

CAREER DEVELOPMENT IN A RELATIONAL CONTEXT: AN EXAMINATION  
OF FAMILY OF ORIGIN DYNAMICS, RELATIONAL HEALTH, ETHNIC  
IDENTITY AND CAREER DEVELOPMENT IN  
DIVERSE COLLEGE WOMEN

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

COLLEGE OF ARTS AND SCIENCES

BY

ADRIA N. VILLARREAL, B.S., M. A.

DENTON, TEXAS

MAY 2007

## ACKNOWLEDGEMENTS

Exploring relational aspects of career development in the lives of college women has made me keenly aware of the extraordinary support I have received throughout this long and meaningful journey.

I would like to express my sincere appreciation to Dr. Roberta Nutt, who served as chair of this project. Her attention to detail, editing skills and ability to rein me in when necessary, helped strengthen my work and sharpen my research skills. Her guidance and encouragement throughout my doctoral training has been greatly appreciated. I would also like to thank my committee members, Drs. Kenneth Foster, Nathan Grant Smith and Debra Mollen for their insights, suggestions and encouragement.

The quality of support and encouragement I have received over many years of graduate training has been immeasurable. I wish to thank the many supervisors, friends and colleagues who have touched my life and fostered my professional and personal development. My wonderful supervisors on internship at the University of Missouri – Columbia offered extensive support and mentoring that has remained with me over the years. My dear friends, Drs. Anne Meyer, Judy Bronson, and Stephanie Chervinko have continued to offer friendship, endless encouragement and much needed laughter throughout internship, dissertation, and life.

I also want to thank my colleagues and friends at the University of Texas at Arlington, who have witnessed the toll this project has taken and provided much

appreciated assistance and encouragement, helping me see this project to completion. I am particularly grateful to Dr. Kenneth Farr and Cynthia Bing for their unwavering support of my professional development and to Dr. Nancy Rowe for her statistical consultation when I desperately needed it. My friend and colleague, Lori Leach, has been a constant source of encouragement and friendship through challenging times.

To my dear friend, Dr. Vickie Goins, I am profoundly grateful. She has remained a constant presence and faithful friend in school and life. Her willingness to share the journey of graduate school has been meaningful and her determination to finish her degree has been inspirational. She has my deep respect and admiration.

To my father and mother, Jesse and Yolanda Villarreal, I am forever grateful. They impressed upon me the value of education at an early age and have always believed I would accomplish great things. Their unwavering support and love have been instrumental in my life and throughout my graduate training.

Finally, I wish to thank my husband, Steve McIntosh, for rearranging his life in support of my dreams. He has demonstrated true partnership at every turn and his faith in me and willingness to assist me at every phase has been truly remarkable. He has kept me moving forward through it all and I lovingly share this accomplishment with him.

## ABSTRACT

ADRIA N. VILLARREAL

### CAREER DEVELOPMENT IN A RELATIONAL CONTEXT: AN EXAMINATION OF FAMILY OF ORIGIN DYNAMICS, RELATIONAL HEALTH, ETHNIC IDENTITY AND CAREER DEVELOPMENT IN DIVERSE COLLEGE WOMEN

MAY 2007

Researchers have encouraged continued exploration of the intersection of career and relationships (Whiston & Keller, 2004a), with particular attention to racial and ethnic minorities (Flores & Ali, 2004). The present study explored associations between career development and the quality of interpersonal relationships in a sample of 294 ethnically diverse college women recruited primarily from undergraduate psychology courses in the Southwest. Participants completed a series of questionnaires assessing multiple relationship dynamics and career outcomes including the Career Decision Self- Efficacy – Short Form (Betz, Klein, & Taylor, 1996), My Vocational Situation (Holland, Daiger, & Power, 1980), Relational Health Indices (Liang et al., 2002), the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), and the Family Environment Scale (Moos & Moos, 1994).

As predicted, results of an analysis of variance revealed Caucasian college women tended to report higher vocational identity than Hispanic women. No differences were observed between Caucasian and African American women's vocational identity. Results failed to support predicted ethnic differences in career decision self-efficacy for

Caucasian, Hispanic and African American women, indicating women reported feeling similar levels of confidence for career decision tasks.

African American and Hispanic women reporting higher ethnic identity tended to indicate greater confidence for career decision tasks, while no differences were found between these two groups of women in vocational identity. Multiple regression analyses identified greater family cohesion and participation in social and recreational activities, together with higher quality mentor relationships as significantly related to higher vocational identity. An inverse relationship was observed between ethnic identity and vocational identity, such that women who endorsed higher ethnic identity tended to possess less stable views of their skills and talents. Further, greater confidence for career decision-making tasks was associated with a higher quality mentor and peer relationships and greater social and recreational activity in the family-of-origin. While preliminary, findings suggest the quality of multiple relationships may be an important area for further study in ethnic minority college women's career development. Implications for theory, research and clinical practice are presented, together with limitations and suggestions for future research.

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## CHAPTER 1

### INTRODUCTION

Career and relationships are intimately connected (Blustein, Prezioso, & Schultheiss, 1995; Flum, 2001). To explore one domain of human functioning requires acknowledgement of the other. The exploration of career embedded within life and relationships has become an exciting research agenda in the field of vocational psychology (Blustein, Walbridge, Friedlander, & Palladino, 1991; Hargrove, Creagh, & Burgess, 2002; Hartung, Lewis, & May, 2002), though many have asserted the importance of this integration for some time (Holland, 1985; Roe, 1957; Schulenberg, Vondracek, & Crouter, 1984; Super, 1980). As career theories have advanced within a changing society, researchers, clinicians, and others interested in understanding and facilitating career development have come to realize the important link between work and relational lives (Blustein, 2001, 2004; Blustein et al., 1995; Flum, 2001). The field of counseling psychology faces a challenge to find creative ways to explore this reality and advance both career and personal development theories (Richardson, 1993).

Devised to understand, predict and facilitate career progress, career development theories were created to understand vocational behavior, including initial decisions about career pursuits, adjustment and satisfaction issues, and the progression of work throughout the lifespan (Swanson & Fouad, 1999). Definitions are critical aspects of psychological constructs. Career development has been defined as "...the total

constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape the career of an individual over the lifespan” (Sears, 1982, p. 139). Moreover, according to Wolfe and Kolb (1980):

Career development involves one’s whole life, not just occupation. As such, it concerns the whole person... More than that, it concerns him or her in the ever-changing contexts of his or her life. The environmental pressures and constraints, the bonds that tie him or her to significant others, responsibilities to children and aging parents, the total structure of one’s circumstances are also factors that must be understood and reckoned with. In these terms, career development and personal development converge. Self and circumstances – evolving, changing, unfolding in mutual interaction – constitute the focus and the drama of career development” (pp. 1-2).

These expansive definitions illustrate that career development encompasses a wide variety of interrelated ideas and processes. What these select definitions of career development have in common is an emphasis on the salience of work and career for all individuals. The acknowledgement in the aforementioned definitions, however rudimentary or complex, of the contexts within which work and career are embedded for all individuals has provided the foundation of current theory.

The speculation that career development is both an integral component of adaptive functioning and embedded within multiple life roles and contexts has been present in many early theories of career development (Holland, 1997; Roe, 1957; Super, 1980). Since Super, Roe and Holland proposed theories of career development, society has

changed; so, too, have theoretical propositions regarding the importance of careers in people's lives (Blustein, 2001; Flum, 2001).

Early pioneers approached career development from multiple orientations, including trait and factor theorists who focused on the interaction between personal abilities, interests and the environment (Holland, 1966, 1985), developmental or self-concept theorists who emphasized the process of self-definition in career choice (Super, 1957, 1980), and more recently, social learning and developmental-contextual theorists who have asserted that career development is composed of a complex interplay of social, personal and environmental contributors across developmental stages (Hackett, Lent, & Greenhaus, 1991; Lent, Brown, & Hackett, 1994; Vondracek, Lerner, & Schulenberg, 1986).

A further organizing framework in vocational psychology includes the recognition that not every member of society approaches career decision-making in the same manner. Factors hypothesized to affect individuals' career behavior include differential life experiences, values, socialization and cultural processes. Aligned with social movements aimed at improving the lives of women and later, racial and ethnic minorities, researchers began to question the applicability of prevailing career theories for such populations. Propelled by findings attesting to the underutilization of women's abilities in areas of work and career, and under representation of women and minority members in higher education, managerial occupations and careers in science and math for example, research has focused on understanding barriers and supports in women's and racial and ethnic minority members' career development (Lent et al., 1994).

Although the earliest scholars in career development theorized about the importance of the family context in understanding vocational development (Roe, 1957; Schulenberg et al., 1984; Super, 1957), and researchers explored the relationships between select family background variables and career development (e.g., Banducci, 1967; Blau & Duncan, 1967), some have suggested that the field of psychology has generally viewed career and life concerns separately (Blustein, 2001; Blustein et al., 1995; Flum, 2001; Richardson, 1993). This separation has led some to conclude that potentially fruitful areas of the intersection between career and relationships have been ignored or inadequately explored (Flum, 2001; Richardson, 1993). Theoretical and empirical progression toward more complex examinations of relational factors involved in career development across the lifespan has been important in shaping current vocational psychology research. Understanding the unique and important role that others, including family members and others, may play in facilitating or hindering career progress for diverse individuals is critical to the field and individual members of society (Blustein, 2001, 2004; Blustein et al., 1995; Whiston & Keller, 2004a).

The exploration of relational factors in career development has received recent attention as an essential advance in the field of counseling psychology (Blustein et al., 1995; Felsman & Blustein, 1999; Flum, 2001; O'Brien, 1996; Phillips, Christopher-Sisk, & Gravino, 2001). This line of inquiry has been approached from multiple perspectives, including attachment, family systems, and feminist relational frameworks, and explored using multiple research methods, including qualitative and quantitative explorations.

However, according to Blustein (2001) “[t]he interface between work and interpersonal relations remains a relatively unexplored frontier in our search for a broad and contextually rich understanding of human behavior and its various manifestations” (pp. 179-180). Detailed, empirical examination of family relational dynamics and family context as crucial variables in the study of career development is a relatively recent phenomenon, however (Blustein, 1994; Blustein et al., 1995; Hargrove et al., 2002; Hartung et al., 2002; Lopez & Andrews, 1987; Schulenberg et al., 1984; Whiston, 1996).

As the structure of the family has changed over time, researchers have taken alternate approaches to understanding the influence of family dynamics on career development. Researchers initially focused on background variables, including social class, family structure and parent-child relationships as potentially important variables associated with career development (e.g., Banducci, 1967; Blau & Duncan, 1967; Crawford, 1978; Harvey & Kerin, 1978). Findings supporting the associations between family background and career variables provided an important foundation for future investigations. Through the use of multidimensional measures assessing dynamics within the family, contemporary researchers are beginning to address criticisms concerning the simplistic measurement of family variables. Researchers have replaced unidimensional measures of family relationships with more complex, multidimensional assessments intended to explore the family as a whole or system in explorations of family and career (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). Current research integrates a combination of background variables with complex assessments of family relational dynamics.

The integration of career decision-making and relationships has been approached from a variety of theoretical perspectives. As researchers in vocational psychology became interested in the process of career decision-making, and specifically, generating a more contextually based understanding of such decision-making, the attachment literature provided an interesting and relevant means to explore career behavior (Blustein et al., 1995). Significant findings from the integration of career development and attachment theory have included the salience of important relationships with attachment figures on career exploration behavior and other adaptive career behaviors.

Though the intricacies of attachment have not been explored fully, and research remains equivocal, the consensus remains that early relationships offer a “secure base” which may provide a necessary foundation for multiple career development processes and behaviors, including career exploration (Blustein et al., 1991; Felsman & Blustein, 1999) and career decision self-efficacy (Wolfe & Betz, 2004). Positive relationships between higher attachment security and adaptive career behaviors for adolescents and young adults have been observed (Blustein et al., 1991; Felsman & Blustein, 1999; Tokar, Withrow, Hall, & Moradi, 2003; Wolfe & Betz, 2004). Blustein and colleagues, for example, found attachment and conflictual independence from mother and father were positively associated with commitment to career choices and negatively related to premature foreclosure of career options for women. Men who identified stronger attachment to and conflictual independence from parents and tended to think like their fathers tended to report greater commitment to career choices (Blustein et al., 1991). In an extension of the relational field to include peers, Felsman and Blustein (1999) reported

that attachment to peers was significantly and positively related to increased exploration behaviors and career commitment. Still other researchers have incorporated a variety of career development variables together with multiple indices of attachment and separation variables and concluded that there is a positive relationship between attachment and separation variables and adaptive career behaviors (Tokar et al., 2003). Extending attachment variables to include attachment style, Wolfe and Betz (2004) reported quality of attachment relationships and attachment style were related to fear of commitment and confidence in career decision-making.

Demonstrating the multi-theoretical approach of work conducted in this area, researchers have begun to explore contextual factors and career development from family systems perspectives (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). Family relational dynamics, including cohesion and adaptability, appear to play a role in career development, including confidence concerning career decision-making (Whiston, 1996) and development of an accurate and healthy sense of vocational identity (Dodge, 2001; Lopez, 1989). Further, a relational framework, represented by the integration of multiple theoretical perspectives, has also been discussed as a useful framework for understanding women's career development (Crozier, 1999).

Understanding how dimensions of diversity impact career development has become a critical endeavor in vocational psychology (Worthington, Flores, & Navarro, 2005). Early explorations focused on racial and ethnic group differences in educational and occupational attainment (e.g., Dillard & Campbell, 1981) provided the foundation for current knowledge of the unique experiences of vocational development for racial and

ethnic minority individuals. Findings of significant racial and ethnic group differences in important career dimensions fueled researchers to begin investigating potential correlates of such differences in the hopes of facilitating the career success of all members of society.

The influence of the family has also been linked to much theoretical speculation concerning the vocational development of ethnic minority individuals. Multiple theorists and researchers have called for continued examination of the career behavior of ethnic minority members, with particular attention to potential familial influences (Brown, 1995; 2004; Flores & Ali, 2004). Although the extant literature concerning family influences on career development in minority populations documents the relative invisibility of individuals from diverse ethnic and racial populations as the focus of such research, there is reason to envision the family as a critical variable in minority members' career development. The family is often identified as critical in understanding the experiences and behaviors of individuals of diverse racial and ethnic groups (Marin & Marin, 1991; Sue & Sue, 1999). Interdependence, embodied in the family, is valued in many minority group members' lives (Sue & Sue, 1999). Within African American culture the family often includes extended family members. Understanding how the potential resources available in some extended families may impact the career development of African Americans seems warranted. An overarching cultural value important in diverse Hispanic subgroups is familism, or the importance of, coupled with an obligation to, nuclear and extended family networks (Marin & Marin, 1991). It has been suggested that familism frames many Hispanic individuals' lives, including

important choices. One might surmise, therefore, that such an important value might play a significant role in various career behaviors (Arbona, 1990; Flores & Ali, 2004; Gomez et al., 2001).

In addition to family relationships, introducing variables that add dimension to ethnic minority status, including ethnic identity, into studies of career development may facilitate a deeper understanding of racial and ethnic minority members' experiences throughout the career development process (Arbona, 1995; Helms & Piper, 1994; Tinsley, 1994). From theoretical speculation concerning the intersection of identities, researchers have begun to investigate the relationship between identity as a racial or ethnic minority individual and various career development constructs (Gloria & Hird, 1999; Jackson & Neville, 1998). Research defining diverse individuals' lives more accurately, including describing the salience of one's ethnic identity, for example, has the potential to enrich the understanding of career development within diverse populations.

The primary purpose of the current investigation is to extend knowledge regarding the unique career development processes of diverse college women. It is hoped that the current findings will facilitate understanding of the complex interplay of factors involved in development of vocational identity (Holland et al., 1980a) and career decision self-efficacy (Betz & Hackett, 1981; Hackett & Betz, 1981), including the potential influence of the quality of interpersonal relationships. Since the majority of vocational research has been conducted with majority culture men and women, the focus of this study on African American and Hispanic women, in addition to Caucasian women will address a missing piece within vocational psychology research.

Researchers have initiated explorations into the unique concerns of minority college students, however, more research is needed (Flores & Ali, 2004). Findings from the present investigation will extend the existing literature through addressing an increasingly complex picture of career development for diverse women. Research exploring the potential association among quality of multiple relationships, ethnic identity, and career behavior will generate findings that have the potential to facilitate career and personal counseling and enhance the quality of life for understudied women.

The following general research questions will be addressed in the present study:

(1) Are family-of-origin relationship patterns, including relational and system maintenance and control dimensions, associated with greater career decision-making self-efficacy and more stable vocational identity? (2) What is the relationship between relational health in peer, mentor and community domains and career outcomes? (3) Are there group differences on measures of family-of-origin dynamics, attachment, relational health or career outcomes for African American, Hispanic or European American college women? (4) Is ethnic identity related to family-of-origin relational dynamics, relational health, parental attachment, or career outcomes?

The principal purpose of the current investigation is to extend previous research exploring family influences on college students' career development process (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002; Whiston, 1996) while addressing emerging criticisms concerning the lack of focused research addressing possible familial influences in diverse students' career development (Brown, 2004; Flores & Ali, 2004).

## CHAPTER 2

### LITERATURE REVIEW

#### Women's Career Development: A Select Overview

The historical neglect of women in the early vocational psychology literature has been extensively criticized (Astin, 1984; Betz, 1993; Betz & Fitzgerald, 1987; Farmer, 1985; Fassinger, 1985; Fitzgerald & Crites, 1980; Osipow, 1975; Osipow & Fitzgerald, 1996). The reevaluation of existing theories and career development models has resulted in new views of women and careers. An impressive accumulation of research addressing a myriad of career-related issues for women has emerged, leading to the assertion that research concerning women's career development may represent the most "vibrant" research agenda in vocational psychology (Fitzgerald, Fassinger, & Betz, 1995). Researchers have explored the unique and complex career-related experiences of women and devised both "gendered" theories (Fitzgerald et al., 1995) of career development (Betz & Hackett, 1981; Farmer, 1985, 1997; Fassinger, 1990; Fitzgerald & Betz, 1984; Hackett & Betz, 1981) as well as universal theories aimed at explaining and predicting the career behavior of men and women (Astin, 1984; Lent et al., 1994). The resulting surge of new ideas, research questions, and career development models has included explorations of multiple external socio-cultural and internal psychological forces affecting women's career progress.

The shift toward appreciating women's place in the vocational psychology research has involved multiple intersecting social forces. The large scale entry of women into the paid workforce since World War II led psychologists to reconsider previous theories (Holland, 1966, 1985; Super, 1980) and devise new theories (e.g., Astin, 1984; Betz & Hackett, 1981; Farmer, 1976; Hackett & Betz, 1981). In recognition that his original theory failed to capture women's career development, Super (1980) developed an adjunct theory to explain the career processes of women, highlighting women's relational orientation. He categorized women's careers according to how women integrated work and family roles. According to Osipow and Fitzgerald, (1996) "Super's central insight concerning the defining role played by family roles in shaping most women's lives remains the major key to understanding women's career development" (p. 251). Holland (1966, 1985), another seminal figure in vocational psychology, initially admitted his theory was inadequate to explain and predict women's career processes due primarily to failing to account for the influence of gender role socialization on women's vocational interests. Such revisions represented critical first steps towards recognizing the unique needs and processes of women, though some have argued that theories focused on women, rather than viewing women as special cases in men's theories, are required for true understanding to occur (Betz & Hackett, 1981; Fassinger, 1990). Although critical questions concerning important aspects of women's career development continue to be addressed, often focused on facilitators and impediments to women's career achievement, much remains unknown or inadequately explored (Osipow & Fitzgerald, 1996).

## Social Context of Women's Careers

Examining the social context of individuals' lives and careers is of paramount importance; social change and expectations impact the vocational development of all members of society. The social context of women's lives has played an influential role in women's vocational behavior over many years (Betz & Fitzgerald, 1987). The accumulation of research concerning women's career development has occurred during rapid social change. Women's participation in the workforce has increased dramatically over the past 50 years (Toossi, 2002). In 1950, 30% of women engaged in full or part-time paid employment. This contrasts with 60% of women currently working in the paid workforce (U.S. Department of Labor, 2003).

Historically, research questions in women's vocational development often concerned discriminating homemakers from career-oriented women working outside the home (Betz & Fitzgerald, 1987). Such questions are no longer relevant in today's society and have not been for some time. Women working outside the home is the norm (Hyde, 1985). Questions focused on traditionality of women's occupational choices have also lost relevance for women, who are both entering more varied occupations and assuming leadership roles in more "traditional" occupations. More meaningful questions concern women's career aspirations, career related self-efficacy -- defined as an individual's belief in his or her ability to complete tasks associated with career development (Bandura, 1977; Betz & Hackett, 1981; Hackett & Betz, 1981), and issues addressing utilization of talents. As the role of women in society has changed, theories have been

refined in an effort to accommodate important shifts in societal, cultural and personal meanings of women's work.

### Prominent Contemporary Career Theories

Women's vocational experiences and development have been viewed through a variety of lenses. For example, Astin's psychosocial theory (1984), self-efficacy theory applied to career development (Betz & Hackett, 1981; Hackett & Betz, 1981), and social cognitive career theory (Lent et al., 1994) among others (Farmer, 1985, 1997; Fassinger, 1985, 1990), have added invaluable information to the theory and practice of women's career development. Although debate continues as to whether women's career development is best understood from separate gendered theories or different application and emphasis of men's career development constructs, researchers for several decades have generated new and important research focused on women's unique challenges and sources of strength (Fitzgerald & Crites, 1980).

Astin's (1984) sociopsychological theory of career development is an example of a theory focusing on women, though originally devised to be equally appropriate for both men and women. Astin suggested personal and socio-cultural aspects were critical to career development but added the perspective that both personal and socio-cultural aspects were experienced differently by men and women. According to Astin, important aspects of career development included motivation, expectations, gender role socialization and the "structure of opportunity," defined as the manner in which "social forces shape and reshape occupational decisions" (p.117). Astin proffered a needs-based principle suggesting factors related to survival, pleasure, and contribution affected work

behavior and speculated that career choice was dependent on the accessibility of work and the ability of work to satisfy needs. Attending to contextual factors, Astin described socialization as important and delineated micro (i.e., family, peers, and school) from macro-level (i.e., structure of opportunity) socialization influences. Experiences within the family, school, and with peers served to reinforce gender stereotyped behaviors and attitudes which impacted skills and talents utilized in future work and career. For Astin, the microsystem was greatly impacted by the structure of opportunity, defined as the “economic conditions, the family structure, the job market, the occupational structure, and other environmental factors that are influenced by scientific discoveries, technological advances, historical events and social/intellectual movements” (Astin, 1984, p. 125).

Fassinger’s career realism model, (Fassinger, 1985, 1990) represents a gendered theory focused exclusively on women’s unique career processes. Fassinger proposed that ability, achievement orientation and feminist orientation interact to predict family and career orientation and choice. Fassinger’s original theory was later revised to include a daughter’s attachment to her mother as an important independent variable (O’Brien & Fassinger, 1993).

Another influential theorist in women’s career development, Farmer (1976, 1985) originally hypothesized that women’s career progress and achievement included intersecting background, psychological and environmental variables. Background variables integrated gender, race/ethnicity, social class and age, whereas psychological variables included self-esteem, values, attitudes toward homemaking and attributions for

success. Environmental variables considered by Farmer to be influential included societal attitudes from teachers and support from teachers and parents. Farmer further delineated motivation strivings, including level of aspiration, mastery strivings and career commitment as influential variables in her theory of career development. While her work emphasized the combination of personal and situational variables hypothesized to predict women's career development, Farmer's model has been criticized as lacking specificity and predictive power for women (Betz & Fitzgerald, 1987) and has not been subjected to rigorous empirical validation. Farmer, however, has continued both theory-building and empirical investigation of multiple hypothesized influences on the career development of women and specifically, understanding barriers to persistence in science and math careers for women (Farmer, 1997). Farmer reported findings from longitudinal research attesting to the positive impact of parental support 10 years prior to women's entry into science and math careers. This research provided evidence suggesting parental encouragement may have a pervasive impact on women's career development. While the significance of encouragement and support has been recognized in women's career development theories for some time (e.g., Haber, 1980; Houser & Garvey, 1983), important questions concerning how family/parental support impacts women's future career development and persistence remain.

Emphasizing the role of cognitions and beliefs in career development, Hackett and Betz (1981; Betz & Hackett, 1981) offered a theory suggesting self-efficacy, as proposed by Bandura (1977), as an appropriate lens through which to begin to understand, predict and improve the career development of women. Self-efficacy was defined as one's belief

that he or she can successfully perform certain tasks or behaviors (Bandura, 1977). Hackett and Betz originally applied self-efficacy to the career development of women in an attempt to explicate women's tendencies to underestimate and underutilize talents in career related domains. Researchers reported significant gender differences in students' self-efficacy for traditional and non-traditional occupations (Betz & Hackett, 1981; Hackett & Betz, 1981). Men had similar efficacy for both traditional male and non-traditional male occupations, whereas women had significantly lower self-efficacy than men for traditional male occupations and high self-efficacy for non-traditional male occupations.

#### Current Status: What We Know About Women's Careers

Over 20 years ago, researchers criticized the paucity of research concerning women's vocational development (Fitzgerald & Crites, 1980) and argued that due to the complexity involved in women's lives, models which addressed multiple variables pertinent in women's lives were needed. Although the aforementioned theories concerning women's career development emphasized different combinations of pertinent variables, collectively, they represent a view of women's unique process of negotiating both social and personal facilitators and impediments to adaptive career choice and behavior. Betz (1994a) cogently integrated divergent theory and research into a framework describing impediments and facilitators of women's career progress. Significant facilitators included the personal variables of high self-esteem and strong academic self-concept, as well as contextual and relational factors, including a mother who works outside the home, access to female role models, and educated parents.

Barriers to career development for women included avoidance of math and low self-efficacy, self-esteem, and expectations of success. Contextual barriers included socio-cultural stereotypes and discrimination, as well as barriers to education and lack of role models.

As our theoretical understanding of women's career development has expanded, the focus of research and theory has changed. Speculation about women's vocational interests (i.e., traditional versus non-traditional) and career orientation (i.e., homemaker versus paid employment) have developed into complex theory building aimed at explicating and facilitating women's career progress through encouraging leadership aspirations, addressing barriers and utilizing interpersonal support. Researchers are investigating how career variables such as vocational identity and career self-efficacy, for example, are related to contextual, and especially familial, and other relational variables (e.g., Blustein et al., 1991; Hargrove et al., 2002; Hartung et al., 2002). These changes, together with expanding theory and research concerning the career development processes of diverse individuals (Betz, 2001; Blustein, 2001; Farmer, 1997; Fitzgerald & Betz, 1994; Hackett & Byars, 1996), represent a dramatic expansion of the view of person-in-context. As such, these new research agendas provide a relevant and timely response to multiple calls in the literature to examine complex factors involved in career development (Blustein, 2001; Flum, 2001). For example, theorists have suggested that understanding women's aspirations in a particular career, rather than examining whether her choice of occupation is traditional or non-traditional, may provide more relevant information about women's career development issues (Fitzgerald & Harmon, 2001).

Fitzgerald and Harmon proposed “...that examination of career facilitators such as parental support, secure attachments, career self-efficacy and the like are best rooted in the recognition that any choice that is realistic and satisfying to the individual is a good one” (p. 215).

Researchers exploring women’s career development have proposed that the process of choosing, initiating and succeeding in the world of work is complicated by the presence of often competing life roles and the influence of differential socialization experiences based on gender and other factors, including race/ethnicity and social class (Astin, 1984; Betz & Hackett, 1981; Farmer, 1976; Fassinger, 1985, 1990; Hackett & Betz, 1981). Although the aforementioned theories have not adequately captured all aspects of the unique career development process for women, each theory has offered an enhanced explanation of how complex variables may interact to affect the process of women’s career development at different stages. Continued work examining variables that may be influential in women’s career development is warranted.

