>After considerable thought I've developed my own individual viewpoint of what is for me an ideal &quot;lifestyle&quot; and don't believe anyone will be likely to change my perspective.</td>
<td>1-6</td>
</tr>
<tr>
<td>21</td>
<td>My parents know what's best for me in terms of how to choose my friends.</td>
<td>1-6</td>
</tr>
<tr>
<td>22</td>
<td>I've chosen one or more recreational activities to engage in regularly from lots of things and I'm satisfied with those choices.</td>
<td>1-6</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>Moderately Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>-------</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

23. I don't think about dating much. I just kind of take it as it comes.

24. I guess I'm pretty much like my folks when it comes to politics. I follow that they do in terms of voting and such.

25. I'm really not interested in finding the right job, any job will do. I just seem to flow with what is available.

26. I'm not sure what religion means to me. I'd like to make up my mind but I'm not done looking yet.

27. My ideas about men's and women's roles come right from my parents and family. I haven't seen any need to look further.

28. My own views on a desirable life style were taught to me by my parents and I don't see any need to question what they taught me.

29. I don't have any real close friends, and I don't think I'm looking for one right now.

30. Sometimes I join in leisure activities, but I really don't see a need to look for a particular activity to do regularly.

31. I'm trying out different types of dating relationships. I just haven't decided what is best for me.

32. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.

33. It took me a while to figure it out, but now I really know what I want for a career.

34. Religion is confusing to me right now. I keep changing my views on what is right and wrong for me.

35. I've spent some time thinking about men's and women's roles in marriage and I've decided what will work best for me.
170

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

36. In finding an acceptable viewpoint to life itself, I find myself engaging in a lot of discussions with others and some self-exploration.

37. I only pick friends my parents would approve of.

38. I've always liked doing the same recreational activities my parents do and haven't ever seriously considered anything else.

39. I only go out with the type of people my parents expect me to date.

40. I've thought my political beliefs through and realize I can agree with some and not other aspects of what my parents believe.

41. My parents decided a long time ago what I should go into for employment and I'm following through their plans.

42. I've gone through a period of serious questions about faith and can now say I understand what I believe in as an individual.

43. I've been thinking about the roles that husbands and wives play a lot these days, and I'm trying to make a final decision.

44. My parent's views on life are good enough for me, I don't need anything else.

45. I've tried many different friendships and now I have a clear idea of what I look for in a friend.

46. After trying a lot of different recreational activities, I've found one or more I really enjoy doing by myself or with friends.

47. My preferences about dating are still in the process of developing. I haven't fully decided yet.

48. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.
171

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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</table>

49. It took me a long time to decide but now I know for sure what direction to move in for a career.

50. I attend the same church my family has always attended. I've never really questioned why.

51. There are many ways that married couples can divide up family responsibilities. I've thought about lots of ways and now I know exactly how I want it to happen for me.

52. I guess I just kind of enjoy life in general, and I don't see myself living by any particular viewpoint to life.

53. I don't have any close friends. I just like to hang around with the crowd.

54. I've been experiencing a variety of recreational activities in hopes of finding one or more I can enjoy for some time to come.

55. I've dated different types of people and now know exactly what my own "unwritten rules" for dating are and who I will date.

56. I really have never been involved in politics enough to have made a firm stand one way or the other.

57. I just can't decide what to do for an occupation. There are so many that have possibilities.

58. I've never really questioned my religion. If it's right for my parents it must be right for me.

59. Opinions on men's and women's roles seem so varied that I don't think much about it.

60. After a lot of self-examination I have established a very definite view on what my own lifestyle will be.

61. I really don't know what kind of friend is best for me. I'm trying to figure out exactly what friendship means to me.
172

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Moderately Agree</th>
<th>Agree</th>
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62. All of my recreational preferences I got from my parents and I haven't really tried anything else.

63. I date only people my parents would approve of.

64. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.
APPENDIX J

CAREER DECISION-MAKING SELF EFFICACY SCALE
CAREER QUESTIONNAIRE

INSTRUCTIONS: For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the following 10-point continuum:

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Example: How much confidence do you have that you could:

A. Summarize the skills you have developed in the jobs you have held?

If your response on the 10-point continuum was 5, "some confidence," you would write the number 5 in the right-hand blank.

HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD

___ 1. List several majors that you are interested in.
___ 2. Find information in the library about occupations you are interested in.
___ 3. Select one major from a list of potential majors you are considering.
___ 4. Make a plan of your goals for the next five years.
___ 5. Determine the steps to take if you are having academic trouble with an aspect of your chosen major.
___ 6. Accurately assess your abilities.
___ 7. Find information about companies who employ people with college majors in English.
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How much confidence do you have that you could

8. Select one occupation from a list of potential occupations you are considering.
9. Determine the steps you need to take to successfully complete your chosen major.
10. Persistently work at your major or career goal even when you get frustrated.
11. List several occupations that you are interested in.
12. Find information about educational programs in engineering.
13. Choose a career that will fit your preferred lifestyle.
14. Prepare a good resume.
15. Change majors if you did not like your first choice.
16. Determine what your ideal job would be.
17. Talk to a faculty member in a department you are considering for a major.
18. Make a career decision and then not worry about whether it was right or wrong.
19. Get letters of recommendation from your professors.
20. Change occupations if you are not satisfied with the one you enter.
22. Ask a faculty member about graduate schools and job opportunities in your major.
23. Choose a major or career that your parents do not approve of.
24. Get involved in a work experience relevant to your future goals.
HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD

25. Resist attempts of parents or friends to push you into a career or major you believe is beyond your abilities.
26. Figure out whether you have the ability to successfully take math courses.
27. Describe the job duties of the career/occupation you would like to pursue.
28. Choose a career in which most workers are the opposite sex.
29. Find and use the Placement Office on campus.
30. Move to another city to get the kind of job you really would like.
31. Determine the academic subject you have the most ability in.
32. Find the employment trends for an occupation in the 90's.
33. Choose a major or career that will fit your interests.
34. Decide whether or not you will need to attend graduate or professional school to achieve your career goals.
35. Apply again to graduate schools after being rejected the first time.
36. Determine whether you would rather work primarily with people or with information.
37. Find out about the average yearly earnings of people in an occupation.
38. Choose a major or career that will suit your abilities.
39. Plan course work outside of your major that will help you in your future career.
40. Identify some reasonable major or career alternatives if you are unable to get your first choice.
41. Figure out what you are and are not ready to sacrifice to achieve your career goals.
177

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HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD

___42. Talk with a person already employed in the field you are interested in.

___43. Choose the best major for you even if it took longer to finish your college degree.

___44. Identify employers, firms, institutions relevant to your career possibilities.

___45. Go back to school to get a graduate degree after being out of school 5-10 years.

___46. Define the type of lifestyle you would like to live.

___47. Find information about graduate or professional schools.

___48. Choose the major you want even though the job market is declining with opportunities in this field.

___49. Successfully manage the job interview process.

___50. Come up with a strategy to deal with flunking out of college.

___51. I believe that I can successfully decide on a major and feel comfortable with it.

___52. I believe that I can successfully decide on a career and feel comfortable with it.
Appendix K

Significant Predictors of Each Independent and Control Variable

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status: an identity instrument for use with late  


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