### **ABSTRACT**

Title of thesis: A QUALITATIVE STUDY OF CHANGES IN CAREER

ORIENTATION: EXPLORING THE CONTRIBUTIONS OF

LIFE MEANING AND ROLE MODELING/MENTORING TO

WOMEN'S LIFE/CAREER PATHS

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The third phase of a longitudinal study, this qualitative project investigated changes in career orientation in a sample of 12 women in the decade following their high school graduation. A modification of grounded theory methodology (Strauss & Corbin, 1998) was used to explore the contributions of life meaning and role modeling/mentoring to women's life/career paths. Major sources of meaning included family, career, education/intellectual growth, autonomy, and friendships. Family was prioritized, however, participants chose both family and career to the extent permitted by flexible work structures and childcare options. Significant individuals, including role models and mentors, influenced women's educational and career choices and achievement as well as values and decisions regarding parenting and the career-family interface. Role models and mentors were parents, siblings, extended family members, educators, and work colleagues.

# A QUALITATIVE STUDY OF CHANGES IN CAREER ORIENTATION: EXPLORING THE CONTRIBUTIONS OF LIFE MEANING AND ROLE MODELING/MENTORING TO WOMEN'S LIFE/CAREER PATHS

by

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### **CHAPTER 1: INTRODUCTION**

In the last two decades, researchers in vocational psychology have contributed substantially to articulating the complex, interrelated external and internal factors that shape women's career development (e.g., Betz & Fitzgerald, 1987; Eccles, 1987, 1994; Farmer, 1985; Fassinger, 1985, 1990; Gomez et al., 2001; McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien & Fassinger, 1993; O'Brien, Miller Friedman, Tipton, & Geschmay Linn, 2000; Rainey & Borders, 1997; Richie et al., 1997; and Schaefers, Epperson, & Nauta, 1997). In particular, O'Brien et al.'s (2000) longitudinal project investigated the roles of attachment, career self-efficacy, and career choice in the vocational development of women; this research identified declines in young women's career ambitions in the years following high school. The purpose of the present study was to gain additional insight into the reasons for these changes, complementing the quantitative approach of O'Brien et al. with a qualitative exploration of the contributions of life meaning and role modeling/mentoring to women's life and work choices.

Contemporary research on women's career development exists within the context of continuing disparities between women's and men's earning potential and employment status in the labor force. In 2002, women's earnings overall were 78% of men's (U.S. Department of Labor Bureau of Labor Statistics, 2004). Female college graduates earned only 74% of what their male counterparts earned; women with college degrees who were full-time wage and salary workers had median earnings of \$809 per week compared with male college graduates who made \$1089 per week (U.S. Department of Labor Bureau of

Labor Statistics, 2004). According to the Department of Labor Women's Bureau (2000a), this wage gap continues due to women's concentration in lower-paying occupations and, when the gap occurs within the same occupation, to education, experience, hours worked, and discrimination. Even more bleak a picture is presented by Rose and Hartmann (2004), who argue that the conventional method of measuring the wage gap is misleading because it does not account for half of working women in the labor force, who work part-time or take time out of the labor force to care for family. Their long-term gender earnings gap, which measures both women's earning losses in a given year and the cumulative effect of balancing family and work responsibilities on women's earnings, indicated that women earned 62% less than men earned over a 15-year period, that is, only \$0.38 for every dollar (38% compared to the Department of Labor's 78% figure).

Projecting that women will comprise 48 percent of the labor force by 2008, the U.S. Department of Labor (2000b) has identified women's underrepresentation in the disciplines of science, engineering, and technology as an issue of national concern. While career opportunities are rapidly expanding in fields like computer technology, computer engineering, and systems analysis, women's employment in these technology-driven careers is lagging behind men's, widening the occupational gap between the genders (U.S. Department of Labor Women's Bureau, 2000b). The gender gap remains wide in more established fields like mathematics, engineering, and the physical sciences; for example, women still made up only 11% of all engineers in 2002 (U.S. Department of Labor Bureau of Labor Statistics, 2004). Though their overall representation in

managerial and professional specialty occupations increased over the last two decades (from 22% in 1983 to 34% in 2002), women continue to be overrepresented in the lowest-paid occupations within this broad category; for example, women comprised 19% of dentists but 98% of preschool and kindergarten teachers and 93% of registered nurses (U.S. Department of Labor Bureau of Labor Statistics, 2004).

Kolbenschlag (1979) predicted that women's limited representation in traditionally male-dominated fields would be their chief obstacle in gaining upward mobility in professional work roles:

...their failure to master the special languages and dialects of numbers, of finance, of technology reduces them to "immigrant" status in many male-identified fields. Inevitably, women are trapped in the job ghetto. Having been put through the double strainer of socialization and education, occupational segregation will finally enclose their aspirations within permanent boundaries. (p. 93)

The ensuing years of research have confirmed Kolbenschlag's (1979) suggestion that these gender gap trends begin long before individuals are established in the workforce (e.g., American Association of University Women [AAUW], 1991, 1994; Holland & Eisenhart, 1991; O'Brien et al., 2000; Savage & Fouad, 1994). A nationwide study commissioned by the American Association of University Women (AAUW, 1991, 1994), *Shortchanging Girls, Shortchanging America*, assessed the career aspirations of girls and boys aged 9 to 15 and observed that girls reduced their expectations for both their careers and their future status in society as they matured. Holland and Eisenhart (1991) reported decreases in the career ambitions of women at two co-ed colleges in the

southern U.S. from the start of college to the time of their graduation. Most women had been successful at attaining desired heterosexual relationships, but graduated with low-paying, marginal career prospects. Savage and Fouad (1994) found that college women enrolled in traditionally female majors had lower career aspiration and career commitment levels than their counterparts in gender-neutral majors; they also indicated plans to combine work and family more often than women in gender-neutral majors. These findings suggest that many women who have both the access to education and the ability to succeed may not fulfill their intellectual or economic potential.

Given the persistence of women's lesser status and earning power in the marketplace, and the research corroborating that these trends may be reflective of reduced career expectations early in a woman's development, it seems critically important to deepen our understanding of what is happening in the lives of women as they make decisions that shape their future positions in society. In addition to those variables that have been researched in models of women's career development, what contextual factors help to account for the complex, often non-linear life/career paths of many women? In particular, what contributions are made by women's definitions of what gives their lives meaning and by role models/mentors they may encounter in their lives? These questions formed the foundation for this study.

# Women's Career Development Research

The study of women's career development began in the mid-1960s with explorations of pre-theoretical concepts that described whether or not women desired to work and the importance to them, if any, of pursuing careers (Fitzgerald, Fassinger, &

Betz, 1995). By 1987, the literature base for women's vocational development was so large that Betz's and Fitzgerald's chapter for the *Handbook of Vocational Psychology* (Walsh & Osipow, 1983) quickly evolved into a seminal full-scale text (Betz & Fitzgerald, 1987). The Career Psychology of Women (Betz & Fitzgerald, 1987) offered the first comprehensive review of the research regarding the processes and outcomes of women's career development across the lifespan. While acknowledging the contributions of early vocational researchers such as Holland and Super, Betz and Fitzgerald (1987) critiqued these theories as insufficient in their explanations of women's career choices. Citing the approaches of Astin (1984), Farmer (1985), Gottfredson (1981), Hackett and Betz (1981), and Harmon (1977), Betz and Fitzgerald called for continued work on a comprehensive theory of women's vocational development. In the ensuing years, researchers have developed sophisticated models of women's career behavior (Fitzgerald et al., 1995). Because empirical models investigate the individual and intersecting contributions of a number of variables in an attempt to provide a holistic picture of women's career development processes and outcomes, research studies focusing on career development models provided the background for the present investigation.

Models of women's vocational development have identified a host of internal and external factors that contribute to women's life/career decisions. Internal factors include ability, attachment, self-esteem, self-efficacy expectations, gender role attitudes, personal values, optimism, multiple role realism, and multiple role self-efficacy. External factors include maternal employment, family responsibilities, societal expectations, educational experiences, workplace barriers, cultural identity, and social support (Betz & Fitzgerald,

1987; Eccles, 1994; Farmer, 1985; Fassinger, 1985, 1990; Gomez et al., 2001; McCracken & Weitzman, 1997; Nauta et al., 1998, O'Brien & Fassinger, 1993; O'Brien et al., 2000; Rainey & Borders, 1997; Richie et al., 1997; Schaefers et al., 1997). Quimby's (2002) review of existing women's career development models identified certain variables as having received consistent empirical endorsement for their predictive capacity in the models. These included ability (mediated by self-efficacy), gender role attitudes, career decision-making self-efficacy, multiple role self-efficacy, perceived barriers, and perceived social support.