### Career Variables

#### *Self-Efficacy Theory*

Bandura’s (1977, 1997) theory of self-efficacy, originally applied to clinical treatment populations, has proven widely applicable within multiple areas of psychology, including clinical, counseling and social psychology (Betz, 2004; Maddux & Stanley, 1986). Based on the proposition that behavioral change is dependent on self-efficacy expectations, Bandura’s theory is behaviorally specific; to be useful, a behavioral referent is needed. Bandura (1977) defined self-efficacy expectations as an individual’s belief in

his or her ability to perform certain tasks or behaviors and hypothesized that behavioral consequences and sources of self-efficacy expectations are critical to development of self-efficacy. Behavioral consequences refer to behaviors that are, or are not, initiated due to one's beliefs or cognitions. Bandura further delineated the following three behavioral consequences: approach versus avoidance, performance, and persistence. Approach versus avoidance refers to what behaviors an individual will or will not attempt. As self-efficacy in a particular behavioral domain increases, individuals are likely to increase approach behaviors. Performance refers to the quality of an individual's performance or amount of effort an individual exerts in a given behavior, whereas persistence entails how an individual will respond to occasional failures.

A critical aspect of understanding and predicting behavior is understanding its origins. Bandura hypothesized that self-efficacy expectations are learned, and therefore, may be modified, through the following four experiential sources: performance accomplishments, vicarious learning, emotional arousal and social persuasion (Bandura, 1977, 1997). Performance accomplishments include what behaviors have been successful in the past. Vicarious learning, or modeling, is another important contributor to developing self-efficacy. Emotional arousal concerns affective reactions present during a given task or behavior. Social persuasion deals with support and encouragement from others. Importantly, Bandura hypothesized that performance accomplishments, vicarious learning, emotional arousal, and social persuasion often occurred in the context of socialization and early family experiences.

### *Self-Efficacy and Career Development*

Self-efficacy has been hypothesized as a useful concept in multiple areas of career development, including occupational self-efficacy (Betz & Hackett, 1981; Hackett & Betz, 1981), career decision-making (Betz et al., 1996; Taylor & Betz, 1983) specific academic areas, including math (Betz & Hackett, 1983), science and engineering (Hackett, Betz, Casas, & Rocha-Singh, 1992; Lent, Brown, & Larkin, 1984, 1986), and self-efficacy for Holland themes, including Realistic, Investigative, Social, Conventional, Enterprising and Artistic themes (Betz, Harmon, & Borgen, 1996; Lenox & Subich, 1994).

Research concerning self-efficacy has been a fruitful area of inquiry in career development in general, and specifically research focused on understanding women's vocational development (Betz, 2004). Early findings documented that women, as compared to men, experienced less self-efficacy in non-traditional occupations (Betz & Hackett, 1981). Researchers exploring math self-efficacy have reported significant gender differences (Betz & Hackett, 1983), with men reporting greater self-efficacy for math and higher math self-efficacy when associated with science careers. Given a principal focus of research concerning women's unique career-related concerns has centered on determining factors related to underutilization of talents, an important focus has been exploring girls' and women's underutilization of abilities, particularly in areas related to math (Betz & Hackett, 1983). Further studies have confirmed previous findings, noting girls' and women's significantly lower math self-efficacy as compared

with men (Gainor & Lent, 1998; Hackett & Campbell, 1987; Lapan, Boggs, & Morrill, 1989; Lent, Lopez, & Bieschke, 1991, 1993; Matsui, Matsui, & Ohnishi, 1990).

### *Career Decision Self-Efficacy*

Extensive research applying self-efficacy to decision-making has been conducted (Betz et al., 1996; Blustein, 1989; Gianakos, 1999; Luzzo & Taylor, 1994; Taylor & Betz, 1983; Taylor & Pompa, 1990). Career decision self-efficacy, defined as confidence in one's ability to perform tasks necessary for career decision-making (Betz et al., 1996; Taylor & Betz, 1983), has been found to be positively related to a variety of attitudes and behaviors associated with career development and decision-making.

In a study concerning the relationship between career decision self-efficacy and general efficacy and self-esteem, researchers found greater confidence in career decision making tasks was related to higher general self efficacy and self-esteem (Lent & Hackett, 1987; Robbins, 1985). Gianakos (1995) reported a relationship between gender role orientation and career decision self-efficacy. In a combined sample of male and female college students, Gianakos found undifferentiated and androgynous men and women reported greater confidence in career decision-making tasks. Concerning career choices, researchers have investigated career decision self-efficacy and multiple career choice variables. Church, Teresa, Rosebrook, and Szendre (1992) explored self-efficacy for careers in an ethnically diverse population of young adults and reported both men and women in this sample indicated higher self-efficacy for occupations dominated by members of their own gender. Women exhibited a stronger tendency to reject male-dominated occupations. Conceptualizing career choice according to Super's (1954)

career choice patterns, Gianakos (1999) reported that college students who chose and entered into professions early, as well as students who moved from one stable career path to another, tended to have more confidence in their ability to perform career decision-making behaviors than students who experimented or could not find a career path. Career decision self-efficacy has also been linked to college students' academic majors, with students reporting greater confidence in their abilities to perform tasks associated with career decision-making significantly more likely to have declared a major (Taylor & Pompa, 1990). Considerable data exist supporting the positive association between adaptive career behaviors and self-efficacy, leading researchers toward understanding the process of changing self-efficacy beliefs. An obvious area to investigate as a site for changing self-efficacy beliefs is the family.

The proposition that family relational influences are involved in creating, maintaining and modifying self-efficacy beliefs, as originally proposed by Bandura (1977), has been empirically investigated (Gianakos, 2001; Wolfe & Betz, 2004). Researchers have become interested in the manner in which relational bonds, including family dynamics and attachment quality, may be related to self-efficacy (Blustein et al., 1991; Gianakos, 2001; O'Brien, Friedman, Tipton & Linn, 2000; Wolfe & Betz, 2004). General findings support the positive relationship between healthy attachment and higher self-efficacy (Blustein et al., 1991; O'Brien et al., 2000; Wolfe & Betz, 2004).

### *Identity Theory*

Career theorists have incorporated self and identity with career development to help further elucidate the complex processes of career development (Bordin, 1943, 1990;

Holland, 1985; Super, 1963). A rich theoretical literature base exists examining the complexity of identity development (e.g., Erikson, 1950, 1968). A review of ideas and theories reveals a myriad of definitions concerning identity development. For example, although there is debate in the field regarding the related concepts of self and identity, most early and contemporary theories of career development include a concept of an internal aspect of an individual that is critical in the career process.

Historical underpinnings of contemporary identity theory are largely attributed to Erikson (1950, 1968), whose influential work explicating dimensions of identity has had a profound impact in developmental psychology. Briefly, Erikson's theory has origins in psychoanalytic thought, though Erikson underemphasized the drive theory prominent in Freudian theory. He defined identity as follows:

The wholeness to be achieved at this stage is called a sense of inner identity. The young person, to experience wholeness, must feel a progressive continuity between that which he [*sic*] has come to be during the long years of childhood and that which he promises to become in the anticipated future; between that which he conceives himself to be and that which he perceives others to see him and to expect of him. Individually speaking, identity includes, but is more than, the sum of all of the successive identifications of those earlier years when the child wanted to be, and often was forced to become, like the people he has depended on. Identity is a unique product, which now meets a crisis to be solved only in new identifications with age mates and with leader figures outside the family (Erikson, 1968, p. 87).

Erikson's identity theory (1950, 1959, 1968) has had a considerable influence on the integration of identity and career theory. His psychosocial theory of identity development assumes progression through stages incorporating different developmental tasks and associated difficulties. The operationalization of these stages was furthered by Marcia (1966, 1980), who hypothesized that identity formation entailed progression through the following stages: identity diffusion, defined as the lack of exploration or commitment; identity foreclosure, referring to premature commitment without adequate exploration; identity moratorium, defined as exploration without commitment; and identity diffusion, or commitment with adequate exploration. While not explicitly proposing a theory of vocational development, Erikson suggested that the development of an occupational identity represents a critical task of adolescence. "In general it is primarily the inability to settle on an occupational identity which disturbs young people" (Erikson, 1959, p. 92).

### *Career and Identity*

The salience of identity in career development processes has been discussed to varying degrees within multiple vocational psychology theories (e.g., Bordin, 1943; Holland, 1985; Super, 1963). Others have suggested that identity and career development are intertwined (Bordin, 1943, 1990; Bordin, Nachman, & Segal, 1963; Super, 1963) and speculated that vocational identity is critical to healthy development. The concept of identity has been explored in Super's theory, though he utilized the term self-concept (Super, 1963). Super's theory of vocational self-concept integrated identity theory within a developmental framework. He suggested that self-concept developed through a process of self-awareness and interactions with others and the environment.

Building on Erikson's conceptualization of identity, contemporary theorizing and empirical exploration of the intersection of identity and vocational development have emerged (Blustein & Noumair, 1996; Grotevant & Cooper, 1985; Vondracek, 1992). Researchers investigating the relationship between identity and career have found positive associations between healthy progress through identity formation stages and adaptive career behaviors, including career exploration and commitment (Blustein, Devenis, & Kidney, 1989), career maturity and vocational identity (Savickas, 1985), and career certainty, planning and indecision (Wallace-Broschius, Serafica, & Osipow, 1994). Newly developed theoretical constructs have emerged from empirical findings. Blustein (1994) and colleagues (Blustein & Noumair, 1996) have hypothesized that "embeddedness," defined as the inclusion of relational and cultural aspects of self and identity in career development, captures important, and often ignored, aspects of lived experience.

### *Vocational Identity*

Vocational identity refers to a general career variable that has received increasing empirical investigation within career developmental literature. Although previous theorists discussed identity and career (Bordin, 1943, 1990; Super, 1963), contemporary empirical investigations of identity in career development often utilize Holland's concept of vocational identity (1985). This is due primarily to the development of *My Vocational Situation* (Holland et al., 1980a), an instrument designed to measure the construct of vocational identity. Holland et al. defined vocational identity as the "possession of a clear and stable picture of one's goals, interests, personality, and talents" (p. 1).

The concept of vocational identity as proposed by Holland (1985, 1992) was hypothesized as an additional variable in his trait and factor theory of vocational personalities. Holland's vocational theory focuses on the match between persons and their environments. According to Holland, career development involves understanding one's typical way of responding to the environment, which is largely determined by personality factors. Both personality and work environments can be described according to the following six dimensions: Realistic, Investigative, Social, Conventional, Enterprising and Artistic. For Holland, vocational identity, included "both the clarity and stability of a person's goals and self-perceptions" (Reardon & Lenz, 1999, p. 108). Holland asserted that vocational identity was related to vocational stability and satisfaction.

Vocational identity has been studied in relation to career decision-making and adjustment variables (Betz et al., 1996), with findings suggesting a strong positive correlation between higher career decision-making self-efficacy and more stable vocational identity. Individuals who reported confidence in career decision-making tasks tended to report stable views of themselves, including their interests and personalities. Researchers have also found that more stable vocational identity was positively associated with self-esteem (Bloor & Brook, 1993; Munson, 1992). Vocational identity has been found to represent a developmental construct, with researchers reporting stability of vocational identity increases with age and class standing for college students (Poe, 1991). Researchers have reported that vocational identity is positively correlated with adjustment and well-being (Graef, Wells, Hyland, & Muchinsky, 1985; Henkels,

Spokane, & Hoffman, 1981; Savickas, 1985). Additionally, vocational identity has been found to be positively related to career maturity and rational decision-making, and negatively related to social anxiety and intolerance to ambiguity (Leong & Morris, 1989). Vocational identity has also been used as an outcome variable in investigations of family context and career development (Dodge, 2001; Graef et al., 1985; Hargrove et al., 2002; Hartung et al., 2002; Johnson, Buboltz, & Nichols, 1999; Lopez, 1989) with general findings supporting a positive association between healthier family dynamics and more stable vocational identity.

### Career Development in Context

The premise that individuals integrate work and career-related strivings within important relational contexts is not novel; the intersection of career and relationships represents lived experience (Blustein, 2001, 2004; Blustein et al., 1995; Flum, 2001). In an effort to provide relevant and critical services to individuals at all stages of career development, vocational psychology researchers have become increasingly concerned with understanding and explaining the career-relationship intersection. Research questions have centered on explaining the unique, subtle and complex ways relationships influence career development.

Interest in the influence of the family-of-origin on career development has been theoretically important (though often implicit) in many, if not all, career theories (e.g., Holland, 1966; Roe, 1957; Super, 1957). Holland, for example, argued for the inclusion of person and environment factors in career development. He hypothesized that

background characteristics and context shape one's personality, which is a critical determinant of future vocational interests. Roe (1957) articulated a theory of career development that included the family context, and specifically the influence of parenting, on children's later career choices. Although Roe is often credited for highlighting the family and career interface and presenting a model which presumed to offer specific and measurable ways to study career development within the family, her model has not resulted in solid empirical support (Brown, Lum, & Voyle, 1997; Osipow, 1983). Super argued for the inclusion of family relationships and other life roles in the development of self-concept, a cornerstone of his career theory (1957, 1963, 1980). Super hypothesized that career development involved deciding upon, implementing and adjusting to a career across the lifetime, through relational transitions.

New research has been initiated which builds on previous theoretical formulations, including developmental life-span (e.g., Super, 1980) and developmental-contextual approaches to career development (Vondracek et al., 1986). Emerging research agendas have focused on understanding, from a family systems perspective, the role the family as a unit plays in individual career development processes (Bratcher, 1982; Carr, 2000; Zingaro, 1983) and how family-of-origin interactions and relational dynamics may impact career development over the lifespan (Hargrove et al., 2002; Hartung et al., 2002; Lopez & Andrews, 1987). At the same time, there has been a paradigm shift in multiple areas of psychology toward greater appreciation of the interconnectedness of human beings as central to healthy human functioning (Blustein, 2001; Blustein & Noumair, 1996; Flum, 2001). This relational shift has provided a rich backdrop for much of the

current work in career development and resulted in an integration of social support, feminist relational theories, attachment theory and family systems perspectives within the career literature. From early theorists such as Sullivan (1953) to more recent proponents of attachment theory (Ainsworth, 1989; Bowlby, 1982, 1988) and feminist frameworks (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991; Josselson, 1988), understanding the complexity of the human experience has advanced.

Social cognitive career theorists (Lent et al., 1994), advocating an integrative theory of career development, have explored the unique and important contextual supports afforded by family and other relationships in the career development process (Lent, Brown, & Hackett, 2000; Lent et al., 2001; Lent et al., 2002). Such research directions exemplify the movement towards context, specifically, relationships, as critical variables that have been discussed but not empirically studied in the career development research.

Although the relational context of career development has been alluded to since the earliest theories of career development were generated (Holland, 1966; Roe, 1957; Super, 1957), more recently there has been renewed interest and empirical study aimed at developing more sensitive and complex models to better understand the intersection of interpersonal relationships and various dimensions of human behavior, and specifically, career development (Blustein et al., 1991; Blustein et al., 1995; Blustein, 2001; Hargrove et al., 2002; Lopez & Andrews, 1987).

### *Family-of-Origin Influences*

As others have asserted (Schulenberg et al., 1984; Whiston & Keller, 2004a), synthesizing the diverse body of literature related to career development and the family is

challenging. The current review of the literature mirrors movement in the field of vocational psychology from investigations of status and demographic variables toward multifaceted relational and complex concepts hypothesized as potentially important to women's career development. This review is organized according to the following theoretical domains: family-of-origin demographic and background variables; parental encouragement and emotional support; quality of parental attachment relationships; and relational dynamics within the family system. Finally, developing theory and research will be explored, including emerging relational perspectives. It is hoped that this organizing framework will facilitate the reader's understanding of the extant literature, though the reader is reminded that distinctions are somewhat arbitrary and research concerning the intersection of family and career is interdependent.

#### *Demographic and Background Variables*

Preliminary explorations into the family-career intersection focused on family background variables hypothesized to be influential in the career development process, including socioeconomic status (e.g., Banducci, 1967; Harvey & Kerin, 1978; Marini & Greenberger, 1978; Sewell, Haller, & Straus, 1957), parental employment patterns (e.g., Almqvist & Angrist, 1970; Banducci, 1967; Crawford, 1978; Haber, 1980; Mortimer, 1976), racial and ethnic group membership (e.g., Blau & Duncan, 1967; Hernandez, 1973), and family structure (Blau & Duncan, 1967; Rehberg & Westby, 1967).

*Socioeconomic status/social class.* The exploration of socioeconomic status and social class variables has a long history within vocational psychology (Banducci, 1967; Harvey & Kerin, 1978; Marini & Greenberger, 1978; Sewell et al., 1957). Social class

has historically been defined to include parental education and employment status and income, with preliminary investigations tending to focus on paternal occupational status (Schulenberg et al., 1984). Findings from decades of research support the relevance of family socioeconomic status/social class membership for vocational development (Schulenberg et al., 1984). In a seminal review of relevant family influence factors on career development, Schulenberg et al. identified social class membership as the single best predictor of vocational status.

Researchers have found higher socioeconomic status consistently associated with higher occupational status aspirations and expectations for men and women (Marini & Greenberger, 1978; Sewell et al., 1957). The positive association between social class and higher occupational aspirations has been found across age groups, including children (e.g., Harvey & Kerin, 1978). Higher social class status has also consistently been associated with higher educational aspirations for women and men (Banducci, 1967; Marini & Greenberger, 1978; Rehberg & Westby, 1967; Sewell et al., 1957). Currently, interest in the intersection of social class and vocational development has waned, although recently there has been renewed interest in explorations of social class (Heppner & Scott, 2004; Whiston & Keller, 2004a).

*Parental employment.* Often subsumed within the social class literature, parental employment has also been investigated as a unique contributor to vocational development (Schulenberg et al., 1984). For example, parental employment has been identified as a factor in career development of sons (Mortimer, 1974) and daughters (Almquist & Angrist, 1970; Betz & Fitzgerald, 1987; Haber, 1980). A significant difficulty in parental

employment research has been the possible confound with social class. In a comprehensive review of the literature, Schulenberg et al. (1984) examined parental employment status and quality of parent-child relationships. The authors highlighted findings suggesting an association between parental employment and quality of parent-child relationship (Mortimer, 1974). It has been suggested that the influence of fathers' employment may be more relevant for sons' career development, with research supporting the assertion that sons "inherit" their fathers' careers (Goodale & Hall, 1976). The relationship between fathers' and sons' careers may be stronger when a relational component is present; occupational transmission is more likely when sons report close relationships with their fathers (Mortimer, 1974). For women, fathers' occupational and educational levels have been found to be positively related to educational aspirations (Falk & Salter, 1978). According to Betz and Fitzgerald, "[h]aving a highly-educated, professional father appears especially facilitative of a woman's pursuit of a male-dominated profession" (1987, p. 38). Mothers' employment has also been identified as a significant predictor of women's career development (e.g., Almquist & Angrist, 1970; Betz & Fitzgerald, 1987; Huston-Stein & Higgins-Trenk, 1978). Mothers' employment during girls' childhoods and adolescence has been described as "the most consistent and well documented correlate of career orientation and departure from traditional feminine roles" (Huston-Stein & Higgins-Trenk, 1978, p. 279-280).

Women's increased labor force participation and the subsequent norm of women working outside the home (Hyde, 1985) have made conclusions regarding the impact of women working more complex. Much of the work concerning mothers' influence has

begun to center on mothers' values and relational dynamics between mother and child, such as quality of attachment (O'Brien, 1996; O'Brien et al., 2000). For example, researchers have found mothers' gender role attitudes and the emotional bond between daughter and mother to be critical determinants of daughter's career behavior (O'Brien, 1996; O'Brien et al., 2000).

*Racial/ ethnic group membership.* Preliminary explorations of racial/ethnic variables and career development have often defined ethnic and racial membership according to discrete, nominal variables and explored differences across groups, particularly between White and African American individuals (e.g., Blau & Duncan, 1967; Duncan, Featherman, & Duncan, 1972; Hauser & Featherman, 1974) and White and Hispanic individuals (Dillard & Perrin, 1980; Holsinger & Chapman, 1984). Researchers found consistent negative associations between racial/ethnic group membership and vocational development outcome measures, including lower occupational and educational aspirations and attainment for minority group members of both genders. Men and women from racial and ethnic minority groups consistently endorsed lower career aspirations (Blau & Duncan, 1967; Dillard & Perrin, 1980; Duncan et al., 1972; Holsinger & Chapman, 1984) and attained less education than men and women from the majority culture (Arbona, 1990; Hauser & Featherman, 1974; Smith, 1983).

Although explorations of career and racial and ethnic status variables were preliminary steps in understanding the career behaviors of racial and ethnic minority individuals, criticism has been leveled against utilizing a nominal classification system and engaging solely in studies examining cross-cultural differences (Arbona, 1990, 1996;

Flores & Ali, 2004). Prominent researchers within the career development arena have suggested that exploring racial and ethnic group membership as a more complex set of assumptions, beliefs, and values may help elucidate significant, though often subtle, within-group differences (Arbona, 1995; Smith, 1983). Examining the salience of racial membership, for example exploring racial/ethnic identity, has been postulated as a critical step in future work in the career development of ethnic and racial minority members (Arbona, 1995; Byars & McCubbin, 2001; Fischer & Moradi, 2001; Helms & Piper, 1994; Tinsley, 1994; Whiston & Keller, 2004b).

*Family structure.* The influence of the family configuration, including family size, birth order, and single parent families, on vocational development has been explored previously (Blau & Duncan, 1967; Rehberg & Westby, 1967)). For example, males from larger families have been found to endorse lower career aspirations (Rehberg & Westby, 1967) and lower occupational attainment (Blau & Duncan, 1967). Birth order has also been explored, with researchers suggesting it may be more meaningful to examine within family differences than to attempt to determine characteristics of birth order status between families. For example, similarities and differences between siblings of the same family have been observed (Verger, 1968). Specifically, in three-sibling families, there was a greater similarity in vocational interest between first and third child, than between first and second child.

Another aspect of family life that has garnered research attention is the impact of single parent homes on career development (Blau & Duncan, 1967). Researchers have reported that for men, when SES was controlled, the presence of a single parent in the

home was associated with lower educational and occupational attainment. In a more recent exploration of single parent homes and career development, Scott and Church (2001) explored the impact of divorce on career decision-making. According to the researchers, individuals from intact families reported higher career decidedness than individuals whose parents had divorced. In contrast, individuals from divorced families reported experiencing greater financial strain. Individuals whose parents had divorced also indicated decreased need for their fathers' approval, the tendency to think for themselves, and freedom from anger and resentment in relationships with their fathers (Scott & Church, 2001). Although associations between separation, attachment and career variables were not found as predicted, explorations of family structure variables including divorce warrant further attention. Given the prevalence of divorce in U.S. culture, understanding what impact such a family structure may have on future career development processes may be beneficial to large segments of society. Such explorations, particularly as additional relational variables are added, including step-parents and relational dynamics, seem consistent with current attempts to understand the real lives of members of society (Scott & Church, 2001). Although researchers interested in family and career have tended to move away from family configuration variables, some have argued that continued exploration is warranted, particularly in light of the continual structural changes of the family in today's society, including the movement toward more inclusive definitions of the family in a pluralistic society (Brown, 2004; Whiston & Keller, 2004a).

## *Quality of Interpersonal Relationships and Career Development*

### *Parental Encouragement and Emotional Support*

Perceived social support has been hypothesized as an important factor in healthy development across the lifespan and has been extensively investigated within the psychological literature, with hundreds of findings supporting the positive relationships between greater social support and increased physical and psychological health (e.g., Cutrona, 1986). Explorations of perceived social support have served as critical precursors to current investigations of relational correlates of career development. Early explorations of social support within the career literature have included the relationships among family and parental support and academic functioning and general adjustment. Researchers have reported significant positive associations between higher perceived support and better academic functioning in college students, including higher grade point averages and better overall adjustment (Cutrona et al., 1994).

Researchers have also explored the relationship between parental support and career decision-making variables. Houser and Garvey (1983) investigated perceived parental emotional support and career decision-making. The researchers explored women's perceptions of support from others for enrolling in traditional and non-traditional vocational courses. Houser and Garvey included both women enrolled in non-traditional courses (i.e., male-dominated) and women who considered but did not enroll in non-traditional courses. Non-traditional women reported experiencing greater support from others than women who considered but did not enroll in male-dominated fields. Non-traditional women also reported greater perceived support from male figures, including

fathers and male romantic partners. Trigg and Perlman (1976) found that women studying non-traditional health fields reported feeling more support for their career choices from family and friends than women pursuing traditional health fields.

Family encouragement has been found to be positively associated with a variety of career development processes (Cartwright, 1972; Farmer, 1985, 1997; Haber, 1980; McLure & Piel, 1978). In longitudinal research exploring women's career choices, Farmer (1985, 1997) found that family encouragement was the strongest predictor of girls' career aspirations and motivation. Farmer's findings highlighted the positive impact perceived support from others has on women's career choice and commitment, particularly in fields in which women are underrepresented, including math and science careers (1985, 1997). The effects of perceived support appear to be long-lasting. Farmer reported women who perceived their parents as more supportive were more likely to remain in science and math careers, even after 10 years.

Haber (1980) found female college seniors majoring in occupations that were comprised of less than 30% female perceived their parents as highly supportive. Encouragement from family has also been identified as an influential facilitator for a national sample of talented high school girls (McLure & Piel, 1978). The researchers further identified access to role models in science, and information about pursuing science careers, as significant facilitators (McLure & Piel, 1978).

Building on previous findings concerning perceived social support and women's career choices (Cartwright, 1972; Farmer, 1985, 1997; Houser & Garvey, 1983), researchers have begun to include the concept of relational support as a potential

facilitator of progress in multiple domains of career development (Lent et al., 2001; Lent et al., 2002). Arguing that support has been recognized, at least theoretically, as playing a critical role in career development processes, Lent et al. (2002) suggested that relational supports needed to be explicitly included in empirical research.

Recent explorations of relational supports have yielded promising findings. Kenny et al. (2003) explored relational supports, together with perceived barriers, in a sample of urban high school students. Kenny et al. found both barriers and supports were positively associated with urban students' commitment to school and career aspirations. Students who reported lower barriers and higher levels of support from family tended to be more committed to school and reported higher career aspirations. The inclusion of "kinship support," in addition to social support in this study was noteworthy. Kinship support was defined as emotional or social support offered by adult family members, in addition to parents, including grandparents, aunts and uncles or other adults within the family. Such multifaceted examinations of parental and familial support seem consistent with current calls in the field to incorporate more complex social support and relational variables in the study of work and career development (Blustein, 2001; Flum, 2001; Richardson, 1993). The field has witnessed a trend from more general examinations of social support, to increasingly specific and defined relational variables. A notable and relevant relational variable that continues to be investigated within the career development literature is attachment quality.

## *Attachment to Parents*

Attachment theory has been proffered as a useful framework to understand the human experience and promote healthy development across the lifespan (Ainsworth, 1989; Bowlby, 1982; 1988; Hazan & Shaver, 1990; Lopez, 1995). Seminal work conducted by Bowlby (1982, 1988) and Ainsworth (1989) has demonstrated the importance of early attachment bonds between child and caregiver. Proponents of attachment theory have asserted that the relationships between child and parent or caregiver immensely affect the child's development (Ainsworth, 1989; Bowlby, 1982, 1988).

Attachment theorists have argued that early attachment is critical to development across the lifespan. Individuals who develop secure attachments, defined as an "enduring affectional bond of substantial intensity" (Armsden & Greenberg, 1987, p. 428.) with early caregivers, develop a "secure base," which impacts future views of self and other through the development of "internal working models" (Ainsworth, 1989). Further, Ainsworth (1989) and Bowlby (1982) have asserted that the quality of early relationships impacts current relationships through serving as a prototype for later relationships.

It has been suggested that attachment theory may provide a useful framework, or emergent "metaperspective," (Lopez, 1995, p. 396) in explorations of career development (Blustein et al., 1995; Hazan & Shaver, 1990; O'Brien, 1996). According to Blustein (1995):

Underlying the broad explanatory power of attachment theory is the assumption that individuals are best equipped to negotiate developmental tasks and transitions when

they experience the felt security provided by effective relationships early in both their lives or their current social network (p. 424).

