FAMILY TIES AND GROWING UP TO BE: LATE ADOLESCENT CAREER DEVELOPMENT AND INTERGENERATIONAL FAMILY RELATIONSHIPS

by

Dan Markham Sandifer

Dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY in Family and Child Development

APPROVED

Jay A. Mancini, Chair

Claire M. Cole
Michael J. Sporakowski

Howard O. Protinsky
J. Michael Hester

May 7, 1993
Blacksburg, Virginia
FAMILY TIES AND GROWING UP TO BE: LATE ADOLESCENT CAREER DEVELOPMENT AND INTERGENERATIONAL FAMILY RELATIONSHIPS

by

Dan Markham Sandifer

Committee Chair: Jay A. Mancini, Ph.D.

Family and Child Development
Marriage and Family Therapy

(ABSTRACT)

The research context for this study is family influence upon adolescent career phenomena. The construct of family influence was focused through use of intergenerational family systems theory (IFS). The career construct was focused through use of Donald Super's theoretical and research work in the area of career development. The purpose of this study was to explore the impact of IFS variables (fusion/individuation, intimacy, triangulation, intimidation, and personal authority) on college students' career development process variables (planning, exploration, decision making, world of work information).

Data were obtained from university undergraduates and one of their primary parent figures. The final sample on which the results were computed was composed of 139 parent/university student dyads. Demographic data indicated that the student portion of the sample was predominately female (81%) and Caucasian (89%). The student selected primary parents were predominately female (82%) birth
parents (98%) whose households were within the top two levels of social position.

Multiple regression analyses determined that several IFS variables significantly impacted students' career development process variables. Higher levels of intimacy and lower levels of intimidation between students and their parents were associated with positive career development profiles. Lower levels of triangulation and intimidation between parents and their parents were associated with positive career development profiles. Lower levels of intimacy and personal authority between parents and their parents were associated with positive career development profiles. Higher levels of intimacy and individuation between parents and their partners were associated with positive career development profiles.

The results of the study generally support the notion that family dynamics are related to late adolescent career development processes. Students may benefit from attention to the family system, particularly in terms of both voluntary closeness between students and parents, and issues of intimidation and triangulation between parents and their parents.
ACKNOWLEDGEMENTS

Acknowledgments related the completion of this research project and the completion of my graduate school experience are intertwined. Likewise this process has impacted both my personal and professional lives.

Dr. Jay Mancini, I have benefitted from your trust and confidence in me beginning with my first assistantship with you. Your accessibility, support, and guidance during this project were invaluable. I look forward to more work together.

I also acknowledge the contributions of the other members and unofficial members of my dissertation committee. Dr. Michael Sporakowski, I value your effort in editing my document. Dr. Claire Cole, your initial questions helped me think deeper about my topic and method. I also value your attention to detail in editing my document. Dr. Howard Protinsky, your initial suggestion to include parents’ family of origin information added to my study. I have benefitted throughout this program from your clinical knowledge and your collegial style. Dr. Michael Hester, counselor, mentor, and friend, your editorial comments improved my document, and your presence enriched the ending of this life phase. Dr. Kelly Harrison, your direction and assistance with main frame data analysis was invaluable.

Numerous persons on the faculty in the Family and Child
Development Department have expanded my thinking, changed my credo, and nurtured my development. Dr. James Keller, you exposed me to brackets and truth, knowledge as fit, and lemons and lemonade. Dr. Katherine Allen, you coupled the personal and political, and expanded the scope of my vision. Dr. Joe Maxwell, you have been a voice of welcome to me initially and throughout the course.

I also acknowledge my therapy student colleagues. Lydia, you brought my assumptions to the surface, and your friendship has been rewarding; Lynn, your friendship has been sustaining and enriching; Alan, your energy and quiet perseverance inspired me. The support of other friends in and the department—Rachel, Sharon, Arleen, Phyllis, and others—has been invaluable.

To my family of origin, Mom, Dad, Dean, and Darrell, thank you for the confidence that I could and I should. To Vicki, thank you for your love, companionship, support, and help over the last two years.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and Existing Research</td>
<td>1</td>
</tr>
<tr>
<td>Theoretical Rationale</td>
<td>7</td>
</tr>
<tr>
<td>Career Development Theory</td>
<td>7</td>
</tr>
<tr>
<td>Career Development Process Variables</td>
<td>11</td>
</tr>
<tr>
<td>Systems Theory</td>
<td>13</td>
</tr>
<tr>
<td>Intergenerational Family System Variables</td>
<td>22</td>
</tr>
<tr>
<td>Research Questions and Hypotheses</td>
<td>27</td>
</tr>
<tr>
<td>Method</td>
<td>29</td>
</tr>
<tr>
<td>Sampling Procedure</td>
<td>29</td>
</tr>
<tr>
<td>Data Collection</td>
<td>31</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>33</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>42</td>
</tr>
<tr>
<td>Results</td>
<td>44</td>
</tr>
<tr>
<td>Description of the Sample</td>
<td>44</td>
</tr>
<tr>
<td>Descriptive Statistics of Independent Variables</td>
<td>46</td>
</tr>
<tr>
<td>Descriptive Statistics of Dependent Variables</td>
<td>49</td>
</tr>
<tr>
<td>Multiple Regression Analyses</td>
<td>53</td>
</tr>
<tr>
<td>Outcomes of Hypotheses Testing</td>
<td>58</td>
</tr>
<tr>
<td>Discussion</td>
<td>76</td>
</tr>
<tr>
<td>Study Results, Theory, and Existing Research</td>
<td>77</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>82</td>
</tr>
<tr>
<td>Implications</td>
<td>83</td>
</tr>
<tr>
<td>Theory</td>
<td>83</td>
</tr>
</tbody>
</table>
vii

Research.................................................86

Practice.................................................88

Conclusion .............................................91
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Norm and Sample Group Comparisons of Students’ Family of Origin Variables</td>
<td>47</td>
</tr>
<tr>
<td>2. Norm and Sample Group Comparisons of Students’ Current Relationship Variables</td>
<td>48</td>
</tr>
<tr>
<td>3. Norm and Sample Group Comparisons of Parents’ Family of Origin Variables</td>
<td>50</td>
</tr>
<tr>
<td>4. Norm and Sample Group Comparisons of Parents’ Current Relationship Variables</td>
<td>51</td>
</tr>
<tr>
<td>5. Norm and Sample Group Comparisons of Students’ Career Development Variables by Classification and Sex</td>
<td>52</td>
</tr>
<tr>
<td>6. Correlation Coefficients of Career Development Process Variables and Students’ Family of Origin Variables</td>
<td>54</td>
</tr>
<tr>
<td>7. Correlation Coefficients of Career Development Process Variables and Students’ Current Relationship Variables</td>
<td>56</td>
</tr>
<tr>
<td>8. Correlation Coefficients of Career Development Process Variables and Parents’ Family of Origin Variables</td>
<td>57</td>
</tr>
<tr>
<td>9. Correlation Coefficients of Career Development Process Variables and Parents’ Current Relationship Variables</td>
<td>59</td>
</tr>
<tr>
<td>10. Summary of Significant Relationships of Career Development Dependent Variables Regressed on Students’ Family of Origin Variables</td>
<td>63</td>
</tr>
<tr>
<td>12. Summary of Significant Relationships of Career Development Dependent Variables Regressed on Parents’ Current Relationship Variables</td>
<td>71</td>
</tr>
</tbody>
</table>
13. Summary of Significant Relationships of Career Development Dependent Variables Regressed on IFS Variables for the Controlled Sample of Freshmen and Sophomores

14. Summary of Significant Relationships of Career Development Dependent Variables Regressed on IFS Variables for the Controlled Sample of Juniors and Seniors
In the second half of this century theorists and researchers from a broad range of disciplines such as vocational guidance, vocational psychology, developmental psychology, and career counseling have made a sustained effort to understand the developmental processes involved in choosing a career. Overall, career development processes have been conceptualized and investigated from an intrapsychic or personal perspective (Bratcher, 1982; Friesen, 1986). Important influences upon career development from this perspective include IQ, self esteem, and decision-making styles. Herr and Lear (1984) state, "It is axiomatic that the family influences the career values, attitudes, knowledge, and behaviors of its members" (p. 2). However, as in other disciplines such as clinical and developmental psychology, the individual’s interactions and relationships with parents, extended family, and peer group have historically received less attention in career development theory and research than intrapsychic or personal influences (Bratcher, 1982; Friesen, 1986). The major career development theorists (Bordin, Nachman, & Segal, 1963, Crites, 1969; Holland, 1959; Roe, 1957; Super, 1957) have varied in the explicit attention they have paid to family influence on career phenomena; however, when considered, family influence is generally conceptualized in objective, sociological terms
(Herr & Lear, 1984). Super (1957) and Roe (1956) have viewed the influence of the family of origin as important in the individual’s career development. Super (1957) categorized family influence into subjective factors or objective factors. Subjective factors included family attitudes and interpersonal relations and interactions. Objective factors included family composition, economic resources, and activities engaged in by family members. Super (1957) gives considerably more attention to objective factors. Super (1957) mentions relational topics such as early independence training; however, the factors which receive the most attention are socioeconomic status, religious values, life experiences, affiliations, and values. The quality, type, and dimensions of nuclear and intergenerational family relationships are missing.

Researchers of the topic of family influence seem to have followed the theorists’ lead. A comprehensive literature review compiled in the early 1980s indicates that the study of family influence on adolescent career phenomena has been primarily a study of sociological family variables (socioeconomic status, racial/ethnic background, family configuration, father’s employment, mother’s employment) on vocational outcomes (Schulenberg, Vonderacek, & Crouter, 1984). Socioeconomic status, the most studied sociological family variable, has repeatedly proven to be a significant
predictor of that individuals' occupational status. The positive association between SES and occupational status exists for males and females, though the magnitude is less for females (Schulenberg, et al., 1984). In the few instances when career development processes as opposed to occupational status or choice are considered, a positive correlation with SES has also been found (Osipow, 1983; Super & Overstreet, 1960). In the area of family configuration, studies show that children from larger families tend to achieve lower occupational status (Schulenberg, et al., 1984). Studies focusing on birth-order and vocational choice have led to inconsistent and contradictory findings (Schulenberg, et al., 1984). Maternal employment studies consistently indicate that if a daughter's mother was employed outside the home, there is a greater probability that the daughter also will work outside the home (Schulenger, et al., 1984). The primary relational variable studied has been the father-son relationship. Mortimer (1976) found that occupational transmission was highest when the son reported a close father-son relationship and when the father's occupational status was high (Schulenber, et al. 1984). Through the early 1980s the construct of family interaction patterns and/or family relational dynamics as an influence on career development
processes has been largely ignored by researchers (Schulenberg, et al. 1984).

In the last decade writers in the field of career development, guided by the increased acceptance of the relationship between family dynamics and family health and dysfunction, have begun to speculate about relationships between family dynamics and adolescent career development. Family interactional patterns, alliances between members, the flexibility for change, boundaries, and the degree of emotional interdependence are relational dynamics which vary across families. These dynamics may be related to career development (Bratcher, 1982; Friesen, 1986; Lopez & Andrews, 1987; Zingaro, 1983).

The limited number of researchers who have investigated the conceptualization of family relationship dynamics as independent variables which potentially influence career phenomena dependent variables have found some support for this relationship. In a study of the levels of career development in a sample of high school seniors in southwestern Virginia, Hesser (1981) utilized the circumplex model of family interaction patterns (Olson, Sprenkle & Russell, 1979) and its accompanying assessment instrument FACES (Olson, Bell & Portner, 1978) to conceptualize family influence as levels of cohesion and adaptability. Results of responses (from students only) indicated that statistically
significant relationships existed between the variables career planning, decision making, and world-of-work information and family adaptability-family cohesion measures (Hesser, 1981).

In his discussion of career development variables and subdimensions within adaptability and cohesion, Hesser (1981) suggests: (1) favorable career planning attitudes are more readily characteristic of adolescents in cohesive family units; (2) more favorable career planning orientations correspond with stable families having flexible leadership styles; (3) the family's tendency to form coalitions (a cohesion subdimension) was negatively associated with career exploration; (4) overall, adolescents from families with a combination of flexibility/structure and separateness had higher world-of-work information scores.

In a study of the degree of career indecision of a sample of 604 undergraduate and graduate students at a large southwestern university, Kinnier, Brigman, and Noble (1990) conceptualized family dynamics in terms of intergenerational family systems theory concepts—fusion and intergenerational triangulation. Kinnier, et al. (1990) hypothesized that family of origin fusion and triangulation may be a precursor to career indecisiveness. Along with the family system variables, this study included age and student status
(graduate versus undergraduate) as predictor variables. Students in the sample completed two instruments: The Career Decision Scale (CDS) (Osipow, Carney, Winer, Yanico, & Koschier, 1976) and The Personal Authority in the Family System Questionnaire (PAFS-QVC) (Bray & Harvey, 1987). Use of PAFS-QVC was limited to two of the eight scales: Intergenerational Fusion/Individuation and Intergenerational Triangulation. Simultaneous regression analysis identified three of the variables as significantly contributing to the variance of career indecision. Age accounted for 6% of the variance, while Student Status, and Individuation accounted for an additional 2% and 3%. Triangulation was not a significant predictor variable.

Hesser (1981) and Kinnier, et al. (1990) have begun the process of understanding the influence on family dynamics on career phenomena. Additional research is needed to respond to the gap in theory and research. The relationship between intergenerational family systems variables and adolescents’ and/or college students’ career development process variables has not been researched. The purpose of the present research is to determine the relative importance of intergenerational family systems variables (both from first and second generation’s point of view) on late adolescents’ career development process variables. In this research "late adolescence" is defined as the development stage from
approximately age 18 to age 24. Based on criteria discussed by Pedhazar (1982) this research is explanatory—whose main emphasis is understanding the phenomena—as opposed to predictive—whose main emphasis is on practical forecasting applications.