As models of women's career development become more finely tuned and employ more advanced statistical methods to predict the career choices and aspirations of women, it is vital that researchers "return to the source" to ensure that our models reflect the experiences of the women we study. The present study's qualitative methodology provided an opportunity to explore in depth variables that may further existing knowledge about women's career choices.

Qualitative Approach to Evaluating Women's Career Development

Published studies overwhelmingly have employed quantitative methods in their

attempts to identify the most salient variables contributing to women's career

development (Betz & Fitzgerald, 1987; Eccles, 1994; Farmer, 1985; Fassinger, 1985,

1990; McCracken & Weitzman, 1997; Nauta et al., 1998, O'Brien & Fassinger, 1993;

O'Brien et al., 2000; Rainey & Borders, 1997; Schaefers et al., 1997). While these

quantitative studies have provided a solid foundation of research on the vocational

psychology of women, the merits of qualitative approaches are gaining recognition in the psychological research community.

Qualitative methods are thought to capture with greater clarity the "complexity and meaningfulness of human behavior and experience. The power of qualitative research lies in the words of the participants and the analysis of the researcher" (Morrow & Smith, 2000, p. 199-200). Through a conscious inclusion of the voices and perspectives of research participants, this methodology deconstructs the subject-object dualism that is at the heart of the scientific method and hierarchical systems of power. The interview process invites a more egalitarian (though still not equal) relationship that respects and emphasizes the strengths and stories of participants (Worell & Remer, 1992); researchers collaborate with the stakeholders of the research to conduct the study and use the knowledge gained from the study to effect positive social change (Schultheiss, 2001).

Betz (1993) suggested that, particularly in the case of research on women's achievement-related behaviors, idiographic, interview-based approaches may have potentially greater validity because they allow women to define their own meanings of success. As an example, Fassinger and her colleagues (Gomez et al., 2001; Noonan et al., 2004; Prosser, 2001; Richie et al., 1997) began an extensive program of qualitative research on the career development of demographically diverse women, recognizing the rich potential inherent in a method that is grounded in participants' own words and perspectives. Qualitative methodologies represent an important tool for capturing the nuanced, information-rich data in the life/career stories of women that may be overlooked by quantitative approaches.

The present study, which employed a modified version of the grounded theory approach by Strauss and Corbin (1998), provided a qualitative complement to the quantitative component of O'Brien et al.'s (2000) longitudinal project. Conducted shortly after the tenth anniversary of the original data collection, these narrative interviews contributed to the continuation of the longitudinal study, furthering the legacy of programmatic research on women's career development. Hackett and Lent (1992) have highlighted the significant contributions of programmatic research (compared to isolated research investigations) to the development of the knowledge base on women's vocational behavior.

### **Career Orientation**

Specifically, the present study analyzed the narratives of several women who appeared to have decreased their orientation to career. Changes in career orientation, for the purposes of this study, were defined as increases or decreases in scores over a five year period on measures assessing two salient career constructs: (1) career traditionality, defined as the percentage of women employed in the woman's career field according to 1997 census data (U.S. Department of Labor, 1997), and (2) career aspiration, the degree to which an individual values her career and aspires to advancement and leadership positions in her career. These constructs were among those used by O'Brien and her colleagues (2000) to assess career orientation in the 1996 sample. While these two variables certainly do not comprehensively capture the entirety of an individual's career interests and motivations, they represent foundational categories that have been related to variables of critical importance in women's career development.

### Variables of Interest

This study explored the roles of two variables that can advance our understanding of the choices that comprise women's life/career paths. The first variable, life meaning, unites disparate research traditions that have attempted to identify the sources of meaning in women's lives, including value structures, life roles, and greater senses of purpose that guide life/career choices. Exploration of role modeling/mentoring, the second variable, contributes to the development of research regarding a specific area of perceived social support, one of the constructs analyzed more generally in current models of women's vocational behavior.

# Life Meaning

One factor that may make a fundamental contribution to women's life/career paths is life meaning. *Life meaning* was defined in this study as (a) the importance an individual assigns to her life roles (role salience); (b) the cognizance of an order, coherence, and purpose in her existence; and (c) a sense of fulfillment that accompanies her beliefs about and involvement in the roles, activities, and commitments that comprise her life. This construct draws from distinct literatures in the discipline of psychology and related fields: vocational counseling, human resource development, existential psychology, and positive psychology. Programs of research within these disciplines have included investigations of the Depth of Meaning in Life Scale (De Vogler-Ebersole & Ebersole, 1985), role salience (Super & Ŝverko, 1995), subjective task value (Eccles, 1987, 1994), values/life role expectations and realization (Arnold, 1993; Granrose & Kaplan, 1996), goal orientation and life purpose (Park & Folkman, 1997; Ryan & Deci,

2000; Zika & Chamberlain, 1992), and cosmic meaning (Cochran, 1990; McCann & Pearlman, 1990; Park & Folkman, 1997; Yalom, 1980).

While the research on role salience and values traditionally has been integrated with research on vocational development (e.g., Arnold, 1993; Eccles, 1987, 1994; Granrose & Kaplan, 1996; Super & Ŝverko, 1995) and goal orientation recently has been included in career development models (Lent, Brown, & Hackett, 1994; Super, Savickas, & Super, 1996), the life meaning literature has received very little attention from career development researchers. This is surprising, given the natural fit of some its key concepts with constructs in career theory, for example, Yalom's (1980) terrestrial/functional meaning with role salience and goal orientation. Bridging these literatures provided new vantage points for looking at foundational and more recent constructs in vocational development theory. In addition, the definitions of life meaning articulated by the existentialist and positive psychology traditions, with their inclusion of the concepts of order, cohesion, and purpose in life, and deep personal engagement and fulfillment in existence, extended this study's exploration of women's life/vocational choices beyond the established discussions on roles and goals.

# Role Models and Mentors

Until recently, contextual career supports have been underexplored in the career development literature (Quimby, 2002). Previous theoretical and empirical work has focused on barriers preventing women's access to and advancement in careers. Lent, Brown, and Hackett (2000) commented that this "barrier-focused" stance has limited

exploration of contextual effects on career development; they recommended the incorporation of facilitative conditions into models of career choice and development. A good example is the growing body of literature indicating that social support may be a vital ingredient in choosing and remaining committed to careers (Caldera, Robitschek, Frame, & Pannell, 2003; Flores & O'Brien, 2002; Lent et al., 2002), attributing importance to career (Moya, Exposito, & Ruiz, 2000), positively managing multiple role stressors (Bernas & Major, 2000), and nurturing self-beliefs that make women more resilient when facing educational and workplace obstacles (Pajares & Zeldin, 1999).

A specific area of social support that may contribute significantly to women's career choices and aspirations, two important elements in a woman's life/career path, is support provided by role models and mentors. According to Crosby (1999), role models are individuals who intentionally or unintentionally model skills that can affect the personal and/or professional development of others; in this study, role modeling was broadened to include the modeling of beliefs and attitudes as well as behaviors. In addition, "intentionally or unintentionally" was replaced with "directly or indirectly" to clarify that the recipient of the modeling may or may not be known to the role model. Furthermore, role models may be real persons or fictionalized characters. Thus, this study defined a *role model* as a person (human or fictionalized) who directly or indirectly models beliefs, attitudes, and/or behaviors that can affect the personal and/or professional development of another individual. Research suggests that positive role model influence may contribute to women's achievement by legitimating novel and/or gender role deviant

options (Eccles, 1994), and by enhancing discipline self-efficacy and career aspirations (Nauta et al., 1998).

Hollingsworth (2000), identifying a growing consensus among researchers (Atkinson, Casas, & Neville, 1994; Bahniuk, Dobos, & Kogler Hill, 1990; Bowen, 1985; Jacobi, 1991; Kram, 1985) regarding a definition of mentoring, posited a definition that includes both instrumental and psychosocial elements: "Mentor refers to an older, more experienced colleague who gives career-related advice, instruction, and guidance to a less experienced protégé. In addition, mentoring relationships implicitly suggest an active, personal commitment to the relationship on the part of both participants" (pp. 8). Because a mentor is not always older than a mentee and may be found in contexts other than professional environments, this study used the following definitions of *mentor* and the mentoring relationship: (a) A mentor is a more experienced individual who provides personal and/or professional guidance, instruction, and support to a less experienced individual, and (b) the *mentoring relationship* is mutually beneficial and growthenhancing, entailing an active and personal investment from both mentor and mentee. In addition, the gender-neutral term mentee was used throughout this manuscript except in those cases when the traditional term "protégé" referred to a variable cited in particular research studies.