Lopez (1995) advocated for the potential of attachment theory to facilitate understanding of behavior in multiple applications in counseling psychology. Career development is one process characterizing normal development across the lifespan. In a review of relevant theory and research concerning the integration of attachment theory and career development, Blustein et al. (1995) argued that attachment theory provides a useful and relevant means of explicating processes related to career exploration, planning and general progress through career decision-making. Schultheiss et al. (2001) suggested:

Supportive interactions are thought to lead to the development of self-esteem and self-efficacy beliefs, the minimization of interpersonal anxiety, faith in the availability of assistance when it is needed, confirmation and validation of the person's adequacy in valued life roles, and social control (p. 216).

Empirical exploration of the association between quality of attachment relationships and career development processes has emerged (Blustein et al., 1991; Felsman & Blustein, 1999; O'Brien, 1996; O'Brien & Fassinger, 1993; O'Brien et al., 2000; Scott & Church, 2001; Tokar et al., 2003), though findings remain equivocal.

Researchers have found associations between reported attachment to parents and multiple career variables, including vocational exploration and commitment, defined as "the early uncommitted or exploratory phase of the commitment process" and tendency to foreclose on career choice (Blustein et al., 1991, p. 43). Blustein et al. conducted two studies with college students examining the relative and combined contributions of

separation and attachment in relationships with parents and career variables. Blustein et al.'s initial findings supported previous findings (Eigen, Hartman, & Hartman, 1987) which had failed to detect a significant relationship between separation and career indecision or career decision self-efficacy. Others however, have found a relationship between separation and vocational identity, a concept which has been found to be closely related to career decision self-efficacy (Lopez, 1989).

In a second study, Blustein et al. included an attachment variable to the exploration of the career commitment process and tendency to foreclose on career choice. Results supported the emerging belief that attachment, together with appropriately timed separation is related to positive career outcomes. Specifically, Blustein et al. reported that attachment to and conflictual independence from both parents were positively associated with the career commitment process and negatively associated with tendency to foreclose for women. For men, on the other hand, findings revealed attachment to and conflictual independence from parents, together with attitudinal dependence on father, were associated with progress in career commitment.

O'Brien and Fassinger (1993), in an extension of Fassinger's (1990) model of women's career orientation and choice, explored the career behavior of high school seniors. The researchers incorporated relational variables, including attachment to mother and separation variables, including independent beliefs and activities from mother in their model. O'Brien and Fassinger reported that students who reported the combination of moderate attachment to and independence from their mothers, while possessing more liberal gender role attitudes and higher self-efficacy for career pursuits and math, valued

their careers. Additionally, O'Brien (1996) theorized that career self-efficacy and career orientation would be associated with degree of attachment to parents for female parochial school students. Findings revealed that women who exhibited more secure attachment to parents, while progressing towards individuation and separation, experienced greater career self-efficacy and career orientation and selected congruent and realistic careers.

Extending previous findings (Fassinger, 1990; O'Brien & Fassinger, 1993) to younger populations, Rainey and Borders (1997) examined career orientation, aspirations and attachment to mother in early adolescent girls. They found both agentic characteristics, such as assertiveness and independence, along with attachment to mother, were associated with career aspiration. Early adolescent girls reporting greater assertiveness and independence, together with a more secure attachments to their mothers, tended to have higher career aspirations. O'Brien et al., (2000) conducted a longitudinal analysis of attachment, separation, career self-efficacy and career aspirations. Data were compiled during students' senior years of high school and again five years later. O'Brien et al.'s (2000) findings revealed a positive relationship between attachment and career self-efficacy, which likely resulted in increased career aspirations. While attachment to mother was significantly associated with career self-efficacy during high school, attachment to father, but not to mother, was associated with higher career self-efficacy at post test (five years later). Data from their longitudinal analysis of career choice revealed that women tended to move toward more traditional career choices after five years. After five years, students endorsed a preference for combining family and career and ranked family as higher in importance than career. The longitudinal design of

this study is particularly noteworthy and appears to demonstrate the relative stability and possible influence of attachment throughout women's lives.

Tokar et al. (2003) explored the association among relationship variables (attachment security and psychological separation-individuation) and career indecision, defined as "the inability to select and commit to a career choice" (p. 3). Tokar et al. further explored the potential mediating role of vocational self-concept crystallization, defined by Barrett and Tinsley (1977) as the "degree of clarity and certainty of self-perception with respect to vocationally relevant attitudes, values, interests, needs and abilities" (p. 302). The authors reported that attachment and separation variables were related to career-indecision. Individuals who reported healthy attachment and separation from parents tended to be more career decided (Tokar et al., 2003). Findings from these studies add validity to the assertion that "attachment relationships are one important element of the context that influences career development" (Blustein et al., 1995, p. 429). Continued work in this area, with focus on exploring the relevance for this model with more diverse populations of girls and women seems warranted.

A related concept often explored in conjunction with attachment is separation, defined as the degree of independence from parents (Hoffman, 1984). Much of the work in this area has often utilized Hoffman's (1984) definition of four types of independence or separation from parents, including emotional, attitudinal, functional and conflictual independence. Separation from parents has been implicated as an important factor in the career development of adolescents and young adults (Lucas, 1997; Scott & Church, 2001; Tokar et al., 2003). In an empirical investigation of the possible relationship between

career decidedness and attachment and separation variables in college students from divorced families, Scott and Church (2001) reported limited support for the hypothesized links between separation and attachment variables and career behavior. Both conflictual independence, defined as freedom from guilt, resentment, or anger towards parents, and greater attachment to parents, were positively associated with career commitment but not the tendency to foreclose on a career choice (Scott & Church, 2001). Individuals who characterized their relationship with their parents as more attached and less resentful and angry tended to be more committed to their career choices. The researchers failed to find support for hypothesized relationships between individuals' tendencies to foreclose on career choices and attachment or separation variables.

#### *Family System Relational Dynamics*

Conceptualizing the family systemically originated from early studies of mental illness (Patton & McMahon, 1999). Significant concepts within the family systems literature include the view of the family as an interactional unit, with each member affecting the dynamics of the system. Systemic theories emphasize “the dynamic and recursive impact of the individual and the context on each other” (Patton & McMahon, 1999, p. 9). Researchers have hypothesized that family systems perspectives may capture the reciprocal and interactional nature of relationships (Lopez & Andrews, 1987) and demonstrate a distinct conceptual lens from which to examine the family-career intersection (Brachter, 1982; Lopez & Andrews, 1987; Patton & McMahon, 1999; Penick & Jepson, 1992; Zingaro, 1983). Theorists focused on specific career-related processes and outcomes have argued that career decision-making may be understood as a family

process, with reciprocal influences between the individual and the family system. Specifically, “[c]ertain family interactions enhance this transformation, whereas others inhibit it, thereby creating a climate that promotes and maintains indecision” (Lopez & Andrews, 1987, p. 65).

Empirical investigations of the family-career link utilizing a systemic approach have begun to accumulate (Dodge, 2001; Eigen et al., 1987; Graef et al., 1985; Hargrove et al., 2002; Hartung et al., 2002; Johnson et al., 1999; Kinnier, Brigman, & Noble, 1990; Larson & Wilson, 1998; Penick & Jepson, 1992; Whiston, 1996). The study of family relational dynamics has included multiple career-related outcomes including career decision making (Eigen et al., 1987), career-related self-efficacy (Whiston, 1996), vocational identity (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002), and career maturity (Graef et al., 1985).

Previous researchers have linked interactions between family members, including fathers and siblings, with females’ career maturity, for example (Graef et al., 1985). Graef et al. reported that conflictual sibling relationships were negatively related to career maturity for female students, whereas warmth within the paternal relationship was positively associated with career maturity for daughters. Penick and Jepson (1992) examined perceptions of family functioning, specifically relationship and system maintenance dimensions and career development variables, including involvement in career planning (crystallizing) and choice certainty (specifying). Penick and Jepson studied 11<sup>th</sup> graders and their parents and found family functioning variables were better predictors of students’ career development than gender, socioeconomic status or

educational achievement. Johnson et al. (1999) examined the relationship between family functioning, including cohesion, expressiveness and conflict, and vocational identity for college students from intact and divorced families. Results of their study suggested statistically significant (albeit small) associations between cohesion, expressiveness, and conflict in the family-of-origin and vocational identity for college students. Expressiveness emerged as the family variable most highly associated with vocational identity. College students who endorsed more stable vocational identity tended to come from families characterized by open and direct communication. No differences were observed between divorced and intact families.

Early explorations have failed to support hypothesized relationships between family interaction patterns and career decision-making (Eigen et al., 1987). Eigen et al. conducted a longitudinal study of family interaction patterns and career decision-making. The researchers hypothesized that functionality of family relationships, defined within the circumplex model of family systems theory (Olsen, Sprenkle, & Russell, 1979), would be related to career decision-making difficulty. Within the circumplex model of family systems (Olsen et al., 1979), functional and dysfunctional families are defined according to the underlying dimensions of adaptability and cohesion. Family cohesion refers to the emotional bonding between family members. The construct of cohesion measures the degree of separation and connection with family members. Within this framework, family adaptability refers to the family's response to stress; family adaptability centers on whether the family can change its rules and roles in response to stress. Distinctions of functional, midrange and dysfunctional families are made

according to how cohesive and adaptable families are. Functional families are more balanced, whereas midrange families may be balanced in one dimension and extreme in another. Dysfunctional families are characterized by extreme bonding, which can stifle individuation, or families lacking bonding. Families who respond to stress in an overly rigid manner, or, conversely, in an excessively unstructured way, are also considered dysfunctional. Eigen et al. (1987) hypothesized that career decided individuals would tend to come from functional families, defined for the purposes of this study as balancing cohesion and adaptation, but failed to find a significant association between family interaction and career decidedness in their sample. However, Eigen et al. reported that certain family environments may be more conducive to decision making than others. Specifically, family environments that are flexible with strong emotional bonds, or environments that combine moderate authoritarian styles with emotional bonding and are permissive of individual freedom may be more likely to promote healthy career decision-making (Eigen et al, 1987).

Whiston (1996), attempting to clarify equivocal findings regarding family interaction and career development (Eigen et al., 1987; Penick & Jepson, 1992), explored relational dynamics, career indecision and career decision-making self-efficacy in college students. Whiston hypothesized that career indecision would be related to cohesion and conflict in the family-of-origin and personal growth and systems maintenance dimensions of the family would be associated with career decision self-efficacy. Findings failed to support hypothesized relationships between career indecision and relationship dimensions or systems maintenance and career decision self-efficacy. Whiston did find a relationship

between personal growth dimensions and career decision self-efficacy. Individuals from families who valued cultural and intellectual pursuits reported feeling greater efficacy for using occupational information. Citing previous findings of gender differences in career decision self-efficacy, as well as previous gender differences in career and family research (Blustein et al., 1991; Kenny, 1990; Lopez, 1989), Whiston hypothesized that gender differences would emerge. Findings revealed significant gender differences in the exploration of system maintenance and career indecision. Women, but not men, who reported high control and organization in their families reported less career indecision.

Bowenian family systems theory (Bowen, 1978; Kerr & Bowen, 1988) has also served as a conceptual lens in examining the intersection of family and career. Important concepts that may be applicable in career development include Bowen's (1978) differentiation of self, the emotional system within the family, multigenerational transmission processes, and emotional triangles (Alderfer, 2004). Differentiation of self refers to the process of developing congruence in both internal and interpersonal relationships and involves healthy separation from parents and decision-making based on one's desires. The concept of differentiation may be applicable to multiple aspects of career development, including adaptive career exploration and decision-making. According to Bowen, the emotional system of the family represents the ties that hold the family together. If emotional ties are too constrictive, it can be difficult for an individual to differentiate from his/her parents. Emotional ties that are not tight enough are hypothesized to lead to difficulties in premature and unhealthy differentiation. The multigenerational transmission processes includes the passing down of emotional

relationships and issues in the family. Bowen's concept of emotional triangles refers to the involvement of a third person in maintaining an interpersonal relationship between a dyad. Theoretical speculation concerns the applicability of these concepts for career development, with some asserting that Bowen's systems theory may be a useful framework for understanding career development (Alderfer, 2004).

In a study of family dynamics and career indecision, Kinnier et al. (1990) reported a weak but significant association between enmeshment and career indecision in sample of predominantly Caucasian college students. Individuals who reported being enmeshed, or overly dependent on their families-of-origin, tended to experience greater career decision difficulties, as compared with individuals who reported less enmeshed, more individuated relationships in their families. This finding must be viewed in context. Since 89% of the participants were Caucasian, it is possible that this finding reflects experiences in Caucasian families which may not represent the experiences of diverse college students. It is possible that examining such family dynamics within ethnic minority families would yield different results, as family members within different ethnic/racial groups often value interdependence (Marin & Marin, 1991; Sue & Sue, 1990).

Larson and Wilson (1998) examined the potential relationship between dysfunctional family dynamics and career indecision. The authors hypothesized that anxiety would emerge as a critical mediational variable between various family dynamics and career decision-making. Findings of this study supported the proposed mediational relationship between anxiety and fusion and intimidation but not between anxiety and triangulation for the sample of 1006 college students. The authors found that increased anxiety

associated with lack of emotional independence and controlling dynamics within the family were related to increased difficulty completing such developmentally appropriate tasks as career decision-making.

In an additional examination of career development within a Bowenian family systems model, Dodge (2001) hypothesized that personal authority and family interaction would be positively associated with vocational identity and career decision-making self-efficacy and negatively associated with dysfunctional career thoughts. Findings supported these hypotheses, with individuals who reported greater perceived conflict in their family-of-origin reporting less confidence in their ability to make career decisions. Further, Dodge found that individuals who endorsed lower individuation reported greater levels of dysfunctional career thoughts.

Additional researchers have extended the study of family context and relationship factors involved in career development to include additional relevant variables (Johnson et al., 1999; Lopez, 1989). In an examination of vocational identity, trait anxiety and academic adjustment, Lopez (1989) reported that conflictual independence from the other-sex parent, defined as freedom from anger, guilt or resentment, emerged as the best predictor of vocational identity for both male and female college students. Students who reported less anger, guilt and resentment in relationships with their other-sex parent tended to have a clearer picture of their vocational goals, interests and talents.

Researchers have also explored the association between career outcomes and family interaction patterns (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). Hargrove et al., (2002) found a significant positive relationship between vocational identity and

achievement orientation in the family. Individuals reporting more stable vocational identity tended to come from families-of-origin valuing achievement orientation, operationally defined in this study as the “extent to which school and work activities are cast as indices of achievement or areas of competition” (Moos, 1989, p.1). Hargrove et al. reported that career decision-making self-efficacy was related to several dimensions of family interaction, including achievement-orientation, intellectual-cultural and moral-religious emphasis, as well as expressiveness and conflict in the family. Individuals reporting more confidence in their ability to make goals tended to come from families valuing achievement and expression of feelings. Moreover, individuals reporting lower confidence in problem solving tended to come from families exhibiting increased conflict.

Contrary to findings reported by others (Hargrove et al., 2002; Penick & Jepson, 1992), Hartung et al. (2002) did not find predicted associations between family interaction, role salience and vocational identity in a recent study of primarily Anglo American college students. Hartung et al. did report significant associations between perceived emotional closeness and structural flexibility and value expectations for home and family roles. Individuals who reported experiencing higher degrees of cohesion and adaptability in their families of origin participated to a greater degree in home and family roles.

### *Relational Models of Career Development*

Researchers and theorists interested in the lives of women have appreciated the salience of interpersonal relationships in women’s identity development for many

decades (Gilligan, 1982; Jordan et al., 1991; Josselson, 1988). Considerable research has accumulated linking relationships and connections to others with mental health for many individuals (Cutrona, 1996; Swanson, 1992). Although the beneficial aspects of social support are certainly critical to health regardless of gender, some researchers have suggested social support may be particularly important for women (Genaro, Miller, Surrey, & Baldwin, 1992; Gottlieb, 1992; Jordan, 1992).

Asserting that new models of women's career development that integrate individualistic and relational components may serve women better, there is movement within the field to generate theory and research concerning the overlap of roles and responsibilities, one that acknowledges the influence of work and relational needs in women's healthy development (Crozier, 1999). Connectedness in relationships has recently been proposed as a useful construct in understanding career behaviors (Blustein, 2001; Blustein & Noumair, 1996; Blustein et al., 1995; Flum, 2001). Blustein and others have suggested that exploring relational components of vocational development is worthwhile and has the potential to facilitate understanding of a wide variety of behaviors. Further, there has been speculation that such relational explorations are particularly salient for women. "Work must be positioned alongside relationships as crucial for women's development and for creating a framework by which to examine the complexity of work and family issues that affect the physical and psychological health of women" (Brennan & Rosenzweig, 1990, p. 528). Such suggestions are underscored by findings such as those offered by Lucas, Skokowski, and Ancis (2000), who revealed an association between career concerns and troubled relationships in college women seeking

treatment for depression. For these women, career difficulties were inextricably linked to personal and relational difficulties. Although the intersection of career and family as proposed by researchers interested in attachment theory and family systems perspectives offers important insights into the explorations of relationships, relational components have been defined in various ways. According to Forrest and Mikolaitis (1986), “a relational component of identity represents an internal psychological construct, that is, a feeling, attitude or commitment one has toward how one thinks about oneself in relationship to others” (p. 77).

Theorists have argued that new theories of women’s development and career-related concerns are needed, theories that capture the lived experiences of women and expand knowledge regarding how women utilize existing values and skills in the search for meaningful work and career (Crozier, 1999). Further, although women as a group may exhibit certain characteristics and possess similar goals and values, it is imperative to value the diversity of women’s experiences. Two important means of understanding women in context include integrating the study of interpersonal relationships into career development research and exploring the intersection of career development and relationships within diverse populations.

*Relational health.* Integrating various relational themes and research in women’s development with career development may help elucidate important career processes of women (Crozier, 1999). While extensive previous literature has supported the critical role of social support in human development (Cutrona, 1986; Cutrona, 1996; Cutrona et al., 1994), and women’s development (Genero et al., 1992), new models are being explored

which have the potential to generate a richer, more complex understanding of the relational influences on women's career development.

The exploration of relational health, defined according to the self-in-relation theory concepts of authenticity, engagement and empowerment, concerns the quality of women's relationships in multiple domains. Relational health has been explored as a potential variable in various adjustment-related issues in college populations (Goldman, 2001; Liang, Tracy, Taylor, & Williams, 2002; Mears, 2002; Peikert, 2003). Citing preliminary data from studies of college women's relational health, researchers have reported findings linking a lack of connection to the college community with increased psychological distress. Goldman (2001) explored relational health and disordered eating and reported a negative correlation between quality of peer and community relationships and symptoms of disordered eating. In an examination of women's relational health in occupational settings, Peikert (2003) explored relational and contextual variables and reported findings suggesting women's positive relational health is not compromised as career success is achieved. Further work is needed to articulate important, but often subtle, nuances of women's relationships that may affect important developmental tasks, including career development.

The complexity of women's career development, particularly the integration of multiple family and work roles (Fitzgerald & Crites, 1980), has been a critical factor in understanding women's career development for over two decades. While relational models have received increased attention, the implication of this new way of viewing women's career development has only recently been investigated empirically (Crozier,

1999). Proposing that a relational model may help advance the field of women's career development, Crozier and others (Brennan & Rosenzweig, 1990; Forest & Mikolaitis, 1986; Powell & Mainiero, 1992) have suggested that a relational orientation toward understanding the career development processes of women may help understand and facilitate multiple women's career processes. Others argue that understanding and respecting women's tendencies toward relationships might enhance understanding of women's career decision-making. For example, theorists have speculated that women may rely on trusted others when making career decisions, rather than approaching decision-making from a purely objective stance (Stonewater, 1988). Combining this speculation with research aimed at explicating how others, particularly family members, are involved in women's career decision-making and other career behaviors seems especially relevant.

*Peers and other relationships.* Although researchers investigating the intersection of attachment relationships and career development have focused primarily on attachment to parents, researchers have begun to examine the influence of attachment to peers on career development (Felsman & Blustein, 1999). Felsman and Blustein (1999) found that the quality of attachment to peers may add important information to understanding the career development process of adolescents and young adults. Felsman and Blustein found college students who reported strong attachment to peers, defined as relationships characterized by high degrees of intimacy, mutuality and attachment, together with a healthy attachment to mother, tended to exhibit greater exploration and career commitment behaviors. Researchers exploring attachment relationships, fear of

commitment and career decision-making self-efficacy included peer attachment with parental attachment and reported that quality of peer attachments added significantly to parental attachment variables in the prediction of career decision self-efficacy (Wolfe & Betz, 2004). Although the extant research concerning peer relational support and career development is limited, researchers have encouraged a more expansive view of relational supports, including peers (Felsman & Blustein, 1999; Schultheiss et al., 2001). In a qualitative study aimed at describing relational factors associated with career development, Schultheiss et al. (2001) suggested that peers and friends play roles in facilitating career decision-making.

Consistent with explorations of a wider network of relationships, researchers have begun to address the impact of additional family members beyond parents on various career behaviors (Schultheiss et al., 2001; Schultheiss, Palma, Predagovich, & Glascock, 2002). Schultheiss et al., (2002) suggested siblings provide a rich source of relational support due to aspects unique to sibling relationships. For example, experiencing comparable family contexts at similar age and developmental stages may contribute to the creation of more egalitarian, mutual relationships between siblings. Participants interviewed in a study examining sibling relationships and career often identified an older sibling as important in their career development process. Researchers found that siblings provided valued emotional support and served as role models. Findings such as these have led to the conclusion that “what transpires in our relationships may be key to the facilitation or hindrance of our ability to progress effectively through challenging career

tasks” (Schultheiss et al., 2001, p. 215). Moreover, it appears that peer and other family members deserve attention when examining relational aspects of career development.

### Diversity and Women’s Career Development

#### *General Considerations: A View Across Groups*

Numerous scholars in vocational psychology have called for increased attention to multiple dimensions of career-related behavior for members of diverse racial and ethnic groups (Arbona, 1996; Betz, 1994a, 2001; Blustein, 2001; Farmer, 1997; Flores & Ali, 2004; Fitzgerald & Betz, 1994; Hackett & Byars, 1996; Worthington et al., 2005).

Researchers interested in women’s career progress, citing the relative invisibility of minority women in vocational psychology, have argued for the creation of multifaceted approaches to understanding minority women’s career development (Betz, 2005; Phillips & Imhoff, 1997).

#### *Social Context: Changing Demographics*

Rapidly shifting demographics call into question the applicability of current career theories, which were designed to explain and predict career behavior of majority culture men and women, for people of color (Betz & Fitzgerald, 1987; Fitzgerald & Betz, 1994; Hackett, 1997; Worthington et al., 2005). United States Census data estimate the population of people of color, including individuals identified as Hispanic/Latino/a, African American, Asian American, Native American/Alaskan Native and Multiracial at 31% of the total U.S. population of over 290 million (U.S. Census Bureau, 2000). Specific percentages for each ethnic/racial group include the following: 12%

Hispanic/Latino(a); 12.3% African American; 3.6% Asian American; .9% American Indian, Alaskan Native; and 2.4% multiracial (U.S. Census Bureau, 2000).

Furthermore, disparities in career-related variables exist. Regarding education, a critical precursor to future career development, high school graduation rates for Hispanics, African Americans, Asian Americans, and Whites, are 57%, 79.2%, 88.7%, and 86%, respectively, for individuals 25 years and older (U.S. Census Bureau, 2003). College graduation rates present similar patterns. For Hispanic, African American, Asian American and White individuals age 25 or older, graduation rates are 11.1%, 17.2%, 29.4% and 44%, respectively (U.S. Census Bureau, 2000). Recent statistics describe labor force participation rates for African American and Hispanic women 20 years or older as 64% and 57% (U.S. Department of Labor, 2003). Closer analysis of data from the Bureau of Labor Statistics (2003) revealed African American and Hispanic women were over-represented in lower status and lower paying occupations. Hispanics and African Americans accounted for 20% and 22% of the “service occupations” and 21% and 18% of the “operators, fabricators, and laborers.” In the “managerial and professional specialty” category, Hispanics and African Americans accounted for 15% and 23% of the labor force, compared to 32% for Whites.

### *Career Development Theory*

Theoretical speculation and empirical investigation of multiple aspects of career development for members of diverse groups represents a recent trend in vocational psychology (Arbona, 1995; Flores & Ali, 2004; Worthington et al., 2005). Alternate views of conceptualizing career development for members of ethnic and racial groups

abound. Modifications of existing theories have been undertaken to accommodate unique concerns of minority individuals' career development (Super, 1990). Some assert, however, that separate theories are needed to understand the career behavior of women from diverse racial and ethnic groups (Arbona, 1990, 1995; Richie et al., 1997; Smith, 1983). Others contend that overarching theories, modified to include general factors relevant for all minority group members, may be appropriate. Within a broader social cognitive theory, Bandura's self-efficacy theory (Bandura, 1977), applied to the career development of women (Betz & Hackett, 1981; Hackett & Betz, 1981) has been found useful in explicating a myriad of career behaviors, including career choice and decision-making. The concept of self-efficacy, together with outcome expectations and distal and proximal influences, has been suggested as a possible framework for understanding the career development of members of ethnic and racial minority groups (Lent et al., 1994). For many individuals from ethnic and racial minority groups, outcome expectations, what individuals believe the final outcome will be, have been impacted by experienced and anticipated barriers (i.e., racism and discrimination). The social cognitive career model, which includes both distal (pertaining to larger social and cultural factors) and proximal (including individual and familial forces) factors seem to address the complexity inherent in career development within minority cultures.

### *Barriers and Supports*

Although examination of the unique socio-historical experiences of individuals belonging to different ethnic groups is necessary, important considerations and experiences common to members of disadvantaged groups, such as barriers to career and

occupational choice faced by many individuals of color (Arbona, 1990; Kenny et al., 2003; McWhirter, 1997), as well as ethnic and racial discrimination (Luzzo, 1993), are important common considerations for members of minority groups. In an examination of African American women engaged in traditional and non-traditional professions, Burlew and Johnson (1992) found that women working in non-traditional occupations reported experiencing greater gender and ethnic discrimination and less peer support as compared with women in traditional occupations. Luzzo (1993) examined perceived past and future barriers to career development for diverse ethnic groups and found that ethnic minority students reported greater perceived career barriers than Caucasian students. African American and Hispanic college students reported the highest past and anticipated future barriers related to ethnic identity as compared to Asian American, Filipino American or Caucasian students. McWhirter (1997) examined Mexican American and European American high school students' perceptions of career and educational barriers and reported an interaction of gender and ethnicity. Although as a group Mexican American students anticipated more barriers than European Americans, gender analysis revealed women anticipated greater barriers than men. Given findings to date, continued research exploring the experience of oppression and the potential impact on career development is necessary.

Research appears to support the contention that minority members face unique stressors and barriers in their educational and career related pursuits (Burlew & Johnson, 1992; Kenny et al., 2003; Luzzo, 1993; McWhirter, 1997). Contextual supports have recently been integrated into existing theories concerning minority career development

(Kenny et al., 2003; Lent et al., 1994), with attention focused on the potential of contextual supports to facilitate career development in the face of added stressors and barriers (Kenny et al., 2003). Social cognitive career theorists have argued for the inclusion of relational supports in research focused on diverse groups (Kenny et al., 2003; Lent et al., 1994). A potentially fruitful area of continued research may be the intersection of multiple relational supports and career behaviors within diverse populations (Blustein et al., 1995; Flum, 2001).

### *Family and Other Relational Support*

The inclusion of the family in research focused on minority individuals has a long history in psychological research (Sue & Sue, 1999). The family has been implicated as critical to understanding a myriad of behaviors within minority populations (Sue & Sue, 1999). Although significant within and between group differences preclude reliance on generalizations, similarities within minority cultures tend to center on values of collectivism, or consideration of the whole, and value of family as a unit.