**Theoretical Rationale**

**Career Development Theory**

The theoretical field of career development emerged out of the vocational guidance field in the mid 1900s. Career development theorists expanded the traditional emphasis upon maximizing compatibility between aptitude for performance and job requirements to include the psychological nature of vocational choice (Herr & Cramer, 1979). Career development expanded the scope of the vocational phenomenon to include a broad range of life experiences and a concern for events before and after job choice (Herr & Cramer, 1979).

**Super's Career Development Theory**

The most comprehensive and influential developmental approach in vocational psychology is promulgated by Donald Super. Super formulated an integrative approach which stresses the interaction of personal and environmental variables of career development (Herr & Cramer, 1979).

In developing his model, Donald Super seems to have been influenced by self-concept theory and developmental psychology (Osipow, 1983). Super (1957) perceived career
choice and the behaviors leading to it as activities whose goal was to implement the self-concept. The vocational choice made, or the particular behavior engaged in prior to a choice, was a function of the individual's stage of life development. Borow (1982) states, "He [Super] interprets career development behavior as a time-extended effort to build and implement a self-concept" (p. 34).

The time extended effort in Super's theory is conceived of as a life-long process which begins in childhood and usually ends in the period following retirement (Jordaan, 1974). Movement is dependent upon an individual's mastery of increasingly complex tasks which arise in a series of more or less clearly discernible stages and substages (Herr & Cramer, 1979; Jordaan, 1974). Super assumed that these tasks are normal life-adjustment problems that are imposed by the society (Borow, 1982). Super (1957) characterized the stages, after Buehler, as growth (childhood), exploration (adolescence), establishment (young adulthood), maintenance (maturity), and decline (old age).

The bulk of Super's work is concentrated on the exploratory stage--encompassing the age range of 15-24 years. Super (1957) divided this stage into three substages: (1) The Tentative Substage, ages 15-17; (2) The Transition Substage, ages 18-21; and (3) The Trial Substage, ages 22-24. During the Tentative Substage (which parallels
the last three years of high school), persons consider and take stock of needs, interests, capacities, values and opportunities. Based on these considerations, tentative choices are made and tried out in fantasy, discussion, courses, work and other experiences. Persons identify possible appropriate fields and levels of work (Jordaan, 1974). The primary task of the Tentative Substage is identified as crystallizing a vocational preference (Herr & Cramer, 1979). In the Transition Substage, individuals encounter the labor market, professional training, and/or education and strive to implement their self concept. During this substage, reality considerations exercise increasingly greater influence on choices which are made. The primary task of the Transition Substage is specifying a vocational preference (Herr & Cramer, 1979). In the Trial Substage, a first job is found and tried out on the premise that the work involved reflects an appropriate choice representative of one's self concept (Hesser, 1981; Jordaan, 1974). The primary task of the Trial Substage is conceptualized as implementing a vocational preference (Herr & Cramer, 1979).

For nearly a quarter of a century, Super and his collaborators have been involved in extensive longitudinal research of the exploration stage of career development (Super & Overstreet, 1960). This research has been focused
toward theory refinement and the development of possible measures or indices of vocational maturity during adolescence (Savickas, 1990). Super (1974) indicated that adolescent career development involves and can be measured along five primary dimensions:

1. Planful attitudes toward life stages and tasks
2. Attitudes toward exploration
3. Educational and occupational information
4. Knowledge of decision-making principles and practice
5. Realism.

The variables that constitute these dimensions have been modified and refined in the development of assessment instruments; however, the basic dimensions in the theoretical model have remained unchanged (Savickas, 1990).

The incorporation of Intergenerational Family Systems (IFS) Theory can expand the categories of "family influence" within career development theory. IFS leads researchers to look beyond obvious or the personally experienced family variables. IFS introduces categories such as the relationship network's constraints upon planning, attitudes toward exploration, and decision making. IFS also leads researchers to look beyond the nuclear family to the parental family of origin.
Summary.

Super's theory is an organized and systematic articulation of the process of career development. Career development is conceptualized as an interaction between personal and environmental variables. The personal dimensions through which adolescents engage their environment and subsequently develop toward the vocational aspect of a self concept are well identified.

Theoretically Derived Career Development Process Variables

Super and his colleagues constructed the assessment instrument, Career Development Inventory (CDI), (Thompson, Linderman, Super, Jordaan, & Myers, 1981), (see instrumentation section below) to measure the first four dimensions of their theoretical model (Savickas, 1990). These four dimensions were used as criterion variables in the present research. The variables are defined as follows:

Career Planning (CP): the extent of planning through career-related high school and post-high school activities, as well as amount and extent of thinking about the future as assessed by Scale CP of the Career Development Inventory-College and University Form (Savickas, 1990; Thompson, Linderman, Super, Jordaan, and Myers, 1981).

Example: "Talking about career plans with an adult who knows something about me: A) I have not yet given any thought to this; B) I have given some thought to this, but
havent't made any plans yet; C) I have some plans, but am still not sure of them; D) I have made definite plans, but don't know yet how to carry them out; E) I have made definite plans, and know what to do to carry them out".

**Career Exploration (CE):** the willingness to find and use good resources--relatives, friends, other adults, media, etc.--for career planning as assessed by Scale CE of the Career Development Inventory--College and University Form (Savickas, 1990; Thompson, et al., 1981).

Example: Would you go to professors or faculty advisors for information or help in making your plans for work or further education? A) Definitely not; B) Probably not; C) Probably; D) Definitely.

**Career Decision-Making Information (DM):** the ability to apply decision-making principles and methods to solve problems involving educational and occupational choices as assessed by Scale DM of the Career Development Inventory--College and University Form (Savickas, 1990; Thompson, et al., 1981).

Example: J.D. might like to become a computer programmer, but knows little about computer programming, and is going to the library to find out more about it. The most important thing for J.D. to know now is: A) what the work is, what one does on the job; B) what the pay is; C) what the hours of work are; D) where one can get the right training.
World-of Work Information (WW): the knowledge of types of occupations and ways to obtain and succeed in jobs as assessed by Scale WW of the Career Development Inventory--College and University Form (Savickas, 1990; Thompson, et al., 1981).

Example: The most important thing about the courses you take at college or the jobs you take after you leave college is A) what the courses or jobs tell you about your interests and abilities; B) whether the courses or jobs are easy or difficult; C) whether your parents approve of the choice of courses or jobs; D) what your instructors or employers think of you.

Systems Theory

The discipline of systems theory is a broad and varied landscape with numerous streams (Kerr, K., 1991). These streams share two common assumptions--the whole is greater than the sum of its parts and the interconnection of individual parts--however, beyond these assumptions significant differences do exist. This research will utilize the stream of the systems discipline known as Murray Bowen's Intergenerational Family Systems Theory (IFS). IFS, often referred to as Bowen Theory was developed and is predominately used in relation to family health and dysfunction; however, IFS has been cited as holding particular promise for helping to understand the role of
family relationships upon career development and career decision making (Bratcher, 1982; Herr & Lear, 1984; Zingaro, 1983).

**Intergenerational Family Systems Theory**

Intergenerational Family Systems Theory (IFS) emerged from Bowen’s personal interests in biology, ethnology, Darwin evolutionary theory, and animal behavior (Kerr, K., 1991). Bowen anchored his theory on the assumption that "the human and the human family are driven and guided by processes that are written in nature" (Kerr & Bowen, 1988, p. 26). Families in Bowen’s system are naturally occurring systems that form without humans creating them or being aware of them (Kerr & Bowen, 1988). Kerr and Bowen (1988) stated, "The principles that govern a natural system are written in nature . . . for us to discover" (p.24).

The connection of the Bowen approach to human families to the nature of the entire species and its relationship to all other forms of life is a lofty task taken on by writers elsewhere (Friedman, 1991; Kerr & Bowen, 1987). The present research draws on IFS content specifically related to individual functioning and family relationships. Several key IFS concepts seem appropriately applicable to adolescent career development: individuation or differentiation of self, the emotional system, fusion, the intergenerational transmission process, and triangles. These theoretical
concepts are interrelated yet will be discussed separately for the purpose of description.

**Emotional System.**

As do all systems theories, IFS conceptualizes each member of a system as an individual and yet integrally connected with the other members of her/his family. In IFS this connection is based on the conceptualization of an emotional system. In a broad sense the emotional system is a naturally occurring system that enables a person--indeed all forms of life--to receive information (from within itself and from the environment), to integrate that information, and to respond on the basis of it (Kerr & Bowen, 1987). The emotional system guides or drives the family's finding and obtaining food and shelter, propagation and preservation of life, and other aspects of social relations (Kerr & Bowen, 1987). The emotional system is always evident within the confines of individual organisms and is also evident between individuals when they are in some type of enduring association with one another (Kerr & Bowen, 1987).

The most significant aspect of the naturally occurring emotional system for our species is the existence of two counterbalancing life forces--individuality and togetherness. These forces influence every human. The life force of individuality inclines people to follow their own
directives, to be independent (Kerr & Bowen, 1987). Overconnection and fusion of individuals into one unit is the directional pull of the force of togetherness (Kerr & Bowen, 1987). These forces are the heart of the processes that govern relationships.

**Differentiation of Self/Individuation.**

Differentiation or individuation (the opposite of which is fusion) is related to the process of defining a self within the context of these opposing life forces (Bowen, 1978; Wylie, 1991). Differentiation is conceptualized as containing two interrelated additive levels—intrapsychic and inter-personal (Kerr & Bowen, 1987; Nichols & Schwartz, 1991). The intrapsychic aspect of differentiation involves the ability—or more likely the inability—to distinguish between the feeling process and the intellectual process (Kerr & Bowen, 1987).

The inter-personal aspect of differentiation involves the issue of autonomous identity—charting one’s own course in life. Indeed, to grow, think, feel and act for one’s self—particularly in the presence of a group—is the essence of what it means to be differentiated (Kerr & Bowen, 1987). Friedman (1991) stated that “differentiation means the capacity to become oneself out of one’s self with minimum reactivity to the positions or reactivity of others” (p. 140). Bowen quickly cautioned, however, that such self
defining actions are often fueled by anger reactions (Wylie, 1991). In Bowen's concept of differentiation, this movement is a thoughtfully determined direction (Kerr & Bowen, 1988).

The two levels are inherently interrelated (Kerr and Bowen, 1988; Nichols & Schwartz, 1991). Persons who can distinguish between thinking and feeling are less reactive to others. The ability to distinguish between thinking and feeling at the intrapsychic level aids one in gaining the ability to direct one's life and solve problems (Kerr & Bowen, 1988).

Bowen and other developers of the differentiation construct assume that an individual's levels of differentiation can be conceptualized along a low/high continuum (Bowen, 1978; Kerr & Bowen, 1988). Bowen (1978) explained that at the lower end of the scale "so much life energy goes into seeking love and approval, or attacking the other for not providing it, that there is little energy left for self-determined, goal-directed activity" (p. 474). Higher placement on the differentiation scale is connected to goal directed activity (Bowen, 1978). Persons at high differentiation levels take "I positions"—giving themselves permission and approval (Kerr & Bowen, 1988; Wylie, 1991). In terms of differentiation "achieving more" is an invariant goal.
Bowen's construct of differentiation has potential for adding to the understanding of influences on career phenomena—career choice, career development, indecisiveness (Bratcher, 1982; Zingaro, 1983). The degree to which late adolescents are exploring and/or planning for a career may be related to the dynamics of differentiation/individuation. An adolescent’s decision making patterns in the area of careers may be related to his/her ability to distinguish feeling processes from thought processes. The ability for self-determined activity may contribute to overall levels of career development.

**Fusion.**

The opposite end of the continuum from differentiation of self is fusion. This concept relates to how emotionally "stuck together" persons are in relationships. Persons with high levels of fusion have high levels of reactivity to the positions and emotional reactions of persons in their family. Frequent "we positions" and difficulty taking "I positions" are common for persons with fused relationships. The level of fusion reflects the degree of unresolved emotional attachment to the parental family (Kerr & Bowen, 1988).

**Intergenerational Transmission Process.**

The family emotional process across three generations is connected by virtue of an intergenerational transmission
process (ITP). The ITP occurs primarily through relationships; however, it includes aspects of nature such as genetic heritage. The content which is transmitted includes aspects of the previously discussed emotional system such as behaviors, feelings, subjectively determined attitudes, values, beliefs, and patterns of family functioning (Kerr & Bowen, 1988). These assumptions take emotional illness not only beyond the individual to the family, but also beyond the nuclear family to several generations (Nichols & Schwartz, 1991). For example in situations where a child is symptomatic (bed wetting) therapists working in this theory might work with the family structure through coaching a parent to increase his/her level of differentiation from his/her parents. A father’s or mother’s differentiation from the triangles of his/her own family of origin can unlock a nuclear system and symptoms will often disappear (Freidman, 1985).

Career development or lack of it may also be located in the structure of the system rather than in the nature of the adolescent. An adolescent’s low levels of career development may coexist with particular family structure patterns in the parental family of origin.

**Triangles.**

The basic concept of triangles is the involvement of a third person in a dyadic relationship. According to Bowen,
triangles are simply a fact of nature. Dyadic relationships are easily disturbed by emotional forces within it and from outside—they are inherently unstable. The "crowd" of the third person decreases anxiety in the twosome by spreading it through three relationships. (Kerr & Bowen, 1988)

The most common source of anxiety in a dyadic relationship is when there is too much closeness or too much distance (Richardson, 1984). When anxiety is high, one person in the dyadic relationship will triangle in a third person, activity, or substance. Triangling cools off tension but freezes the conflict in place (Nichols & Schwartz, 1991). In such situations, triangles serve as anxiety binding mechanisms (Kerr & Bowen, 1988). In nuclear families, this scenario often involves one parent involving a child as a triangle in the marital relationship. If the high anxiety and thus the triangle remain in place over a long period of time, symptoms often develop in one or more members of the triangle (Kerr & Bowen, 1988). Additionally, Bowen stressed that this process often takes place across generational lines. As noted above, family systems are not just nuclear families with two parents and some children, but generations of family members connected by an intergenerational transmission process. Most families experience various interlocking triangles spread between the nuclear and extended families.
Triangles are a product of the undifferentiation in the human process (Kerr & Bowen, 1988). The likelihood of needing and/or being pulled into a triangle depends on the level of differentiation. Family members with low levels of differentiation are more subject to anxiety and have higher needs for pulling in a third person or activity. Family members with low levels of differentiation also have less resistance to being involved in a triangle.