The activities of mentoring often include role modeling, but, stemming from its foundation in an interpersonal relationship, mentoring also entails such behaviors as: advising, supporting, coaching, sponsoring, instructing, exposing, advocating, endorsing, praising, encouraging, socializing, and protecting (Fassinger, 1997). Thus, mentors are

likely to serve as role models, but the reverse is not true: being a role model does not necessarily include the more intimate functions of a mentor.

Studies investigating women's experiences with mentoring have noted its empowering effects on women's careers in academia (Pistole, 1994), as well as the nurturing role played by verbal invitations and encouragement by family-, academic-, and work-related influences in the development of women's self-beliefs and future resilience in the face of obstacles (Pajares & Zeldin, 1999). Additional research studies from the fields of psychology, business, and education have highlighted a lack of supportive mentoring relationships for women (e.g., Dreher & Cox, 1996; Paludi & DeFour, 1992) due to factors such as tokenism (Kanter, 1977) and effects of the null environment (Betz, 1989; Freeman, 1979), in which the absence of academic support and encouragement operates as a subtle yet powerful form of discrimination.

The present study addressed the need for additional research on the incidence, quality, and effects of mentoring and role models in the lives and career development of women. Furthermore, this study investigated the social support experiences of young women outside of academia, thus contributing to the broadening of the knowledge base about the career psychology of women.

## Summary

In summary, the goal of the present study was to apply a qualitative approach to the study of specific internal and external factors that may contribute to changes in women's life/career paths. Specifically, the project explored the contributions of life meaning and role modeling/mentoring to women's life and career decisions with the

intention of (a) developing knowledge about less-researched variables that may be contributing to women's career development, and (b) contributing to programmatic research through a longitudinal study of women's life/career choices.

### CHAPTER 2: REVIEW OF THE LITERATURE

With the goal of clarifying what additional factors may contribute significantly to the decisions that shape women's life/career paths, the following areas of literature were reviewed: (a) models of women's career development (to provide context for this investigation and to highlight critical variables from programmatic research that have been shown to relate to women's vocational paths); (b) life meaning, that is, research on the component constructs of role salience, values expectation and realization, goal orientation and life purpose, and cosmic meaning; and (c) social support research focused on role modeling and mentoring.

# Models of Women's Career Development

The models of women's career development in counseling psychology that have generated consistent empirical support have focused on the contribution of individual differences to the career choices and aspirations of women (Fitzgerald et al., 1995).

Farmer's (1985) multidimensional model of career and achievement motivation showed that both female and male students' levels of aspirations, mastery strivings, and career commitment were predicted by background factors (gender, race, age, socioeconomic status, and ability), personal characteristics (academic, self-esteem, independence, values, attributions), and environmental variables (support from parents and teachers). The data, collected from a group of Illinois 9<sup>th</sup>- and 12<sup>th</sup>-grade students (77% Caucasian, 9% Spanish origin, 8% African American, and 6% Asian/Eskimo/American Indian) indicated that educational and career aspirations were predicted strongly by background factors,

and that personal variables contributed the most to both mastery strivings and career commitment in the students.

Follow-up studies by Farmer and her colleagues (Farmer, Wardrop, Anderson, & Risinger, 1995) on 173 students from this sample who aspired to careers in math, science, or technology showed that, ten years later, fewer women (36%) than men (46%) persisted in these career areas. Persistence in women was related to the number of elective science courses taken in high school, math self-efficacy, and current career aspirations. Women's career commitment in general was correlated negatively with commitment to the home. In addition, both women and men placed more importance on the working role for women over time, yet men still trailed behind women on these scores. Farmer and her colleagues suggested that this difference in men's and women's expectations about women's work role plays a major role in conflicts regarding the home-work interface.

A second model was proposed by Betz and Fitzgerald (1987) after their extensive review of the research on the career psychology of women. This theoretical framework predicting career choice examined the direct effects of four independent variables (previous work experience, academic success, role model influence, and perceived encouragement) on three dependent variables (attitudes toward work, attitudes toward self, and sex role attitudes). These dependent variables were hypothesized to influence two other variables: lifestyle preferences and plans, and realism of career choice. In addition, role-model influence and perceived encouragement were proposed to be reciprocally related.

Using structural equation modeling, Fassinger (1985, 1990) tested Betz's and Fitzgerald's (1987) theoretical model of career choice with two different samples of college women. In the first study, Fassinger (1985) made several modifications to the model to improve the overall fit with the data collected from 309 junior and senior female students from a large Midwestern university (ethnicity of subjects not reported). In the final model, the construct of family orientation (predicted by feminist orientation and career orientation) and the construct of career orientation (influenced by ability, achievement orientation, and feminist orientation) predicted women's career choices. Family orientation and career orientation were reciprocally related. In addition, ability had a direct causal effect on career choice and achievement orientation.

Noting measurement and structural problems, as well as size and range restrictions in the sample, Fassinger (1990) improved upon her initial study, incorporating a new construct, mathematics orientation (Hackett, 1985), into the model. In this second study, undergraduate women from two universities were sampled (N = 663); the first group (n = 315) consisted of a large number of majors in allied health and the second group (n = 348) included a majority of students studying pre-law, business, and engineering. Data analyses were conducted for each group individually as well as for the pooled sample from both universities. The overall ethnic composition of the sample was representative of both university populations, with 83% being Caucasian.

Fassinger's (1990) revised model hypothesized a causal relationship between four independent latent variables (ability, agentic characteristics, feminist orientation, and family orientation) and three dependent latent variables (career orientation, mathematics

orientation, and career choice). In addition, career orientation and mathematics orientation predicted career choice, and reciprocal relationships were predicted between ability and agentic characteristics, and between feminist orientation and family orientation. Adjustments to this model included dropping the mathematics orientation latent variable; creating a sex role attitudes construct that combined the latent variables family orientation and feminist orientation; and measuring the dependent latent variable career orientation with career and family variables. The test of the final model showed that high ability, interacting with gender role attitudes and instrumental personality characteristics, predicted career orientation and choice of career. High ability and agentic personality characteristics contributed to choosing non-traditional, science-related, and high-prestige careers; agentic characteristics and liberal gender role attitudes predicted high levels of career orientation; and the dependent variables career orientation and career choice were reciprocally related.

Fassinger's (1990) study identified some important limitations in measuring the constructs of career choice and career orientation. The complex relationships among the measures for prestige, traditionality, and science-relatedness were thought to be contributing to inaccuracy in predicting career choice in the model. Also, measures for career choice did not capture how realistic or congruent women's choices were given their interests and abilities. Challenges with the career orientation construct included its limited "family versus career" focus; Fassinger articulated a need to measure aspirations for achievement within a given field, regardless of that field's categorization as

traditional or nontraditional. Finally, Fassinger expressed interest in testing and refining the model with additional diverse samples.

O'Brien and Fassinger (1993) found additional support for Fassinger's (1990) model, and also addressed some of the identified limitations. They tested two models of career choice with a sample of 409 adolescent women, that is, predominantly Caucasian (80.7%), college-bound (98%) seniors from a Catholic, all-female high school in the midwest. The first model, a replication and refinement of Fassinger's study, further validated the predictive value of the model for career orientation and career choice. The second model, which included an additional independent latent variable, relationship with mother, improved the fit of the model. O'Brien and Fassinger thus found support for the significant influence of ability, gender role attitudes, agentic personality characteristics, and relationship with one's mother on both the career orientation and career choice of young women. More specifically, young women who valued their career pursuits held liberal gender role attitudes, demonstrated instrumentality and self-efficacy with regard to math and careers, and exhibited moderate degrees of attachment and independence from their mothers. Moreover, high ability and a strong sense of agency contributed to women selecting nontraditional and prestigious careers.