As vocational psychology is expanding to include minority populations, understanding the role the family may play in minority individuals' career development throughout the lifespan becomes critical. Much of the current understanding of the intersection of family and career development within minority populations, however, is theoretical and speculative (Flores & Ali, 2004). Scholars in the field of vocational psychology have become interested in family variables hypothesized to contribute to career development, however, criticism has been leveled at the negligible amount of research concerning family-of-origin influences in the career development processes of

diverse individuals (Flores & Ali, 2004). Although research in the area of relational support in the context of career development of diverse individuals is beginning, there is not a clear foundation of knowledge upon which to build (Lent et al., 2002). According to Flores and Ali (2004) there is not "...a critical mass of studies to draw any meaningful conclusions about family variables that may influence career development of people of color at different life stages" (p. 581). Further, according to Schultheiss et al., (2001), "[t]he importance of extended family members has been largely overlooked in the attachment and career development literature and may well represent an important source of relational security and support across racial and ethnic groups and developmental stages (p. 217).

The lack of a critical body of research deserves attention given findings concerning increased perception of career-related barriers (Luzzo, 1993; McWhirter, 1997) and emerging findings concerning relational supports in minority individual's career development processes (Fisher & Padmawidjaja, 1999; Kenny et al., 2003). Preliminary research suggests parental support, including support from extended family, may be particularly important for African American and Latino/a college students (Fisher & Padmawidjaja, 1999). Fisher and Padmawidjaja (1999) interviewed a sample of 20 high-achieving African American and Mexican American college seniors. Qualitative analysis of semi-structured interview data suggested a positive relationship between parental influence and career development for this group of students. The participants described parental encouragement, educational and critical life events and work identity as significant contributors to their career development. Parents who were perceived as

available, offered continued guidance, advice and acceptance, as well as refrained from exerting pressuring were found to have a positive impact on career development and career choice in this select group of college seniors.

Social support has also been found to contribute to specific career processes.

Researchers have reported a positive relationship between social support and persistence for members of ethnic and racial minority groups (Gloria & Ho, 2003; Gloria & Robinson Kurpius, 2001; Gloria, Robinson Kurpius, Hamilton & Wilson, 1999). Gloria and Ho (2003) investigated social support as one of a multitude of factors contributing to academic persistence for individuals from various Asian ethnic groups. Findings supported the crucial role of familial and, to a lesser degree, peer social support, with a subset of social support variables emerging as the strongest predictors of academic persistence for this sample. Additional research has been conducted supporting the positive relationship between social support and adaptive career development for African American students (Gloria & Robinson Kurpius, 2001; Gloria et al., 1999). A positive relationship between social support and multiple career processes, including career aspirations, school engagement and expectations for success has been reported in ninth grade ethnic and racial minority students. Although researchers continue to explore career development processes in college students of color, much remains unexplored about college students' experiences of parental involvement and support in their academic and career pursuits (Fisher & Padmawidjaja, 1999).

Family support may be more influential for ethnically and racially diverse women than men, due in large part to the combination of greater actual and perceived barriers to

educational and career attainment and possible heightened importance of family in racial and ethnic minority cultures (McWhirter, 1997). The possibilities associated with greater social support from others and women's career development seem important to continue investigating. Such findings are theoretically consistent with women's career development theories (Astin, 1984; Betz & Hackett, 1981; Farmer, 1976; Hackett & Betz, 1981) and extend earlier findings regarding the positive relationship between increased social support and adaptive career development for women (e.g., Haber, 1980; Houser & Garvey, 1983).

In addition to social support, ethnic identity has been proffered as a potentially important variable in the career development of racial and ethnic minority members (Arbona, 1995; Evans & Herr, 1994; Helms & Piper, 1994; Tinsley, 1994). Developing a positive ethnic identity may serve as a resource in the face of oppression experienced in multiple aspects of progress towards a career (Arbona, 1995; Tinsley, 1994).

### *Ethnic Identity Theory*

Exploration of the complexity of within-group differences, or heterogeneity, within ethnic minority groups represents a relatively new direction in psychological research. Researchers have initiated exploration of ethnic identity as an important factor in understanding the life experiences of members of minority groups (Phinney, 1996). Phinney (1996) stressed the importance of understanding ethnic identity as an integral component of ethnicity. Defining the term *ethnicity* to "refer to broad groupings of Americans on the basis of both race and culture of origin," Phinney suggested ethnicity was an essential contributor to mental health (1996, p. 919). Phinney (1996) proposed

that ethnicity was related to psychological health and well-being in three ways: through the expression and transmission of salient cultural values; in understanding the issues related to the importance, development, and maintenance of ethnic identity; and in recognizing and validating experiences related to minority status and oppression.

For example, cultural values and norms within groups help define daily life for ethnic minority individuals and provide valuable information into the daily experiences of members of ethnic minority groups. While there is much within-group heterogeneity, Phinney (1996) argued that understanding widely agreed upon general cultural values may provide insight into unique problems and strengths within ethnic group members. For example, within various Hispanic groups, the cultural value of familism, which refers to the strong bond and commitment between family members, is a central component for many Hispanic individuals (e.g., Marin & Marin, 1991). Additional cultural values which may be important considerations in the life experiences of Latinos/as include “high levels of interdependence, conformity, and readiness to sacrifice for the welfare of ingroup members,” as well as an avoidance of conflict and promotion of harmonious interpersonal contact and relationships (Phinney, 1996, p. 921). Appreciating these cultural values helps researchers and clinicians understand the life experiences of Hispanic individuals.

Phinney asserted that another important dimension of the life experience of ethnic minority individuals was ethnic identity and argued that ethnic identity was a critical concept in understanding the experiences and psychological well-being of ethnic minority members. “For members of groups of color, the significance of their group membership

may lie in part in the struggle to gain equality, recognition, and acceptance within a predominantly White society” (Phinney, 1996, p. 925). For example, Phinney (1996) suggested it was valuable to understand whether a positive or secure ethnic identity protects minority members from stressors and experiences faced as a result of membership in oppressed groups. Researchers in the field of psychology have encouraged the examination of within-group considerations in diversity research or differences between members of the same racial or ethnic group (Ocampo, 2000). Ethnic identity, and the associated psychological impact of such identity, is an important within-group characteristic to consider.

Confusion exists within the field of psychology concerning conceptual distinctions and similarities among acculturation, ethnic identity, and racial identity (Fischer & Moradi, 2001). Acculturation has been conceptualized as how individuals relate to the dominant society (Keefe & Padilla, 1987; Olmedo, 1979). In contrast, ethnic identity refers to “an aspect of acculturation in which the concern is with individuals and the focus is on how they relate to their own group as a subgroup of the larger society” (Phinney, 1990, p. 501).

Racial identity refers to “...the process by which persons develop (or do not develop) healthy racial collective identities in environments in which their socially ascribed racial group has differential access to sociopolitical power” (Helms & Piper, 1994, p. 125). The racial identity model developed by Cross (1978, 1995) includes four stages which describe feelings and meanings associated with individual ethnic identity: Pre-encounter, Encounter, Immersion-Emersion, and Internalization. It has been suggested that Cross’

model represents a conceptualization of racial identity which emphasizes the meaning of minority membership for African American individuals and attends to unique socio-historical experiences of group members (Sellers, Smith, Shelton, Rowley, & Chavous, 1998). The first stage of Cross' model includes the pre-encounter stage, represented by attitudes related to devaluing of culture, which can be conscious or unconscious.

Encounter attitudes encompass an awakening or a shift, which may be the result of significant positive or negative life experiences. The process of Immersion-Emersion includes movement away from the dominant culture, and increased pride in being an African American. Internalization represents a more balanced sense of self and identity, including a resolution of previous internal conflicts and a greater self-acceptance (Cross, 1978; Parham & Helms, 1985; Sue & Sue, 1999). Cross' (1978) work in racial identity lead to the development of a widely used measure of Black racial identity development, the Racial Identity Attitudes Scale (Parham & Helms, 1981).

While Cross' (1978) work in African American racial identity development has had a profound impact on the field, more recently, researchers have suggested that African American racial identity might be better understood through incorporating both experiences of oppression and racism (as is the focus of the Cross model) and meaning attributed to historical and contemporary experiences. The multidimensional model of racial identity (Sellers et al., 1998) incorporates stigma, qualitative meaning and experiences and theory of group process into an overarching model examining the experiences of African American individuals. Basic principles of the theory include the belief that identity encompasses both static and changing properties of an individual;

individuals possess different and “hierarchically ordered” identities; how one perceives his/her identity is the most salient determinant of identity; and a focus on the status of one’s racial identity rather than the process of developing an identity (Sellers et al., 1998, p. 225).

Although racial and ethnic identity are often used interchangeably in the literature (Phinney, 1990), it has been suggested that these constructs represent related but distinct concepts (Cokley, 2005; Sellers et al., 1998). Some researchers have maintained that racial identity encompasses a view and reaction to societal oppression based on one’s race, while ethnic identity refers to the meaning and practice of customs and beliefs of particular groups. Blurring the picture even further is acculturation. Briefly, acculturation refers to a complex process by which individuals adapt to a new environment. An important distinction between acculturation and ethnic and racial identity includes where focus is placed. In acculturation, the larger social context becomes a fundamental focus and individuals are understood to be interacting with a larger social environment. Ethnic and racial identity, in contrast, are concerned with individual, internal processes (Phinney, 1990). While there are obvious distinctions between the concepts of acculturation and ethnic and racial identity, there is much overlap with each process impacting the other.

*Ethnic identity and career development.* A relevant and important task for late adolescents and young adults is identity development (Erikson, 1950, 1968). As described by Erikson (1950) and others (e.g., Bordin, 1990) a sense of self, or identity, includes a sense of one’s vocational identity. For members of ethnic and racial minority

groups, a sense of self also includes developing a sense of oneself as a member of a minority group. The potential relationship between ethnic identity and career process and outcome variables has emerged as an important theoretical and research topic (Gloria & Hird, 1999; Jackson & Neville, 1998). As the field of psychology has moved away from identifying ethnic and racial group status nominally (Arbona, 1996; Worthington et al, 2005), researchers have suggested that ethnic identity may provide insight into the intersection of a more broadly based identity development, an identity incorporating ethnic behaviors, values and meanings with vocational self-concept (Carter & Constantine, 2000; Evans & Herr, 1994; Gloria & Hird, 1999; Helms & Piper, 1994; Jackson & Neville, 1998; Leong & Chou, 1994).

Ethnic identity has been found to be positively associated with multiple indicators of adjustment in adolescents and young adults (Phinney, 1992, 1996). Researchers have reported that higher ethnic identity, or greater exploration and commitment related to ethnicity, has been found to be positively associated with self-esteem (Phinney & Chavira, 1992; Phinney & Alipuria, 1990) and psychological adjustment (Phinney, 1989). Such findings have stimulated interest in the possible applicability of ethnic identity theory to the vocational development of racial and ethnic minority members (Arbona, 1995; Osipow & Littlejohn, 1995; Tinsley, 1994).

Theorists have asserted that the intersection of vocational behavior and racial identity, not just ethnic and racial group membership designates, are critical to understanding the unique experiences of minority members. According to Tinsely (1994):

It seems obvious that a somewhat different configuration of factors influences the career development of persons of different cultural and racial heritage. Despite their individuality, people from the same culture share common experiences which help shape their attitudes, values, expectations and aspirations (p. 115).

In research exploring racial and vocational identities, a positive correlation was observed between racial identity status and more stable vocational identity. African American women who identified possessing more internalized racial identities tended to possess clearer pictures of their interests and talents (Jackson & Neville, 1998).

Researchers have also initiated studies of ethnic identity and career decision self-efficacy within diverse groups (Gloria & Hird, 1999). Gloria and Hird found that ethnic minority students (African Americans and Hispanic men and women) reported less confidence in their abilities to perform career decision making tasks than White students. Furthermore, ethnic identity accounted for more variance in the career decision-making of minority students than White students. In structured interviews with Hispanic high school students, Bullington and Arbona (2001) reported that students identified a range of experiences and feelings concerning their ethnicity, which included feelings of pride, ambivalence and a sense of detachment. According to Arbona (1995), "it is very likely that developing a sense of ethnic identity constitutes an additional developmental task that Hispanics need to contend with in implementing their self-concept in a vocational identity" (p. 49). These preliminary findings, coupled with theoretical speculation that ethnic identity development is relevant to minority members' career development processes, lend

support for the possible relationship between racial/ethnic identity and vocational development.

### Within-Group Considerations

#### *African American Women*

“To be Black and female in today’s society poses unique and complex issues in thinking about, planning for, and working towards a career” (Turner, 1997, p. 163). This assertion underscores the foundation of work concerning African American women’s career development. Following the recognition that career development proceeds differently for African American women (Smith, 1983), research describing such a unique process is building (Brown, 1995).

#### *Social Context*

A prerequisite to understanding the career development of a particular group is understanding the socio-historical experiences and cultural values of that group. In explorations of work and career, it is imperative to recognize the reality of work in African American women’s lives. African American women have exhibited different labor force participation than other groups of women, including European American and Hispanic women (Gump & Rivers, 1975). Of particular significance, researchers have found that African American women have worked in the paid workforce in larger numbers than European American women and other minority women for decades (Gump & Rivers, 1975), suggesting that the process of work and career development may be different for African American women than both majority and other minority women. Perhaps due to the reality of African American women’s participation in the workforce,

African American women have expected to work during their adult years (Bingham & Ward, 1994; Greene, 1990; Gump & Rivers, 1975; Smith, 1982). This reality has led to speculation that African American women may not experience the home-career conflict in the same way other women have because they have often not had a choice (Murrell, Frieze, & Frost, 1991; Robinson, 1983). The overarching foundation of career development – that individual choice is the highest priority in one’s career process – may not reflect African American women’s lived experiences (Smith, 1983).

### *Career Development Theory*

Several theoretical discussions and empirical studies aimed at explicating African American women’s career behavior have been conducted (Fassinger & Richie, 1994; Gainor & Lent, 1998; Hackett & Byars, 1996; Pearson & Bieschke, 2001; Richie et al., 1997; Smith, 1983). Researchers have explored the applicability of self-efficacy theory to African American girls and women (Gainor & Lent, 1998; Hackett & Byars, 1996). Hackett and Byars (1996) proposed several theoretical and research considerations in the application of a self-efficacy based career theory (Betz & Hackett, 1981; Hackett & Betz, 1981) to African American girls and women. Hackett and Byars asserted that the cultural value of the extended family may be an important consideration in developing self-efficacy for African American girls. It is often through such extended family networks that African American girls and women are exposed to more flexible gender roles, potentially impacting future career choices. Indeed, researchers have found that African American girls and women have endorsed more nontraditional career aspirations than European American women (Murrell et al., 1991).

Theorists have suggested that racial identity and vocational development may be related (Helms & Piper, 1994; Thompson, 1985), and specifically, that racial identity is associated with vocational identity. Although empirical investigations of the integration of identities in African American populations are few, emerging evidence is accumulating to support such hypotheses. Thompson (1985) reported that African American individuals endorsing values and beliefs consistent with the Pre-encounter stage of racial identity exhibited lower tolerance for career indecision than individuals in different stages of racial identity. Individuals endorsing values and beliefs consistent with the Encounter stage of racial identity tended to have more tolerance for ambiguity with regard to occupational identity, defined in this study as less of a tendency to discard possible occupational choices. Utilizing self-efficacy in a more broadly-based social cognitive career theory, Gainor and Lent (1998) integrated racial identity with social cognitive variables focused on math interest and efficacy. Findings of their study with African American college students revealed self-efficacy was positively related to math interest and efficacy, which in turn were associated with intentions to pursue math. Contrary to hypotheses, associations between racial identity and efficacy or interest variables did not emerge as significant findings (Gainor & Lent, 1998). Helms and Piper (1994) have argued for continued exploration of possible connections between vocational and racial identities for ethnic minority individuals.

### *Family and Other Support*

Qualitative explorations into familial and relational influences on African American women's career development have revealed the vital role of the nuclear and extended

family networks in promoting African American women's career development (Pearson & Bieschke, 2001; Richie et al., 1997). The family has also emerged as an important facilitator of women's career development in diverse groups of African American women, including high achieving women (Richie et al., 1997). In a qualitative study of high achieving African American and White women from various occupations emergent themes generated from women's stories were categorized according to the following dimensions: a core story, socio-cultural influences, personal background, contextual influences, and actions and consequences (Richie et al., 1997). Critical factors in participants' progression through career development included high family expectations and the presence of role models and mentors in women's lives. Women also identified support from family members as crucial to their career success, with mothers' influence emerging as essential factors in these women's successes. Highlighting the relational themes in women's stories, the authors described the participants as "a group of relationally oriented women who are persistent in the face of obstacles and are passionate about their work" (Richie et al., 1997, p. 144). For this select group of women, personal and career lives were interwoven and success was defined as a balance between relational and personal dimensions. According to the authors, "participants achieved career success on their own terms, maintaining interconnectedness, valuing social support, balancing their personal and professional lives" (Richie et al., 1997, p. 145).

In an extension of research suggesting a positive association between career development and family support for African American women (e.g., Richie et al., 1997), Pearson and Biescke (2001) focused on familial influences in the careers of professional

African American women. Women were interviewed to deepen understanding of the meanings African American women made of family-of-origin experiences and career. For these women, nuclear and extended family networks were critical to their career development. Women believed they gained valuable lessons in having nuclear and extended family role models and identified support and encouragement to pursue education as vital to career development. In describing the impact of family support, women identified feeling support from others facilitated the development of self-confidence and belief in their abilities. One important finding from this research was the impact that nuclear and extended family had on career development across the lifespan. Family support seems to have played a role in these women's career choices, entry into various professions and maintenance over their lifespan, demonstrating a profound effect of family influence for these women.

### *Hispanic Women*

The designations “Hispanic” and “Latina/o” identify a large and diverse group of individuals from different countries with unique subcultures, values and customs (Arbona, 1995). Many national origins are subsumed under these broad terms, including Mexican, Central and South American, Cuban, and Puerto Rican, for example (Arbona, 1990). Hispanic and Latino/a are used to identify both recent immigrants and individuals who have resided in the U.S. for many generations. Given the heterogeneity within this cultural group, important considerations in discussions of specific Hispanic groups (i.e., Mexican Americans, Cuban Americans, Puerto Ricans) must include acknowledgement

of specific ethnic group, acculturation level, including generational status and variables associated with social class.

### *Social Context*

Although individuals from each of these countries of origin and/or ancestry possess unique socio-cultural backgrounds, there are collective cultural histories, beliefs and values that tend to unite many of these group members. Prominent shared values among various Hispanic/Latino cultures include the salience of family, collectivist values and a tendency toward interdependence, a preference for harmonious interpersonal relationships and more clearly defined gender roles (Marin & Marin, 1991; Ruiz & Padilla, 1977; Sue & Sue, 1999). Although individuals from Hispanic subgroups often share similar values and worldviews, research is needed to understand how these views affect the lives of Hispanic men and women from different subgroups. An area of focus which has garnered recent attention is the career development of Hispanic individuals. Census data predict that individuals of Hispanic origin will account for the largest percentage of minority individuals sometime after the year 2050 (U.S. Census Bureau, 2003). Given such statistics, it becomes apparent that the health and productivity of this large and diverse group has ramifications for society at large.

### *Career Development Theory*

Although comprehensive theories concerning the career development processes of Hispanic populations have yet to be established, exploration of important career variables for a heterogeneous collective of people identified as Hispanic has been initiated (Arbona, 1990, 1995; Bingham & Ward, 1994; Flores & O'Brien, 2002; Gomez et al.,

2001; McWhirter, 1997; McWhirter, Hackett, & Bandalos, 1998). Early studies of the career development process within Hispanic populations have often compared European American and Hispanic individuals on a variety of career outcomes (Berman, 1972; Frost & Diamond, 1979). In a study of girls' and women's vocational preferences, researchers reported that Hispanic girls and women tended to prefer traditional careers (Berman, 1972; Frost & Diamond, 1979). Researchers have also reported differences in career aspirations among Hispanic and European Americans, with Hispanic girls and women aspiring to less prestigious, more traditional careers than European Americans (Berman, 1972). In contrast, similarities in career aspirations between Hispanic and European American women have been found (Arbona & Novy, 1991), particularly when mediating variables, such as social class were controlled.

Although research is equivocal with regard to career aspirations between Hispanic and European American individuals, researchers have consistently reported disparities between Hispanic individuals' aspirations and achievements (Arbona, 1990, Holsinger & Chapman, 1984). In a longitudinal study of the career aspirations of Hispanic and European American students, Holsinger and Chapman (1984) found that aspirations for both Hispanic and Caucasian students diminished during college, with Hispanic students' career aspirations diminishing to a greater degree than European American students. This finding has been replicated in numerous studies, with the discrepancy between Hispanic individuals' career aspirations and career attainment emerging as a reality within Hispanic populations (Arbona, 1990, 1995; Flores & O'Brien, 2002). The findings are borne out by census data revealing high school drop out rates for Hispanic men and

women between the ages 18 and 24 in excess of 30% (compared to 12% for Whites) and college attendance rates of approximately 20% for Hispanic men and women (compared to 36% for Whites) (U. S. Census Bureau, 2000). Such statistics have played a pivotal role in determining contemporary research agendas. Much current theorizing and empirical study of the career development of Hispanic individuals centers around understanding the underutilization of talents, high-school drop out rates, and lower college attendance of members of Hispanic groups (Arbona, 1990; Flores & O'Brien, 2002).

Additional variables hypothesized as critical in the career development process for Hispanic individuals include culturally-related variables such as acculturation, ethnic identity and race (Arbona, 1990, 1995; Miranda & Umhoefer, 1998). Researchers have found that for a diverse group of Hispanic individuals, acculturation is a significant predictor of career behavior (Arbona, 1990, 1995; Neggy & Woods, 1992). Acculturation has been found to be positively related to multiple career behaviors, including educational attainment for recent immigrants (Neggy & Woods, 1992) and career self-efficacy for immigrant adults with differing levels of education (Miranda & Umhoefer, 1998). Others, however, have failed to find hypothesized associations between acculturation and career decision-making or vocational identity (Lucero-Miller & Newman, 1999). Equivocal findings together with theoretical assertions highlighting the complexity involved in acculturation (Arbona, 1995) lend support to the need for further research in this area.

Experiences of discrimination have also been identified as critical in the career development process of Hispanic individuals. Theorists have suggested that anticipated and perceived discrimination may play a significant role in the lower educational and occupational attainment of Hispanic individuals (Arbona, 1995; Luzzo, 1993; McWhirter, 1997). The reality of discrimination is faced by many Hispanic individuals (Arbona, 1995). Researchers have found that Hispanic individuals perceived greater barriers to career and academic success than Caucasians (Luzzo, 1993; McWhirter, 1997) and perceive these barriers to impact negatively on their future educational and occupational attainment.

Although there has been limited empirical exploration of specific factors involved in the process of career development for Hispanic women, some have speculated that factors important in the process of career development for majority women may be applicable to Hispanic women (Flores & O'Brien, 2002). For example, support has been found in applications of Farmer's theory, which includes background factors, social support, gender role attitudes and educational and occupational barriers, to the career development process for Hispanic girls and women (Flores & O'Brien, 2002; McWhirter et al., 1998). Parental support emerged as predictive of career prestige and career aspirations. Adolescent girls in this study who identified greater parental support evidenced higher career aspirations and planned to enter more prestigious careers (Flores & O'Brien, 2002). McWhirter et al.(1998) found modest support for the inclusion of acculturation with other variables in career development for Mexican American high school girls. Contextual supports, defined as the perception of available assistance or

support, have been identified as important factors in the career development process. It has been suggested that contextual supports may be particularly relevant for understanding the career behavior of minority individuals (Fisher & Padmawidjaja, 1999; Gomez et al., 2001, Kenny et al., 2003). An obvious arena for receiving support is the family.

### *Family and Other Support*

A variable hypothesized to be related to multiple aspects of career development for members of ethnic and racial minority groups, including Hispanic individuals, is the family. Indeed, although the research base concerning Hispanic women's career development is relatively recent and emerging, a critical theme identified as facilitative of career development for this group has been the family and family support in particular (Flores & O'Brien, 2002; Gomez et al., 2001). Within Hispanic cultures, familism (also referred to as familialism or familismo) refers to a strong connection with the family of origin (Marin & Marin, 1991). More specifically, this cultural value often includes utilizing family members as first lines of support in multiple areas of life. Family members often feel obligated to offer emotional and sometimes financial support. Research is beginning to accumulate documenting the role that various aspects of the family may play in multiple aspects of career progress for Hispanic women (Flores & O'Brien, 2002; Gomez et al, 2001).

Research has been initiated including family support as an important factor in a general adjustment and academic success model for Hispanic college students (Torres & Solberg, 2001). Torres and Solberg found that Latino/a men and women who perceived

family support as available reported greater self-efficacy for a variety of academic tasks, including tasks associated with academic courses, and managing general adjustment, including roommate and other social interactions. Torres and Solberg concluded that their findings highlight “the importance of family as providing the developmental framework from which confident learners emerge” (p. 61). According to the authors, “[f]amily support likely produces a self-identity capable of perceiving life transitions as challenges rather than threats by encouraging environmental exploration while also providing a safe place to rely on when challenges far exceed one’s abilities” (p. 61). An important addition to their model is the construct of social integration, defined in the present study as “students’ perception of connection to their institution and faculty” (p. 54). The inclusion of a more general relational variable, in addition to specific relational variables (i. e., family support) exemplifies movement towards broadening the contextual factors related to career development of minority individuals (Blustein, 2001; Worthington et al., 2005).

Other researchers have focused on providing rich, descriptive accounts of the career processes of Hispanic women through qualitative investigation, including familial and other relational aspects of development (Gomez et al., 2001). Interviews with “notable Latinas,” defined as “women whose contributions on the local, national, or international level ha[d] been identified as having a visible impact in their respective fields, communities, or society-at-large,” (p. 287) revealed a dynamic and interactive influence of personal, background and socio-cultural influences. Using grounded theory, the authors defined the core category, or overarching theme, as the career-life path. This

theme included aspects of the self, the integration of culture, family, and personal background, together with immediate contexts and socio-political conditions. Gomez et al. (2001) concluded the following:

The high achieving women were passionate, tenacious, demonstrated strong career self-efficacy, and had an inner conviction that included effective coping skills, internal motivation, career persistence, and high instrumentality. When confronted with challenges and potential barriers, high achieving women used similar support systems such as mentors, networks of women, role models, family, and spouses (p. 297).

Contemporary research on Hispanic women's career successes appears to validate earlier assertions about the value of family support in pursuing higher education (Gomez et al., 2001). As documented in previous research (Buriel & Saenz, 1980; Casas & Ponterotto, 1984; Gandara, 1982; Lujan & Zapata, 1983), family support has been identified, along with personality traits, including assertiveness and cultural fluidity between majority and Hispanic culture as critical to the career success of Hispanic women (Arbona, 1990).

#### *Other Diverse Women*

A thorough analysis of developing literature concerning the career development of women belonging to additional diverse racial and ethnic groups, women with disabilities, and women identifying as members of sexual minority groups is beyond the scope of the current review. It is imperative, however, to acknowledge both the paucity of research with these populations and the importance of such explorations.

Researchers are beginning to investigate multiple dimensions of career development with various populations, with preliminary findings suggesting perceptions of barriers and experiences of discrimination, together with available supports, may facilitate understanding of unique career processes of individuals from minority cultures (Lent et al., 1994). Career theorists, including advocates of the social cognitive career theory as proposed by Lent and colleagues, have suggested including divergent factors hypothesized to be related to the career development of individuals from disadvantaged groups. Proponents of the social cognitive career model have argued for the inclusion of contextual supports, including relational supports, with barriers, in explorations of minority individuals' career development. Further, the widening of the relational field, as evidenced in Kenny et al.'s (2003) inclusion of "kinship support" represents an important effort at developing models that reflect minority individuals' lived experiences.