The symptoms or consequences which often develop in persons involved in a triangle over a long period of time perhaps include an adolescent's low levels of planfulness or exploration into the world of careers. Adolescents whose parents are bound in a long-term triangled relationship with grandparents may have experienced limited freedom to begin thinking about a career.

**Summary.**

Intergenerational family systems theory is complex and contains much depth. The basic concepts of IFS theory are interdependent and "require a constant circularity of exposition" (Freidman, 1991, p. 134). At the core of this theory are universal assumptions about nature and life. IFS theory is increasingly utilized beyond the traditional family therapy field (Friedman, 1985). IFS may have potential to contribute understanding of family influence to the field of career development.
Theoretically Derived Intergenerational Family System

Variables

The shift from IFS theoretical concepts to variables which can be defined and measured involves the work of Williamson (1981) and his colleagues (Bray, Williamson & Malone, 1984). This section will summarize the theoretical work of Williamson (1981) for the purpose of providing context for his work in the development of an assessment tool for IFS concepts.

Williamson (1981) added to the fundamental theoretical concepts of Bowen theory by introducing concepts of intimacy, isolation, intergenerational intimidation, and personal authority. Intimacy is defined as voluntary closeness with distinct boundaries to the self (Williamson, 1981). Isolation is regarded as the opposite pole on a continuum with intimacy. Intergenerational intimidation is viewed as the degree to which the individual is fearful of punishment or loss of parental protection. Personal authority is the establishment of a relationship of peerhood with one’s father and mother. Personal authority is achieved through termination of the intergenerational hierarchical boundary (Williamson, 1981). Personal authority is at the opposite end of the continuum from intergenerational intimidation.
The total set of concepts--individuation, fusion, intimacy, triangulation, intimidation, and personal authority--comprise the construct identified as Personal Authority in the Family System (PAFS) (Bray, Williamson & Malone, 1984). PAFS is conceptualized as a new or added stage in the family life cycle. The stage of "Personal Authority in the family system" was operationally defined by Williamson (1982) as "a pattern of abilities to do the following: 1) to order and direct one's own thoughts and opinion; 2) to choose to express or not to express one's thoughts and opinions regardless of social pressures; 3) to make and respect one's personal judgments, to the point of regarding these judgements as justification for action; 4) to take responsibility for the totality of one's experience in life; 5) to initiate or to receive (or to decline to receive) intimacy voluntarily, in conjunction with the ability to establish clear boundaries to the self--at will; 6) to experience and relate to all other persons without exception, including 'former parents', as peers in the experience of being human." (p.311)

Bray, Williamson, & Malone (1984) developed the Personal Authority in the Family System Questionnaire--(PAFS-Q) and (PAFS-QVC)--(see instrumentation section below) to measure this total group of concepts. These concepts will be utilized as independent variables in the present
research. The variables are defined as follows:

Student Family of Origin

**Intergenerational Fusion/Individuation (SININD).**
The degree to which a person operates in a fused or individuated manner with parents as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Intergenerational Intimacy (SININT).**
The degree of voluntary closeness with distinct boundaries to the self between the adolescent and parent as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Intergenerational Triangulation (SINTRI).**
The degree to which parents triangle or involve their children in marital and family issues and inappropriate coalitions in the family as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Intergenerational Intimidation (SINTIM).**
The degree of personal intimidation—including pressure to change one's behavior and goals to correspond with parental expectations and demands—experienced by an individual in relation to his/her parents as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Personal Authority (SPerAut).**
The ability to have an intimate and simultaneously individuated relationship—peer-type relationship—with
one’s parent as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Student Current Relationship**

**Peer Fusion/Individuation (SPFUS).**
The degree to which a person operates in a fused or individuated manner in relationship with an intimate peer as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Peer Intimacy (SPINT).**
The degree of satisfaction, intimacy, trust, self-disclosure, and overall voluntary closeness with distinct boundaries to the self in an intimate dyadic relationship as measured by the PAFS-QVC (Bray & Harvey, 1987).

**Parental Family of Origin**

**Intergenerational Individuation/Fusion (PININD).**
The degree to which parents of students operated in a fused or individuated manner with their parents as measured by the PAFS-Q (Bray, Williamson, Malone, 1984)

**Intergenerational Intimacy (PININT).**
The degree of intimacy and satisfaction that student’s parent(s) have with their parent(s) as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).

**Intergenerational Triangulation (PINTRI).**
The degree of triangulation between student’s parents and their parents as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).
**Intergenerational Intimidation (PINTIM).**
The degree of personal intimidation experienced by student's parents in relation to their parent(s) as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).

**Personal Authority (PPerAut).**
A measure of the student's parent'(s) potential for intimate interaction with a parent while maintaining an individuated stance as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).

**Parental Current Relationship**

**Spousal Fusion/Individuation (PSPFUS).**
The degree to which student's parent'(s) operate in a fused or individuated manner in relationship with the mate or significant other as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).

**Spousal Intimacy (PSPINT).**
The degree of intimacy and satisfaction that student's parents have with their mate or significant other as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).

**Nuclear Family Triangulation (PNFTRI).**
The degree of triangulation—from the parental perspective—in the student's nuclear family as measured by the PAFS-Q (Bray, Williamson, & Malone, 1984).
Research Questions and Hypotheses

This research seeks to expand the investigation of family relationship dynamics as independent variables which potentially influence career phenomena dependent variables. The conceptualization of family relationship dynamics through the use of Intergenerational Family Systems Theory creates new questions for the field of career development. Are the processes of career development a component of relational patterns that are learned and passed down across generations? Is the experience of having parents who are less emotionally reactive and more able to chart their own course in life related to a late adolescent's processes of career planning, exploring, information, and decision making? Is a late adolescent's ability to differentiate from parents related to his/her career development processes? Is the experience of having parents whose primary dyadic relationship is characterized by emotional fusion related to an adolescent's processes of career development? Is an adolescent's current involvement in a fused primary relationship related to his/her career planning, exploring, obtaining information, and decision making? How is an adolescent's experience of being placed in an emotional triangle with her/his parents related to the processes of career development?
Hypotheses

The hypotheses addressed in this investigation of the influence of intergeneration family systems variables upon career development process variables are driven by the literature and theoretical framework outlined above.

**Group A (Hypotheses 1-4)**
The magnitude of the effect of student's family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon each of the four student career development process variables will be below significant levels.

**Group B (Hypotheses 5-8)**
The magnitude of the effect of student's current relationship variables (levels of peer intimacy and peer fusion/individuation) upon each of the four student career development process variables will be below significant levels.

**Group C (Hypotheses 9-12)**
The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon each of the four student career process variables will be below significant levels.

**Group D (Hypotheses 13-16)**
The magnitude of the effect of parents' current relationship variables (levels of spousal intimacy, spousal fusion/individuation, nuclear family triangulation) upon each of the four student career development process variables will be below significant levels.

**Group E (Hypothesis 17)**
The pattern of IFS variables effects will be similar for students in the transition stage (freshmen and sophomores 18-20 years old) and students in the trial stage (juniors and seniors 20-23 years old).
Method

Sampling Procedure

Individual cases for this study were comprised of parent/university student pairs. The students in these units were solicited first. Three successive sampling strategies were used to secure participation from undergraduates at Virginia Tech. This section will provide an overview of these strategies.

The initial purposive sampling strategy sought to secure participation of a group of freshmen between the ages of 18 and 20 currently enrolled at Virginia Tech. The names of 800 freshmen students were selected at random by a computer operator in the office of student computer records. These students were mailed an initial flyer which asked them to be involved in a study exploring family dynamics and career development. The flyer explained that participation was open to freshmen between ages 18-20 who lived at home with at least one primary parent figure (natural parent, step-parent, guardian) during most of their adolescent years. The flyer also explained that participation would involve completing two questionnaires administered during a group session (scheduled two weeks following the mailing) as well as the completion of a questionnaire via mail by one primary parent figure. Finally, the flyer indicated that students who complete all the student questionnaire material
could have their names entered in a drawing for $150.00 to be awarded on March 17, 1993. One week prior to the scheduled group sessions a reminder card with a summary of the important information was also sent to the initial group of 800 freshmen. Fourteen (1.8%) of the original 800 students invited to participate attended a group session. Potential reasons for the low attendance rate to the original student mailing are students’ anxiety about parental involvement, students’ resistance to addressing career issues, and/or the impersonal nature of a mailed invitation.

Following this first sampling effort the year in school category was expanded to include sophomores and freshmen. The second purposive sampling strategy involved class announcements by the researcher. A list of 10 undergraduate classes (approximate class size average of 90) within the researcher’s department (Family and Child Development) was selected on the basis of a high percentage of freshmen and sophomores, at least a 30% ratio of males to females, and professor permission. In each class an overhead transparency with information about study was displayed on a screen at the front of the classroom as students entered the room. At the start of each class the researcher was introduced by the professor of the class. The announcement included information about subject criteria, place and drop-
in times for participation, and the chance for entry into the raffle for $150 dollars to be awarded on March 17, 1993. This second sampling effort produced 20 student subjects. This class announcement strategy was likely hampered by the loss of the second drop in day due to a snow storm that hampered travel.

Following this second sampling effort the year in school category was expanded to include all underclassmen between the ages of 18 and 23. The third purposive sampling strategy, which followed the awarding of the raffle cash prize, involved the offer of class extra credit for student's participation in the study. Instructors of four FCD classes (3 marriage and family dynamics sections and 1 section of adolescent development) offered students points on their upcoming exams for participation. Together these 4 sections contained approximately 500 students--70% female and 30% male students. This third sampling strategy produced 137 subjects.

Data Collection

The data collection process was consistent for all three sampling procedures. Each student who arrived at the various data collection locations was initially given an informed consent document (Appendix A). This three page document contained information about the purpose, procedures, benefits, confidentiality, compensation,
subject's responsibilities, freedom to withdraw, and approval of the research by the Institutional Review Board. After reviewing this information students were asked to indicate their willingness to participate by signing the document.

Each participating student was given a packet of materials. The primary researcher provided individual or small group explanations on how to proceed through the materials. Initially students were asked to identify a primary parent figure (natural parent, step parent, or guardian) who played a primary parenting role (financial support, nurture, guidance, discipline) in his/her growing up years. Students with two or more primary parent figures were asked to choose one parent figure on the basis of "most involved in parenting you." Following this selection students were asked to address an envelope and reminder card to the primary parent figure as well as write a brief note requesting participation from the parent at the top of a previously prepared cover letter (Appendix B). Each student was also given the opportunity to request a summary of the overall results by completing a specific form. Following these initial steps students were asked to complete a demographic questionnaire (Appendix C), the CDI-P1 college and university form (Thompson, Linderman, Super, Jordaan, & Myers, 1981), and the PAFS-QVC (Bray & Harvey, 1987), (see
instrumentation section which follows). The time range for completing the packet was 50 minutes to 1.5 hours.

Approximately two days following each data collection session the primary parent figures identified by each student were mailed "student addressed" white business envelopes containing a PAFS instrument (see instrumentation section which follows) folded into thirds (Dillman, 1978). A cover letter designed to follow established mail survey principles—explanation of the study, communication of the usefulness of the study, importance of the respondent to the success of the study, and assurance of confidentiality—was enclosed along with an addressed stamped envelope (Dillman, 1978). The letter of explanation included a deadline date three weeks from the mailing of the letter. One week following the initial mailing, a follow-up postcard designed as a thank you for the prompt return of the "questionnaire sent to you last week" was sent to parents (Dillman, 1978).

**Instrumentation**

Collecting data descriptive of the sample and measures of the predictor and criterion variables involved use of:
(1) The Student Demographic questionnaire; (2) The Parent Demographic questionnaire; (3) The Career Development Inventory (CDI); and (4) The Personal Authority in the Family System Questionnaire (PAFS-Q) versions A and C.
The Student Demographic questionnaire

This instrument was constructed to obtain information to describe the student portion of the research sample in terms of age, race, gender, family composition and birth order. Additionally, these categories were used for control and supplementary analytic purposes.

The Parent Demographic questionnaire

This instrument was constructed to obtain information to describe the parent portion of the research sample in terms of age, race, gender, and socioeconomic status (Appendix D). For determining socioeconomic status of the parent household this questionnaire included an adaptation of the Hollingshead two-factor index of social position (Miller, 1991). The parent demographic questionnaire requested occupation group and education level information from each student-selected parent. Additionally this information was requested for the second parent figure in the household if applicable. Scores were determined through a weighted formula and assigned one of five predetermined social class levels—with one representing the highest social class level. For households with two working adults social class level was determined by utilizing the highest of the two levels provided. This method avoided the increasingly false assumption that the male parent's education and occupation determines household social
position. This method also avoided the potential error of adding two middle occupations together to produce a higher level of SES. For example the household with one practicing physician is likely to be at a higher SES position than a household with two travel agents.

**The Career Development Inventory (CDI): College and University Form**

This instrument was developed by Donald Super and his colleagues (Thompson, et al., 1981) at Teachers College of Columbia University. The CDI is based on more than 40 years of research that began with the Career Pattern Study (Betz, 1988; Super & Overstreet, 1960).

The intention of the CDI College and University form was to assess readiness of students to make career decisions. The complete CDI includes 120 items that are organized into five scales: career planning, career exploration, decision making, world of work information, and knowledge of preferred occupational group. The first four scales form Part I: Career Orientation, which includes 80 items. The fifth scale forms Part II: Knowledge of Preferred Occupation, which includes 30 items (Super, Osborne, Walsh, Brown, Niles, 1992). In this study, use of the CDI was limited to Part I due to the specificity of part II to one occupational group rather than to a more general characteristic of career maturity.
Administration and scoring.