O'Brien and Fassinger (1993) highlighted some measurement limitations in their study, particularly with the instruments assessing gender role attitudes. Expanding upon the model of career orientation and career choice tested by O'Brien and Fassinger, Rainey and Borders (1997) included maternal variables that assessed the role of mothers' gender role attitudes, employment status, educational status, and agentic characteristics

(e.g., independence, assertiveness, willingness to take a stand) on the career development of young women. Their study broadened the original sample by studying early adolescent girls and their mothers who lived in a rural area in the southern U.S. (N = 276 seventh- and eighth-grade students; approximately 96% Caucasian). In addition, Rainey and Borders tested two separate models with distinct outcome variables: career orientation and career aspiration. Results of the testing for the first model (career orientation) indicated a poor fit with the data: none of the variables significantly predicted career orientation, defined as interest in traditional versus nontraditional occupations for women. Results for the second model showed that two predictors (girls' agentic characteristics and maternal characteristics) contributed to the outcome variable, career aspiration. In both models, gender role attitudes of the early adolescent girls were influenced by agentic personality characteristics and by characteristics of their mothers (e.g., educational status, employment status, gender role attitudes, and agentic characteristics).

Schaefers et al. (1997) studied factors that were hypothesized to contribute to women's persistence in traditionally male fields. Their work responded to calls to integrate separate models of women's career development, and to attend to contextual variables like social support and barriers (Fitzgerald et al., 1995; Hackett & Lent, 1992). Drawing from self-efficacy theory, expectancy-valence theory, interest congruence theory, and studies identifying additional variables related to women's career development (e.g., Betz & Fitzgerald, 1987), they created a model of persistence that included the constructs of ability, self-efficacy, expectancy-valence, interest congruence,

and support-barriers. The model allowed for the evaluation of each of these variables' contributions relative to the predictive ability of the cumulative model. Participants were 278 male and female undergraduates in their third, fourth, or fifth years; all were American students who had entered college directly from high school with declared majors in engineering. Ethnicity of the sample was not assessed due to the marginal number (fewer than 5%) of minority students enrolled in the College of Engineering. Hierarchical logistic regression indicated that ability, self-efficacy, support-barriers, and interest congruence each added significantly to the prediction of persistence in engineering. Gender and expectancy-valence variables did not significantly predict persistence in the tested model. Overall, the model proposed by Schaefers et al. successfully identified 92.6% of persisters and 62.3% of nonpersisters.

Nauta et al. (1998) incorporated social-cognitive career theory into a model that extended research on the career aspiration construct (O'Brien, 1996; O'Brien & Fassinger, 1993). They tested specific pathways by which ability and role-model influence might predict career aspiration in two samples of women (students majoring in mathematics, physical science, and engineering; and students in biological science majors). Participants (N = 546) included 91% Caucasian, 6% Asian Americans, 2% African Americans, and 1% other ethnicities. The data yielded the following results: (a) Self-efficacy mediated the relationship between ability and career aspiration, and (b) both role conflict and self-efficacy mediated the effect of positive role-model influence on career aspiration. While the two samples of women did not differ in mean levels of career aspiration, the relationships between ability and self-efficacy and between positive role-

model influence and self-efficacy were stronger for women majoring in mathematics, physical science, and engineering compared to their colleagues in biological sciences. Nauta et al. speculated that these self-efficacy differences might be due to women's underrepresentation in math, physical sciences, and engineering majors: women may believe in the strength of their abilities more when they succeed at tasks not often accomplished by women; similarly, they may be more affected by positive role model influences in environments that may lack other forms of feedback and support.

O'Brien et al.'s (2000) longitudinal project had two main purposes. The first purpose was to extend the work of O'Brien (1996) on the role of attachment and separation in the vocational development of adolescent women. Using data collected from a sample of 207 young women (88% Caucasian, 6% African American, 2% Asian American, 3% Latina, 0.5% biracial, 0.5% other) during their senior year of high school and then five years later, O'Brien et al. tested a model that proposed specific relationships among attachment to and separation from parents, career self-efficacy, and career aspiration. In accordance with established theory and previous research findings, the researchers hypothesized that secure attachment and a healthy degree of separation would lead to high levels of career self-efficacy, which in turn would increase career aspiration. The second purpose of the study was to investigate changes in relational and career development variables over the five-year period. In addition to attachment and separation, career self-efficacy, and career aspiration, the variables traditionality, prestige, congruence (match between interests and job characteristics), and realism (match between ability and job requirements) were studied.

Results of the model testing (O'Brien et al., 2000) indicated that, at the time of the initial survey, attachment to mother significantly contributed to variance in career self-efficacy and career self-efficacy directly influenced career aspiration. After five years, attachment to father was the only variable that significantly and directly affected career self-efficacy; self-efficacy again affected levels of career aspiration. The results of the study also indicated a downward trend in women's career choices and career orientation over the five-year time period, with women selecting more traditional and less prestigious careers compared to those they had identified in high school; underutilizing their abilities in their careers; and intending to prioritize family over career while pursuing both.

Most recently, Quimby (2002; Quimby & O'Brien, 2004) tested a model of women's career orientation (defined as the importance placed on the pursuit of career interests) with a non-traditional college sample: reentry women. Diverse with regard to demographic factors such as age, marital status, number of children, work status, and income, reentry women were suggested to be more representative of the general population of women than traditional-aged students (Quimby & O'Brien, 2004).

Participants included 354 female undergraduate reentry students enrolled at a large Mid-Atlantic university; they ranged in age from 25 to 68 years (M = 33.95, SD = 7.6).

Ethnicity of the sample was: 66% Caucasian, 13% African American, 5.4% Asian American, 4.8% Latina, 2% Middle Eastern, 1.7% Biracial, and 0.8% Native American; 5.9% identified as "Other."

Quimby's (2002) model addressed limitations in previous research by integrating constructs from women's career development theory (Betz & Fitzgerald, 1987; O'Brien

& Fassinger, 1993) and social-cognitive career theory (Lent, Brown, & Hackett, 1994). Variables drawn from theoretical and empirical work on women's career development included ability, gender role attitudes, and career self-efficacy. The model predicted a direct path between gender role attitudes and career orientation, and an indirect path between gender role attitudes and career orientation, mediated by career self-efficacy. Additional variables in the model derived from social-cognitive career theory included role management self-efficacy, and social support and barriers. Consistent with socialcognitive career theory, an indirect path was proposed between ability and career orientation, with career self-efficacy as the mediator. Also, the variable perceived barriers was proposed to have both direct and indirect influences on career orientation (with the indirect relationship being mediated by career self-efficacy and role management selfefficacy). Finally, a direct path between perceptions of social support and career orientation, as well as an indirect relationship between perceived social support and career orientation (mediated by role management self-efficacy and career self-efficacy), were proposed.

The testing results (Quimby, 2002; Quimby & O'Brien, 2004) indicated that perceived barriers, perceived social support, and gender role attitudes had significant direct effects on career decision making self-efficacy, and that perceived barriers and perceived social support were significantly and directly related to role management self-efficacy (i.e., confidence with regard to managing student responsibilities and to pursuing tasks related to advancing vocational development). In addition, career self-efficacy had a significant direct effect on career orientation. The results did not support the

hypothesized paths between ability and career self-efficacy, liberal gender role attitudes and career orientation, and role management self-efficacy and career orientation. The independent variables accounted for 16% ( $R^2 = 0.18$ ) of the variance in career self-efficacy and 23% ( $R^2 = 0.23$ ) of the variance in role management self-efficacy. Overall, the data explained 7% ( $R^2 = 0.07$ ) of the variance in reentry women's career orientation.

In summary, while substantial progress has been made over the last two decades in identifying and distilling critical variables that contribute to women's life/career decisions, a substantial amount of variance in the career behavior of women remains unexplained. The current study therefore investigated additional factors that may contribute to our understanding of women's life choices.

### Life Meaning

Life Meaning: Component Constructs

The construct of life meaning articulated in this study bridges the literature in a range of fields, including vocational counseling, human resource development, existential psychology, and positive psychology. The following section identifies key component constructs from each of these fields that, when linked together, provide a comprehensive framework for talking about life meaning as it relates to vocational decision-making and women's life/career paths.

# Role Salience

Historically, research in the areas of career counseling and human resource development focused largely on role salience, or role importance, a construct that is informed by role theory and the meaning of work literature (Super & Ŝverko, 1995). This

section briefly will describe these two lines of research and their integration in the Values Scale and Salience Inventory of the international Work Importance Study (WIS, Super & Ŝverko, 1995).