Important research aimed at understanding the potential career-family link with understudied populations has only recently been initiated (Gomez et al., 2001; Jordan, 2004; Juntunen et al., 2001), and much of the work remains largely peripheral; questions concerning the link between career and family have been secondary findings rather than the central questions. For example, in an exploratory investigation of the meaning of career for American Indian individuals, the salience of career, "mitigated by the needs of the family and community" emerged as a significant theme (Juntunen et al., 2001, p. 282). Further, American Indian individuals who had attained postsecondary education identified family support as an important contributor in their career development. These findings are consistent with findings highlighting the critical role of family support in the

career success of individuals from other diverse racial and ethnic groups (Gomez et al., 2001; Pearson & Bieschke, 2001; Richie et al., 1997).

Additional populations which are beginning to be studied within the vocational psychology literature include individuals living with various disabilities (Jordan, 2004; Luzzo, Hitchings, Retish, & Shoemaker, 1999; Noonan et al., 2004) and individuals diverse with respect to sexual orientation (Nauta, Saucier, & Woodward, 2001). Research conducted thus far highlights the impact that supportive others may have in facilitating career development in the face of multiple barriers, oppression and discrimination. For example, while lesbian, gay and bisexual college students reported having more career role models than heterosexual individuals, they perceived less support and guidance than heterosexual students in career decision-making tasks (Nauta et al., 2001). Although such explorations are encouraging, in many ways the intersection of diversity and vocational psychology represents a new frontier.

## Summary

Understanding and facilitating the career development of all members of society is an immense, vital task with ramifications for society on numerous levels, including personal, social, and economic. Researchers from a variety of fields in psychology and social science have converged on various relational perspectives as essential approaches to understanding healthy development, including vocational development, across the lifespan. Indeed, striving for productive work and meaningful interpersonal relationships has been described by many, including Freud, according to Erikson's writings (1950), as the quintessential indicator of healthy psychological development.

Addressing concerns and questions in a rapidly changing society, vocational researchers have begun to address the lack of knowledge of career behavior of a large segment of society – namely, individual members of racial and ethnic groups. In the quest for relevant and meaningful knowledge about the career process of ethnic and racial minority members, researchers have begun to acknowledge a more complex array of potential variables with a wider group of individuals (Blustein, 2001, Blustein et al., 1995; Flum, 2001). Important variables that have begun to emerge include relational dynamics within the family-of-origin, as well as in other interpersonal relationships, and issues related to racial and ethnic salience, specifically ethnic identity.

Explorations of family influences on vocational development are not new. Researchers have discussed and explored multiple dimensions of the family and career intersection for many decades (Roe, 1957; Schulenberg et al., 1984; Super, 1980). A more recent addition concerning relational components of career development concerns

the role that other relationships may play in facilitating or hindering career development. The investigation of additional salient relationships, including peer, mentor, and community relationships as potential factors affecting career development may allow for a deeper, more complex, and potentially more culturally relevant understanding of individuals' relational fields and their impact on career issues.

The overarching purpose of the present investigation is to clarify and extend previous findings in which significant associations have been found between career variables and family relational dynamics (Blustein et al., 1991; Hargrove et al., 2002; Hartung et al., 2002; Whiston, 1996). Although some researchers have reported findings supporting the association between various relational variables and career behavior (Blustein et al., 1991; Dodge, 2001; Hargrove et al., 2002), others have failed to find hypothesized relationships (Hartung et al., 2002). Given such equivocal findings, clarification is necessary (Whiston & Keller, 2004b).

Furthermore, researchers have failed to explore critical familial and other relational influences on career development with diverse populations (Brown, 2004; Flores & Ali, 2004). The present study is aimed at extending research questions to understudied populations, including African American and Hispanic college women. Attesting to the complexity of relationships, multiple relational variables have been included in the present investigation, including attachment, family dynamics, and relational quality within peer, community, and mentor relationships.

## Hypotheses

Although research concerning the relational context of diverse women's career development is emerging and equivocal, hypotheses for the present investigation include the following:

- 1a) Caucasian college women will have higher total scores on the Career Decision Self-Efficacy Scale–Short Form (Betz et al., 1996) than Hispanic or African American college women.
- 1b) Caucasian college women will have higher total scores on the Vocational Identity subscale of My Vocational Situation (Holland et al., 1980a) than Hispanic or African American college women.
- 1c) Ethnic minority (African American and Hispanic) college women will have higher total scores on the Multigroup Ethnic Identity Measure (Phinney, 1992) than Caucasian women.
- 2a) Ethnic minority (African American and Hispanic) college women with higher total scores on the Multigroup Ethnic Identity Measure (Phinney, 1992) will score higher on the Vocational Identity subscale of My Vocational Situation (Holland et al., 1980a) than ethnic minority women with lower total scores on the Mutigroup Ethnic Identity Measure.
- 2b) Ethnic minority (African American and Hispanic) college women with higher total scores on the Multigroup Ethnic Identity Measure (Phinney, 1992) will have higher total scores on the Career Decision Self-Efficacy-Short Form

(Betz et al., 1996) than ethnic minority women with low total scores on the Multigroup Ethnic Identity Measure.

- 3) Significant, positive relationships will be found between the quality of college women's interpersonal relationships, as measured by subscale scores on the Family Environment Scale (Moos & Moos, 1994), Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), and the Relational Health Indices (Liang et al., 2002), and career decision-making tasks, measured by the total score on the Career Decision Self-Efficacy-Short Form (Betz et al., 1996).
- 4) Significant positive relationships will be found between the quality of college women's interpersonal relationships, measured by subscale scores on the Family Environment Scale, the Inventory of Parent and Peer Attachment, and the Relational Health Indices, and perceptions of talents, interests and goals, as measured by the Vocational Identity subscale of My Vocational Situation (Holland et al., 1980a).

## CHAPTER 3

### METHOD

#### Participants

The present sample consisted of 346 college students, ranging from 17 to 46 years old, recruited primarily from introductory psychology classes at a public, predominantly female university located in the Southwest. Eighteen male college students were excluded from data analysis since research questions concerned women's experiences. Additionally, five 17 year-old college students were excluded due to ethical issues concerning informed consent for minors. Therefore, the final sample consisted of 323 women. With correlational research questions and the choice of analysis of variance, t-test, multiple regression and multivariate analysis of variance, a sample size of at least 210 was considered adequate to detect a moderate effect size with a power of .90 (Cohen & Cohen, 1983).

#### Instrumentation

##### *Demographic Questionnaire*

The researcher-generated demographic questionnaire (see Appendix D) included information concerning participants' family composition, both family of origin and current family, ethnic/racial background, age, relationship status, current academic major and classification, future educational/occupational aspirations and religious/spiritual

background. Additional questions concerning parents' educational/occupational levels were also included in the demographic questionnaire.

### *Career Decision Self-Efficacy Scale–Short Form*

The Career Decision Self-Efficacy –Short Form (CDSE–SF; Betz et al., 1996; see Appendix E) is a self-report instrument which assesses an individual's belief in his or her ability to perform tasks necessary to make decisions concerning career implementation. Theoretical underpinnings for the original Career Decision Self-Efficacy Scale (CDSES; Taylor & Betz, 1983) included the integration of Bandura's theory of self-efficacy and Crites' theory of career maturity (Crites, 1961).

Providing the theoretical foundation for examination of self-efficacy applied to career behaviors, and specifically career indecision, self-efficacy theory was utilized as an overarching framework. The authors hypothesized Bandura's theory (1977) would provide a practical means to conceptualize career indecision and the potential to modify self-efficacy through interventions (Taylor & Betz, 1983). Crites' (1978) career maturity theory, and specifically his career choice competencies, as measured by the Career Maturity Inventory (Crites, 1978), provided the framework for career decision-making behaviors and determinates of behavioral referents. Crites theorized that competence in the following five career behaviors characterized adaptive career decisions: accurate self-appraisal, gathering occupational information, goal selection, making plans for the future and problems solving. These behaviors served to define career decision-making and provided the foundation for the behavioral referents in the CDSES. Ten items were then chosen to reflect each of the five career behavioral domains.

Theoretical development of the Career Decision Self-Efficacy Scale (CDSES) originated from a desire to understand and explain women's unique career development processes (Betz & Hackett, 1981; Hackett & Betz, 1981). The original scale (CDSES) consisted of 50 items, with each subscale consisting of 10 items. The CDSES was shortened to create a more readily useable scale for assessment of career decision self-efficacy for research and clinical use (Betz et al., 1996).

Crites' (1978) Career Choice Competencies were utilized in the shortened scale, and it was expected that psychometric evaluation would support internal reliability estimates of .90 or higher for the total scale and at least .70 for subscales. Modifications of the original scale included eliminating five items for each subscale. Several criteria were utilized to determine which items to eliminate. Retained items were required to be of "substantive generality," correlate with the scale equal to or higher than .50, load on the appropriate factor, and meet recommendations as suggested by Gati, Osipow, and Givon (1995), including removing items deemed problematic due to low (or high) item-scale correlations or correlations with other scales. Items which did not meet the above criteria were eliminated.

The authors of the scale, after considerable research concerning reliability of both forms, recommended using the short form, due to demonstrated reliability equal to or better than the original form (Betz & Taylor, 2001). The CDSE-SF was therefore chosen for the current study. The subscales of the CDSE-SF include (1) self-appraisal, (2) occupational information, (3) goal selection, (4) planning and (5) problem solving.

Respondents rate items according to how much confidence they have in their ability to accomplish tasks associated with making a career decision.

Although the original scale and shortened version were devised to be rated on a 10-point continuum, from 0 (“No confidence”) to 9 (“Complete confidence”), researchers eventually began employing a 5-point response continuum, 1 (“No confidence”) to 5 (“Complete confidence”). In a recent comparison of reliability and validity for both response continua, Betz, Hammond, and Multon (2005) concluded that the 5-point response continuum resulted in reliability and validity at least as good as that reported for the 10-point response continuum. As recommended in the CDSE manual, the 5-point continuum will be used in the current investigation. Sample items on the CDSE-SF include “Decide what you value most in an occupation;” “Figure out what you are and are not ready to sacrifice to achieve your career goals;” “Accurately assess your abilities.” Scoring the CDSE–SF, utilizing the recommended 5-point response continua, requires summing scores for each scale, with each subscale score ranging from 5 to 25. Total scores are calculated by adding subscale scores or summing across all items. Total scores can range from 25 to 125, with higher scores reflecting more confidence in tasks associated with career decision making (Betz & Taylor, 2001).

Evidence of psychometric soundness, including reliability and validity, of the CDSE– SF has been accumulated (Betz & Taylor, 2001). Numerous researchers have established reliability for the CDSE - SF (Betz et al., 1996; Betz & Klein Voyten, 1997). Betz et al. reported internal consistency reliability estimates for subscales ranging from

.73 to .83. and total scale reliability of .94. Betz and Klein Voyten (1997) reported subscale reliability estimates ranging from .69 to .83 and total scale reliability of .93.

Researchers have also initiated reliability studies of the CDMSE–SF with minority populations (Betz et al., 2005). The authors recently examined career decision self-efficacy in multiple ethnic groups and concluded that there were no significant differences between career decision self efficacy in a large ( $N = 1836$ ), ethnically diverse (including African American, Hispanic American, Asian American, and Caucasian) sample of college students. Previous studies examining career decision self-efficacy in diverse populations have been equivocal. Some researchers have found differences in career self-efficacy between Caucasian and ethnically diverse students, with Caucasian students reporting higher self-efficacy for career decision tasks in some research (Gloria & Hird, 1999). In contrast, Chung (2002) found African American students indicated higher career decision self-efficacy than Caucasian students. Given the paucity of studies that have focused on career decision self-efficacy of ethnic minority students, coupled with inconsistent results, further research is warranted (Betz et al., 2005; Gloria & Hird, 1999).

Factor analyses of the CDESES (Taylor & Betz, 1983) have produced inconsistent results (Peterson & DelMas, 1994). Researchers have reported findings which have failed to support the 5-factor structure of the CDESES, as originally proposed by the authors of the instrument (Taylor & Betz, 1983) and suggested the CDSE – SF yields two factors, Decision Making and Information Gathering (Peterson & DelMas, 1994). The authors of the scales (Betz et al., 1996; Taylor & Betz, 1983) have argued that content validity has

been established through the use of Crites' well-established theory as the conceptual framework for the career decision self efficacy scale.

According to Betz and Taylor (2001), convergent validity has also been demonstrated, with scores on the CDSE-SF correlated with other career measures associated with adaptive career behaviors. Career decision self-efficacy, as measured by both the CDSE and CDSE-SF, have been found to correlate significantly with the Career Decision Scale (Osipow, Carney, & Barak, 1976; Osipow, 1987), and the Vocational Identity subscale of My Vocational Situation (Holland et al., 1980a). Taylor and Betz (1983) reported significant correlations between subscales on the CDSE scale and the Career Decision Scale (CDS; Osipow, 1987; Osipow et al., 1976) ranging from -.29 for Problem Solving to -.48 for Goal Selection. A significant inverse relationship ( $r = -.40$ ) was observed between CDSE total and the CDS. Analysis of convergent validity for the CDSE-SF yielded stronger relationships between the CDSE and the CDS (Betz et al., 1996). Correlations between the CDSE-SF and Vocational Identity ranged from .40 to .66 for women and .28 to .56 for men (Betz & Taylor, 2001; Robbins, 1985).

The CDSE and CDSE-SF have been used extensively in vocational research (Betz & Taylor, 2001; Betz et al., 2005), leading to the assertion that career decision self-efficacy is related to a wide variety of adaptive career decision making behaviors (Betz & Taylor, 2001). Research has supported the inverse relationship between career decision self-efficacy and career indecision (Betz et al., 1996; Taylor & Betz, 1983; Taylor & Pompa, 1990) and a positive correlation between career decision self-efficacy and more stable vocational identity (Robbins, 1985). Furthermore, career decision self-efficacy has been

consistently found to be positively associated with adaptive career beliefs (Luzzo & Day, 1999) and increased career related exploration (Blustein, 1989). Career decision self-efficacy has been utilized as an outcome variable in research exploring the association between career and family relational variables (Blustein et al., 1991; Hargrove et al., 2002; Whiston, 1996). Researchers have reported mixed findings in explorations of familial and attachment variables and career decision self-efficacy. Career decision self-efficacy has been found to be positively related to achievement and expression of feelings in families (Hargrove et al., 2002), family environments valuing cultural and intellectual pursuits (Whiston, 1996), more secure attachment bonds and attachment style (Wolfe & Betz, 2004), and negatively related to family conflict (Hargrove et al., 2002). Other researchers have failed to find significant associations between hypothesized family interaction patterns and career decision self-efficacy (Eigen et al., 1987; Hartung et al., 2002).

### *My Vocational Situation*

My Vocational Situation (MVS; Holland et al., 1980a; see Appendix F) is a widely used assessment of vocational identity originating from research on career indecision, as well as Erikson's (1968) conceptualizations concerning identity development (Holland et al., 1980a). Vocational identity is defined as "the possession of a clear and stable picture of one's goals, interests, personality and talents. These characteristics lead to relatively untroubled decision-making and confidence in one's ability to make good decisions in the face of some inevitable environmental ambiguities" (Holland et al., 1980a, p.1). Holland et al., described instrument development as originating from a desire to explain and

predict career indecision more fully, hypothesizing that individuals reporting higher vocational identity would experience less difficulty making career decisions.

My Vocational Situation is a self-report instrument containing three subscales: Barriers, Vocational Identity and Occupational Information. While the scale includes three subscales, neither Barriers nor Occupational Information subscales have demonstrated adequate psychometric properties for research purposes and have been described as “checklists” (Holland et al., 1980a). The Vocational Identity subscale, however, has demonstrated adequate psychometric properties (Holland et al., 1980b; Holland, Johnston, & Asama, 1993). Therefore, only the Vocational Identity subscale was utilized in data analysis for the present investigation.

Examples of items on the 18-item, true-false Vocational Identity (VI) subscale include the following: “I need reassurance that I have made the right choice of occupation;” and “I am confused about the whole problem of deciding on a career.” Scoring the VI scale consists of the total number of false items, with higher scores reflecting more stable vocational identity (Holland et al., 1980a).

Holland et al. (1980b) provided Kuder Richardson–20 reliability estimates for the VI subscale of .89 for males and .88 for females in a combined college student and worker sample. Test-retest reliability estimates of have been reported to average approximately .75 during a two-week period (Holland et al., 1993).

Regarding validity, researchers have provided evidence that vocational identity is positively associated with age ( $r = .28$ ) and negatively associated with number of vocational aspirations ( $r = -.16$ ) (Holland et al., 1980b). According to Wanberg and

Muchinsky (1992), vocational identity was positively correlated with self-esteem ( $r = .45$ ) and negatively correlated with multiple types of anxiety, including state anxiety ( $r = -.33$ ), trait anxiety ( $r = -.41$ ) and social anxiety ( $r = -.26$ ).

The Vocational Identity subscale of My Vocational Situation has been used extensively in multiple aspects of career development research (Holland, 1997; Holland et al., 1993; Reardon & Lenz, 1999). Vocational identity has been found to be related to higher ego identity status and increased well-being (Reardon & Lenz, 1999). The culmination of multiple studies finding vocational identity associated with positive career and adjustment variables has led some to conclude that vocational identity, as measured by the Vocational Identity subscale, may be tapping into more broadly based psychological health, although it was devised solely to measure career decision-making (Holland et al., 1993).

Perhaps due to the combination of adequate psychometric properties, quick administration and potential to reflect career and more general psychological health, the Vocational Identity subscale has been utilized in recent research examining family interactions and general career development in college students (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). Findings focused on associations between vocational identity and family relationships have been equivocal, though limited support has been found for the potential role of family dynamics in career development. For example, individuals who described their family-of-origin as low in conflict, emotionally expressive, and higher in achievement orientation tended report more stable views of their personalities, talents and goals (Hargrove et al., 2002).

### *Inventory of Parent and Peer Attachment*

The Inventory of Parent and Peer Attachment–Revised (IPPA; Armsden & Greenberg, 1987; see Appendix I) is a self-report instrument originally developed to assess late adolescents’ and young adults’ perceptions of positive and negative affective and cognitive dimensions in relationships with parents and friends. The IPPA was based on Bowlby’s (1982) theories concerning attachment to caregivers and is purported to measure broad relational dimensions, including mutual trust, communication, and anger and alienation (Armsden & Greenberg, 1987). The original version of the instrument contained 53 items, including 28 items concerning attachment to parents and 25 items concerning attachment to peers. Based on the initial version of the IPPA, the revised version includes subscales assessing attachment to mother and father separately, as well as attachment to peers. The present study focused on attachment to parents; therefore, the peer subscale of the IPPA was not used in the present study.

Attachment to mother and father subscales each consist of 25 items, answered with a 5-point Likert scale, from 1 (“Almost never or Never true”) to 5 (“Almost always or Always true”). Subscales are scored by reverse scoring negatively worded items and summing across items. Sample items on the attachment to mother subscale include “I like to get my mother’s point of view on things I’m concerned about;” “I don’t get much attention from my mother;” and “My mother doesn’t understand what I’m going through these days” (Armsden & Greenberg, 1987, p.1). Examples of items in the attachment to father subscale include “Talking over my problems with my father makes me feel ashamed or foolish;” “When I am angry about something, my father tries to be

understanding;” and “If my father knows something is bothering me, he asks me about it” (p. 2).

Research assessing the psychometric properties of the IPPA has been conducted (Armsden & Greenberg, 1987; Lopez & Gover, 1993; Lynndon, Bradford, & Nelson, 1993). The authors of the scale reported internal reliability estimates of .87 for attachment to mother and .89 for attachment to father (Armsden & Greenberg, 1987). Other researchers have reported reliability estimates ranging from .89 to .96 for attachment to mother and .88 to .96 for attachment to father (O’Brien, 1996; O’Brien et al., 2000; Papini, Roggman, & Anderson, 1991). Test-retest reliabilities after three weeks of .93 and .86 have been reported for parent and peer attachment, respectively (Armsden & Greenberg, 1987).

Validity of the IPPA has also been assessed (Armsden & Greenberg, 1987) with attachment scores moderately to highly correlated with multiple subscales on the FES (Moos & Moos, 1994). Specifically, parent attachment was found moderately correlated to the following subscales: Cohesion ( $r = .56$ ), Expressiveness ( $r = .52$ ), Conflict ( $r = -.36$ ), and Organization ( $r = .38$ ). Smaller correlations were reported between parental attachment and Independence ( $r = .15$ ) and Control ( $r = -.20$ ). Construct validity has been supported by observed negative relationships between parental attachment and separation (O’Brien, 1996) and depression (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990). Further evidence for construct validity as been reported, including positive correlations between attachment and college adjustment (Lapsley, Rice, & Fitzgerald, 1990).

The IPPA has recently been included as a measure of attachment in investigations of career development and attachment relationships (Blustein et al., 1991; Felsman & Blustein, 1999; O'Brien, 1996; O'Brien et al., 2000; Ryan, Solberg, & Brown, 1996). Researchers have reported positive associations between healthy parental attachment relationships and greater career exploration (Blustein et al., 1991), greater career self-efficacy and higher career aspirations (O'Brien, 1996; O'Brien et al., 2000) and career search self-efficacy (Ryan et al., 1996). Healthy attachment to peers has also been found to be positively related to career exploration (Felsman & Blustein, 1999).

#### *Family Environment Scale*

The Family Environment Scale (FES; Moos & Moos, 1994; see Appendix G) was developed as a measure of an individual's perception of the social environment in the family. The scale consists of three forms measuring individuals' perceptions of their real family environment (Form R), ideal family environment (Form I), and expectations about family environment (Form E). The FES consists of 90 items which are answered true or false. The authors described the development of the FES as originating from the stress and coping literature (Moos & Moos, 1994).

The FES consists of 10 subscales reported to assess three dimensions of family environments. The dimensions included in the FES are relationship, personal growth, and system maintenance dimensions. The authors defined the relationship dimension to include the following subscales: Cohesion, Expressiveness, and Conflict. Cohesion has been defined as "the degree of commitment, help, and support family members provide for one another" (Moos & Moos, 1994, p. 1). A sample item from the Cohesion subscale

includes “Family members really help and support one another;” (Moos & Moos, p. 2). Expressiveness referred to “the extent to which family members are encouraged to express their feelings directly” (Moos & Moos, p. 1). The final subscale included in the relationship dimensions is Conflict, defined as “the amount of openly expressed anger and conflict among family members” (Moos & Moos p. 1).

Independence, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation and Moral-Religious Emphasis are included in the Personal Growth dimension. Independence is defined as “the extent to which family members are assertive, are self-sufficient, and make their own decisions,” with a sample item of this scale being “We don’t do things on our own very often in our family” (Moos & Moos, p. 3). Achievement Orientation is defined as “how much activities (such as school and work) are cast into an achievement-oriented or competitive framework” (p. 1). Intellectual-Cultural Orientation is defined as “the level of interest in political, intellectual, and cultural activities (p. 1). Active-Recreational Orientation, defined by the authors of the scale to include “the amount of participation in social and recreational activities (p. 1). The Moral- Religious Emphasis subscale represents “the emphasis on ethical and religious issues and values” (p. 1). A sample item within this subscale includes “Family members attend church, synagogue, or Sunday School fairly often” (Moos & Moos, p. 2).

The System Maintenance Dimension consists of two subscales, including Organization, defined as “the degree of importance of clear organization and structure in planning family activities and responsibilities” and Control, “how much set rules and

procedures are used to run family life” (Moos & Moos, 1994, p. 1). A sample question from the Organization subscale includes “Activities in our family are pretty carefully planned;” while “Family members are rarely ordered around” represents a sample question from the Control subscale (Moos & Moos, p. 2). Scoring subscales requires using the key provided in the manual. Tallying responses answered in the keyed direction provides the raw score, which is then converted to a standard score.

The authors reported internal consistency reliabilities for all subscales (Moos & Moos, 1994). Reliability was assessed in a sample of 1,067 individuals and the following Cronbach alphas were reported for each subscale: Cohesion .78, Expressiveness .69, Conflict .75, Independence .61, Achievement-orientation .64, Intellectual-Cultural orientation .78, Active-recreational orientation .67, Moral-religious .78, Organization .76, and Control .67. The authors have also provided test-retest reliability information. In a sample of 47 individuals, tested two months apart, test-retest reliability ranged from .68 to .86.

Substantial evidence for construct and construct validity has been reported. For example, the FES cohesion subscale was found positively correlated with perceived support from friends and family (Vaux et al., 1986). The Cohesion subscale of the FES has been reported to be highly correlated with cohesion as measured by alternate instruments measuring family relationships. Dickerson and Coyne (1987) found a strong positive correlation ( $r = .85$ ) between the FES cohesion subscale and the affective involvement subscale of the Family Assessment Device (FAD: Epstein, Baldwin, & Bishop, 1983). Moderate and high correlations ( $r = .61$ ) were observed between the

Family Adaptability and Cohesion Evaluation Scales (FACES II: Olsen, Portner, & Bell, 1982) and the FES (Dickerson & Coyne, 1987). The cohesion subscale of the FES has also been found to be associated with greater perceived parental care and less overprotection as measured by the Parental Bonding Instrument (Sarason, Shearin, Pierce, & Sarason, 1987). The wide research and clinical applicability of the FES has resulted in an abundance of research using the FES within a variety of populations, including families with ill children, alcoholic families, families with histories of abuse, and families with psychiatric members (Moos & Moos, 1994). Recently, the instrument has been used in vocational research aimed at identifying family relational factors associated with various career related outcomes and behaviors (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002; Lopez, 1989; Whiston, 1996). Research accumulated to date has been mixed. Negative relationships between perceived conflict in the family-of-origin and career decision self-efficacy have been observed (Dodge, 2001). Additionally, positive relationships have also been reported between families valuing achievement and expression of feelings in the family and various aspects of confidence in career decision-making (Hargrove et al., 2002).

### *Relational Health Index*

The Relational Health Index (RHI; Liang et al., 2002; see Appendix H) was developed as a measure of the quality of women's relationships. The RHI, theoretically derived from the Stone Center's relational model of women's development (Jordan et al., 1991), is a self-report measure consisting of 37 items.

The RHI includes three subscales representing relational qualities: engagement, authenticity, and empowerment/zest, which are measured in three relational domains: peer, mentor, and community relationships. The authors included definitions for each of the relational domains. For example, closest friend is defined as “someone whom you feel attached to through respect, affection, and/or common interests, someone you can depend on for support and who depends on you,” while mentor is defined as “an adult who is often older than you, has more experience than you, and is willing to listen, share her or his experiences, and guide you through some part or area of your life (Liang et al., 2002, p. 28). Additionally, community is defined as “your college community” (Liang et al., 2002, p. 28). In the present study, the instructions for each scale included the following: “Next to each statement below, please indicate the number that best applies to your relationship with a close friend” (Liang et al., 2002, p. 28) No definition was provided for “close friend” as the authors of the instrument intended users to do. The same instructions were provided for the mentor and community scales. In other words, for each scale, the corresponding definition was unintentionally omitted from the instructions.

Items on the RHI are rated on a Likert scale from 1 (“Never”) to 5 (“Always”). Examples from the RHI-Peer scale include “Even when I have difficult things to share, I can be honest and real with my friend;” “My friendship inspires me to seek other friendships like this one.” Items from the RHI-Mentor scale include “I can be genuinely myself with my mentor;” “I feel as though I know myself better because of my mentor.” Items from the RHI-Community scale include “This community provides me with

emotional support,” and “I have a greater sense of self-worth through my connection with this community.” Scores are summed by subscale (i.e., engagement, authenticity, and empowerment/zest) for each of the three indices, peer, mentor, and community. Higher scores reflect higher degrees of relational health in peer, mentor and community relationships (Liang et al., 2002)

Reliability estimates for the domains and subscales have been reported, indicating preliminary support for reliability of the scales (Frey, Beesley & Newman, 2005; Liang et al., 2002). Cronbach alphas for the composite scores in relational domains of peer, mentor and community have been reported as .85, .86, and .90 (Liang et al., 2002) and .90, .91 and .86 (Frey et al., 2005), respectively. Furthermore, the authors reported cronbach alpha scores for the subscales, which were .74, .73, and .69 for the engagement, empowerment/zest and authenticity subscales of the Peer index, respectively. Reliability estimates for the engagement, empowerment/zest, and authenticity subscales of the mentor domain were .72, .72, and .77. Finally, estimates for the community domain subscales were reported as .86, .87, and .75 (Liang et al., 2002).