Part I can be administered in 40 minutes. Due to its complexity, scoring is available only from the publisher. Scores are provided for each of the four scales. Additionally three factor scores are provided: (1) Career Development Knowledge (CDK) combines DM and WW; (2) Career Development Attitudes (CDA) is the sum of the CP and CE scores; and (3) a composite score identified as Career Orientation Total (COT) which combines CP, CD, DM, and WW. All CDI scores provided by the publisher are standard scores having a mean of 100 and a standard deviation of 20 (Betz, 1988).

Reliability.

Internal consistency for the college and university form was determined from the responses of 1,345 college and university students. The average values of alpha for factor scores (CDK, CDA, COT) range from .75 to .90. The average values of alpha for the four subscales range from .62 to .91 (Thompson, et al., 1981).

Validity.

Content validity for the CDI is generally acknowledged to be superior (Betz, 1988; Savickas, 1990). This rating is based on the manner in which the inventory’s items originated. Thompson et al. (1981) report, "The CDI is based on the theoretical model that was developed and tested
by the Career Pattern Study; tested independently by Gribbons and Lohnes (1968, 1969), Asis (1979), Vriend (1968), and by Willstach (1966); slightly modified and then tested by Crites (1973) and further refined by Super (1974) (p. 16)

Evidence for construct validity is presented in two forms (Betz, 1989; Thompson et al., 1981): (1) score differences between age groups, across gender, and across curricula; and (2) correspondence of the dual cognitive and attitudinal factor structures to theoretical prediction. Overall means on the CDI scales increase as students progress to higher levels in school--support for developmental nature of the construct. Relatively few instances in which sex differences within a grade are meaningful supports the theory prediction of minimal sex differences. Higher means on the cognitive scales of the CDI of students in honors programs is also cited as support of construct validity. Finally, reported analysis results support classification of CP and CE scales as attitudinal measures and DM and WW as cognitive measures.

**Personal Authority in the Family System Questionnaire (PAFS-Q and PAFS-QVC)**

Both versions of The Personal Authority in the Family System Questionnaire (PAFS-Q) and (PAFS-QVC) to be used in this research were developed in the 1980s for the purpose of
assessing important relationships in the three-generational family system (Bray & Harvey, 1987; Bray, Williamson, & Malone, 1984). Both versions are self-report instruments that operationalize components of the intergenerational family systems theories of Bowen (1978), Boszormenyi-Nagy and Ulrich (1981), and Williamson (1981, 1982) into scales for use in clinical practice and research. The PAFS-QVA is designed for use with adults with children. The PAFS-QVC is designed to be used with a young adult or college-aged population.

Instrument Development.

PAFS-Q.

The PAFS-Q is a 132-item self report questionnaire which utilizes a 5-point Likert scale to rate responses. The PAFS-Q asks adults with children to assess their current relationships with parents, spouse or significant other in an intimate dyadic relationship, and children. If one or both parents of the adult completing the questionnaire are deceased, the questions about parents should be answered in terms of how the adult remembers or imagined their relationships to be. Questions are organized into eight nonoverlapping scales: (1) Spousal Fusion/Individuation, (2) Intergenerational Fusion/Individuation, (3) Spousal Intimacy, (4) Intergenerational Intimacy, (5) Nuclear Family
Triangulation, (6) Intergenerational Triangulation, (7) Intergenerational Intimidation, and (8) Personal Authority. Scales 1 through 4 and scale 8 have been constructed so that larger scores indicate higher levels of individuation, intimacy, and personal authority. Scales 5 through 7 were constructed so that larger scores indicate lower levels of triangulation and intimidation (Bray, Williamson & Malone, 1984).

**Reliability.** Bray et al. (1984b) assessed the reliability of the PAFA-S-Q by an internal consistency and test-retest study (N=90, 2 weeks). Cronbach alphas ranged from .82 to .95, with a mean of 90. The test-retest estimates ranged from .55 to .95, with a mean of .74. According to Bray et al. (1984), "all of the reliabilities, except for the Intergenerational Fusion/Individuation Scale, were within an acceptable range. Anecdotical evidence from subjects indicated that taking (this scale) was an intervention which produced changes in their perception of their parents. Thus, the low test-retest reliability probably reflects changes (in relationship functioning along these dimensions) rather than simple mood shifts" (p.4).

**Validity.** Content validity on the initial pool of items was evaluated by two groups: one enrolled in a course on "Transgenerational Family Therapy" and a second group of mental health professionals in the Houston area. The items
were dropped, moved to another scale, or re-worded on the basis of the evaluations (Bray, et al., 1984).

Concurrent validity has been assessed by correlating individuals' responses on the PAFS-Q, the Dyadic Adjustment Scale (DAS; Spanier, 1976), and the Family Adaptability and Cohesion Evaluation Scales (FACES-I; Olsen, Bell, & Portner, 1978). Detailed information regarding the relationships among these instruments is provided elsewhere (Bray, et al., 1984b). Overall the Pearson correlations between the PAFS-QVA and the Adaptation scale of the FACES-I were very low. This low level suggests these scales measure different phenomena. Significant correlations were found, however, between the FACES-I Cohesion scale and the PAFS-Q Spousal Intimacy scale and Intergenerational Intimacy scale. People who report having a cohesive (emotionally bonded with autonomy) nuclear family also report high spousal intimacy and high intergenerational intimacy. This relationship is expected due to the similarity of these constructs (Olson, Sprenkle, & Russell, 1979; Bray Williamson, & Malone, 1984b).

Construct validity of the PAFS-QVA was measured by factor analysis (Bray, et al., 1984). The eight conceptual scales within the instrument were generally confirmed by the factor structure. Correlations among the scales within the instrument were moderate to low. These correlations indicate that the scales were measuring different aspects of
the intergenerational family process.

**PAFS-QVC.**

PAFS-QVC is essentially a modification of the PAFS-Q developed for the purpose of examining two generations within the family system as evaluated by college students. Like the PAFS-Q, it is composed of scales which assess individuation/fusion, intimacy/isolation, personal authority/intimidation, and triangulation. The nuclear Family Triangulation scale has been replaced by intergenerational triangulation II which measures triangulation which tends to be conflicted between children and their parents. The Spousal Fusion/Individuation and Spousal Intimacy scales have been replaced by Peer Fusion/Individuation and Peer Intimacy scales.

Overall, Bray and Harvey (1987) found this instrument to be a reliable and valid measure of family processes as experienced by college students and/or young adults. The range of test-retest correlations over a two-month period for the seven scales was .56 to .80. The low score of .56 was found for the Intergenerational Intimidation scale which may be due to changes occurring more rapidly for this age group in this aspect of their intergenerational relationships. Internal consistency (alpha coefficient) scores from a non clinical sample ranged from .73 to .92.
Data Analysis

Subjects marked responses to the student demographic questionnaire, parent demographic questionnaire, and the PAFS-C questionnaire directly on opscan sheets read by the Virginia Tech testing center. Parents hand wrote number responses to the PAFS questionnaire on an answer sheet with question numbers and blanks. Parents' responses to the PAFS were hand entered by the researcher into an SPSS data file. Data files for the demographic questionnaires and both versions of the PAFS were scored by SPSS program files prepared by the researcher.

Students marked responses to the CDI on opscan sheets purchased from Consulting Psychologists Press (CPP). These answer sheets were scored by CPP.

Analysis utilized only the data from complete cases—cases containing both student and parent data. Descriptive statistics were run using The Statistical Package for the Social Sciences (SPSS) (Nie, Hall, Jenkins, Steinbrenner, and Brent, 1975). Following the descriptive analysis two scales from the PAFS-C (SINTIM, SINTRI) and three scales from the PAFS (PINTIM, PINTRI, PNFTRI) were reverse coded for the purpose of making larger scores on all scales indicate more of the variable. Following this recoding, correlations were run on the set of independent variables (IFS variables) for the purpose of examining
multicolinearity. Correlations were also run to determine the level of association between independent and dependent variables.

Major hypotheses were tested by regressing career development process variables on intergenerational family system variables using the SPSS Multiple Regression Analysis: Stepwise Selection (SPSS-X User's guide, 1988, p. 851). With the stepwise method, variables are added to the equation one at a time. The first variable selected for inclusion into the regression equation is the independent variable that has the highest correlation with the dependent variable. At each step after a new independent variable is added to the model, a second significance test is conducted to determine the contribution of each of the previously selected predictor variables, as if it were the last variable entered (Hinkle, Wiersma, Jurs, 1988). The stepwise solution is terminated when the remaining independent variables do not make a statistically significant (P < .05) contribution to the regression. Because of the explanatory nature of this research, the primary goal of data analysis was to determine the relative magnitudes of the effects of independent variables on the dependent variable as they are reflected by the standardized regression coefficients—Beta (B) (Pedhauzer, 1982). Pedhauzer (1982) interprets Beta "as indicating the expected
change in the dependent variable, expressed in standard scores, associated with a one standard deviation change in an independent variable, while holding the remaining variables constant" (p. 247).

**Results and Discussion**

**Results**

**Description of Sample**

The final sample on which the results were computed was composed of 139 parent/university student dyads. Originally 171 students completed the packet of student instruments. Of this original group 154 parents returned the set of mailed parental instruments—representing a response rate of 90.1%. Missing or incomplete parental questionnaires caused the loss of 15 cases.

The student portion of the sample ranged in age from 18 to 24. The group was comprised of 20 freshmen, 53 sophomores, 37 juniors, and 29 seniors. The total group of students was comprised of 112 females and 27 males. The disproportionate number of female students resulted in large part from the preponderance of females in the Family and Child Development classes which offered extra credit for participation in this study. The overall group of students was predominately Caucasian (N=124 or 89%). Five students identified themselves as Asian American, eight students identified themselves as African American, one student
selected Hispanic, and one student selected "other" for ethnic group. Ninety-seven percent of the students have at least one sibling, and the largest birth order category was "oldest child" with 58 (41%) students.

Parents were student selected. Instructions given to each student requested that he/she "select a primary parent figure (natural parent, step-parent, or guardian) who was involved in your parenting while growing up". Like the student portion of the sample, the parental respondents were predominately female (N=114 or 82%). These disproportionate numbers may be related to the predominately female student group (i.e., female students may be more likely to choose mothers). Additionally, the student’s selection of mothers instead of fathers may be related to student’s perceptions that mothers were more involved in parenting and/or mothers may represent the parent to whom students felt closest. The parent portion of the sample was comprised almost entirely of birth parents (136 or 98%). Students whose birth parents are divorced (27 or 19.4%) overwhelmingly selected a birth parent to complete the set of parental questionnaires. The most frequent parent age grouping was 45-49 (58 parents or 41.7%). Based on the adaptation of the Hollingshead two-factor index of social position included in the parent demographic questionnaire (see instrumentation above) 100 (72%) of the parental households in this study fall within
the top two levels of social position.

**Descriptive statistics comparisons of the four independent variable groups with the norm statistics**

Norm group means and standard deviations were obtained from the instrument manuals that accompanied the PAFS, PAFS-C, and CDI test booklets.

**Student's family of origin variables.**

In comparison to males and females in the norm group, the mean and standard deviation scores of males and females in the study sample were lower on intergenerational intimacy, intergenerational intimidation, and intergenerational triangulation. The mean and standard deviation scores on intergenerational individuation and personal authority for males and females in the sample and males and females in the norm group were similar. A summary of comparisons for this group of variables is presented in Table 1.

**Student's current relationship variables.**

In comparison to males and females in the norm group, the mean and standard deviation scores of males and females in the study sample were lower on peer intimacy. The norm and sample groups had equivalent mean scores on peer individuation. A summary of comparisons for this pair of variables is presented in Table 2.
Table 1

Norm and Sample Group Comparisons of Students’ Family of Origin Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Poss. Range</th>
<th>Samp. Range</th>
<th>Norm Mean</th>
<th>Sample Mean</th>
<th>Norm SD</th>
<th>Samp. SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SININT</td>
<td>23-115</td>
<td>61-84</td>
<td>Male 89.4</td>
<td>Male 75.4</td>
<td>Male 11.9</td>
<td>Male 4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 93.2</td>
<td>Female 75.9</td>
<td>Female 14.3</td>
<td>Female 5.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SININD</td>
<td>8--40</td>
<td>10-40</td>
<td>Male 30.1</td>
<td>Male 33.0</td>
<td>Male 4.8</td>
<td>Male 4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 30.2</td>
<td>Female 30.5</td>
<td>Female 5.6</td>
<td>Female 5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPERAT</td>
<td>18-63</td>
<td>31-50</td>
<td>Male 41.0</td>
<td>Male 39.3</td>
<td>Male 7.0</td>
<td>Male 3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 43.8</td>
<td>Female 40.0</td>
<td>Female 6.7</td>
<td>Female 3.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINTIM</td>
<td>8-40</td>
<td>13-40</td>
<td>Male 17.6</td>
<td>Male 31.6</td>
<td>Male 5.8</td>
<td>Male 4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 17.8</td>
<td>Female 31.9</td>
<td>Female 6.6</td>
<td>Female 6.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=26</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SINTRI</td>
<td>8-40</td>
<td>14-40</td>
<td>Male 19.3</td>
<td>Male 30.9</td>
<td>Male 4.9</td>
<td>Male 5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 18.7</td>
<td>Female 29.6</td>
<td>Female 5.1</td>
<td>Female 5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=112</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2

Norm and Sample Group Comparisons of Students’ Current Relationship Variables

SFINT (Student Peer Intimacy)
SPIND (Student Peer Individuation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Poss. Range</th>
<th>Samp. Range</th>
<th>Norm Mean</th>
<th>Samp. Mean</th>
<th>Norm SD</th>
<th>Samp. SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFINT</td>
<td>11-55</td>
<td>20-37</td>
<td>Male 44.4</td>
<td>Male 27.96</td>
<td>Male 6.6</td>
<td>Male 2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=27</td>
<td>N=345</td>
<td>N=27</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 44.7</td>
<td>Female 30.07</td>
<td>Female 4.8</td>
<td>Female 5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=112</td>
<td>N=367</td>
<td>N=112</td>
</tr>
<tr>
<td>SPIWD</td>
<td>8--40</td>
<td>18-40</td>
<td>Male 29.5</td>
<td>Male 30.07</td>
<td>Male 4.8</td>
<td>Male 6.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=345</td>
<td>N=27</td>
<td>N=345</td>
<td>N=27</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female 29.9</td>
<td>Female 31.02</td>
<td>Female 5.3</td>
<td>Female 5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=367</td>
<td>N=112</td>
<td>N=367</td>
<td>N=112</td>
</tr>
</tbody>
</table>
Parent's family of origin variables.
Norm group statistics for this group of variables are not separated for gender. Sample parents had a higher mean score on intergenerational intimacy than norm group parents. The mean scores of sample parents on intergenerational triangulation and intergenerational intimidation were lower than parents in the norm group. The comparison groups had similar mean and standard deviation scores on intergenerational fusion/individualization and personal authority. A summary of comparisons for this pair of variables is presented in Table 3.