According to Gouws (1995), the concept of roles, and formulations of role theory, have a history of over 50 years in the academic literatures of sociology, anthropology, psychology, education, and management. Initially, theory and empirical studies focused on traditional male roles, that is, on the activities of work and leisure. As a result of the need to address the impact of profound economic and social changes in the lives of many American women and men over the last few decades, definitions of work have broadened to include the many roles that individuals adopt over their lifetimes, with emphasis on the various combinations and sequences of those roles. Referring to the metaphor of an actor who plays a character in a show, Gouws defines roles in the following way:

A member of society generally occupies one or more positions in a particular social system, shows a more or less coherent pattern of behaviors characteristic of or at least consistent with each position, is implicitly or explicitly aware of social norms and the expectations of others regarding appropriate conduct in each position, has personal ideas or conceptions of what behavior is appropriate for each position, and, like the actor, receives feedback (rewards or punishments) from others. (p. 22)

Role theory thus emphasizes the social construction of individuals, who conform to the normative behaviors of prescribed life positions.

The research literature addressing the meaning of work is specific to the traditional notion of workplace. Similar to role theory, however, Ŝverko's and Vizek-Vidović's (1995) definition of the meaning-of-work concept acknowledges the influence of societal shaping: individuals, interacting with their social environment, acquire a set of beliefs about work. Because these beliefs are thought to be related to a person's career orientation and work behavior (e.g., job performance and job turnover), research on the meaning of work has remained of interest to both vocational and organizational specialists (Ŝverko & Vizek-Vidović, 1995). The research approaches have included investigations of (a) the function of work in people's lives, that is, what values and goals they try to achieve through working; (b) the importance of work in relation to an individual's self-image (psychological identification with one's work) and in relation to other life roles; and (c) the effects of work alienation, or, a lack of opportunity for self-fulfillment through work (Ŝverko & Vizek-Vidović, 1995).

Integrating the above research approaches on role theory and work meaning,
Super and Ŝverko (1995) developed two instruments for the multinational WIS: the
Values Scale and the Salience Inventory. Conceptualizing "value" as "an objective, either
a psychological state, a relationship, or a material condition, that one seeks to attain or
achieve" (Super, 1980, p. 82, cited in Super & Ŝverko, 1995), the Values Scale consisted
of 18 values: Ability Utilization, Achievement, Advancement, Aesthetics, Altruism,
Authority, Autonomy, Creativity, Economics, Life-Style, Personal Development,
Physical Activity, Prestige, Risk, Social Interaction, Social Relations, Variety, and
Working Conditions. Measure items were sentence completions in the form of: "It is now

or will be important for me to \_\_\_\_\_\_," for example, "get ahead" (Advancement), "help people with problems" (Altruism), "discover, develop or design new things" (Creativity), "be admired for my knowledge and skill" (Prestige), or "do risky things" (Risk). The Salience Inventory assessed the degree of importance of life roles in five areas of human activity: work, study, homemaking, community activities, and leisure. "Importance" was evaluated in terms of an individual's participation in a role (a behavioral dimension capturing the amount of time and energy given to a role), role commitment (an affective dimension indicating emotional attachment to a role), and perception of the possibility of realizing particular values through a role (an affective-cognitive dimension).

A foundational assumption of the WIS model supported by the study's crosscultural data (stated here in terms of the work role only) was that

the importance or salience of work in individuals' lives depends mainly on their perception of the opportunities for the realization of salient values within their work roles....only work that is perceived as providing an opportunity to realize various needs and values can be the source of real job satisfaction and intrinsic work motivation. (Ŝverko & Vizek-Vidović, 1995, p. 18)

Super's and Ŝverko's (1995) construct of role salience, with its thorough empirical grounding in role theory and the meaning of work literature, and its consequent emphasis on the realizing of personal values through one's chosen/assigned positions in society, thus entails a sophisticated approach to thinking about the meaning women may ascribe to their various life roles. The substantial data collected by the WIS provide an invaluable

opportunity to track patterns and changes in women's personal values and significant life roles over time and across cultures.

Life Meaning Construct in Existential and Positive Psychology

The construct of life meaning as it has evolved within the existential and positive psychology traditions shares key elements with the construct of role salience. However, the life meaning construct offers a definition that originates from a paradigm more general than the world of work and it extends the discussion of meaning in women's lives to include global views of meaning and more explicit treatment of life meaning's connection to overall satisfaction and well-being.

The literature of existential psychology (e.g., Frankl, 1984; Yalom, 1980) has given full attention to the exploration of the meaning of life in relation to individuals confronting suffering, aloneness, and the inevitability of their own deaths. Within the last decade, research in the burgeoning arena of positive psychology has extended the work of Frankl (1984), Yalom (1980), and others who observed connections between positive life meaning and a reduction in/absence of psychopathology (Csikszentmihalyi, 1990; Park & Folkman, 1997; Ryff & Keyes, 1995; Schneider, 2001; Zika & Chamberlain, 1992). For example, empirical studies and theoretical articles have investigated the role of life meaning (also identified as "sense of purpose") in psychological well-being, both generally (Ryff & Keyes, 1995; Zika & Chamberlain, 1992) and with regard to specific variables thought to contribute to well-being: the ability to cope with stressful life events and circumstances (Park & Folkman, 1997), a predisposition toward optimism

(Schneider, 2001), and the capacity to set and reach goals (Cantor & Sanderson, 1999; Csikszentmihalyi, 1990).

A challenge inherent in exploring the construct of life meaning within the existential and positive psychology literature has been one of definition; conceptualizations and operationalizations of life meaning abound. Yalom (1980) attributed this to the inexactness of conventional language, and helped to clarify terms that often are used interchangeably. He distinguished among "meaning," which refers to a sense of coherence; "purpose," which refers to the aim, intention, function, or role of something; and "significance," which can imply something very similar to meaning or can confuse matters when taken to mean "importance" or "of consequence." (Supporting Yalom's point, Super's and Ŝverko's (1995) construct of role "importance" implies both consequence and Yalom's definition of "purpose.") Building upon these definitions, Yalom articulated a distinction between questions of cosmic meaning and questions of terrestrial meaning.

Cosmic and terrestrial meaning. Queries about cosmic meaning ask whether life in general is guided by a coherent universal plan. Yalom (1980) suggested that this universal plan typically was an ordering of the universe originating from magic or spirituality. Zika and Chamberlain (1992) described this component of life meaning as the perception that the world is "sensible, ordered, and predictable" (p. 138). A dimension of Park's and Folkman's (1997) definition of "global meaning" entailed people's "fundamental assumptions, beliefs, and expectations about the world" (Global Meaning section, ¶ 1), for example, assumptions about order, that is, individuals'

perceived control over events in relation to their beliefs about the goodness of the world, its people, and its events.

For Yalom (1980), questions of terrestrial (personal) meaning focus on purpose or function, that is, on the overriding goals that organize, justify, and direct one's life (e.g., altruism, dedication to a cause, creativity, hedonism, self-actualization). This element of the life meaning construct is virtually identical to the affective-cognitive dimension of Super's and Ŝverko's (1995) role salience construct, in which an individual seeks to realize deeply-held personal values through her life roles. Indeed, Yalom indicates that experiencing meaning in life involves "some fit between one's goals and values and the roles and needs of the social structure in which one is enmeshed" (p. 459). Like the role salience construct, Yalom's life meaning construct acknowledges the contributions of socializing forces to the shaping of personal values and the living of life roles.

Goal-setting. The positive psychology literature has addressed this functional, motivational aspect of life meaning in a number of empirical studies on goal-directedness. Park and Folkman (1997), in their review of the goal literature, make reference to a hierarchy of goals, with some being superordinate and distal, and others being more situation-specific and proximal. Typically, individuals pursue proximal goals that contribute to reaching distal, superordinate goals such as pleasure, autonomy, relational intimacy, career achievement, power, generativity, and self-transcendence (Park & Folkman, 1997). Although individuals are not always explicitly aware of their own distal or proximal goals (Martin & Tesser, 1989; Vallacher & Wegner, 1987), this

goal orientation provides a sense of purpose and contributes to overall well-being (Zika & Chamberlain, 1992).

Interplay of terrestrial and global meaning. Yalom (1980) pointed out that an individual's sense of personal meaning or purpose may exist independently of their cosmic meaning system, but often works in conjunction with it. For example, a positive sense of life meaning was found to be associated to deeply held religious beliefs (Yalom, 1980); this has been substantiated by more recent work on subjective well-being and religion (Diener, Suh, Lucas, & Smith, 1999). Similarly, Park and Folkman (1997) emphasized the need to look at the powerful impact of goal systems in the lives of individuals as they play out in the realm of global meaning, for example, in the development of beliefs about causation and agency, or in connection with people's fundamental need for cognitive stability and coherence. Attention to the interplay of these two levels of meaning in women's lives may provide important insights into how women's deeply rooted beliefs about the world inform their current and future identities in society.