Preliminary research examining the validity of the RHI has also been conducted (Liang et al., 2002). Regarding convergent validity, the authors correlated the RHI with previously validated instruments measuring similar constructs: the Mutual Psychological Development Questionnaire (MPDQ; Genero et al., 1992), the Quality of Relationships Questionnaire (QRI; Pierce, Sarason, Sarason, Solky-Butzel, & Nagle, 1997), and the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). The authors reported support for convergent validity with relational health

composite and subscale scores correlated with MPDQ and QRI. The correlations between RHI - P (composite) and MPDQ peer subscales was significant and positive ( $r = .69$ ). Correlations between RHI - P (composite) and two out of three subscales of the QRI - P (depth and support) were .64 and .61, respectively. A moderate inverse relationship was observed between the RHI - P and the QRI - P conflict subscale ( $r = -.32$ ). A significant moderate positive correlation ( $r = .50$ ) was reported between RHI-P (composite) and a measure of peer supportiveness (Liang et al., 2002). A similar pattern of correlations was reported between RHI-M and MPDQ - M ( $r = .68$ ) and two subscales of the QRI, depth ( $r = .51$ ) and support ( $r = .58$ ) (Liang et al., 2002).

To assess concurrent validity, the authors correlated the RHI with previously validated scales measuring multiple aspects of psychological health, including self-esteem, loneliness, depression, and stress. The authors reported correlations between RHI composite and subscale scores and measures of psychological health, including self-esteem (Rosenberg, 1965), loneliness (University of California, Los Angeles Loneliness Scale; Russel, Peplau, & Cutrona, 1980), depression (Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), and stress level (Perceived Stress Scale; Cohen, Kamarck, & Mermelstein, 1983). Significant correlations were observed between RHI- P (composite) and self-esteem ( $r = .18$ ) and loneliness ( $r = -.35$ ). No significant correlations were observed between RHI - P (composite) and measures of depression or perceived stress. Regarding RHI - M (composite) correlations, only the correlation with the measure of loneliness was significant ( $r = -.14$ ). The authors reported significant correlations between RHI - C (composite) and self-esteem ( $r = .28$ ), loneliness

( $r = -.47$ ), depression ( $r = -.39$ ) and perceived stress ( $r = -.32$ ) (Liang et al., 2002)

Although preliminary evidence supports the psychometric adequacy of this instrument, due to the recent development of the RHI, limited evidence concerning psychometric properties has accumulated (Liang et al., 2002). Recent researchers have utilized the RHI in explorations of relational health in college women (Goldman, 2001; Mears, 2002) with findings suggesting an inverse relationship between quality of women's peer and community relationships and disordered eating in Black, Latina and White college women (Goldman, 2001). Researchers have also reported an association between lack of connection to one's community and increased psychological distress. In a sample of occupational women, Peikert (2003) reported that contextual variables, including education and tenure, were positively related to relational empowerment, whereas age was found to be positively related to feeling more connected to one's community. Peikert also observed that career success was not associated with relational difficulties for these women.

#### *The Multigroup Ethnic Identity Measure*

The Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; see Appendix J) is a 15-item self-report instrument used to assess ethnic identity across multiple ethnic groups. Respondents rate on a 4-point Likert scale the extent to which they agree with items, ranging from 1 ("strongly disagree") to 4 ("strongly agree"). Total scores are computed by summing across item scores. The mean score is calculated with scores ranging from 1, indicating low ethnic identity, to 4, indicating high ethnic identity.

The MEIM yields two subscales including Ethnic Identity Search and Affirmation, Belonging, and Commitment. Examples of items on the MEIM included the following: “I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs;” “I think a lot about how my life will be affected by ethnic group membership;” and “I have a clear sense of my ethnic background and what it means for me” (Phinney, 1992, p.172).

The MEIM standardization sample consisted of ethnically diverse high school and college student populations. The high school sample consisted of 417 students attending an urban, ethnically diverse school and included 134 Asian Americans, 131 African Americans, 89 Hispanics, 41 students with mixed heritage, 12 Caucasians, and 10 individuals classified as “other.” They ranged in age from 14 to 19, with a mean age of 16.5 years (Phinney, 1992). The college sample included 136 psychology students from an ethnically diverse urban college. The sample consisted of 58 Hispanics, 35 Asian Americans, 23 Caucasians, 11 African Americans, 8 individuals of mixed heritage, and 1 American Indian. They ranged in age from 18 to 34, with a mean age of 20.2 years.

Phinney (1992) reported separate reliability estimates for the high school and college samples. For the high school sample, Cronbach’s alpha estimates for the total score were .81, while for the college sample, Cronbach’s alpha estimates were .90. For the 5-item Affirmation and Belonging subscale, reliability estimates for the high school and college samples were .75 and .86, respectively. Reliability coefficients for the Ethnic Identity Achievement subscale ranged from .69 to .80 for the high school and college samples. The third subscale, Ethnic Behaviors and Practices, consisted of only two items and

therefore, could not be assessed for reliability. Worrell (2000), in a recent assessment of the MEIM, reported general findings indicating moderate to high internal consistency reliability estimates. Further work assessing and improving the psychometric properties of the MEIM was recommended. The time required to complete the MEIM is approximately five minutes.

Research exploring ethnic identity and career development variables has emerged (Gloria & Hird, 1999), with findings suggesting ethnic minority individuals have less confidence in career decision-making tasks than White students. Further, ethnic identity emerged as a better predictor of career decision self-efficacy for ethnic minority students than for White students. While the MEIM was developed for use with adolescents and young adults, researchers exploring ethnic identity have used the MEIM with a variety of populations, including a recent study with medical students of Indian descent (Gurung & Mehta, 2001) and a sample of community members and graduate students (Gaines et al., 1997). Findings from such studies have revealed positive associations between ethnic identity and self-esteem and sense of efficacy (Gurung & Mehta, 2001) as well as positive relationships between ethnic identity and cultural values of collectivism and familism (Gaines et al., 1997).

### *Procedure*

This study was presented as one opportunity for students in Introductory and Developmental psychology courses to earn extra credit. Prospective participants were recruited via announcements on course websites and flyers posted in public areas of campus. The present study was described to groups of college students in meetings and

classroom settings as an exploration of interpersonal relationships and career development. Prospective participants were informed that their participation was voluntary, responses would be kept anonymous and confidential, and they could withdraw from the study at any time without penalty. Participants were advised of possible risks associated with participation, including the possibility of experiencing uncomfortable feelings associated with answering questions about personal issues, including family and other interpersonal relationships. Mental health resources including campus and community counseling referrals were included in study materials in the event participants experienced uncomfortable or distressing feelings and wanted to discuss these feelings with a mental health professional.

Participants were informed that they could contact the researcher at any time with any questions or for additional referral information. To accommodate various schedules, participants were offered several times to participate in this study. Participants completed the questionnaires at the designated time and place and returned packets to the researcher.

Instruments were counterbalanced to control for order effects or participant reactivity. A table of random numbers was used to determine the order of instruments. Participants were informed that the estimated time requirement to complete all materials was between 45 minutes and one hour, depending on participants' reading speed and deliberation over responses. Participants were provided an opportunity to request by mail a written summary of the findings generated at the conclusion of the present study and had an option to enter a drawing to win a \$25.00 gift card. Participants were provided

with instructions for entering the drawing and informed that ten names would be drawn at random at the conclusion of this study. Furthermore, prospective participants were advised that neither their grades in a course or their membership or privileges in an organization would be affected by their decision to participate in the present study.

## CHAPTER 4

### RESULTS

#### *Demographics*

Demographic information, including personal data such as age, relationship status, family-of-origin composition, ethnic group membership, academic standing and educational/occupational aspirations, and parental education and income was collected (see Appendix D). Participants included 323 female college students, ranging in age from 18 to 46 years ( $M = 20.21$ ,  $SD = 4.35$ ). Incomplete data were collected from 9% ( $n = 29$ ) of the participants; those participants were excluded from the present sample, leaving 294 participants remaining for data analysis.

Demographic information for the total sample is presented below. See Table 1 for demographic data by ethnic group. Concerning relationships status, 42% ( $n = 123$ ) of participants identified as single, while 49% ( $n = 143$ ) indicated they were dating. Of the remaining women, 7% ( $n = 20$ ) indicated they were married or partnered, while 2% ( $n = 7$ ) stated they were divorced. One respondent did not complete data concerning relationship status. The overwhelming majority of women in this sample indicated they did not have children (90%;  $n = 264$ ), while 27 women (9%) reported having children. Data concerning children were missing for three research participants.

Table 1

*Frequency of Demographic Information by Ethnic Group (African American, Caucasian and Hispanic)*

Variable	African American (n = 92)		Caucasian (n = 112)		Hispanic (n = 46)	
Mean Age	19.5		21.1		28.0	
	Frequency	%	Frequency	%	Frequency	%
<b>Relationship</b>						
Single	44	47.8	35	31.3	22	47.8
Dating	44	47.8	58	52.3	21	45.7
Married/Partnered	4	4.3	11	9.9	3	6.5
Divorced	0	0.0	7	6.3	0	0.0
<b>Children</b>						
Yes	8	8.7	15	13.5	3	6.7
No	84	91.3	96	86.5	42	93.3
<b>Family Composition</b>						
Mother and father	15	16.3	23	20.7	7	15.2
Mother, father, siblings	22	23.9	53	47.7	22	47.8
Mother, father, siblings and extended	7	7.6	5	4.5	8	17.4

Table 1 Continued

Variable	African American (n = 92)		Caucasian (n = 112)		Hispanic (n = 46)	
	Frequency	%	Frequency	%	Frequency	%
Family Composition (continued)						
Single mother	9	9.8	4	3.6	4	8.7
Single father	2	2.2	1	.9	0	0.0
Other family/caregiver	37	40.2	25	22.5	5	10.9
Academic Year						
First	59	64.0	68	61.2	34	77.3
Second	15	16.3	19	17.1	4	9.1
Third	14	15.2	11	9.9	4	9.0
Fourth	2	2.2	9	8.1	1	2.3
Other (sixth)	2	2.2	4	3.6	1	2.3
Aspirations						
Bachelor's	22	23.9	32	29.1	13	28.9
Master's	38	41.3	55	50.0	19	42.2
Doctorate/Professional	32	34.8	23	20.9	13	28.9

Table 1 Continued

Variable	African American (n = 92)		Caucasian (n = 112)		Hispanic (n = 46)	
	Frequency	%	Frequency	%	Frequency	%
<b>Mother's Education</b>						
Some High School	0	0.0	2	1.8	1	2.2
High School	31	33.7	31	28.2	12	26.7
Some College	33	35.9	32	29.1	9	20.0
College Graduate	22	23.9	32	29.1	3	6.7
Advanced Degree	6	6.5	11	10.0	2	4.4
Other	0	0.0	2	1.8	17	37.8
Don't Know	0	0.0	0	0.0	1	2.2
<b>Father's Education</b>						
Some High School	0	0.0	2	1.8	0	0.0
High School	42	47.7	26	23.4	9	20.0
Some College	18	20.5	24	21.6	5	11.1
College Graduate	17	19.3	45	40.5	4	8.9
Advanced Degree	6	6.8	12	10.8	2	4.4

Table 1 Continued

Variable	African American (n = 92)		Caucasian (n = 112)		Hispanic (n = 46)	
	Frequency	%	Frequency	%	Frequency	%
<b>Father's Education</b>						
Other	0	0.0	1	0.9	23	51.1
Don't Know	5	5.7	1	0.9	2	4.4
<b>Income</b>						
10,000-20,000	15	17.4	18	16.5	11	25.0
20,001-30,000	11	12.7	7	6.4	11	25.0
30,001-40,000	14	16.2	9	8.3	7	15.9
40,001-50,000	18	20.9	3	2.8	5	11.4
50,001-60,000	4	4.6	7	6.4	4	9.1
60,001-70,000	2	2.3	12	11.0	1	2.3
70,001-80,000	8	9.3	12	11.0	2	4.5
80,001-90,000	3	3.4	11	10.1	0	0.0
90,001 and over	11	12.7	30	27.5	3	6.8

The majority of respondents indicated their family composition (family-of-origin) included mother and father (19%;  $n = 55$ ) and mother, father and siblings (40%;  $n = 116$ ). Women also reported being raised by single parents, including single mothers (7%;  $n = 19$ ) and single fathers (1%;  $n = 3$ ). Respondents also described their family composition as including mother, father, siblings and extended family member(s) (9.2%;  $n = 27$ ) or being raised by another family member/caregiver (25%;  $n = 73$ ).

The present sample was diverse with respect to ethnic group membership. Women identifying as African American comprised 31% ( $n = 92$ ) of the sample, while Asian and Asian American women made up 9% ( $n = 25$ ) of the sample. Women identifying as Caucasian included 38% ( $n = 112$ ) of the sample and Hispanic women comprised 16% ( $n = 46$ ). The remaining women endorsed Native American (.7%;  $n = 2$ ), Biracial (5%;  $n = 16$ ) and Other (.3%;  $n = 1$ ).

Data concerning academic status, educational major and occupational goals were also obtained. The majority of participants reported being in their first (63%;  $n = 185$ ) or second year of college (17%;  $n = 49$ ), while 12% ( $n = 33$ ) and 5% ( $n = 15$ ) were in their third and fourth years, respectively. The remaining women (1.3%;  $n = 4$ ) were in their sixth year.

Participants in the present study represented a wide range of majors, although many endorsed nursing (48%;  $n = 140$ ) and psychology (12%;  $n = 34$ ). Concerning educational aspirations, 28% indicated they planned to earn bachelor's degrees, while 44% reported aspirations of earning master's degrees and 27% stated they planned to obtain a doctorate or professional degree.

In terms of family education, the majority of respondents indicated their mothers were high school graduates (29.6%;  $n = 87$ ), had attended some college (27.2%;  $n = 80$ ) or had graduated from college (24.5%;  $n = 72$ ). Others indicated their mothers had attended some high school (1.45%;  $n = 4$ ) or attained an advanced degree (8.2%;  $n = 24$ ). A small number of respondents did not know their mothers' educational backgrounds (.7%;  $n = 2$ ) or indicated Other (7.15%;  $n = 21$ ).

Respondents indicated similar educational histories of fathers, with the majority of participants' fathers having graduated from high school (30.6%;  $n = 90$ ), attended some college (18%;  $n = 53$ ), or graduated from college (28.2%;  $n = 8$ ). Fewer indicated their fathers had attended, but not graduated, from high school (.7%;  $n = 2$ ) or attained an advanced degree (8.8%;  $n = 26$ ). Still others indicated "other" (7.1%;  $n = 21$ ) or that they did not know their fathers' educational backgrounds (2.7%;  $n = 8$ ).

#### *Descriptive Statistics for Predictor and Criterion Variables*

Descriptive statistics, including means, standard deviations, and ranges for all predictor and criterion variables for the total sample, and by ethnic groups, are presented in Tables 2 and 3, respectively. Cronbach's alpha estimates for all subscales were also calculated and are presented. Analysis of reliability data indicates unacceptable reliability for three subscales of the FES. Reliability for expressiveness ( $\alpha = .58$ ), independence ( $\alpha = .37$ ) and achievement - orientation ( $\alpha = .35$ ) subscales of the FES were questionable and therefore, these subscales were not used in data analysis.

Table 2

*Descriptive Statistics for Predictor and Criterion Variables for the Total sample (N = 294)*

Variables	M	SD	Possible Range	$\alpha$
MEIM	3.02	0.64	1 – 4	.89
AM	3.91	0.94	0 – 5	.97
AF	3.39	1.07	0 – 5	.96
RHIP	4.17	0.55	0 – 5	.84
RHIM	3.87	0.82	0 – 5	.94
RHIC	3.11	0.66	0 – 5	.86
Cohesion	6.42	2.34	0 – 9	.76
Expressiveness	5.39	2.05	0 – 9	.58
Conflict	3.60	2.45	0 – 9	.77
Independence	6.29	1.62	0 – 9	.37

Note. MEIM = Multigroup Ethnic Identity Measure; AM = Attachment to Mother; AF = Attachment to Father; RHIP = Relational Health Peer; RHIM = Relational Health Mentor; RHIC = Relational Health Community; CDSE = Career Decision Self-Efficacy – Total; VI = Vocational Identity

Table 2 Continued

Variables	M	SD	Possible Range	$\alpha$
Achievement	6.60	1.42	0 – 9	.35
Intellectual Cultural	5.37	2.22	0 – 9	.68
Active Recreational	5.35	2.19	0 – 9	.66
Moral Religious	6.27	2.02	0 – 9	.67
Organization	5.29	2.37	0 – 9	.72
Control	4.95	2.21	0 – 9	.64
CDSE-Total	3.91	0.61	1 – 5	.93
VI	11.54	4.73	1 – 18	.87

Note. MEIM = Multigroup Ethnic Identity Measure; AM = Attachment to Mother; AF = Attachment to Father; RHIP = Relational Health Peer; RHIM = Relational Health Mentor; RHIC = Relational Health Community; CDSE = Career Decision Self-Efficacy – Total; VI = Vocational Identity.

Table 3

*Descriptive Statistics for Predictor and Criterion Variables by Ethnic Group*

Variable	Ethnic Group					
	African American		Caucasian		Hispanic	
	M	SD	M	SD	M	SD
Cohesion	6.97	2.25	6.24	2.32	5.98	2.38
Expressiveness	5.38	1.79	5.68	2.22	5.24	1.98
Conflict	3.26	2.45	3.55	2.59	4.00	2.39
Independence	6.49	1.51	6.41	1.63	6.02	1.81
Achievement	6.65	1.26	6.40	1.36	6.35	1.39
Intellectual Cultural	5.73	1.99	5.13	2.49	4.63	2.08
Active Recreational	5.87	2.11	5.24	2.20	4.59	2.28
Moral Religious	6.98	1.66	5.96	2.11	5.72	1.80
Organization	5.49	2.07	5.21	2.57	4.91	2.42
Control	4.88	1.87	4.80	2.43	4.67	2.14
RHIC	3.16	.70	3.09	.63	3.04	.74
RHIP	4.14	.59	4.23	.47	4.06	.68

Note: RHIC = Relational Health Community; RHIP = Relational Health Peer.

Table 3 Continued

Variable	Ethnic Group					
	African American		Caucasian		Hispanic	
	M	SD	M	SD	M	SD
RHIM	3.82	.96	3.92	.78	3.90	.73
AM	4.02	.84	3.95	.93	3.95	.95
AF	3.32	1.17	3.54	.98	3.25	1.06
CDSE	3.90	.67	3.97	.57	3.93	.58
VI	11.47	4.73	12.64	4.40	10.59	4.94
MEIM	3.22	.57	2.70	.55	3.24	.65

Note. RHIM = Relational Health Mentor; AM = Attachment to Mother; AF = Attachment to Father; CDSE = Career Decision Self-Efficacy – Total; VI = Vocational Identity; MEIM = Multigroup Ethnic Identity Measure.

\*\*  $p < .01$ , \*  $p < .05$ .

### *Bivariate Correlations among Predictor and Criterion Variables*

To assess relationships between variables, Pearson-product moment correlations were calculated for all variables. Intercorrelations are presented in Table 4. Using Cohen's (1988) criteria for interpreting the strength of a relationship, primarily weak ( $r = .10 - .30$ ) to moderate ( $r = .30 - .50$ ) correlations were observed between criterion and predictor variables. A large, positive correlation was observed between vocational identity and career decision-self-efficacy ( $r = .55, p < .01$ ), while small positive correlations were found between vocational identity and subscales of the FES, including cohesion ( $r = .24, p < .01$ ), active – recreational orientation ( $r = .23; p < .01$ ), and organization ( $r = .15; p < .01$ ), a small negative correlation was found between vocational identity and conflict ( $r = -.15; p < .05$ ).

Career decision self-efficacy was positively, though weakly, correlated with ethnic identity ( $r = .15; p < .05$ ) and select family-of-origin relational variables, including cohesion ( $r = .15, p < .01$ ), intellectual – cultural orientation ( $r = .15, p < .05$ ) active – recreational orientation ( $r = .17, p < .01$ ), and organization ( $r = .13, p < .05$ ). Positive correlations were also observed between career decision-self-efficacy and relational quality in peer ( $r = .24, p < .01$ ), mentor ( $r = .25, p < .01$ ) and community ( $r = .21, p < .01$ ) domains, though relationships were weak.

Small positive relationships were also observed between ethnic identity and cohesion ( $r = .12, p < .05$ ), active – recreational orientation ( $r = .23, p < .05$ ), intellectual – cultural orientation ( $r = .13, p < .05$ ), relational health in peer ( $r = .12, p < .05$ ) and community

Table 4

*Intercorrelations for Predictor and Criterion Variables*

Variable	1	2	3	4	5	6	7	8
VI	--							
CDSE	.55**	--						
MEIM	-.10	.15*	--					
C	.24**	.15*	.12*	--				
CON	-.15*	-.03	-.00	-.66**	--			
ICO	.09	.15*	.23**	.43**	-.22**	--		
ARO	.23**	.17**	.13*	.44**	-.28**	.52**	--	
MRE	.06	.07	.08	.18**	-.18**	.20**	.24**	--
ORG	.15**	.13*	.10	.52**	-.47**	.23**	.27**	.14*
CTL	-.10	-.11	.09	-.13**	.15*	.02	-.13*	.14*
RHIC	.17**	.21**	.20**	.33**	-.27**	.17**	.20**	.12*
RHIP	.12*	.24**	.12*	.16**	-.11	.21**	.18**	.07
RHIM	.20**	.25**	.10	.26**	-.13*	.19**	.11	.11
AM	.16**	.12*	.19**	.49**	-.38**	.23**	.28**	.11
AF	.14**	.18**	.03	.31**	-.37**	.23**	.24**	.06

Note. VI = Vocational Identity; CDSE = Career Decision Self-Efficacy Total; MEIM = Multigroup Ethnic Identity Measure; C = Cohesion; CON = Conflict; ICO = Intellectual – Cultural Orientation; ARO = Active – Recreational; MRE = Moral Religious Emphasis; ORG = Organization; CTL = Control; RHIC = Relational Health Community; RHIP = Relational Health Peer; RHIM = Relational Health Mentor; AM = Attachment to Mother; AF = Attachment to Father.

\*\*  $p < .01$ , \*  $p < .05$ , two tailed.

Table 4 Continued

Variable	9	10	11	12	13	14	15
VI							
CDSE							
MEIM							
C							
CON							
ICO							
ARO							
MRE							
ORG	--						
CTL	.20**	--					
RHIC	.16**	.06	--				
RHIP	.09	-.01	.28**	--			
RHIM	.08	.03	.25**	.36**	--		
AM	.25**	-.19**	.23**	.19**	.26**	--	
AF	.23**	-.14**	.21**	.17**	.18**	.25**	--

Note. VI = Vocational Identity; CDSE = Career Decision Self-Efficacy Total; MEIM = Multigroup Ethnic Identity Measure; C = Cohesion; CON = Conflict; ICO = Intellectual – Cultural Orientation; ARO = Active – Recreational; MRE = Moral Religious Emphasis; ORG = Organization; CTL = Control; RHIC = Relational Health Community; RHIP = Relational Health Peer; RHIM = Relational Health Mentor; AM = Attachment to Mother; AF = Attachment to Father.

\*\* p <.01, \* p <.05, two tailed.

domains ( $r = .20, p < .01$ ). Attachment was found to be significantly and positively related to family cohesion ( $r = .49, p < .01$ ), intellectual – cultural orientation ( $r = .23, p < .01$ ) and active – recreational orientation ( $r = .28, p < .01$ ) and negatively correlated with conflict ( $r = -.37, p < .01$ ). Similar small to moderate correlations were also observed between attachment to father and various family subscales, including cohesion ( $r = .31, p < .01$ ) and conflict ( $r = -.37, p < .01$ ).

### *Analysis of Hypotheses*

Hypothesis 1a stated Caucasian college women would have higher total scores on the Career Decision Self-Efficacy Scale–Short Form (CDSE–SF; Betz et al., 1996) than Hispanic or African American college women and was analyzed using a one-way analysis of variance (ANOVA; see Table 5). No differences were observed between Caucasian, Hispanic and African American women’s career decision-making self-efficacy,  $F(2,247) = .389, p > .05$ .

Table 5

*One-Way Analysis of Variance for Effects of Ethnic Group Membership on Career Decision Self-Efficacy Total Score*

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Between groups	2	.29	.45	.39
Within group	247	92.13	.37	
Total	249	92.42		

Hypothesis 1b, stating Caucasian college women would have higher total scores on the Vocational Identity subscale of the MVS (Holland et al., 1980a) than Hispanic or African American college women, was analyzed using one-way ANOVA. Statistically significant differences were observed between Caucasian, Hispanic, and African American women's vocational identity scores,  $F(2, 247) = 3.672, p < .05$ . Tukey HSD post-hoc analysis revealed a statistically significant difference in vocational identity between Caucasian women ( $n = 112; M = 12.64$ ) and Hispanic women ( $n = 46; M = 10.59$ ), with Caucasian women scoring significantly higher in vocational identity than Hispanic women.

Hypothesis 1c stated ethnic minority women (African American and Hispanic) would have higher total scores on the MEIM (Phinney, 1992) than Caucasian women. Results of an independent samples t-test supported this hypothesis. A statistically significant difference in ethnic identity was found between ethnic minority and Caucasian women,  $t(248) = 7.259, p < .001$ , with African American and Hispanic women ( $M = 3.23$ ) endorsing higher ethnic identity than Caucasian women ( $M = 2.70$ ).

Hypothesis 2a stated African American and Hispanic college women with higher total scores on the MEIM (Phinney, 1992) would score higher on the Vocational Identity subscale of the MVS (Holland et al., 1980a) than ethnic minority women with lower scores on the MEIM. A Pearson product moment correlation was computed and results failed to support this hypothesis. A non-significant correlation ( $r = -.043; p > .05$ ) was observed.

Hypothesis 2b stated African American and Hispanic college women with higher total scores on the MEIM (Phinney, 1992), reflecting higher ethnic identity, would have higher total scores on the CDSE-SF (Betz et al., 1996) than minority women with lower ethnic identity scores. A Pearson product moment correlation was computed and a significant positive correlation was calculated between ethnic identity and career decision self-efficacy for ethnic minority women ( $r = .25, p < .01$ ). Results indicated ethnic minority women with higher ethnic identity also tended to possess greater confidence in career decision-making tasks.

Hypothesis 3 stated that significant, positive relationships would be observed between the quality of college women's interpersonal relationships, as measured by subscale scores on the FES (Moos & Moos, 1994), IPPA (Armsden & Greenberg, 1987), and the RHI (Liang et al., 2002), and career decision-making tasks, measured by the total score on the CDSE-SF (Betz et al., 1996). A stepwise multiple regression analysis was conducted, with select demographic, ethnic identity and relational variables serving as predictors and the total score on the CDSE-SF as criterion (see Table 6).

The regression model was highly significant,  $F(3, 291) = 10.67, p < .001$ , and revealed relational health in mentor ( $\beta = .18, p = .002$ ) and peer domains ( $\beta = .15, p = .016$ ), and family-of-origin active-recreational orientation ( $\beta = .12, p = .033$ ) were positively associated with career decision self-efficacy scores, accounting for 10% of the variance in college women's confidence in career decision tasks.

Table 6

*Summary of Stepwise Regression Analysis for Variables Predicting College Women's Career Decision Self-Efficacy (N = 294)*

Variable	B	SE B	$\beta$	$\Delta R^2$
RHIM	.134	.044	.183**	
RHIP	.159	.066	.146*	.03
ARO	.034	.016	.122*	.01

Note. RHIM = Relational Health Mentor; RHIP = Relational Health Peer; ARO = Active – Recreational Orientation

$R = .32$ ,  $R^2 = .10$ , Adjusted- $R^2 = .09$

\*\*  $p < .01$ , \*  $p < .05$ .