Parent's current relationship variables.
Sample parents had a slightly higher mean on spousal fusion/individualization than parents in the norm group. Higher levels on this variable indicate more individualization. The comparison groups had similar mean and standard deviation scores on spousal intimacy and nuclear family triangulation. A summary of comparisons for this grouping of three variables is presented in Table 4.

Descriptive statistics of career development dependent variables
Table 5 contains comparisons between the sample group and norm group for the four career development process variables. Mean and standard deviation scores are presented by year in college and by sex. Sample students in all
Table 3

 Norm and Sample Group Comparisons of Parents' Family of Origin Variables

PININT (Parent Intergenerational Intimacy)
PINFUS (Parent Intergenerational Fusion/Individuation)
PINTRI (Parent Intergenerational Triangulation)
PINTIM (Parent Intergenerational Intimidation)
PPERAUT (Parent Personal Authority)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Possible Range</th>
<th>Sample Range</th>
<th>Norm Mean</th>
<th>Samp Mean</th>
<th>Norm SD</th>
<th>Samp SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PININT</td>
<td>25-125</td>
<td>48-123</td>
<td>93.65</td>
<td>100</td>
<td>17.3</td>
<td>16.11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PINFUS</td>
<td>8-40</td>
<td>13-39</td>
<td>29.53</td>
<td>30.41</td>
<td>5.25</td>
<td>4.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PINTRI</td>
<td>11-55</td>
<td>29-48</td>
<td>27.05</td>
<td>44.20</td>
<td>11.7</td>
<td>5.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PINTIM</td>
<td>29-145</td>
<td>65-142</td>
<td>98.55</td>
<td>109.7</td>
<td>24.87</td>
<td>15.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=136</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPERAUT</td>
<td>18-63</td>
<td>22-60</td>
<td>42.13</td>
<td>42.85</td>
<td>8.03</td>
<td>8.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=364</td>
<td>N=138</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

Norm and Sample Group Comparisons of Parents' Current Relationship Variables

PSPINT (Parent Spousal Intimacy)
PSPFUS (Parent Spousal Fusion/Individuation)
PNFTRI (Parent Nuclear Family Triangulation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Possible Range</th>
<th>Sample Range</th>
<th>Norm Mean</th>
<th>Sample Mean</th>
<th>Norm SD</th>
<th>Samp. SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSPINT</td>
<td>11-55</td>
<td>17-55</td>
<td>45.15</td>
<td>45.77</td>
<td>8.18</td>
<td>7.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSPFUS</td>
<td>20-100</td>
<td>48-90</td>
<td>64.64</td>
<td>69.43</td>
<td>8.39</td>
<td>7.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNFTPRI</td>
<td>10-50</td>
<td>29-48</td>
<td>38.16</td>
<td>38.54</td>
<td>5.54</td>
<td>4.17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N=525</td>
<td>N=138</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Norm and Sample Group Comparisons of Students' Career Development Variables by Classification and Sex

CP (Career Planning)
CE (Career Exploration)
DM (Decision Making)
WW (World of Work Information)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Junior Female Norm/Smp.</th>
<th>Junior Male Norm/Smp.</th>
<th>Senior Female Norm/Smp.</th>
<th>Senior Male Norm/Smp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>110/107</td>
<td>107/116</td>
<td>107/118</td>
<td>110/119</td>
</tr>
<tr>
<td>SD</td>
<td>18/16</td>
<td>22/8</td>
<td>18/12</td>
<td>16/</td>
</tr>
<tr>
<td>CE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>102/97</td>
<td>97/112</td>
<td>97/101</td>
<td>101/98</td>
</tr>
<tr>
<td>SD</td>
<td>17/17</td>
<td>20/17</td>
<td>18/19</td>
<td>23/29</td>
</tr>
<tr>
<td>DM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>105/98</td>
<td>99/101</td>
<td>112/106</td>
<td>102/101</td>
</tr>
<tr>
<td>SD</td>
<td>18/15</td>
<td>23/15</td>
<td>14/13</td>
<td>23/20</td>
</tr>
<tr>
<td>WW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>107/104</td>
<td>100/102</td>
<td>110/102</td>
<td>101/98</td>
</tr>
<tr>
<td>SD</td>
<td>15/14</td>
<td>27/6</td>
<td>11/12</td>
<td>21/16</td>
</tr>
</tbody>
</table>
grades (male and female) with the exception of female 
juniors had higher mean scores than the norm group on career 
planning. Male and female sample students with the 
exception of freshmen had lower mean scores than the norm 
group on decision making.

**Multiple Regression Analyses**

Prior to presenting the results related to the research 
hypotheses, this section will present correlations between 
the four groups of IFS variables and career development 
dependent variables.

**Student's family of origin variables.**

Four correlations in this grouping are statistically 
significant at the .05 level. Three of the significant 
correlations involve the variable students’ 
intergenerational intimacy (SININT) with three career 
development variables—career planning (.17), career 
exploration (.22), and world of work information (.24). 
Students’ intergenerational intimidation (SINTIM) is 
negatively associated (-.30) with world of work information. 
Students’ personal authority (SPERAUT) is negatively 
correlated with all four career development variables—
though the strength of the relationships are not 
significant. The remaining correlations are relatively low. 
The entire set of students’ family of origin and career 
development correlations are presented in Table 6.
Table 6

Correlation Coefficients of Career Development Process Variables and Student's Family of Origin Variables

CP (Career Planning)  
CE (Career Exploration)  
DM (Decision Making)  
WW (World of Work)  

SININT (Student Intergenerational Intimacy)  
SININD (Student Intergenerational Individuation)  
SPERAUT (Student Personal Authority)  
SINTIM (Student Intergenerational Intimidation)  
SINTRI (Student Intergenerational Triangulation)

<table>
<thead>
<tr>
<th>VARS</th>
<th>SININT</th>
<th>SININD</th>
<th>SPERAUT</th>
<th>SINTIM</th>
<th>SINTRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>.1686*</td>
<td>.0837</td>
<td>-.1328</td>
<td>-.1580</td>
<td>-.1534</td>
</tr>
<tr>
<td>CE</td>
<td>.2153*</td>
<td>.0679</td>
<td>-.0446</td>
<td>-.0620</td>
<td>-.0951</td>
</tr>
<tr>
<td>DM</td>
<td>.1058</td>
<td>.0658</td>
<td>-.0530</td>
<td>-.1385</td>
<td>-.0532</td>
</tr>
<tr>
<td>WW</td>
<td>.2418*</td>
<td>.1585</td>
<td>-.1376</td>
<td>-.2955**</td>
<td>-.0078</td>
</tr>
</tbody>
</table>

0* - Signif. LE .05*  ** - Signif. LE .01  (2-tailed)
Student’s current relationship variables.

None of the measures of association between students’ current relationship variables and career development variables (presented in Table 7) are statistically significant. The positive correlations range from .015 to .096. The negative correlations range from -.048 to -.12.

Parent’s family of origin variables.

Four measures of association (three negative and one positive) between parents’ family of origin variables and career development variables are statistically significant at the .05 level. Parents’ intergenerational intimidation (PINTIM) is negatively associated (-.19) with students’ world of work information. Both parents’ intergenerational intimacy (PININT) and parents’ intergenerational fusion/individuation (PINFUS) are negatively associated (-.24) with career exploration (CE). Parents’ intergenerational triangulation is positively associated (.2042) with career planning. The entire set of parents’ family of origin and career development correlations are presented in Table 8.

Parent’s current relationship variables.

Two measures of association between parents’ current relationships variables and career development variables are statistically significant. Spousal intimacy (PSPINT) is positively correlated (.18) with students’ career
Table 7

Correlation Coefficients of Career Development Process Variables and Students’ Current Relationship Variables

<table>
<thead>
<tr>
<th>VARS</th>
<th>SPINT</th>
<th>SPIND</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>-.0744</td>
<td>.0868</td>
</tr>
<tr>
<td>CE</td>
<td>-.1212</td>
<td>.0409</td>
</tr>
<tr>
<td>DM</td>
<td>.0152</td>
<td>.0956</td>
</tr>
<tr>
<td>WW</td>
<td>-.0484</td>
<td>.0692</td>
</tr>
</tbody>
</table>

0* - Signif. LE .05    ** - Signif. LE .01 (2-tailed)


Table 8

Correlation Coefficients of Career Development Process

Variables and Parents' Family of Origin Variables

CP (Career Planning)
CE (Career Exploration)
DM (Decision Making)
WW (World of Work)

PININT (Parent Intergenerational Intimacy)
PINFUS (Parent Intergenerational Fusion/Individuation)
PINTRI (Parent Intergenerational Triangulation)
PINTIM (Parent Intergenerational Intimidation)
PPERAUT (Parent Personal Authority)

<table>
<thead>
<tr>
<th>VARS</th>
<th>PININT</th>
<th>PINFUS</th>
<th>PINTRI</th>
<th>PINTIM</th>
<th>PPERAUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>.0091</td>
<td>-.0671</td>
<td>-.2042*</td>
<td>-.0205</td>
<td>-.0225</td>
</tr>
<tr>
<td>CE</td>
<td>-.2372**</td>
<td>-.2429**</td>
<td>.0271</td>
<td>-.0214</td>
<td>-.1001</td>
</tr>
<tr>
<td>DM</td>
<td>-.0654</td>
<td>-.0081</td>
<td>-.0354</td>
<td>-.0619</td>
<td>-.1007</td>
</tr>
<tr>
<td>WW</td>
<td>-.0519</td>
<td>-.0159</td>
<td>-.0156</td>
<td>-.1874*</td>
<td>-.0738</td>
</tr>
</tbody>
</table>

Signif. LE .05  ** - Signif. LE .01 (2-tailed)
exploration. Spousal fusion/individuation (PSPFUS) is positively associated (.24) with student's world of work information. The remaining associations are relatively low. The entire set of parents' current relationship and career development correlations are presented in Table 9.

**Outcomes of Hypotheses Testing**

**Hypothesis Group A.**

The magnitude of the effect of student's family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' career development process variables will be below significant levels.

**Group A: Hypothesis 1**

The magnitude of the effect of students' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' career planning will be below significant levels.

Students' Intergenerational Intimacy (SININT) was entered into the regression equation (Beta .169; T= 1.98, P < .05). The $R^2$ value was .029, for which the significant (P < .05) F value was 3.93. Students' reported levels of intimacy with their parents appear to have a positive effect upon students' career planning scores. The remaining four student family of origin variables (intergenerational individuation, personal authority, intergenerational intimidation, intergenerational triangulation) were not


Table 9

Correlation Coefficients of Career Development Process

Variables and Parents’ Current Relationship Variables

CP (Career Planning)
CE (Career Exploration)
DM (Decision Making)
WW (World of Work)

PSPINT (Parent Spousal Intimacy)
PSPFUS (Parent Spousal Fusion/Individuation)
PNFTRI (Parent Nuclear Family Triangulation)

<table>
<thead>
<tr>
<th>VARS</th>
<th>PSPINT</th>
<th>PSPFUS</th>
<th>PNFTRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>.1079</td>
<td>.1186</td>
<td>-.5989</td>
</tr>
<tr>
<td>CE</td>
<td>.1780*</td>
<td>.0361</td>
<td>-.0705</td>
</tr>
<tr>
<td>DM</td>
<td>.0419</td>
<td>.1670</td>
<td>.0693</td>
</tr>
<tr>
<td>WW</td>
<td>-.0853</td>
<td>.2361**</td>
<td>.0091</td>
</tr>
</tbody>
</table>

* - Signif. LE .05      ** - Signif. LE .01       (2-tailed)
entered into the career planning regression equation. Because the magnitude of students' intergenerational intimacy exceeds significant levels, hypothesis 1 was rejected.

**Group A: Hypothesis 2**

The magnitude of the effect of students' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' career exploration will be below significant levels.

Students' Intergenerational intimacy (SININT) was entered into the regression equation (Beta = .224; T= 2.65; P < .05). The R² was .050, for which the significant (P < .05) F value was 7.04. Students' reported levels of intimacy with their parents appear to have a positive effect upon students' career exploration scores. The remaining four student family of origin variables (intergenerational individuation, personal authority, intergenerational intimidation, intergenerational triangulation) were not entered into the career exploration regression equation. Because the magnitude of students' intergenerational intimacy exceeds significant levels hypothesis 2 was rejected.

**Group A: Hypothesis 3**

The magnitude of the effect of students' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' decision making will be below significant levels.
The magnitude of the effect of students' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' decision making did not exceed significant levels. Hypothesis 3 was not rejected.

**Group A: Hypothesis 4**

The magnitude of the effect of students' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' world of work information will be below significant levels.