Developmental/situational aspects of life meaning. Yalom (1980) also added a developmental perspective to the construct of life meaning, suggesting that individuals' sources of meaning change over the course of their lives. Park and Folkman (1997) referred to "situational meaning...the meaning that is formed in the interaction between a person's global meaning and the circumstances of a particular person-environment transaction" (Introduction, ¶ 5). An individual's global meaning system can be affected through experiences in her environment. For example, events that impede her central

goals (which are expressions of her deepest personal values and commitments) could fundamentally diminish her sense of purpose and direction in life and thus challenge her sense of global meaning (Park & Folkman, 1997). Researchers in the field of human relations also have employed a situationist perspective in studies of role identity and meaning, hypothesizing that men and women both identify work and family roles as sources of meaning as a result of their involvement in the roles, not because of culturally dictated identities (Aryee & Luk, 1996). Thus, the existential and positive psychology literatures as well as vocational development literature include a developmental or malleable view of the life meaning construct, which can contribute to capturing the complex, often non-linear path of women's life and work decisions.

Summary: Life Meaning Construct

In conclusion, the construct of life meaning suggested in the present study offers an integration of diverse research on life meaning and vocational development. The literatures of existential psychology and positive psychology and their broader definitions of life meaning complement the established vocational development literature on the construct of role salience. Together, these literatures provide a comprehensive working construct for life meaning that includes attention to value systems, salience of life roles, goal-orientation, life purpose and order, and the experience of overall personal fulfillment and well-being. The following section will address current research in these areas as it informs the development of women's life/career paths.

## Life Meaning: Review of Research

Harr (1995) described the search for meaning as an essential driving force of career development: many individuals seek a path through work and life that allows them to express and create what is most meaningful to them, to realize a sense of individual purpose and significance. The literature reviewed in this section addresses this connection between what is most meaningful (most valued, most important, most fulfilling) in people's lives and what they aspire to do and be. In particular, research on the Depth of Meaning in Life Scale (De Vogler-Ebersole & Ebersole, 1985), the construct of role salience (WIS, Super & Ŝverko, 1995), the construct of subjective task value (Eccles, 1987, 1994), values/life role expectations and realization (Arnold, 1993; Granrose & Kaplan, 1996), life meaning and goal-orientation (Cantor & Sanderson, 1999; Diener et al., 1999; Park & Folkman, 1997; Ryan & Deci, 2000; Zika & Chamberlain, 1992), and cosmic life meaning (Cochran, 1990; Diener et al., 1999; McCann & Pearlman, 1990; Park & Folkman, 1997; Yalom, 1980) will shape our understanding of how the search for meaning motivates women's life and work choices.

#### Depth of Meaning in Life Scale

De Vogler-Ebersole and Ebersole (1985), in developing their Depth of Meaning in Life Scale, asked participants (N = 50 college women) to write down and rate in the order of importance all those things that provided their major sources of meaning (space for ten responses was provided). Participants also wrote about "the thing that you find gives you greatest meaning in your life" (p. 304). These individuals reported an average of 6.29 areas in their lives that provided meaning. Interrater analysis of the essays about

the most meaningful thing in one's life yielded a percentage distribution of categories of life meaning. The women's priorities were as follows: Relationships (37%), Belief (18%), Growth (13%), Life Work (10%), Pleasure (10%), Service (5%), Miscellaneous (6%), and Health and Obtaining combined (1%). Relationships were the source of greatest meaning for this group, accounting for more than a third of the responses. This prioritization of relationships as the source of meaning also was reflected in previous samples of adults over thirty years old (51%) and young adolescents (67%) using this measure (Klinger, 1977; Young, 1974, cited in DeVogler-Ebersole & Ebersole, 1985). *Findings from the Work Importance Study* 

A significant contribution to the research on role importance has been the WIS (Super & Ŝverko, 1995), an extensive international project spanning sixteen years and eleven countries. Analyses of the data provided strong support for the WIS model's basic proposition, that is, that the importance or salience of particular roles in individuals' lives would be highly correlated with their perceptions of the opportunities for the realization of salient values within those life/work roles. Roles perceived as providing the possibility for realizing dominant needs and values were both satisfying and intrinsically motivating (Ŝverko & Vizek-Vidović, 1995).

Nevill (1995) reported on the United States sample of the WIS, including a number of validation studies for the project's instruments: the Values Scale and the Salience Inventory. The sample was collected across age groups (high school, college, and adult samples). The high school sample (N = 2,816 for the Values Scale; N = 3,347 for the Salience Inventory) was diverse in terms of grade level; type of population (urban,

suburban, and rural); socioeconomic status; and geographical region. The college sample (N = 2,140 for the Values Scale; N = 2,693 for the Salience Inventory) included liberal arts, fine arts, and science students from mostly large state universities representing the major regions of the country. The adult sample (N = 1836 for the Values Scale and N = 979 for the Salience Inventory) was obtained from participants at conferences, random nationwide mailings from American Psychological Association Divisions, and adult acquaintances of graduate students in the general population. The adult sample represented all of the Holland-type occupations (realistic, investigative, artistic, social, enterprising, and conventional) and the literate socioeconomic levels, and was diverse in terms of geographical region, age, and gender. Statistics on race/ethnicity were not reported for any of the samples.

Nevill's (1995) report included specific findings with regard to gender for both the Values Scale and the Salience Inventory. Research on the Values Scale found support for hypothesized differences between values of men and women. Specifically, Yates (1985b, cited in Nevill, 1995), in his WIS investigation of military personnel, found that adult women placed significantly greater importance on the values of Aesthetics, Personal Development, Working Conditions, and Altruism compared to men. Men gave more importance to Risk and Physical Prowess than their female counterparts. However, men and women showed virtually identical rankings for the seven most important values: Economic Security, Achievement, Ability Utilization, Personal Development, Advancement, Economic Rewards, and Life-Style. Nevill (1988, cited in Nevill, 1995) also studied the Values Scale, with a nationwide sample of investigative and social

psychologists. She reported higher scores for women compared with men on the following values: Ability Utilization, Achievement, Working Conditions, Personal Development, and, notably, Risk.

Validation studies with the Salience Inventory examined the relationship between gender and Commitment to Home and Work (Nevill, 1995). The high school sample yielded a low positive correlation between being female and being Committed to Home and Family. A difference was found between male and female students in their Commitment to Work and Commitment to Home and Family roles; female students were relatively more Committed to Home and Family and male students were relatively more Committed to Work. By contrast, data from a sample of higher education students indicated that men and women did not differ in their relative Commitment to Work versus Commitment to Home and Family. Both male and female students showed a greater commitment to Home and Family than to Work. Participation in Home and Family, however, did yield a gender difference, with women participating more than men.

According to Nevill (1995), this progression from secondary to higher education, with the gender difference in motivation toward either Work or Home and Family lessening with the movement to higher education, is likely due to the presence of a higher percentage of both career-focused women and men who have been exposed to changes in contemporary gender-roles. This hypothesis is supported by Hawley and Even (1982), who found increased gender similarities on career development attitudes and behaviors as educational level increased from before secondary school to graduate school.

WIS studies with older populations reported more traditional gender role differences on the Salience Inventory (e.g., Ellermann & Johnston, 1988; Yates, 1985a). Yates' (1985b) study with adult students in an off-campus adult-education university-degree program in the Midwest (N = 321) found that women, relative to men, showed more Participation in Home and Family Activities; indicated greater Commitment to Work, to Community Affairs, and to the Home and Family; and looked for more satisfaction from activities related to the Community and to the Home and Family. Ellermann and Johnston (1988), in their research on senior women, indicated that women in nontraditional majors (pre-medicine, engineering, and business) were less Committed to Home and Family than women in traditional majors (special education, nursing, and home economics).

Another series of research projects using the Salience Inventory assessed the relationship between gender and career maturity (Super & Nevill, 1984; Nevill & Super, 1988). These studies surveyed secondary school students from central New Jersey schools (N = 204) and higher education students from two large public universities in Florida and Maryland (N = 446). Socioeconomic status was reported for each study and showed overrepresentation of higher socioeconomic levels; ethnicity was not reported for either sample. Career maturity was measured by the Career Development Inventory (Super, Thompson, Lindeman, Jordaan, & Myers, 1981). Gender and career maturity were correlated to a small degree in the secondary school group, with female students scoring higher on the cognitive aspects of career maturity. According to Nevill (1995), this early cognitive development was viewed as potentially detrimental, since it meant

that women might be foreclosing on their career options before they had sufficient knowledge of themselves or the working world. Indeed, subsequent correlations indicated that female students who showed any level of career commitment were more vocationally mature than other females or than males. This distinction was not found in the higher education samples, however, where men and women who were highly committed to their careers showed similar career maturity levels.