Hypothesis 4 stated significant positive relationships would be observed between the quality of college women's interpersonal relationships, measured by subscale scores on the FES (Moos & Moos, 1994), IPPA (Armsden & Greenberg, 1987), RHI (Liang et al., 2002), and ethnic identity (Phinney, 1992), and perceptions of talents, interests and goals, as measured by the Vocational Identity subscale of the MVS (Holland et al., 1980a).

A stepwise multiple regression analysis was performed with vocational identity serving as the criterion variable and demographic measures, ethnic identity, and scores on multiple relational variables serving as predictor variables (see Table 7). Regression results indicated cohesion ( $\beta = .14, p = .03$ ), active – recreational orientation ( $\beta = .17, p = .006$ ), and quality of mentor relationships ( $\beta = .16, p = .005$ ) demonstrated significant, positive effects on vocational identity, whereas ethnic identity ( $\beta = -.16, p = .006$ ) demonstrated significant, negative effects on vocational identity. The regression model including these predictors was highly significant  $F(4, 287) = 9.70, p < .001$ , accounting for 12% of the variance in women's vocational identity scores.

Table 7

*Summary of Stepwise Regression Analysis for Variables Predicting College Women's Vocational Identity (N = 294)*

Variable	B	SE B	$\beta$	$\Delta R^2$
Cohesion	.280	.129	.138*	
Relational Health Mentor	.932	.331	.162**	.02
Active - Recreational	.371	.134	.171**	.02
MEIM	-1.148	.418	-.155**	.02

Note. MEIM = Multigroup Ethnic Identity Measure.

$R = .35$ ,  $R^2 = .12$ , Adjusted- $R^2 = .11$

\*\*  $p < .01$ , \*  $p < .05$ .

### *Additional Analyses*

Potential ethnic group differences in relational quality were assessed using a Multivariate Analysis of Variance (MANOVA), with attachment to mother and father, relational health in peer, mentor and community domains, and family interaction patterns serving as dependent variables (see Table 8). Overall analysis revealed differences in interpersonal relationships between ethnic groups (Wilk's  $\Lambda = .81$ ),  $F(30, 466) = 1.68$ ,  $p < .05$ . Univariate F tests revealed significant differences between groups in

cohesion ( $F(1, 249) = 3.74, p < .05$ ), intellectual-cultural orientation ( $F(1, 249) = 4.0, p < .05$ ), active-recreational orientation ( $F(1, 249) = 5.56, p < .01$ ), and moral-religious emphasis ( $F(1, 249) = 9.84, p < .001$ ).

Tukey HSD post hoc analysis revealed significant differences in Cohesion between Hispanic and African American women, with African American women reporting a greater sense of family commitment and support than Hispanic women. Differences were also observed in Intellectual – Cultural Orientation between Hispanic and African American women, with African American women reporting greater interest in political and cultural activities in families than Hispanic women.

Additionally, differences emerged in Active – Recreational Orientation between Hispanic and African American women, with African American women reporting greater family participation in social and recreational activities. Statistically significant differences were also observed between African American, Hispanic and Caucasian women in Moral – Religious Emphasis, with African American women reporting greater family emphasis in moral and religious issues and activities than Caucasian and Hispanic women.

Table 8

*Means and Standard Deviations for Relational Variables by Ethnic Group*

Variable	Racial/Ethnic Group						Univariate F (30, 466)
	African		Caucasian		Hispanic		
	American (n = 92)	SD	(n = 112)	SD	(n = 46)	SD	
Cohesion	6.97	2.25	6.24	2.32	5.98	2.38	3.74*
Expressiveness	5.38	1.79	5.68	2.22	5.24	1.98	.97
Conflict	3.26	2.43	3.55	2.59	4.00	3.39	1.36
Independence	6.49	1.51	6.41	1.63	6.02	1.81	1.35
Achievement	6.65	1.26	6.40	1.36	6.35	1.39	1.19
Intellectual Cultural	5.73	1.99	5.13	2.49	4.63	2.08	4.00*
Active Recreational	5.87	2.11	5.24	2.20	4.59	2.28	5.56**
Moral Religious	6.98	1.67	5.96	2.11	5.72	1.81	9.84**
Organization	5.49	2.07	2.57	5.21	4.91	2.42	.95
Control	4.88	1.87	4.80	2.43	4.67	2.14	.14
RHIC	3.16	0.70	3.09	0.63	3.05	.074	.45

Note. RHIC = Relational Health Community.

\*\*  $p < .01$ , \*  $p < .05$ .

Table 8 Continued

Variable	Racial/Ethnic Group							F(30, 466)
	African American ( <i>n</i> = 92)		Caucasian ( <i>n</i> = 112)		Hispanic ( <i>n</i> = 46)			
	M	SD	M	SD	M	SD		
RHIP	4.15	.059	4.24	.047	4.06	0.68	1.75	
RHIM	3.82	.096	3.92	0.78	3.90	0.73	.39	
AM	4.02	0.84	3.95	0.93	3.95	0.95	.18	
AF	3.33	1.17	3.54	0.98	3.25	1.06	1.68	

Note. RHIP = Relational Health Peer; RHIM = Relational Health Mentor; AM = Attachment to Mother; AF = Attachment to Father.

\*\*  $p < .01$ , \*  $p < .05$ .

A MANOVA was also conducted to examine possible differences in relational quality between women endorsing high versus low ethnic identity (see Table 9). The cut-off point for ethnic identity (high versus low) was determined by calculating the median (3.08). Women who scored 3.08 or higher on the MEIM were classified as “higher ethnic identity,” while women who scored 3.07 or lower were categorized as “lower ethnic identity.” Dependent variables included family-of-origin dynamics, relational health in peer, mentor and community domains, and attachment scores for mother and father. A significant main effect for ethnic identity was found between the two groups of women, (Wilk’s  $\Lambda = .90$ ),  $F(15, 278) = 2.00, p < .05$ . Univariate F tests revealed significant differences among groups in intellectual – cultural orientation ( $F(1, 293) = 11.17, p < .001$ ), moral – religious emphasis ( $F(1, 293) = 8.61, p < .01$ ), control ( $F(1, 293) = 4.68, p < .05$ ), and relational health in peer ( $F(1, 293) = 4.21, p < .05$ ), mentor ( $F(1, 293) = 4.30, p < .05$ ) and community domains ( $F(1, 293) = 6.61, p < .05$ ) domains. Women who reported higher ethnic identity also tended to report greater intellectual – cultural orientation and moral – religious emphasis in the family, more control in their families-of-origin, and greater relational health in peer, mentor and community domains.

Table 9

*Means and Standard Deviations for Relational Variables by Ethnic Identity Status*

Variable	Ethnic Identity				Univariate F (1, 292)
	Low		High		
	M	SD	M	SD	
Cohesion	6.27	2.32	6.74	2.36	2.62
Expressiveness	5.33	2.13	5.53	1.88	.61
Conflict	3.59	2.43	3.62	2.51	.01
Independence	6.37	1.65	6.12	1.55	1.61
Achievement	6.48	1.42	6.68	1.39	1.31
Intellectual Cultural	5.08	2.29	5.99	1.94	11.17**
Active Recreational	5.21	2.24	5.66	2.04	2.83
Moral Religious	6.03	2.13	6.76	1.66	8.61**
Organization	5.26	2.47	5.35	2.14	.10
Control	4.75	2.28	5.35	2.03	4.69*

Note. RHIC = Relational Health Community; RHIP = Relational Health Peer; RHIM = Relational Health Mentor; AM = Attachment to Mother; AF = Attachment to Father.

\*\*  $p < .01$ , \*  $p < .05$ .

Table 9 Continued

Variable	Ethnic Identity					Univariate F (1, 292)
	Low		High			
	M	SD	M	SD		
RHIC	3.04	.63	3.26	.71	6.61*	
RHIP	4.12	.56	4.26	.54	4.21*	
RHIM	3.80	.84	4.01	.77	4.30*	
AM	3.85	.95	4.03	.89	2.32	
AF	3.38	1.06	3.42	1.20	.13	

Note. RHIC = Relational Health Community; RHIP = Relational Health Peer; RHIM = Relational Health Mentor; AM = Attachment to Mother; AF = Attachment to Father.

\*\*  $p < .01$ , \*  $p < .05$ .

## CHAPTER 5

### DISCUSSION

#### Summary of Findings and Integration with Literature

While literature concerning the intersection of individuals' relational and career lives is increasing, much remains unknown about this complex reality (Blustein, 2001, 2004; Schultheiss et al., 2001; Whiston & Keller, 2004a), particularly for minority women (Flores & Ali, 2004). The present study was an attempt to generate knowledge concerning relational factors associated with career development for diverse college women. As predicted, positive associations were found between relational and career variables in an ethnically diverse sample. Further, ethnic group membership and the meaning and experience of such membership were positively associated with career decision self-efficacy and, somewhat surprisingly, negatively associated with vocational identity.

#### *Career Decision Self-Efficacy*

An outcome variable of interest in the present study, career decision self-efficacy, has been offered as an important factor in successful career decision-making (Betz et al., 1996; Blustein, 1989, 2001, 2004; Gianakos, 1999; Luzzo & Taylor, 1994; Taylor & Betz, 1983; Taylor & Pompa, 1990), with potential usefulness in elucidating the career process of ethnic minority individuals (Lent et al., 1994). General findings revealed college women in the present study endorsed moderate to high career decision-self

efficacy, or confidence in tasks associated with career decision-making, and a positive relationship was observed between confidence in career decision tasks and vocational identity, a finding which is consistent with previous research (Betz & Taylor, 2001; Robbins, 1985). College women who expressed greater confidence in career decision-making tasks tended to possess more stable views of their vocational talents and strengths.

In the present investigation, several variables emerged as significantly related to the development of confidence in career decision-making tasks, including family-of-origin dynamics, quality of relational health in peer and mentor domains, and ethnic identity, or the meaning of one's ethnic group membership (Phinney, 1992). While research has begun to accumulate suggesting the family, and specifically, family relationship dynamics, are associated with career development processes (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002; Whiston, 1996), the integration of relational health (Liang et al., 2002) and ethnic identity with the career development literature is novel. Contrary to predictions and previous literature (Chung, 2002; Gloria & Hird, 1999), ethnic group differences in career decision-self-efficacy between African American, Caucasian and Hispanic college women were not found in the present sample. This finding is consistent with results of recent research by Betz et al. (2005) who failed to detect differences between African American, Caucasian and Hispanic students' confidence for career decision tasks in a large urban sample of students. Conversely, Chung (2002) found African American college students reported higher career decision self-efficacy than Caucasian students.

### *Vocational Identity*

The process of developing a clear sense of identity, including strengths and weaknesses related to careers, represents a critical and overarching factor in satisfying career development (Holland et al., 1980a). In general, college women in the present study endorsed a moderately stable view of their talents and strengths. Relational variables emerging as significantly associated with vocational identity included higher family-of-origin cohesion, greater participation in social and recreational activities in the family, and higher quality mentor relationships for college women. Vocational identity was also inversely related to ethnic identity.

Regarding ethnic differences, Caucasian women in the present study, as predicted, scored significantly higher than Hispanic women in vocational identity. This finding is consistent with previous research suggesting Hispanic women may experience developing a stable sense of self, including vocational talents and strengths, differently than Caucasian women (Arbona, 1990, 1995). Development of a stable sense of vocational identity requires knowledge of self and the world of work. Differential access to education for members of various Hispanic groups, in conjunction with lower family socio-economic status, may contribute to Hispanic college women attaining less information about work, potentially contributing to less certainty about available career options and a less stable sense of vocational identity. It is also plausible that developing vocational identity for Hispanic women is affected by the need to negotiate multiple identities (Arbona, 1995). Whereas previous researchers have found that Caucasian women reported higher vocational identity than African American women (Gloria &

Hird, 1999), no differences were observed in the present sample between African American and Caucasian women's views of vocational talents and goals.

### *Ethnic Identity*

The need for more complex explanatory models of career development for diverse members of society has been regarded as critical to the field of vocational psychology (Flores & Ali, 2004; Whiston & Keller, 2004a). Researchers have been strongly encouraged to incorporate variables reflecting the complexity of ethnicity in addition to between group differences (Arbona, 1995; Brown, 2004; Evans & Herr, 1994; Helms & Piper, 1994). A variable of interest in the field of vocational psychology as a means to explore the meaning of ethnic group membership, and within-group differences, is ethnic identity (Arbona, 1995; Osipow & Littlejohn, 1995; Phinney, 1992; Tinsley, 1994).

Results of the present investigation indicated minority women (African American and Hispanic women) demonstrated higher ethnic identity than Caucasian women, a finding consistent with a substantial body of literature (Phinney, 1992) and emerging research integrating career and ethnic diversity (Gloria & Hird, 1999). Results of the current study, however, are inconsistent with regard to associations between career variables and ethnic identity. For ethnic minority women, a significant positive relationship was found in the present sample between higher ethnic identity and career decision self-efficacy. Results failed to support the hypothesized association between more secure ethnic identity and more stable vocational identity and a significant negative relationship was observed between ethnic identity and vocational identity. Women endorsing healthier ethnic identity tended to report greater confidence for tasks associated

with career decision-making and a less clear picture of vocational talents and strengths. Possible explanations for the inverse relationship between ethnic identity and vocational identity may include the complexities involved in negotiating multiple identities (Arbona, 1995). Perhaps women who endorsed stronger ethnic identity are focused on developing an understanding and connection to their ethnic heritage and the meaning of ethnic group membership. They may, therefore, direct less attention to attaining information about themselves and the world of work.

### *Interpersonal Relationships*

An important goal of the present investigation was to extend research concerning the association between the quality of one's interpersonal relationships and career outcomes, supporting theoretical writing (Blustein, 2001, 2004; Blustein et al., 1995; Flum, 2001; Schultheiss et al., 2001) and empirical research (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). While much of the literature supporting the intersection of relationships and careers has been qualitative (Lucas et al., 2000; Pearson & Bieschke, 2001; Richie et al., 1997; Schultheiss et al., 2001), empirical support has begun to accumulate suggesting a relational lens is appropriate for understanding career development, particularly in the lives of ethnic minority women (Brown, 2004; Flores & Ali, 2004; Whiston & Keller, 2004a). The relational lens has integrated diverse perspectives, including family systems (Alderfer, 2004; Brachter, 1982; Lopez & Andrews, 1987; Patton & McMahon, 1999; Zingaro, 1983), feminist theories (Brennan & Rozenzweig, 1990; Forrest & Mikolaitis, 1986) and attachment theories (Blustein et al., 1995) with career development.

### *Family-of-Origin Dynamics*

Family focus has a long history in the vocational psychology literature (Roe, 1957; Schulenberg et al., 1984; Super, 1963, 1980; Whiston & Keller, 2004a), with early research highlighting the associations between demographic and structural family variables and career development outcomes (e.g., Banducci, 1967; Blau & Duncan, 1967). As stated earlier, the structure of the family has changed over time. Researchers have taken alternate approaches to understanding the influence of family dynamics on career development, initially focusing on background variables, including social class, family structure and parent-child relationships as potentially important variables associated with career development (e.g., Banducci, 1967; Blau & Duncan, 1967; Crawford, 1978; Harvey & Kerin, 1978). Findings supporting the associations between family background and career variables have provided an important foundation for current investigations. Through the use of multidimensional measures assessing dynamics within the family, contemporary researchers are beginning to address criticisms concerning the simplistic measurement of family variables. Researchers have replaced unidimensional measures of family relationships with more complex, multidimensional assessments intended to explore the family as a whole or system in explorations of family and career (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). Current research integrates a combination of background variables with complex assessments of family relational dynamics. The present findings suggest a complex picture of family context variables related to career development, adding to the often equivocal literature base

(Dodge, 2001; Eigen et al., 1987; Johnson et al., 1999; Penick & Jepson, 1992; Whiston, 1996).

A family interaction variable emerging as significantly related to developing confidence in career decision-making in this sample was a family focus on participating in social and recreational activities in the family. College women who perceived their family as encouraging participation in such activities tended to endorse greater confidence for career decision-making tasks. No other family relational variables emerged as significantly associated with career decision self-efficacy. The findings of the present study failed to support previous findings identifying additional family dynamics as related to career decision self-efficacy. For example, Whiston (1996) found that higher perceived family-of-origin control, together with organization, were related to decreased career indecision. Others have found individuals who perceived less conflict (Dodge, 2001) and greater focus on expression of feeling, support and achievement in the family (Hargrove et al., 2002) tended to exhibit greater confidence for decision making tasks.

Vocational identity has also been studied in connection with family and other relationships (Dodge, 2001; Eigen et al., 1987; Hargrove et al., 2002; Hartung et al., 2002; Johnson et al., 1999; Penick & Jepson, 1992; Whiston, 1996) with inconsistent findings. The present findings, that greater family-of-origin cohesion and a focus on social and recreational activities were related to a more stable sense of vocational identity, add to the inconclusive research base. Hargrove et al. reported for a sample of mostly Caucasian college students, higher vocational identity was positively associated with a focus on achievement in the family. Others have reported family-of-origin

expressiveness and cohesion, together with less conflict, accounted for a portion of variance in vocational identity scores (Johnson et al., 1999). Hartung et al. (2002) however, did not find hypothesized relationships between family interaction patterns and vocational identity in a sample of primarily Caucasian students, leading to the suggestion that family variables may not provide relevant information concerning the development of vocational identity for college students. While this contention is viable, it is possible that these findings were affected in meaningful ways by sample characteristics, including the predominantly Caucasian student sample attending a private, Catholic university.

Other researchers have reported associations between family functioning and career variables (Penick & Jepson, 1992) with results suggesting system maintenance dimensions were better predictors of vocational identity in a sample of 11<sup>th</sup> grade students than demographic variables. Whiston (1996) reported inverse relationships between independence and achievement-orientation and using occupational information for women.

Several hypothesized family interaction variables did not emerge in the present study as significantly associated with career variables. While it is plausible that no relationships exist among family dynamics, career decision-making and vocational identity, it is also possible that the lack of adequate reliability for several scales of the FES had an impact on the findings. Further, it is possible that the FES does not capture experiences of diverse families and measures specifically designed to assess relational dynamics in diverse families are needed

## *Attachment*

College women in the present study reported moderate attachment to both mother and father. As expected, attachment variables were correlated with family-of-origin relational dynamics. Positive relationships were observed between attachment to mother and father and family-of-origin cohesion and expressiveness and negatively associated with conflict.

The attachment framework has been posited as a useful way to investigate the intersection of relationships and careers (Blustein et al., 1999; Hazan & Shaver, 1990; O'Brien, 1996; O'Brien et al., 2000; Wolfe & Betz, 2004). The present findings, however, failed to support this proposed relationship. Support for the hypothesized positive relationship between quality of attachment to mother and more adaptive career behaviors, including confidence with regard to career decisions and more stable sense of talents and strengths, were not found in the present study, conflicting with previous research highlighting attachment to mother as an important variable in the career development of women (O'Brien et al., 2000; Rainey & Borders, 1997).

Further, results failed to support the hypothesized positive relationship between higher quality of attachment to fathers and more adaptive career behaviors. These findings conflict with earlier research suggesting warm paternal relationships were positively associated with career maturity for women (Graef et al., 1985). Paternal influence on women's career development, however, seems to represent a complex dynamic. For example, Falk and Salter (1978) found women with professional, highly educated fathers tended to have higher educational aspirations while Stanley and Soule

(1974) and others (Betz & Fitzgerald, 1987) have suggested that fathers impact the non-traditional occupational choice of their daughters. Later findings (Hoffman, Hofacker, & Goldsmith, 1992) began to incorporate relational dynamics (i.e., closeness) into explorations of fathers influence on children's career development. Hoffman et al., found that closeness with fathers, but not mothers, was a significant factor in parental influence, while father's salary and success were not related to amount of influence.

Early findings concerning parental influence on daughters' career development suggests a shift over time in roles between mothers and fathers. While early findings have suggested fathers were critical models for women's career development for a variety of reasons (Falk & Salter, 1978; Hoffman et al., 1992; Stanley & Soule, 1974), more recent research has identified mothers' roles and relational quality as critical (O'Brien, 1996; O'Brien et al., 2000). This shift is likely attributable in part to the changing nature of work in women's lives. As more women have entered the job market, their influence on their children has changed.

For example, O'Brien et al.'s (2000) longitudinal study suggested fathers may play a critical role in daughters' career development after the high school years, while attachment to mothers may be more critical during earlier developmental periods such as high school. Others have suggested that negative relational bonds with fathers may have a significant impact on reduced self-efficacy with regard to science for women (Scott & Mallinckrodt, 2005). While limited, such findings highlight the role fathers may play in daughters' career development and indicate a need for further study. While the present study failed to support this link, it will be important to continue investigating ways in

which relationships with and attachments to fathers and mothers are related to women's career progression.

The lack of significant relationships between career and attachment variables may be connected to the meaning of family in diverse cultures. Perhaps the family as a system, rather than specific qualities within the maternal and paternal relationships, are more relevant, and therefore associated with development of career decision self-efficacy and vocational identity for women of color. Further, the variety of family structures may make focusing on attachment to mother and father difficult, and perhaps, less valid.

### *Relational Health*

The present sample of college women endorsed relatively high relational quality in all three relational domains (Liang et al, 2002) with scores in the peer domain higher than mentor and community domains. The inclusion of relational health in studies of career development represents a new paradigm for women's career development (Crozier, 1999), one which may help elucidate the specific qualities of relationships affecting women as they navigate career development tasks. The present findings lend preliminary support for previous, often qualitative, results suggesting women's relationships play a role in career development processes (Lucas et al., 2000; Pearson & Bieschke, 2001; Richie et al., 1997).

The current study represents a preliminary attempt to investigate empirically the possible associations between relational health and career development in diverse college women. Generally, results indicated that college women in this study who endorsed relationships characterized by higher qualities of authenticity, empowerment and zest in

peer and mentor domains tended to endorse more positive career outcomes (i.e., more stable view of talents and strengths and more confidence in career decision-making tasks). While little, if any, research to date has integrated relational health and career development directly, findings of the current study are consistent with previous research suggesting higher quality connections to peers and community were associated with adaptive outcomes, including less depressive symptoms (Arce, 2004) and less disordered eating (Goldman, 2001) in college women.

With regard to relational health in mentor domains, research is emerging suggesting mentors may play an important role in the career development of minority individuals (Cook et al, 2002; Gandara, 1982; Phinney, Dennis, & Osorio, 2006). The current results, with higher mentor relational quality significantly related to more stable vocational identity and higher career decision self-efficacy, suggest it may be an important consideration in understanding women's career development. Peers have also been examined in the career development literature (e.g., Felsman & Blustein, 1999; Schultheiss et al., 2002) and found to have a potentially unique contribution to career development processes. The present results lend limited support for the contention that peers are important factors in career development progression.

### *Ethnic Group Differences*

Heeding recommendations from voices in the fields of counseling and vocational psychology and others interested in explicating the career development of diverse individuals (Arbona, 1995; Flores & Ali, 2004), the combination of ethnic group differences and within group heterogeneity was examined in the present study. While

limited support was found for select group differences, significant relationships were found between career outcomes and ethnic identity.

Group differences in relational quality emerged in the present study and may help elucidate important patterns of differential family interaction within different ethnic groups. Specifically, African American women in the present study reported higher family-of-origin cohesion, intellectual – cultural, and active – recreational orientations than Hispanic women and higher moral - religious emphasis in the families than both Hispanic and Caucasian women. The manner in which such unique characteristics of family dynamics may impact career development deserves further attention.

Existing research concerning possible ethnic group differences in career decision self-efficacy has been equivocal (Betz et al, 2005; Chung, 2002; Gloria & Hird, 1999). Results of the present study failed to support hypothesized group differences in career decision self-efficacy between Caucasian, African American and Hispanic college women. While significant differences between minority and Caucasian women were not detected in the present study, ethnic identity emerged as significantly and positively related to career decision self-efficacy for college women in this study, highlighting within-group, as opposed to between-group differences. Ethnic minority women (African American and Hispanic) who endorsed higher ethnic identity (Phinney, 1992) tended to report greater confidence for career decision tasks than minority women reporting lower ethnic identity. While this finding may indicate differences in ethnic identity, it is also possible that for minority women, more secure ethnic identity reflects greater global

confidence and self-esteem, which may impact career decision self-efficacy in positive ways.

### Limitations

The advancement of scientific knowledge about human behavior demands a critical analysis of relevant limitations of findings. For the present study, design considerations, potential effects of selection, generalizability, and statistical issues must be acknowledged.

### *Design Considerations*

Design issues that may have limited the present findings include the use of correlational design and analysis, which preclude causal inference. From the present results conclusions cannot be drawn that healthier relationships with significant others cause increased self-efficacy with regard to career decision-making or conversely, that more adaptive career outcomes affect interpersonal relationships. While intuitive and theoretical speculation has supported that quality relationships may be associated with more adaptive career development processes (e.g., Blustein et al., 1995), the direction of such a relationship can not be inferred from the present findings.

Some additional issues inherent in correlational analyses include the inability to rule out alternate explanations for findings. For example, perhaps results suggesting associations between career outcome variables and the quality of personal relationships are due to, or at least impacted by, confounding variables, such as social class, overall psychological well-being, or self-esteem. Researchers have argued that the inclusion of social class is relevant in examinations of both ethnic differences and career development

outcomes (Heppner & Scott, 2004). Incorporating more comprehensive measures of social class, and including social class as a variable in the present study, may have impacted the results in meaningful ways. As social class has historically been linked to higher career and academic attainment (Banducci, 1967; Harvey & Kerin, 1978; Marini & Greenberger, 1978; Rehberg & Westby, 1967; Sewell et al., 1957), it is possible that individuals from different social classes may exhibit differing levels of career decision self-efficacy and vocational identity, along with varying levels of ethnic identity.

Relevant design and methodological issues include operationalization and measurement of study variables. An important consideration in present investigation concerns the distinction between racial identity and ethnic identity. Whether a distinction exists is a matter of debate in the field (Cokely, 2005; Fischer & Moradi, 2001; Sellers et al., 1998). For the present investigation, it was necessary to categorize individuals according to racial group membership. It is possible that through using racial groupings (i.e., Hispanic, African American, White) the results reflect racial identity rather than ethnic identity. This may have affected the results through introducing a confounding variable (i.e., racial identity) into the study. Future researchers are encouraged to examine specific groups within larger racial and ethnic groups.

Concerning instrumentation, three subscales of the FES, a widely used assessment of family dynamics, were found to have unacceptable reliability. Additionally, the RHI (Liang et al., 2002) is a relatively new instrument with limited psychometric data. Further, pencil and paper, self-report measures potentially limited the results due to distorted recall of past events, particularly with regard to family functioning. An

additional methodological issue in the present investigation involved the researcher's failure to define individual domains (peer, mentor and community) on the Relational Health Indices, as directed by the authors of the instrument (Liang et al., 2002). It is possible that the findings in the present investigation were affected by this omission. This potential seems especially relevant for the community subscale as women may have been responding to different "communities." This consideration, together with the exploratory nature of the integration of relational health and career development, suggests the present findings should be interpreted cautiously.

### *Selection*

Sampling considerations also must be addressed. Given procedural issues, in particular, extra credit and course requirement issues, it is possible that students who chose to participate differed in meaningful ways from those who did not participate. Since deception was not used in the present research, demand characteristics may have been an issue. Participants were informed of the purpose of the present investigation and may have guessed the research hypotheses and responded to the questions included in the study accordingly. For example, the present study was described as an examination of the quality of interpersonal relationships and career development; therefore, it is possible that participants responded in ways to support this association. Social desirability, or a desire to present a positive image, including career development processes and family and other relationships, presents another possible issue.