Students' Intergenerational intimacy (SININT) and students' intergenerational intimidation (SINTIM) were entered into the regression equation (SININT Beta = .183; T= 1.98; P < .05; SINTIM Beta = -.247; T= -2.95; P < .05)

The \( R^2 \) value for student's intergenerational intimacy was .115, for which the significant (\( P < .05 \)) F value was 8.55. The \( R^2 \) value for students' intergenerational intimidation was .082, for which the significant (\( P < .05 \)) F value was 11.95. Students' reported levels of intimacy with their parents appear to have a positive effect upon students world of work score, and students' levels of intimidation with their parents appear to have a negative effect upon students' world of work scores. The remaining three student family of origin variables (intergenerational individuation, personal authority, intergenerational triangulation) were not entered into the world of work equation. Because the
magnitude of students' intergenerational intimacy and students' intergenerational intimidation exceeds significant levels hypothesis 4 was rejected. The significant results related to hypotheses 1, 2, and 4 are presented in Table 10.

**Hypothesis Group B.**

The magnitude of the effect of student's current relationship variables (levels of peer intimacy and peer fusion/individuation) upon students' career development process variables will be below significant levels.

As in all four groups of hypotheses, the influence of this group of predictor variables was examined separately for each of the career development process variables. The magnitude of the effect of students' peer intimacy (SPINT) and peer individuation (SPIND) upon students' career development process variables did not exceed significant levels. Hypotheses 5, 6, 7, and 8 were not rejected.

**Hypothesis Group C:**

The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' career development process variables will be below significant levels.
Table 10

Summary of Significant Relationships of Career Development

Dependent Variables Regressed on Students’ Family of Origin Variables

CP (Career Planning)
CE (Career Exploration)
WW (World of Work Information)

SININT (Students’ intergenerational intimacy)
SINTIM (Students’ intergenerational intimidation)

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Beta; / T</th>
<th>R² / F</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>SININT</td>
<td>.169/ 1.98*</td>
<td>.029/ 3.93*</td>
<td>1/133</td>
</tr>
<tr>
<td>CE</td>
<td>SININT</td>
<td>.224/ 2.65*</td>
<td>.050/ 7.04*</td>
<td>1/133</td>
</tr>
<tr>
<td>WW</td>
<td>SININT</td>
<td>.183/ 2.19*</td>
<td>.115/ 8.55*</td>
<td>1/133</td>
</tr>
<tr>
<td></td>
<td>SINTIM</td>
<td>-.248/ -2.95*</td>
<td>.082/ 11.95*</td>
<td>1/133</td>
</tr>
</tbody>
</table>

; Beta weight = standard regression coefficient.
* Significant at p ≤ 0.05


**Group C: Hypothesis 9**

The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' career planning will be below significant levels.

Parents' intergenerational triangulation (PINTRI) was entered into the regression equation (Beta = -.223; T = -2.623; P ≤ .05). The R² value was .050, for which the significant (P < .05) F value was 6.88. Parents' reported levels of triangulation with their parents appear to have a negative effect upon students' career planning scores. The remaining four parent family of origin variables (intergenerational intimacy, intergenerational individuation, personal authority, intergenerational intimidation) were not entered into the career planning regression equation. Because the magnitude of parents' intergenerational intimacy exceeds significant levels, hypothesis 9 was rejected.

**Group C: Hypothesis 10**

The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' career exploration will be below significant levels.

Parents' intergenerational intimacy (PININT) was entered into the regression equation (Beta = -.270; T = -3.21; P ≤ .05). The R² value was .073, for which the significant (P < .05) F value was 10.32. Parents' reported levels of intimacy with their parents appear to have a
negative effect upon students' career exploration scores. The remaining four parent family of origin variables (intergenerational individuation, personal authority, intergenerational intimidation, intergenerational triangulation) were not entered into the career exploration regression equation. Because the magnitude of parents' intergenerational intimacy exceeds significant levels hypothesis 10 was rejected.

**Group C: Hypothesis 11**

The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' decision making will be below significant levels.

The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' decision making did not exceed significant levels. Hypothesis 11 was not rejected.

**Group C: Hypothesis 12**

The magnitude of the effect of parents' family of origin variables (levels of intimacy, individuation, personal authority, intimidation, triangulation) upon students' world of work information will be below significant levels.

Parents' Intergenerational Intimidation (PINTIM) and Parents' Personal Authority (PPERAUT) were entered into the regression equation (PINTIM Beta = -.228; T= -2.57; P ≤ .05; and PPERAUT Beta = -.176; T= -1.99; P ≤ .05). The R² value for parents' intergenerational intimidation was .032, for
which the significant ($P < .05$) $F$ value was 4.256. The $R^2$ value for parents' personal authority was .060, for which the significant ($P < .05$) $F$ value was 4.16. Parents' reported levels of intimidation with their parents and parents' reported levels of personal authority appear to have negative effects upon students' world of work scores. The remaining three parent family of origin variables (intergenerational individuation, intergenerational intimacy, intergenerational triangulation) were not entered into the world of work equation. Because the magnitude of parents' intergenerational intimidation and parents' personal authority exceeds significant levels, hypothesis 12 was rejected. The significant results related to hypotheses 9, 10, and 12 presented in Table 11.

**Hypothesis Group D.**

The magnitude of the effect of parents' current relationship variables (levels of spousal intimacy, spousal fusion/individuation, nuclear family triangulation) upon students' career development process variables will be below significant levels.

**Group D: Hypothesis 13**

The magnitude of the effect of parents' current relationship variables (levels of spousal intimacy, spousal fusion/individuation, nuclear family triangulation) upon students' career planning will be below significant levels.
Table 11

Summary of Significant Relationships of Career Development

Dependent Variables Regressed on Parents' Family of Origin

Variables

CP (Career Planning)
CE (Career Exploration)
WW (World of Work Information)

PININT (Parents' intergenerational intimacy)
PINTIM (Parents' intergenerational intimidation)
PPERAUT (Parents' personal authority)

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Beta / T</th>
<th>R² / F</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>PINTRI</td>
<td>.223 / 2.62*</td>
<td>.050 / 6.88*</td>
<td>1/131</td>
</tr>
<tr>
<td>CE</td>
<td>PININT</td>
<td>-.270 / -3.21*</td>
<td>.073 / 10.32*</td>
<td>1/131</td>
</tr>
<tr>
<td>WW</td>
<td>PINTIM</td>
<td>-.228 / -2.57*</td>
<td>.032 / 4.256*</td>
<td>1/131</td>
</tr>
<tr>
<td></td>
<td>PPERAUT</td>
<td>-.176 / 1.99*</td>
<td>.060 / 4.16*</td>
<td>2/130</td>
</tr>
</tbody>
</table>

* Beta weight = standard regression coefficient.
* Significant at p ≤ 0.05
The magnitude of the effect of parents' current relationship variables upon students' career planning did not exceed significant levels. Hypothesis 13 was not rejected.

**Group D: Hypothesis 14**

The magnitude of the effect of parents' current relationship variables (levels of spousal intimacy, spousal fusion/individuation, nuclear family triangulation) upon students' career exploration will be below significant levels.

Parents' Spousal Intimacy (PSPINT) was entered into the regression equation (Beta = .186; T = 2.17; P ≤ .05). The R² value was .034, for which the significant (P < .05) F value was 4.70. Parents reported levels of intimacy with their spouses or significant others have a positive effect upon students' career exploration scores. The remaining two parent current relationship variables (spousal fusion, nuclear family triangulation) were not entered into the career exploration regression equation. Because the magnitude of parents' spousal intimacy exceeds significant levels hypothesis 14 was rejected.

**Group D: Hypothesis 15**

The magnitude of the effect of parents' current relationship variables (levels of spousal intimacy, spousal fusion/individuation, nuclear family triangulation) upon students' decision making will be below significant levels.

Parents' Spousal Fusion/Individuation (PSFUS) was entered into the regression equation (Beta = .180; T = 2.10; P
The \( R^2 \) value was \(.035\), for which the significant \((P < .05)\) F value was \(4.71\). Parents reported levels of fusion/individuation with their spouses or significant others appear to have a positive effect upon students' decision making scores. The remaining two parent current relationship variables (spousal intimacy, nuclear family triangulation) were not entered into the career exploration regression equation. Because the magnitude of parents' spousal fusion/individuation exceeds significant levels hypothesis 15 was rejected.

**Group D: Hypothesis 16**

The magnitude of the effect of parents' current relationship variables (levels of spousal intimacy, spousal fusion/individuation, nuclear family triangulation) upon students' world of work information will be below significant levels.

Parents' Spousal Fusion/Individuation (PSFUS) was entered into the regression equation \((\text{Beta} = .241; \ T = 2.85; P < .05)\). The \( R^2 \) value was \(.059\), for which the significant \((P < .05)\) F value was \(8.14\). Parents reported levels of fusion/individuation with their spouses or significant others appear to have a positive effect upon students' world of work scores. The remaining two parent current relationship variables (spousal intimacy, nuclear family triangulation) were not entered into the career exploration regression equation. Because the magnitude of parents' spousal fusion/individuation exceeds significant levels
hypothesis 16 was rejected. The results related to hypotheses 13, 14, 15, and 16 presented in Table 12.

**Group E: Hypothesis 17**

The pattern of IFS variables effects will be similar for students in the transition stage (freshmen and sophomores 18-20 years old) and students in the trial stage (juniors and seniors 20-23 years old).

For the controlled sample of freshmen/sophomores stepwise regression procedures determined that two IFS variables (students' intergenerational intimacy and parents' intergenerational triangulation) were entered into the equation for the dependent variable career planning. Additionally, three IFS variables (students' intergenerational intimidation, students' individuation/fusion, and parents' intergenerational intimidation) were entered into the equation for the dependent variable world of work information. For the controlled sample of juniors/seniors stepwise regression procedures determined that one IFS variable (parent spousal fusion) was entered into the equation for career planning, decision making, and world of work information. Parent intergenerational individuation was entered into the equation for career planning. Student intergenerational intimacy was also entered into the equation for world of work information. Beta weights and other information for
Table 12

Summary of Significant Relationships of Career Development

Dependent Variables Regressed on Parents’ Current Relationship Variables

CP (Career Planning)
CE (Career Exploration)
WW (World of Work Information)

PSPFUS (Parents’ Spousal Fusion/Individuation)
PSPINT (Parents’ Spousal Intimacy)

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Beta(\beta)/ T</th>
<th>R² / F</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>PSPINT</td>
<td>.186 / 2.170*</td>
<td>.035/ 4.7*</td>
<td>1/131</td>
</tr>
<tr>
<td>DM</td>
<td>PSPFUS</td>
<td>.180 / 2.102*</td>
<td>.033/ 4.41*</td>
<td>1/131</td>
</tr>
<tr>
<td>WW</td>
<td>PSPFUS</td>
<td>.242 / 2.85*</td>
<td>.058/ 8.14*</td>
<td>1/131</td>
</tr>
</tbody>
</table>

Beta weight = standard regression coefficient.
* Significant at p ≤ 0.05
these significant relationships are presented in Tables 13 and 14. Because the pattern of effects of IFS variables on career development process variables is nonoverlapping hypothesis 17 is rejected.

**Summary of Results**

This study included 139 student/parent paired units. Both the student and parent groups were predominately female--80% female students and 82% female parents. The student group was predominately Caucasian (89%), and almost all the students had at least one sibling (97%). Nearly all parents were the students' natural parents (98%), and 72% of the parental households in this study fall within the top two levels of SES on the Hollingshead two-factor index.

Descriptive statistical comparisons between norm groups and the sample for each group of IFS independent variables and the group of career development dependent variables reveal both similarities and numerous differences. In comparison to the norm group the mean scores of the student sample were lower on intergenerational intimacy, intimidation, triangulation and peer intimacy. The student sample and norm group had similar levels of intergenerational individuation, personal authority, and peer individuation. In comparison to the norm group the mean scores of the parent sample were lower on intergenerational triangulation and intimidation, and higher
Table 13

Summary of Significant Relationships of Career Development

Dependent Variables Regressed on IFS variables for controlled sample of Freshmen and Sophomores

CP (Career Planning)
CE (Career Exploration)
WW (World of Work Information)

SININT (Student Intergenerational Intimacy)
SINTIM (Student Intergenerational Intimidation)
SPIIND (Student Peer Intimacy)
PINTRI (Parent Intergenerational Triangulation)
PINTIM (Parent Intergenerational Intimidation)

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Beta / T</th>
<th>R² / F</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>SININT</td>
<td>.263 / 2.26*</td>
<td>.069 / 5.1</td>
<td>1/69</td>
</tr>
<tr>
<td></td>
<td>PINTRI</td>
<td>.279 / 2.43*</td>
<td>.078 / 5.9</td>
<td>1/70</td>
</tr>
<tr>
<td>WW</td>
<td>SINTIM</td>
<td>-.335 / -2.96*</td>
<td>.112 / 8.7</td>
<td>1/69</td>
</tr>
<tr>
<td></td>
<td>SPIIND</td>
<td>.246 / 2.12*</td>
<td>.060 / 4.5</td>
<td>1/70</td>
</tr>
<tr>
<td></td>
<td>PINTIM</td>
<td>-.255 / -2.21*</td>
<td>.065 / 4.9</td>
<td>1/70</td>
</tr>
</tbody>
</table>

Beta weight = standard regression coefficient.
* Significant at p ≤ 0.05
Table 14

Summary of Significant Relationships of Career Development

Dependent Variables Regressed on IFS variables for controlled sample of Juniors and Seniors

CP (Career Planning)
CE (Career Exploration)
WW (World of Work Information)

PSPFUS (Parent Spousal Fusion/Individuation)
PININD (Parent Intergenerational Individuation)
PSPFUS (Parent Spousal Fusion)
SININT (Student Intergenerational Intimacy)

<table>
<thead>
<tr>
<th>Ind. Variable</th>
<th>Dep. Variable</th>
<th>Beta / T</th>
<th>R² / F</th>
<th>DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>PSPFUS</td>
<td>.255 / 2.06*</td>
<td>.065 / 4.23</td>
<td>1/61</td>
</tr>
<tr>
<td>CE</td>
<td>PININD</td>
<td>-.384 / -3.2*</td>
<td>.148 / 10.2</td>
<td>1/59</td>
</tr>
<tr>
<td>DM</td>
<td>PSPFUS</td>
<td>.338 / 2.80*</td>
<td>.115 / 7.86</td>
<td>1/61</td>
</tr>
<tr>
<td>WW SININT</td>
<td></td>
<td>.287 / 2.37*</td>
<td>.083 / 5.60</td>
<td>1/62</td>
</tr>
<tr>
<td>WW PSPFUS</td>
<td></td>
<td>.290 / 2.37*</td>
<td>.084 / 5.61</td>
<td>1/61</td>
</tr>
</tbody>
</table>

Beta weight = standard regression coefficient.
* Significant at p ≤ 0.05
on intergenerational intimacy and spousal
fusion/individuation. The parent sample and norm group had
similar levels of intergenerational fusion/individuation,
personal authority, spousal intimacy and nuclear family
triangulation. Comparisons between the norm groups and the
student sample in terms of career development variables
indicate higher career planning scores by all categories of
the student sample with the exception of female juniors.