The relationship between role salience and gender also was investigated with the above samples (Super & Nevill, 1984; Nevill & Super, 1988). Secondary school females showed more home than work commitment, and males indicated more commitment to work than to home. Female college students, however, were more committed to both work and home compared with their male counterparts. Nevill (1995) pointed out that this greater commitment to work did not correspond with greater values realization scores for women: women were more committed to work than men but did not view work as an outlet for realizing personal values to the same degree that men did. She suggested that women's higher work commitment levels might be reflective of women's ability to meet personal needs through work, women's tendency to be highly involved and responsible, and/or a realistic acknowledgment of limited opportunities in non-traditional fields.

Women's greater participation in and commitment to home activities, on the other hand, corresponded with higher expectations for realizing personal values compared with men.

Perhaps the most relevant WIS investigation to this thesis project is that of Claes, Martin, Coetsier, & Super (1995), who developed a comparative portrait of homemakers and employed women in Belgian Flanders and the Southeast United States based on their

perceptions of their life roles. Citing the large, although declining, number of women primarily identifying with the role of homemaker and the increasing number of women dealing with the dual roles of worker and homemaker, the authors designed their study to address such research questions as: What are women's important life roles and values?, In which roles do women realize the values that are important to them?, What are women's important career concerns?, How satisfied with their life roles are homemakers and working women?, and What is the potential for role conflict?.

Participants in the Belgian Flemish sample (Claes et al., 1995) were homemakers and working women, all 40 years of age (due to the assumption that most women of this age would usually be established in home, work, or both roles). Both the homemaker (N = 161) and the working women (N = 120) groups were varied in terms of level of education, employment status, occupational level, number of children, and husband's occupational level. The homemaker group was selected randomly; for the group of working women, all demographic variables were random except educational level, which was stratified across the sample. More than 90% of the women in each group were married. The average participant had received more than a secondary education, and, if working, was employed full-time in a skilled position requiring a college-level education. Interviews for both groups were held in respondents' homes (in small groups for the homemaker sample), and measures included the Salience Inventory (Super & Ŝverko, 1995) and the Values Scale (Super & Ŝverko, 1995).

Participants in the Southeast United States sample (Claes et al., 1995) were varied in age, ranging from 27 to 54, with a mean age of 37 years (no SD reported). Interviews

were conducted individually at the respondents' homes or offices; 29 homemakers and 29 working women participated. Similar to the Belgian sample, over 90% were married and the modal woman had more than a secondary education, with full-time, skilled, college-education-level employment if she was working. The ethnicity of the women in the sample was not reported. U.S. women completed the Salience Inventory (Super & Ŝverko, 1995) and the Adult Career Concerns Inventory (Super, Thompson, & Lindeman, 1988).

Claes et al.'s (1995) results from the Salience Inventory (Super & Ŝverko, 1995) showed that homemakers in both countries ranked Home first on all three scales (Participation, Commitment, and Value Expectations). Working women in both countries ranked Home first and Work second on the Commitment and Value Expectations scales. Belgian women rated Work and Home equally and as most important on the Participation scale, whereas United States women indicated greater Participation for Work (ranked first) than Home (ranked second), though this difference in the U.S. group was not significant. Thus, in both countries, homemakers and career women ranked the Home role first in terms of Participation, Commitment, and Value Expectations. Within group comparisons showed that working women in Belgium were more committed to Home than to Work, and have greater Value Expectations for the Home compared with Work. In the U.S., working women's Commitment and Value Expectations for Home versus Work did not differ.

Claes et al.'s (1995) data for the Values Scale (Super & Ŝverko, 1995), available only for the Belgian sample, were used to assess which important values women expected

to realize in which roles. The results indicated that both Flemish homemakers and career women believed they could realize their most important values in the role of homemaker. The most important values of homemakers were: Aesthetics, Ability Utilization, Working Conditions, Life-Style, Altruism, and Autonomy; the values listed as most important by Working women were: Aesthetics, Ability Utilization, Autonomy, and Life-style. Working Conditions was the only value that career women expected to realize in both Work and Family. When the homemaker and working women groups were combined, educational level predicted Participation in and Value Expectations of the role of homemaker, with university-educated respondents scoring very low on homemaker role salience and women with less than a university education scoring higher.

Overall, women in both the Belgian and U.S. samples (Claes et al., 1995) indicated satisfaction with their most important roles. Ten percent of women in the Belgian sample reported dissatisfaction; in the U.S., 7% of working women compared to 25% of homemakers were dissatisfied with their roles. The majority of women in both samples were satisfied and actively fulfilling the roles that were most salient in their lives; approximately 25% were enthusiastic about their roles. Both samples of women expected to realize important values in their roles, and their career concerns generally matched their current role status. Moreover, based on the responses elicited by these instruments, there seemed to be little evidence of conflict among roles.

Eccles' Subjective Task Value

In the field of motivation research, Eccles (1994) applied her theoretical model of achievement-related choices (Eccles, 1987) to women's educational and occupational

choices. In addition to expectancy (individuals' expectations for success at particular tasks--similar to the self-efficacy variable in the counseling psychology literature), the model emphasizes subjective task value, the importance or value individuals attach to the various achievement-related options they perceive to be available to them (i.e., Even if a woman expects to do well at a task, she will not pursue it unless she values it.). Both expectancy and value beliefs are influenced by social and cultural factors, including gender role stereotypes and cultural stereotypes of occupational characteristics, socializers (e.g., parents and teachers), an individual's memories and self-perceptions about previous achievement-related experiences, and perceptions about the task itself (Eccles, 1987, 1994).

Subjective task value, as defined by Eccles and her colleagues (1994), includes four components: (a) the utility value of the task in facilitating one's long-range and intermediate goals; (b) intrinsic interest in and enjoyment derived from the task; (c) attainment value, the value an activity has due to its compatibility with one's self-image; and (d) the cost of engaging in the task. Eccles argued the following:

...personal needs, self-images, and values operate in ways that both decrease the probability of engaging in those activities or roles perceived as inconsistent with one's central values and increase the probability of engaging in roles or activities perceived as consistent with one's definition of self. (p. 597)

More specifically, Eccles and her team theorized that individuals perceive tasks in terms of certain characteristics that can be related to their needs and values, for example, viewing a task as competitive, nurturing, aesthetically pleasing, or as a source of

achievement. Participation in a task is seen as an opportunity or a burden depending on whether the task characteristics are consistent with individual values, motives, and needs, and whether it is perceived as desirable to demonstrate these characteristics to oneself and others.

Research findings supported the hypothesis that individual differences in educational and occupational choices are mediated by the relative subjective task values of those educational pursuits and vocational occupations (Eccles, 1994). In their longitudinal study of intellectually able, college-bound high school students, Eccles [Parsons], Adler, and Meece (1984) showed that gender differences in the value attached to mathematics mediated the gender differences in enrollment in advanced mathematics courses. Young women, compared with their male counterparts, believed that math was less useful, less important, and less enjoyable. Eccles and Harold (1992) found similar results with elementary school children in a gifted program; no gender difference existed with regard to expectations for success in mathematics, but girls rated math as less enjoyable and less useful.

Eccles' and her colleagues' (Josefowicz, Barber, & Eccles, 1993, cited in Eccles, 1994) longitudinal study of 1,000 adolescents (The Michigan Study of Adolescent Life Transitions) further substantiated the hypothesis, demonstrating that the values that high school seniors associated with aspects of particular jobs both positively and negatively predicted their occupational aspirations. For example, young women who valued helping others did not aspire to careers in the physical sciences and young women who valued creativity planned to become artists or writers. Consistent with traditional gender roles,

the young women in the sample valued jobs that involved helping others while the young men placed more value on jobs that provided financial reward and personal recognition.

Values/Life Role Expectations As Predictors of Achievement

A study by Arnold (1993) analyzed the career outcomes of 46 academically talented women five and ten years after graduation from high school. This sample constituted all of the female participants in a larger project that studied 1981 graduates (all were valedictorians or salutatorians) from Illinois city and suburban public and private high schools. Participants in the study as a whole were of predominantly European-American descent, and the occupations of their parents included farmers, laborers, business and craftspeople, and professionals. After 10 years, 93% of these men and women had completed college degrees (overall GPA for the participants was 3.6 on a 4.0 scale); of these college graduates, 75% had majored in business, engineering, or science.