### *Generalizability*

External validity, or the degree to which a study can be generalized to other samples, is a critical aspect of any investigation. Caution is recommended in generalizing the results from this convenience sample of mostly undergraduate women enrolled in psychology courses at a predominantly female, public university in the Southwest. Given research suggesting women attending women's colleges may differ in meaningful ways from women attending co-ed colleges (Smith, 1990), it is imperative to recognize limitations in generalizability. For example, women who attend women focused universities tend to endorse higher career and educational aspirations and have higher graduation rates than women attending co-ed universities (Smith, 1990). Aspirations of the women in the present study were high, with over 70% of the sample of women aspiring to graduate level education. Additionally, the present sample was overrepresented with women early in their academic careers who planned to major in areas related to health or medicine.

### *Statistical Considerations*

Lower than expected reliability was obtained for three of ten subscales of the Family Environment Scale (Moos & Moos, 1994), including expressiveness, independence and achievement-orientation subscales. Due to inadequate reliability, data concerning these scales were excluded from the analysis and discussion. It is therefore, possible that associations between family relationship variables were not detected in the present study due to a lack of reliable means to measure such dynamics.

Since the current study was exploratory in nature and one of the purposes was to examine which of a large set of relational variables may be related to career outcomes, stepwise multiple regression procedures were appropriate. However, it is important to note limitations of such procedures, including the possibility that stepwise regression capitalizes on chance and have a tendency to overfit the data. Additionally, it is possible that the use of stepwise procedures contributed to important variables being missed (Tabachnick & Fidell, 2006).

### Implications for Theory, Research, and Practice

#### *Theoretical Implications*

Research in the area of career and relational development emphasizes healthy functioning across numerous contexts, supporting the overarching philosophy of counseling psychology (Blustein, 2001, 2004). Integrative research exploring the intersection of relationships and careers has the potential to impact theoretical development in various areas, including career, relational and multicultural theories. Concerning broad-based career theories, literature suggesting career and personal/relational functioning have been artificially separated has accumulated (Blustein, 2001, 2004, 2006; Blustein et al., 1995; Flum, 2001; Richardson, 1993). The present study, through examining career decision self-efficacy and vocational identity within multicultural and relational contexts, extends social cognitive career theory (Lent et al., 1994), with particular attention to understanding relational supports (Kenny et al., 2003; Lent et al., 2001) in the career development of diverse women. The inclusion of peer, mentor and community relationships in the present investigation represents a

strength of this investigation in that it may allow for aspects of lived experiences of minority members, who may utilize divergent and inclusive relational contexts for support in career development, to be known (Kenny et al., 2003).

Findings of the present study may enhance understanding of the emerging psychology of working (Blustein, 2006; Richardson, 1993), an area which has the potential to generate knowledge concerning segments of the population traditionally understudied (i.e., non-college bound youth). Blustein and others (Juntunen, 2006; Schultheiss, 2006) have suggested that understanding how individuals navigate work and relationships has the potential to inform various aspects of science and practice. Related to the psychology of working, the present findings have implications for an emergent view of women's career development which focuses on "work family role convergence" (Barnett & Hyde, 2001; Betz, 2001). Rather than approaching work and family roles as if they are competing aspects of life, as early theories often did with women, such roles are now being conceptualized as complementary and adaptive for both men and women (Barnett & Hyde, 2001).

Research concerning the intersection of careers and relationships may also advance theories of strength-based aspects of vocational psychology (Robitscheck & Woodson, 2006), an historical underpinning of counseling and vocational psychology. Such realistic appraisals of optimal human functioning in two intersecting domains, with a focus on utilizing strengths, is also consistent with feminist theories, broadly defined (Worell & Johnson, 1997). The strengths-based paradigm for understanding and ameliorating human suffering and promoting well-being has been applied in numerous areas of psychology

(Seligman, 2002) particularly with women and girls (e.g., Johnson, 2001). Gathering additional evidence concerning possible ways relationships may promote functioning in career development is consistent with strengths-based paradigms and may contribute to theory development in such areas as positive psychology, feminist psychology and more generally, counseling psychology.

The present research has considerable potential for enhancing multicultural career development theory (Arbona, 1995; Leong & Brown, 1995), and by extension, career counseling theories. Additional empirical data about unique needs and experiences of ethnic minority individuals and applying research concerning the intersection of family-of-origin and other relationships with career development to understudied populations represents an important extension of previous theorizing (Flores & Ali, 2004; Whiston & Keller, 2004a) and more recent empirical study (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002). For example, understanding ways ethnic group membership, ethnic identity and quality of important relationships intersect may help foster development of theories concerning between group and within-group variability in career development process and outcome for diverse individuals. Many have argued that traditional career theories have inadequately explained the career progression of minority members (Arbona, 1995; Leong & Brown, 1995), but questions remain concerning whether separate theories or revised current theories are better suited to explain the career development of ethnic minority members.

An additional implication of the present findings concerns identity development theory. Both vocational and psychological theorists have suggested that early adulthood

represents a critical period for identity development (e.g., Bordin, 1990; Erickson, 1968; Super, 1963). Greater understanding of ways minority women develop vocational and ethnic identity processes, in conjunction with gender identity, seems important and may provide data concerning appropriate education or intervention in support of developing a healthy and multidimensional identity. Research examining multidimensional aspects of relational functioning for diverse women has the potential to inform emerging relational theories of career development, including family systems, attachment and feminist theories, and as such may provide insight into various ways to increase self-efficacy as suggested by social cognitive career theory (Lent et al., 1994).

Current findings also have implications for emerging theories focused on identifying and explicating the myriad forces associated with career progression for diverse individuals. A systems theory of career development has been offered as a potentially useful framework for understanding the complex interplay of related systems in individuals' lives (Arthur & McMahon, 2005; McMahon, 2002; McMahon & Patton, 1995; Patton & McMahon, 1999). Proponents of a systems framework for career development suggest it has unique applicability with culturally different populations and may offer novel means of addressing complex factors involved in career development for minority individuals (Arthur & McMahon, 2005). For example, in acknowledging both macro and micro systems interacting to influence career development, systems theory addresses multiple intersecting and recursive forces, including internal processes, relationships, and socio-cultural considerations which shape individuals' career development. The addition of relational health in the present investigation (Liang et al.,

2002) extends feminist theories of psychological development (Jordan et al., 1991) and emerging feminist theories of career development (Crozier, 1999) and highlights the possible impact of relationship quality for numerous aspects of development, including career development.

### *Research Implications*

The present findings advance general research focused on developing more comprehensive models of minority women's career development (Arbona, 1990, 1995; Ward & Bingham, 1993) and offer insight into possible ways ethnicity may be related to career decision-making and vocational identity development. While the inclusion of relational variables has proven informative, additional work is needed to explicate such complex relational dynamics. Given the questionable reliability of three of ten subscales on the FES (Moos & Moos, 1994) in the present sample, together with lower reliabilities often reported by the scale authors and others, it is possible that additional measures of family relational dynamics may capture important family-of-origin dynamics more accurately. While the inclusion of multiple relational domains (i.e., attachment, relational health, and family environment dynamics) in the present study represents an important step forward, replication is necessary with family and other relationships (i.e., peers, mentors, community) operationalized in diverse ways. The very definition of "family" is an aspect of further research which warrants attention (Flores & Ali, 2004; Schultheiss, 2006). Research utilizing divergent definitions of "family" are necessary in order to describe the lived experience of many members of racial and ethnic groups (Flores & Ali, 2004). In the present study, for example, 25% of

women in this sample, and 40% of African American women, identified their family-of-origin composition as “another family member/caregiver,” suggesting “traditional” definitions of family may not be adequate to describe today’s families. Moreover, in a multicultural society, alternative and extended families may represent the norm, attesting to both cultural preferences and economic and other socio-cultural realities (Landrine & Klonoff, 1996). Further exploration concerning the impact of extended and other diverse family systems for career development is warranted.

Equivocal findings in studies of career and interpersonal relationships suggest these processes may not be easily understood and diverse methods of investigation may also be necessary to capture the complexities involved in career and relational lives (Schultheiss et al., 2006; Whiston & Keller, 2004a). Important additions to future research include divergent methodology, instrumentation, and the inclusion of additional relevant variables. With regard to improved methodology, longitudinal studies focused on gathering data from the family as a system over time would represent an advance in the field. Since family necessarily includes diverse perspectives, it seems reasonable to consider research methods that assess perspectives of multiple family members to gather a systemic, composite view of family, rather than relying solely an individual’s perspective of family. This seems especially relevant for explorations concerning diverse members of society, as researchers have acknowledged the importance of family in career decision making (Phinney et al., 2006). Multiple methods of data collection (i.e., interview, focus group, case studies, self-report) may also be beneficial. Studies of additional meaningful relationships, including diverse definitions of “family” (Flores &

Ali, 2004; Schultheiss, 2006; Whiston & Keller, 2004a), together with siblings, cousins, grandparents, peers and mentors are essential to developing a richer understanding of the possible contextual sources of relational support.

Concerning potential additional relevant variables, issues of social class have been identified as important and often missing variables in the understanding of diversity and career development (Heppner & Scott, 2004). Researchers are encouraged to incorporate social class variables into explorations of career processes (Blustein, 2006; Richardson, 1993) as a means to gather a more complete picture of diversity (Heppner & Scott, 2004) and extend the reach of vocational psychology to include underrepresented groups (i.e., non-college bound youth and adults).

Exploring within group heterogeneity, including deeper understanding of the meaning of ethnic group membership seems important. It is possible that more comprehensive measures of ethnic identity, together with racial identity and acculturation capture complexities involved in meaning associated with ethnic membership for individuals belonging to different groups (Cokley, 2005; Sellers et al., 1998). Due to complex histories and collective experiences of members of different groups, it is possible that more specific explorations of individual groups may be needed.

While researchers are beginning to include the experiences of a wide range of diverse individuals in general career development literature, much remains unexplored concerning the experiences of individuals from other diverse ethnic/cultural backgrounds, and individuals diverse with respect to sexual orientation (Fassinger, 1996) and ability (Luzzo et al., 1999). Moreover, the extant research concerning career development for

diverse individuals has focused on broad ethnic group classifications (i.e., Hispanic, Asian, etc.). It may be fruitful to consider unique characteristics of specific diverse groups, as each group's unique history likely impacts career development. It seems especially relevant to explore possible relational supports for individuals with multiple intersecting identities due to possible experiences of compound oppression and the potential for quality relationships to serve a buffering or protective function for these individuals. Qualitative investigations concerning the intersection of relational and career lives may elucidate important patterns of behavior, informing theory-building in this area. An additional application of the present findings which may be further extend relational and career explorations is the application of current research to racially/ethnically diverse men.

Given research highlighting important barriers faced by individuals of color in multiple life roles, including career development (Arbona, 1990; Kenny et al., 2003; Luzzo, 1993; McWhirter, 1997) it seems important to integrate relational career development theories and research with examinations of racism. Perhaps research exploring the associations among relational quality, ethnic identity and career development may shed light on important interactions. For example, does higher ethnic identity help mediate or buffer individuals' experiences of racism throughout the career development process? If so, what role might family and other important relationships play in supporting individuals through such barriers? These questions are beginning to be addressed (Kenny et al., 2003), but more work is clearly needed to explicate these complex and important dynamics.

### *Practice Implications*

Deeper understanding of the complexities involved in the intersection of career and interpersonal relationships has the potential to impact various dimensions of applied psychology, including personal and career counseling, family counseling, educational interventions and advocacy. Researchers questioning the artificial separation of career and personal issues have argued that “integrated therapeutic practice,” incorporating career and personal pursuits and difficulties, may reflect human behavior and well-being more accurately and provide important direction for clinical practice (Blustein, 2006; Peterson & Gonzales, 2005; Richardson, 2002; Schultheiss, 2006).

Knowledge concerning the intersection of career and relationships has the potential to inform various applied areas, with implications for the provision of more holistic, relevant and effective services to individuals struggling with career and relational difficulties (Lee & Johnston, 2001; Richardson, 2002; Whiston & Keller, 2004a). Psychologists working with college students, in particular, may find that the integration of career, personal and relational issues offers a more accurate representation of the presenting issues for clients seeking services. As others have suggested, neither personal issues nor career struggles are experienced in isolation (Lucas et al, 2000; Juntunen, 2006; Schultheiss, 2006). The opportunity to normalize and address relational distress in the lives of career clients, for example, may have a positive impact on both psychological functioning and progression towards a satisfying career choice. As suggested by

Juntunen (2006) the interaction of work and relational distress represents an important reality for many that is often ignored or minimally addressed in clinical settings.

While theorizing about the influence of culture on career development has increased, empirical support has been limited (Brown, 2004; Flores & Ali, 2004; Worthington et al., 2005). The provision of culturally relevant career services for diverse members of society requires greater understanding of the influence of culture and contextual variables, including relational supports, for members of diverse groups (Byars-Winston & Fouad, 2006; Flores & Ali, 2004; Fouad & Byars-Winston, 2005). Clinicians interested in fostering effective career counseling with ethnic minority women (Bingham & Ward, 1994; Gainor & Forrest, 1991; Ward & Bingham, 1993) have developed models to address important dimensions of career development experiences for women and have incorporated assessment of family variables in career counseling instruments (Ward & Bingham, 1993). It seems especially relevant to consider integrating relational supports with self-efficacy research as a means of increasing self-efficacy for a variety of career related tasks.

An additional link between career and personal lives concerns the possibility that members of various minority groups, and particularly racial/ethnic minorities, are more comfortable seeking career services rather than traditional mental health counseling (Constantine & Flores, 2006; Leong, 1995) due to possible lack of information about services or mistrust of the counseling profession. This reality adds relevance to increasing our understanding of ways in which career and relationships interact for diverse members of society (Leong & Brown, 1995).

The application of research knowledge to broad educational contexts may inform academic and educational programming for students traditionally underrepresented in higher education. Outreach focused on integrating career decisions within individuals' contexts, including multiple relationships, may provide a point of connection for ethnically diverse college students. Understanding available supports for diverse populations offers the potential to maximize educational/vocational attainment and satisfaction while potentially improving interpersonal functioning (Juntunen, 2006; Schultheiss, 2006). In a practical sense, this may include encouraging connection to family and the inclusion of others in career decision-making and offering alternate means to gain needed support if away from family, including mentors.

Recent research conducted by Phinney et al. (2006) highlighted the association between academic attainment and family issues. Data were reported suggesting a sense of family interdependence was related to ethnic minority students' reasons for attending college. College students, particularly those from lower socio-economic groups, reported a strong desire to offer financial assistance to their families. Findings such as these lend support for incorporating family variables in career theory and practice with minority students.

For the counseling psychologist, the intersection of careers and relationships represents fertile ground with which to foster a holistic view of career and personal well-being. From the counseling perspective, remaining cognizant of ways therapy relationships can provide important relational support for individuals struggling with career issues (Schultheiss, 2006) may represent an important aspect of career counseling

with ethnic minorities. While this may seem obvious to the clinician adhering to one of many relational theoretical orientations, career counselors in general may be less aware of the importance of relational functioning in career development. Additionally, programming which encourages the use of relational supports, including family and other important relationships, and encouragement to develop healthy connections to peers, mentors and the larger community may also have a positive effect on career development.

### Conclusion

Within the vocational psychology literature the reality of complex and multidimensional lives has been acknowledged for some time. The intersection of career and relationships is rich with possibilities to deepen our understanding of important related domains of behavior and as such, provides a particularly useful lens from which to explore career development for members of ethnic minority groups (Flores & Ali, 2004). Influential theorists have identified context, including the family-of-origin, as vital in career development (e.g., Roe, 1957; Schulenberg et al., 1984; Super, 1957), but only recently have family relationships been conceptualized and explored as central to career development processes (Dodge, 2001; Hargrove et al., 2002; Hartung et al., 2002; Johnson et al., 1999; Kinnier, et al., 1990; Larson & Wilson, 1998; Whiston, 1996; Whiston & Keller, 2004a).

Findings of the present study offer support for the inclusion of a wider network of relational influences in explorations of career development for women of color. Findings suggesting peer and mentor relationships may be important in the career development of women lend credence to efforts to foster such relationships for women throughout their

educational careers and beyond. While the present findings need to be replicated, it seems likely that ethnic identity is related to developing self-efficacy for career decision-making for college women. Further, family participation in social and recreational activities and family cohesion seem to have a positive impact on development of vocational identity and self-efficacy for career decision-making. While there is much territory to explore, emerging research is beginning to illuminate dimensions of important lived experiences of diverse members of society, including the manner in which family context and other relationships may offer essential support as college women navigate career choice and development. The current findings highlight the need for continued explorations of relational domains associated with important career development outcomes.

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APPENDIX A

Consent to Participate in Research

**TEXAS WOMAN'S UNIVERSITY**  
**CONSENT TO PARTICIPATE IN RESEARCH**

Title: Career Development in a Relational Context: An Exploration of Family of Origin Dynamics, Relational Health, Ethnic Identity and Career Development in Diverse College Students

Investigator: Adria Villarreal, M.A. (972) 234-8409 or [career\\_research@comcast.net](mailto:career_research@comcast.net)  
Advisor: Roberta Nutt, Ph.D. (940) 898-2313

You are being asked to participate in a research study exploring career development and interpersonal relationships. Participation involves completing a series of anonymous questionnaires assessing your experiences in a wide range of relationships and your process of career development.

Participation involves attending one pre-arranged meeting and completing the study materials at that time. Completion of all questionnaires is estimated to take between 45 minutes and one hour. The foreseeable risks or discomforts from participation in this study include the risk of release of confidential information and possible discomfort or emotional reactions you may experience as a result of responding to the questions being asked. Additionally, you may experience loss of time as a result of participating in this study.

Confidentiality will be protected to the extent that is allowed by law. In order to protect confidentiality, questionnaires are anonymous and no names are required. If you request a summary of results to be mailed to you at the completion of the study or choose to enter the drawing, you may complete forms provided to you in your packet with your name and mailing address. The forms will be separated from the packet of completed questionnaires. Completed questionnaires will be stored in a locked filing cabinet for a maximum of five years and will then be shredded.

You may experience anger, sadness, embarrassment, or other uncomfortable feelings as a result of answering questions about your experiences. To minimize this risk, the researcher will share appropriate resources with you, such as counseling referral information. You may experience a loss of time as a result of participation. Several meeting times will be offered to accommodate various schedules and minimize disruption.

Your participation in this research is completely voluntary and you may stop participating at any time without penalty. You may refuse to answer questions also without penalty. Data collected from college student participants under eighteen years of age will not be included in data analysis

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Participant initials  
Page 1 of 2

There are two possible direct benefits of this study to you. The first is that you have the opportunity to receive an abstract of results at the completion of the study. A second potential benefit is the option to enter a drawing for \$25.00. Ten (10) names will be drawn from participants at random. If you choose to enter the drawing, you may complete a form with your name and mailing address. If your name is drawn, a \$25.00 Visa gift card will be mailed to you at the address you have provided.

If you have any questions about the research study you should ask the researchers; their phone numbers are at the top of this form. If you have any questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Office of Research and Sponsored Programs at 940-898-3378 or email [irb@twu.edu](mailto:irb@twu.edu).

The researcher will try to prevent any problems that could happen because of this research. You should let the researcher know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

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Signature of Participant

---

Date

**\* If you would like to receive a summary of the results of this study, please provide an address to which this summary should be sent.**

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## APPENDIX B

### Transcript of Verbal Instructions

## TRANSCRIPT OF VERBAL INSTRUCTIONS

### Career Development in a Relational Context: An Examination of Family of Origin Dynamics, Relational Health, Ethnic Identity and Career Development in Diverse College Students

Hello. My name is Adria Villarreal and I am a doctoral student at Texas Woman's University working on a Ph.D. in Counseling Psychology. I am currently conducting a research study examining interpersonal relationships and career development in college students and I am here today to describe my study and provide an opportunity for you to volunteer to participate. One of the first things I'd like to describe is exactly what's involved in participating in this study. Participation involves responding to a series of anonymous questionnaires, estimated to take between 45 minutes to one hour to complete. Since the questionnaires are anonymous, you will not put your name on any of the materials. Information concerning dates and times of administration will be provided in a flier I will hand out in a moment. If you would like to participate, please attend an administration session (dates and times listed on flier). You will complete the questionnaires at the administration session.

You may experience uncomfortable feelings while answering some of the questions included in the questionnaires. I will provide a list of resources for help in your packet of materials should you experience difficulty managing uncomfortable feelings. You may also contact me at any time for additional resources and referrals. Loss of confidentiality is an additional potential risk of participation.

Your participation is completely voluntary. An incentive is being offered for participation. Because I know your time is valuable and I am asking personal questions of you, I'm offering you the opportunity to enter a prize drawing. Ten names will be chosen at random to receive a \$25.00 gift card. To enter, all you have to do is complete a form with your name and mailing address. At the conclusion of the study I will be drawing 10 names of prize winners. \$25.00 Visa gift cards will be mailed to individuals whose names are drawn. An additional benefit is the option of obtaining an abstract of the research findings at the conclusion of the study. If you choose to enter the drawing or to receive an abstract, the form(s) with your name and address will be immediately separated from your completed questionnaires to protect your confidentiality.

Does anyone have any questions for me at this time? Should you have questions for me at any time before, during or after participation, please don't hesitate to contact me. Information on how to contact my research advisor, Roberta Nutt, Ph.D. and me can be found on the flyer I am handing out. Should you have any questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Office of Research and Sponsored Programs; their contact information is also listed on the flier. Thank you for your time.

APPENDIX C

Research Recruitment Flyer

# PARTICIPANTS WANTED!!

## Research on Interpersonal Relationships and Career Development in College Students

Adria Villarreal, a doctoral student in Counseling Psychology from the Department of Psychology and Philosophy at Texas Woman's University, is conducting a study of career development and relationships in college students for her dissertation. Participation in the study is completely voluntary and includes the following:

- ✦ Completing a series of anonymous questionnaires concerning interpersonal relationships and career development.
- ✦ Estimated total time commitment is between 45 and 60 minutes.

\$\$ ENTER A DRAWING TO WIN \$25.00 \$\$

- ✦ TEN names will be chosen from participants at random to receive \$25.00!

**To participate, please come anytime during ONE of the following administration sessions:**

<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>LOCATION</u>
MON	NOV 21 <sup>st</sup>	2-7pm	ASB 207
MON	NOV 28 <sup>th</sup>	2-7pm	ASB 207
TUES	NOV 29 <sup>th</sup>	7-9pm	MCL 503
WED	NOV 30 <sup>th</sup>	7-9pm	ASB 207

I hope to include students who are diverse with respect to academic majors, career plans and racial/ethnic backgrounds. If you have any additional questions, please call Adria at (972) 254 - 8409 or via email at [career\\_research@comcast.net](mailto:career_research@comcast.net). This research has been approved by the TWU's Institutional Review Board. If you have any questions about your rights as a participant you may contact the Office of Research and Sponsored Programs at (940) 898-3378 or [irb@twu.edu](mailto:irb@twu.edu)

Thank you for your interest in this research study!

APPENDIX D  
Demographic Form

## DEMOGRAPHIC INFORMATION

Instructions: Please answer the following questions.

1. What is your age? \_\_\_\_\_

2. What is your gender? \_\_\_\_\_

3. With whom were you raised? (Please check all that apply)

\_\_\_\_\_ Mother

\_\_\_\_\_ Father

\_\_\_\_\_ Siblings

\_\_\_\_\_ Step-parents

\_\_\_\_\_ Grandparents

\_\_\_\_\_ Other Relative (Please specify) \_\_\_\_\_

\_\_\_\_\_ Other (Please specify) \_\_\_\_\_

4. What is your current relationship status?

\_\_\_\_\_ Single

\_\_\_\_\_ Dating

\_\_\_\_\_ Married/Partnered

\_\_\_\_\_ Divorced

\_\_\_\_\_ Widowed

5. What is your ethnicity?

\_\_\_\_\_ African American

\_\_\_\_\_ Asian American

\_\_\_\_\_ Biracial

- Caucasian
  - Hispanic/Latina(o)
  - Native American
  - Other (please specify)
- 

6. Do you have children?  YES  NO

7. If applicable, what is your religious/spiritual background?

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8. If employed, what is your current job or occupation?

\_\_\_\_\_ (Please be specific)

9. How many college semesters have you completed? \_\_\_\_\_

10. What is your college major or field of study? \_\_\_\_\_  
(Please be specific)

11. What are your educational goals?

Earn Bachelor's degree

Earn Master's degree

Earn Doctorate or other advanced degree (i.e., M.D./J.D./Ph.D.)

Other (Please specify)

---

12. What job/occupational field do you plan to enter after graduation?

\_\_\_\_\_ (Please be specific)

13. What is the highest level of education your parents have completed?

Mother \_\_\_\_\_

Father \_\_\_\_\_

14. What was your current total household income last year?

\_\_\_ 0 - \$20,000

\_\_\_ \$20,001-\$30,000

\_\_\_ \$30,001-\$40,000

\_\_\_ \$40,001-\$50,000

\_\_\_ \$50,001-\$60,000

\_\_\_ \$60,001-\$70,000

\_\_\_ \$70,001-\$80,000

\_\_\_ \$80,001-\$90,000

\_\_\_ \$90,001 and Over

APPENDIX E

Career Decision Self-Efficacy – Short Form (CDSE-SF)

Career Decision Self-Efficacy – Short Form

Inquiries should be addressed to:

Nancy E. Betz

Professor

Department of Psychology

The Ohio State University

137 Townshend Hall

1885 Neil Avenue Mall

Columbus, OH 43210-1222

[Betz.3@osu.edu](mailto:Betz.3@osu.edu)

APPENDIX F

My Vocational Situation (MVS)

SAMPLE ITEMS FOR  
My Vocational Situation

By John L. Holland, Denise C. Daiger, and Paul G. Power

Directions: Try to answer all the following statements as mostly TRUE or mostly False.  
Circle the answer that best represents your present opinion.

1. I need reassurance that I have made the right choice of occupation.      T    F
2. I am confused about the whole problem of deciding on a career.      T    F

For the last two questions, circle YES or NO.

1. I need the following information:

How to find a job in my chosen career.      YES    NO

2. I have the following difficulties:

I lack the special talent to follow my first choice.      YES    NO

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APPENDIX G

Family Environment Scale - R (FES)

## FAMILY ENVIRONMENT SCALE

### SAMPLE ITEMS

#### Instructions:

There are 90 statements in this booklet. They are statements about families. You are to decide which of the statements are true of your family and which are false. Make all your marks on the separate answer sheet. If you think the statement is *True* or mostly *True* of your family, make an X in the box labeled T (true). If you think the statement is *False* or mostly *False* of your family, make an X in the box labeled F (false).

You may feel that some of the statements are true for some family members and false for others. Mark T if the statement is *true* for most members. Mark F if the statement is *false* for most members. If the members are evenly divided, decide what is the stronger overall impression and answer accordingly.

Remember, we would like to know what your family seems like to *you*. So do not try to figure out how other members see your family, but do give us your general impression of your family for each statement.

Family members really help and support one another.	T	F
Family members attend church, synagogue, or Sunday school fairly often.	T	F
Activities in our family are pretty carefully planned.	T	F
Family members are rarely ordered around.	T	F
We don't do things on our own very much in our family.	T	F

## APPENDIX H

### Relational Health Indices (RHI)

## Relational Health Indices

Available in:

Liang, B., Tracy, A. J., Taylor, C. A., Williams, L. M., Jordan, J. V., & Miller, J. B.

(2002). The relational health indices: A study of women's relationships. *Psychology of Women Quarterly*, 26, 25-35.

## APPENDIX I

### Inventory of Parent and Peer Attachment (IPPA)

Inventory of Parent and Peer Attachment (IPPA)

Available by contacting:

Mark T. Greenberg, Ph.D.

Professor

Human Development

Penn State University

State College, PA 16802

[Mxg47@psu.edu](mailto:Mxg47@psu.edu)

APPENDIX J

Multigroup Ethnic Identity Measure (MEIM)

Available by contacting:

Jean S. Phinney, Ph.D.

Department of Psychology

California State University, Los Angeles

Los Angeles, CA 90032-8227

Phone: 323 343-2261

FAX: 323 343-2281

E-mail: [jphinne@calstatela.edu](mailto:jphinne@calstatela.edu)