Correlation analyses between the four groups of
relational predictor variables and career development
process variables identified 10 significant (p<.05) measures
of association. These 10 significant measures are within
three of the four groups of IFS variables---student family of
origin, parent family of origin, parent current
relationship.

Multiple regression analyses produced the rejection of
nine of the 16 null hypotheses that had predicted non
significant impact of intergenerational family system
variables on student’s career development process variables.
Students’ family of origin variables were significantly
related to (P<.05) career planning, career exploration, and
world of work information. Similarly, parents’ family of
origin variables were significantly (P < .05) related to
career planning, career exploration and world of work
information. Students’ current relationship variables did
not have significant impacts upon career development variables. Parents' current relationship variables were significantly (\( P < .05 \)) related to career exploration, decision making, and world of work information. The pattern of effects by IFS variables was dissimilar for the sample subgroups--freshmen/sophomores and junior/seniors.

**Discussion**

The purpose of this study was to determine the relative importance of intergenerational family systems IFS variables on college students' career development process variables. Consistent with the assumptions of IFS theory, data were collected on family of origin and current relationship issues from both students and the person they identified as a primary parent. The impacts of 15 IFS variables on career development process variables were explored and tested for significance. This section will include: a discussion of the results for overall groups of variables within the context of theoretical expectations and existing research, limitations of the study, followed by an analysis of the implications of this study for theory, research and practice.
Study results, theoretical expectations, and existing research

Students' family of origin.

Intimacy and intimidation between students and their parents were associated with students' career development variables. Students who report higher levels of voluntary closeness with distinct boundaries to the self may be more likely to be involved in making plans, exploring resources, and obtaining information about the world of work. Similarly, students who experience higher levels of intimidation with their parents may be less likely to have information about the world of work.

The positive effect of students' intimacy with parents upon students' career development processes is compatible with IFS assumptions of the benefits of involvement in a family system that is supportive and intimate while respecting boundaries. The benefits of boundaries in family systems (or more likely the detriments of a family system that violates boundaries) have primarily been conceptualized in terms of clinical categories such as anxiety, depression, somatic complaints, and/or problem solving ability. As other writers have speculated (Bratcher, 1982; Zingaro, 1982), this study indicates that a supportive family system with boundaries is also beneficial to the processes of career development.
The negative impact of students' levels of intimidation with parents also supports IFS assumptions and their connection to career development. The interrelated constructs of IFS theory assume the value of allowing other family members to make choices in terms of behaviors, values, and goals. This study supports the assumption that intimidation is a limiting and nonproductive family dynamic. Additionally, this study supports the speculation that the career development process may be a content area that is limited by intimidation.

Comparisons with the work of Rinnier, et al. (1990) in terms of the influence of intergenerational intimacy and intergenerational intimidation is not possible since their study limited the use of PAFS-C scales to individuation/fusion and intergenerational triangulation. The findings of students' intergenerational intimacy and intergenerational intimidation seem to be in line with Hesser's (1981) findings that favorable career planning attitudes are more readily characteristic of adolescents in cohesive family units.

Students' current relationships.

Intimacy and individuation between students and their peers were not associated with students' career development variables. This absence of association is perhaps related to the particular characteristics of the sample group (i.e.,
the sample students' mean score on peer intimacy was significantly lower than the norm group); or perhaps the processes of career development are unrelated to the dynamics of the peer systems of students.

Parents' family of origin.

Triangulation, intimidation, intimacy, and personal authority between parents and their parents were associated with students' career development variables. Students whose parents report higher levels of being triangulated into the relationship between their parents may be less likely to be involved in making plans for a vocation. Similarly, students whose parents experience higher levels of intimidation from their parents may be less likely to have knowledge of the world of work. Students whose parents experience higher levels of intimacy and personal authority with their parents may be less likely to explore resources in and have information about the world of work.

IFS theory assumes that nuclear family dynamics are often related to parental family of origin issues. Children benefit when their parents' family of origin relationships are characterized by increased levels of individuation/differentiation, intimacy, personal authority, and lower levels of triangulation and intimidation. The associations between parental intimidation and parental triangulation with career development processes are
understandable in this context. Students of less intimidated and less triangulated parents perhaps are given more freedom to gather information about and explore resources into the world of work.

The associations between parental intimacy and personal authority with less favorable career development scores were unexpected and difficult to understand. These associations suggest that students whose parents are less intimate and have less personal authority tend to report more favorable career development scores. Perhaps these associations represent a launching response on the part of students. Students who grew up around parental and grandparent relationships that are (from the parents' perspective) less intimate, less satisfying, and less individuated may have more need for and/or energy to explore, plan for, and possess knowledge of the world of work. The previous studies related to career phenomenon and family issues (Hesser, 1981; Kinnier et al., 1990) did not include information from and/or about parental family of origin relationships.

Parents' current relationships.

Intimacy and individuation between parents and their partners were associated with students' career development variables. Students whose parents report higher levels of intimacy and satisfaction with their mate may be more likely to be involved in exploring resources in the world of work.
Similarly, students whose parents report higher levels of individuation with their mates may be more likely to possess the ability to apply decision-making principles to problems involving occupational choices, as well as be more likely to have information about the world of work.

The relationships in this grouping are congruent with IFS assumptions of the benefits of involvement in a family system in which individuals maintain boundaries and claim their power to chart their own course in life. These findings suggest that some of the benefits of such family systems may be late adolescents' ability to chart their own course by venturing into the world of work.

The positive relationship between parents' spousal fusion/individuation is in line with Hesser's (1981) finding that adolescents from families with a combination of flexibility/structure and separateness had higher world-of-work information scores.

**Career development variables.**

Each career development variable (Career Planning, Career Exploration, Decision making, World of Work) was associated with at least one family relationship variable. The pattern of influence suggests that students' access to, need for, and/or value of career information are sensitive to family relational dynamics. Students' career planning and career exploration are moderately sensitive to family
relational dynamics, and students' decision making patterns appear to be only minimally sensitive to family relational dynamics.

The limited impact of IFS variables upon students' decision making scores appears to contrast with Hesser's (1981) finding of the significant association between family adaptability and cohesion with decision-making scores. For example Hesser (1981) found that higher decision-making information levels were associated with families manifesting higher dependence and emotional closeness among members. Differences between IFS variables and those measured by FACES may account for this contrast in the sensitivity of decision making scores to family dynamics. Additionally in order to respond accurately to the items on the decision-making scale, the attainment of reasoning skills applied to problem-solving circumstances is required. The attainment of reasoning skills is perhaps a phenomenon that is largely immune to IFS variables.

**Limitations of the study**

In as much as this study attempted to gather self-report information from both college students and a student selected primary parent in order to measure the impact of a variety of intergenerational and nuclear family constructs upon career development process variables, it has been largely successful. The results, however, are limited by
the homogeneous nature of the sample. The sample was comprised largely of white, female, college students from families in the upper levels of social position. It may not be justified statistically to extend the results of this investigation to other groups such as late adolescents in various ethnic groups and/or, various work situations.

An additional limitation is the fact that the parental IFS information was obtained from only one student selected parent. Restrictions on time, money, and the statistical complications resulting from the combination of one-parent and two-parent cases led to the decision of asking students to select one primary parent for participation. The picture of intergenerational family systems constructs from the "not selected" parent figures might change the pattern of associations.

Implications

Theory.

Intergenerational Family Systems Theory

The discovery of significant impact upon career development variables of numerous family of origin variables (both student and parent) seems to give support to the theoretical assertion of the existence of an intergenerational transmission process that connects the family emotional process across three generations. Indeed, the one non-intergenerational grouping of variables,
students’ current relationship variables, did not have any significant impact upon students’ career development variables.

While the discovered impact of IFS variables in this study lends support to the overall theory, the particular variables that emerged as having significant impacts were unexpected. IFS theoretical concepts are interrelated, and therefore, the variables that represent these concepts share some common group; however, the cornerstone of IFS theory is the concept of differentiation of self/individuation. This concept, which has been referred to as the ability to chart one’s own course in life (Friedman, 1991), is operationalized in the PAFS and PAFS-C questionnaires most directly as the variables, student intergenerational individuation/fusion (SININD) and parent intergenerational individuation/fusion (PININD). Neither of these variables produced a significant level of impact on any of the students’ career development variables. It is unclear whether the absence of individuation levels from the list of significant impactors is a theoretical issue or instrument issue or perhaps both. Career development, at least at the college student levels, is perhaps a process that benefits more from intimate connections than the ability for self-determined activity. Additionally the PAFS and PAFS-C may be deficient in their ability to measure individuation.
Kinnier et al (1990) support this position when they call for a better measure of enmeshment.

**Career development theory**

As discussed above, Super's career development theory identifies three substages of the larger exploratory stage of development. The substage identified as transition coincides with persons ages 18 to 21, and the trial substage coincides with persons ages 22-24. The division of the overall sample into a freshmen/sophomore subsample and a junior/senior subsample for analysis of hypothesis 17 allows for considerations of the theory's ideas about the existence and tasks of these stages.

While Table 5 above indicates that trial substage students generally have higher career planning scores than younger transition students, overall the scores for the two groups on career exploration, career planning, and world of work information do not give indication of two separate phases of career development. Contrastingly, the dissimilar pattern of influence of IFS variables on the two groups is perhaps indicative of different concerns and issues for the two subgroups. Three IFS variables related to students' relationships had significant impact upon career development variables of students in the freshmen/sophomore group. Of the 5 IFS variables impacting career development variables of students in the junior/senior group four related to
parents' relationships with parents. Perhaps students' relationships are more salient than parents' relationships to the primary task of persons in the transition substage—specifying a vocational preference. Conversely, perhaps parents' relationships are more salient than students' relationships to the primary task of persons in the trial substage—implementing a vocational preference.

Research.

This study represents the third attempt to investigate the interplay of aspects of family relationship dynamics and career phenomenon. This section will seek to compile the findings and limitations of these studies in order to identify likely directions for future research.

Future research should utilize a wider variety of sample populations. Hesser's (1981) sample consisted of high school seniors, while Kinnier et al. (1990) and the present study drew samples from university populations. Knowledge of family influence upon late adolescent career development can benefit from future research that compares groups from various life situations. Are the influences of IFS variables on career development variables of persons currently enrolled in a major research university different from the influences for similar age persons who are working, living at home not working, or enlisted in the military?

Future research should also allow for attention to
specific dyadic relationships within family systems. The family systems instrument used by Hesser (1981), FACES, provides only scores for the total system in two general areas—family adaptability and family cohesiveness. The PAFS-C instrument, used by Kinnier et al. (1990) and in this study, asks for parent-specific information (i.e., separate questions for satisfaction of relationship with mother and father); however, currently responses for students' intergenerational intimacy, intergenerational triangulation and intergenerational intimidation for mother and father are summed for each question to calculate the total score for each scale. Future researchers should perhaps consider consulting with the authors of PAFS and PAFS-C to determine the possibility of obtaining parent-specific scores on at least the intergenerational intimacy and intergenerational intimidation scales. With such refinement, for example, researchers could explore questions such as differences between intimacy or intimidation with mothers versus fathers as sources of influence upon students' career development.

The need for parent specific information and other concerns about the PAFS and PAFS-C instruments, such as inconsistencies in the scale lists of the PAFS-C and typographical errors in the scoring manuals, are motivation for future researchers to investigate other instruments designed to measure IFS variables. Three other instruments

Practice.

This investigation into the impact of intergenerational family systems variables on late adolescents' career development offers several directions for career counseling clinicians. This section seeks to articulate and discuss several of these applications.

In recent years several authors and researchers have developed programs, groups, and resources which assist parents in supporting the career development of their adolescent children (Hummel, D. L. & McDaniels, C., 1979; Osguthorpe, R., 1976; Palmer, S. & Cochran, L., 1988; Whiston, S., 1989). These efforts place emphasis on various topics such as developing the child's feeling of worthiness, teaching career decision making processes, exploring the world of work, strengthening parent-child relationships, and promotion of effective family communication patterns. A primary finding of this study identifies the positive impact of intimate parent/child relationships. Specifically the present research supports the idea that relationships between parents and adolescents that are characterized by
high degrees of voluntary closeness with distinct boundaries to the self are associated with higher levels of career development. Career counselors can apply this finding by giving priority to the assessment of voluntary closeness between parents and adolescents. Given the popular culture's view of intimacy as enmeshment, interventions might include education around issues of boundaries and the importance of voluntary involvement. Such education can take place through analysis of popular song lyrics that confuse intimacy and fusion. For families characterized by distant relationships career counselors might utilize in session experiential techniques designed to facilitate closeness. For example, sculpting techniques can be used to symbolize the barriers that prevent voluntary closeness between parents and adolescents. Once constructed, parents and adolescents can be encouraged in session to experiment with lowering these symbolic barriers.

University counseling centers are often actively involved in providing career information, assessment, and counseling. A primary implication of this study for counselors in these settings is the possible association between beginning students' uninformed, premature career selections and family intimidation. A college student's freedom to postpone definite career paths while gathering broad knowledge of types of occupations may be related to
the family system dynamic of intimidation. The "counseling work" in such situations can be expanded to include assessment of real and/or imagined intimidation. What are the students' perceptions of parental expectations and demands? What are the students' perceptions of the consequences if these expectations and/or demands are not met? Following assessment, numerous clinical models can be utilized to address levels of intimidation. IFS clinical work would begin by educating the student about family dynamics through construction of a family genogram. Additionally, the counselor can coach to manage his/her anxiety while experimenting with less intimidated behaviors. Cognitive techniques can be utilized to alter irrational ideas. For example, students may need to examine the irrational idea that it is an absolute necessity for him/her to have total love and approval from his/her parents. Experiential techniques such as role-playing interactions between the student and parent can also be utilized. For example, students can be encouraged to symbolically represent (through art, movement, or use of props) their relationship to "parental expectations". Students can be encouraged to experiment with new relationships to "parental expectations".

Counselors working with families in which adolescent career development is a primary issue can also utilize both
the parents' family of origin and parents' current relationships in the therapeutic process. In addition to objective career counseling techniques geared toward the acquisition of knowledge, attitudes, and skills, counselors can assess (through clinical observations and questioning and/or testing) issues of individuation, intimidation, and triangulation. For example, parents who appear to be overly involved in the relationships of their parents might be coached by the therapist toward a more individuated stance. This coaching can take the form of "home visits" by one or both parents. The goal of such work is to back the parent(s) out of his/her family of origin relationships. Shifts in the family system at the parental family of origin level may change the structure of the nuclear family system so as to free up the student for launching into the world of work.

Conclusion

This study attempted to investigate the influence of specific aspects of family interaction patterns on career development processes of late adolescents. Data were obtained from university undergraduates and one of their primary parent figures. The final sample on which the results were computed was composed of 139 parent/university student dyads. While additional research is needed, the results of the study generally support the notion that
intergenerational family systems variables are related to late adolescent career development processes. University students may benefit from counseling approaches that include attention to the family system, particularly in terms of both voluntary closeness between students and parents, and issues of intimidation and triangulation between parents and their parents.
REFERENCES


APPENDIX

FORMS AND QUESTIONNAIRES
Appendix A

Virginia Polytechnic Institute and State University

Informed Consent for Participants of Investigative Projects

Title of Project: Late adolescent career development and intergenerational family relationships

Principle Investigator: Dan M. Sandifer

I. Purpose of This Research

This study is designed to investigate the relationship between family relationships and aspects of an individual’s career development. Career development is a general term which includes thoughts and behaviors related to the process of choosing a career.

II. Procedures

The time required for your participation is approximately one hour.

You will be asked to complete a short demographic questionnaire and two survey instruments. The career survey is answered on an orange opscan sheet. The family survey is answered on a green opscan sheet.

This study also involves mailing a family relationship survey to one adult who played a primary parenting role (financial support, nurture, guidance, discipline) in your life. This adult can be a natural parent, step-parent, or guardian. The purpose of this survey is to obtain information about your primary parent’s family of origin. You will be asked to choose one primary parent and address an envelope and reminder card to this person. You will also be asked to write a very brief note encouraging their participation at the bottom of a prepared form letter to parents.

III. Benefits of This Project

Your participation in the project will provide information about the relationship between family relationships and aspects of late adolescent’s career development. This information may help career counselors in
their work with college students. This information may help career counselors design family programs.

You may receive a synopsis or summary of this research when completed. If you would like to receive this information tell the researcher at the time you sign this form.

IV. Extent of Anonymity and Confidentiality

The results of individual surveys will be kept strictly confidential. The information you and your primary parent provide is only identified by a case number. That number is indicated on the items in your packet. The master list which matches names and case numbers will be kept in a locked file. Students and parents who request information about the results will be given an overall summary only. Parents cannot obtain their student's survey results or vice versa. Published reports of overall findings from this research will refer to Virginia Tech as a large southeastern University.

V. Compensation

For participation in this project your instructor has agreed with the researcher to provide you with extra credit. The amount of credit is determined by your particular instructor. To receive this credit you must print your name, social security number, and provide your signature on one of the sheets with the name of your instructor at the top. These sheets will be given to instructors by the researchers.

VI. Freedom to Withdraw

You are free to withdraw from this study at any time without penalty.

VII. Approval of Research

This research study has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University, by the Department of Family and Child Development.
VIII. Subject’s Responsibilities

I know of no reason I cannot participate in this study. I understand I have the following responsibility of completing the surveys as appropriate and to the best of my knowledge.

________________________
Printed Name

________________________
Signature

IX. Subject’s Permission

I have read and understand the informed consent and conditions of this project. I hereby acknowledge the above and give my voluntary consent for participation in this project.

I also understand that if I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

I understand that should I have any questions about his research and its conduct, I should contact:

Dan Sandifer; Investigator 552-1122
VA. Tech Research Division 231-4384
Jay Mancini Ph.D.; Faculty Advisor 231-6110
Appendix B
March 17, 1993

Dear Virginia Tech Parent/Guardian,

Last week your son/daughter was invited and subsequently agreed to participate in my research study about family relationships and late adolescent career development. He/she attended a one hour group session where he/she completed two survey instruments and addressed this envelope to you. Each student who participates in the study is receiving extra credit in one of their current courses.

The purpose of my dissertation research is to investigate the relationship between family relational dynamics and career development. Career development is a general term which includes attitudes and behaviors such as exploration into the world of work. I hope that my research will help career counselors work with college students. I hope that my research will also help parents facilitate the career development of their adolescents.

The uniqueness of my dissertation study is the attempt to take an intergenerational perspective. I am attempting to include input from one parent/parent figure about their relationships with children, spouses/significant others, and their parents. Participation from you is essential to the success of this study.

Your participation will take 30 to 45 minutes and involves completing the enclosed demographic survey (printed on a grey opscan form and a second white page) and the PAFS questionnaire. The answers to the questions on the PAFS questionnaire should be written on the numbered (1-132) answer sheet provided. A self-addressed stamped envelope is provided for your convenience in returning the grey opscan form and the numbered (1-132) answer sheet. DEADLINE IS APRIL 2.

Your participation and answers given on the instrument will be kept confidential. The answer sheets mailed to you are identified by a case number only--names will not be used during analysis or reporting. The master list matching case numbers and names is kept in a locked file and will be destroyed following completion of the research. Published reports of this study will discuss overall results and refer to Virginia Tech as a large southeastern university.
You may request an overall summary of the completed research by making a written request to the address given below. Students cannot obtain their parent's survey results or vice versa.

This letter is designed to serve as a document of informed consent for your participation. Please check the box at the top of the demographic survey to acknowledge your awareness of the information contained in this letter.

I would like to thank you in advance for your prompt return of the questionnaires. I am very grateful for your time and effort.

Sincerely,

Dan M. Sandifer
Appendix C

The Student Demographic Questionnaire

Instructions

As you move through this short questionnaire please read each question carefully, and then darken in your reply in the answer column to the right. Be sure you are using a #2 pencil when you enter your responses. If you make a mistake, be sure to erase you error completely. Also, be certain to darken in only one number for each item in the questionnaire.

If the instruction for any of the questions are not clear, please raise your hand and either myself (or one of the test proctors) will come to your seat to help you.

1. Age (1) 18 (2) 19 (3) 20

2. Sex (1) Male (2) Female

3. Ethnic Group
   (1) Asian-American; (2) African-American; (3) Hispanic
   (4) White; (5) Native-American; (6) Other

4. Status of Parents
   (1) Never married; (2) Married and living together
   (3) Separated; (4) Divorced; (5) One parent deceased; (6) Both parents deceased
   (7) other

5. Total number of brothers and/or sisters
   (Living both at home and away from home)
   (1) 0 (2) 1 (3) 2 (4) 3 (5) 4
   (6) 5 (7) 6 or more

6. Which of the following best describes your family position?
   (1) I am an only child (have no other brothers and sisters).
   (2) I am an oldest child (have at least one younger brother or, but none that are older)
   (3) I am a middle child (have at least one older and younger brother or sister)
   (4) I am a youngest child (have at least one older brother or sister but none that are younger)
7. The "primary parent" I have selected to receive a family relationship questionnaire by mail is:

(1) natural parent  (2) step parent  (3) guardian  (4) relative  (5) other
Appendix D

I acknowledge my informed consent to participate in this research study.

The Parent Demographic questionnaire

Instructions

As you move through this short questionnaire please read each question carefully, and then darken in your reply in the answer column to the right. Be sure you are using a #2 pencil when you enter your responses. If you make a mistake, be sure to erase you error completely. Also, be certain to darken in only one number for each item in the questionnaire.

Thank you for your participation.

1. Age
   (1) 30-34 (2) 35-39 (3) 40-44 (4) 45-49
   (5) 50 or older

2. Sex
   (1) Male (2) Female

3. Ethnic Group
   (1) Asian-American; (2) African-American
   (3) Hispanic; (4) White; (5) Native-American
   (6) Other

4. Your Current Family Income Level (per year)
   (excluding children's income)
   (1) 11-20,000 (2) 21-30,000 (3) 31-40,000
   (4) 41-50,000 (5) 51-60,000 (6) 61-70,000
   (7) 71-80,000 (8) 81-90,000 (9) 91-100,000
   (10) over 100,000

5. Your educational Level
   1. grade school
   2. some high school
   3. diploma/vocational certificate
   4. some college
   5. 4 year college
   6. some graduate school
   7. graduate degree
Which of the eight categories listed below best describes the present or last occupation of the designated individual?

*If the actual job is not listed please select the number of the category within which the job/career fits.

6. Person completing this survey
7. The other parent/step-parent/guardian in your household.

(1) Not applicable
(2) Has never been employed outside the home.
(3) Jobs such as cafeteria worker, dairy worker, farm helper, freight handler, unspecified laborer, stock handler.
(4) Jobs such as assembly line worker, bartender, practical nurse, roofer, bus driver, short order cook, general truck driver, factory machine operator, hairdresser.
(5) Jobs such as blacksmith, butcher, carpenter, chef, mason electrician, mechanic, plumber, city policeperson, printer, repairperson.
(6) Jobs such as bank clerk & teller, book-keeper, sales clerk, draftsman, laboratory technician, post office clerk.
(7) Jobs such as insurance agent, private secretary, sales representative, store manager (chain), computer programmer, photographer, Army (master sergeant), Navy (chief petty officer), travel agent, small business owner.
(8) Jobs such as office manager, postmaster, government official (minor, IRS agent) military: commissioned officers, lieutenant, captain, librarian, pharmacist, social worker, school teacher, medium business owner.
(9) Jobs such as executive in a large business, accountant, chemist, engineer, lawyer, clergy, physician, college teacher, military: commissioned officers--major and above, geologist, psychologist.
EDUCATION

Doctor of Philosophy
Family & Child Development
Marriage & Family Therapy
Virginia Polytechnic Institute & State University

Master of Divinity
Pastoral Care & Counseling
Southern Baptist Theological Seminary; Louisville, KY

Bachelor of Arts
Psychology
Baylor University
Waco, TX

PROFESSIONAL EXPERIENCE

Family Therapy Intern
June 1992 - May 1993
The Family Institute
Beckley, WV

Family Therapy Practicum
March 1991 - April 1992
The Center for Family Services
Blacksburg, VA

Group Facilitator for Grief Support Groups
New River Valley Hospice
Blacksburg, VA

Teaching Assistantship
August 1991 - May 1992
Family & Child Development
VPI & SU
Marriage and Family Dynamics
(Full lecture and management responsibility for section with 150 students)

Chaplain
April 1991 - September 1991
Lewis Gale Psychiatric Center
Roanoke, VA
(Primary responsibility to substance abuse unit)
Graduate Research Assistantship  Family and Child Development  
August 1990 - May 1991  VPI & SU  
(Statistical analyses utilizing  mainframe and SPSS)

Minister to Youth  Myers Park Baptist Church  
January 1988 - June 1990  Charlotte, NC

Residency in Clinical Pastoral  Education  Children's Medical Center  
August 1986 - August 1987  Dallas, TX

Clinical Pastoral Education  Central State Hospital  
January 1986 - May 1986  Louisville, KY

Clinical Pastoral Education  Baptist Hospital East,  
May 1983 - August 1983  Louisville, KY

PROFESSIONAL TRAINING

The Dissociative Continuum: Working with abuse survivors.  
Presenter: Nancy Napier; March 4 and 5, 1993; Charleston,  
WV.

9th Annual West Virginia University Hypnosis Workshop, "The  
'art' in the Science of Healing; December 11-13, 1992;  
Morgantown, WV.

1989 Religious Education Summer Institute; Boston College;  
Boston, MA.; Course: Educating in faith.

1988 Religious Education Summer Institute; Boston College;  
Boston, MA.; Course: Practice of youth ministry.

POSTER PRESENTATIONS

Dwyer, S., Sandifer, D. M., Marek, L., Beach, A., Coward,  
L. "Half-hour Families: A feminist perspective".  
National Council on Family Relations Annual Conference  
Orlando FL, November, 1992

Sandifer, D. "The Inner Journey: Family of Origin and  
Awareness of Human Finitude For Persons Living With  
AIDS".  
American Association for Marriage & Family Therapy Annual  
Conference Miami, FL, October, 1992

PRESENTATION OF PAPERS

Sandifer, D.M. "Is the Genogram Complete: Developmental Theory Background of Bowen's Differentiation". 17th Annual Southeastern Conference on Child & Family Development Blacksburg, VA April 1992


PUBLICATIONS


AWARDS & HONORS

Graduate Student Scholarship Award Faculty of College of Human Resources Virginia Polytechnic Institute & State University Fall 1991

Phi Kappa Phi National Honor Society Virginia Polytechnic Institute & State University Chapter April, 1991

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

American Association of Marriage and Family Therapy .
National Council on Family Relations