According to Arnold (1993), "In the first decade of the Valedictorian project, gender emerged as the single most salient determinant of the aspirations and attainments of these gifted young adults" (p. 169). Women, in contrast to men, reported lowered intellectual self-esteem starting in sophomore year of college (despite the fact that women's academic performance was equal to or higher than men's), expectations of future work-family role conflict, and plans to reduce their future labor force participation to accommodate child raising. Ten years after graduating high school, 50% of the women, compared to 80% of the men, were working in prestigious male-dominated

careers, and a disproportionate number of women were employed at the lowest occupational levels, including traditionally female-dominated professions and clerical positions.

Spurred by these findings, Arnold (1993) performed a number of discriminant function analyses patterned on the Terman Genetic Studies of Genius (1959) investigation of the most and least successful male subjects. Her purpose was to identify intergroup differences that might explain varying levels of career aspiration among the gifted women. In their senior year of college, 1985, the high and low aspiring groups of women were equivalent in ability, intellectual self-esteem, socioeconomic status, selectivity of college institution, and the desire for professional work that used their talents. The groups were differentiated by the following variables: the educational and occupational level of the women's mothers, the desire to help others but not necessarily in the context of service professions, and plans for marriage and children later in life. In 1991, ten years after their high school graduations, the low and high aspiring groups actually were shown to have married at the same rates and ages; they differed in that they had planned, in 1985, for later marriage and childbearing. In addition, more low aspiring women already were parents in 1991, and had attained less advanced education. Overall, Arnold's study indicated that differences in women's career aspirations were largely a function of the presence of children and their approaches to balancing career and family. These results led her to suggest that values and life role expectations, rather than academic achievement, are better predictors of the early adult achievements of top female students.

Values Realization and Life Role Satisfaction

A study by Granrose and Kaplan (1996) followed more than 200 women who were making decisions regarding employment and family during the first decade after their college graduation. The participants were predominantly European-American and lived in urban and suburban areas of the Northeastern United States. Women were organized into four life choice categories (Careerists, Homemakers, Breadwinners, and Nesters) based on their intentions in college (Phase I), and then subsequent decisions in the following ten years (Phase II), regarding career and childrearing plans. Careerists reported being more likely to return to paid work than to stay at home in both Phase I and Phase II. Homemakers' Phase I and Phase II comments indicated a higher likelihood of staying home versus returning to paid work. Breadwinners reported a higher probability of staying at home in Phase I and a higher likelihood of returning to work in Phase II.

Nesters' responses indicated a higher probability that they would return to paid work in Phase II.

Empirical and qualitative analyses were performed to identity facilitators and barriers for each of the categories. Women also identified the consequences of their life choices on themselves, their partners, and their children. For the women in each group, satisfaction with their life/career decisions was a product of the following elements: having followed their individual values, the presence of supportive social networks (friends, spouses, coworkers), and working in organizations that were supportive of families.

Careerists, the women who remained committed to their careers during the decade after college, believed that their paid work expressed a key part of who they were. They selected people and experiences that supported their choices to be employed mothers and their beliefs about employment as a source of advancement, pride for one's achievements, income, and fun. These women had faith in their abilities to manage the time challenges that come with work and family roles. Their biggest struggles involved lack of acceptance and support of these multiple commitments by employers and institutional policies. Careerists maintained their self-confidence and life satisfaction by adhering to their central beliefs; their lives were internally consistent and supported by their personal networks.

Homemakers were content with their consciously-made decisions to remain out of the paid work force. They viewed this commitment to home as the best way to meet the needs of themselves and their families, believing that no one can take the place of a mother. They derived satisfaction from sharing this traditional sex role ideology with their working spouses, and were willing to make financial sacrifices, justify some lack of personal time/independence, and resist societal messages about the importance of work in women's lives because of their belief in the importance of their mother role.

Influenced by changing economic conditions and social norms, the Breadwinners became less enamored with full-time homemaking and more involved with paid work over time. They reported being motivated by the economic benefits to their family, but they also indicated enjoyment of their jobs. They were not particularly committed to achievement at work as a life goal, however, as employment was not key to their

identities. The Breadwinners were particularly careful about time management and childcare arrangements, and chose work arrangements that allowed them to experience their children's development. These women were free from both the careerist and homemaker identities, and thus shaped their life and work choices around their current and long-term needs.

The Nesters, who remained at home after childbirth instead of returning to work, represented the smallest group in this study and suffered the most ambivalence of the four groups of women. Abandoning their career aspirations for homemaking meant, at times, disapproval from peers and feeling "backward" in terms of societal advances for working women. These women received little support from their personal networks and exhibited patterns of self-sacrifice; these factors contributed to the abandoning of their careers, and to reductions in their self-confidence and feelings of well-being. Nesters saw careers as a luxury or as a form of self-centeredness; they spent much of their time sacrificing for their families' needs. However, these women lacked the strong belief in motherhood and family values that marked the Homemakers; the interruption of their careers thus remained a source of ambivalence for them.

According to Granrose and Kaplan (1996), one of the most significant implications of their study was the emphasis that emerged on identifying and living one's values in relation to decisions about life and work:

...the question of "What do I prefer and value" is at the heart of adolescent struggles for identity and adulthood. The reason this question, so simple to pose and so difficult to answer, is the key question in that it plays a crucial role in

encouraging consistency between early and later adulthood and in promoting satisfaction with life choices if a woman decides to change her mind. (p.124)

In the midst of rapid changes in society and in developmental tasks, the majority of the participants in this study affirmed their varied identities by choosing social roles that satisfied their needs and values and that were supported by their personal networks. This quantitative and qualitative longitudinal project thus supported the findings of other studies connecting personal values with decisions about life and occupational roles. It also explicitly included the construct of life satisfaction, the sense of fulfillment arising from congruence between one's values and chosen roles. Both of these components were captured in the definition of life meaning used in this study.

# Life Meaning as Goal Orientation

As noted in the introduction, and as explicated in previous sections, major elements of the life meaning construct, as defined in this study, appeared in the work/role importance and career/life values literature, and these components were found to be highly relevant to women's life/career choices. Explicit use of the term "life meaning" or even the foundational construct "meaning of work," however, was rare in the current career development literature. Where "life meaning" seems to be making a comeback is in the burgeoning positive psychology literature, particularly as it relates to the concept of goals, a construct familiar to the vocational literature. Most of the positive psychology studies on goal orientation have not addressed the relationship between gender and goals, as will be evident in this section. An exception to this is Holahan's (1994) secondary analysis of data from the Terman Study of the Gifted. This investigation not only

explored the achievement goals of women across their life-spans but also directly connected this exploration of goals to a discussion of meaning in women's lives. The description of the Holahan study will conclude this section.

Goal-setting concepts have been important to various models of career development (e.g., Lent et al., 1994; Super et al., 1996). The career theory literature documents an association between high levels of motivation and work performance--and firmly held, specific, and challenging but attainable goals (Brown & Ryan Krane, 2000). Recently, however, research in the field of positive psychology has broadened investigations of goal-setting to include its relationship with constructs such as life meaning, life satisfaction and subjective well-being (e.g., Cantor & Sanderson, 1999; Diener et al., 1999; Ryan, Sheldon, Kasser & Deci, 1996; Zika & Chamberlain, 1992).

Goals are typically defined in the positive psychology literature as expressions of the values and commitments of individuals (Lazarus & Folkman, 1984) or as objectives toward which individuals strive (Emmons, 1996). Goal-striving or goal-orientation concepts have been included as components of the life meaning construct (Cantor & Sanderson, 1999; Klinger, 1977; Reker & Wong, 1988; Park & Folkman, 1997; Zika & Chamberlain, 1992). For example, Zika and Chamberlain (1992) studied the relationship between meaning in life and well-being. They assessed life meaning, in part, by measuring the degree to which an individual possessed a set of life-goals and the degree to which these goals were fulfilled; goal-setting and goal-fulfillment were conceptualized as contributing to individuals' overall sense of purpose and meaning. As a second example, Park and Folkman (1997), in their elaboration of the dimensions of meaning

relevant to stressful life events, contended that goals were central to the meaning systems of individuals; through the pursuit of goals, one discovers a sense of purpose in life. Third, researchers have shown that the more central a goal is within an individual's meaning system, the more goals it will subsume (Emmons, 1992; Stein & Levine, 1990; Stein, Trabasso, & Liwag, 1993). As an illustration, the goal of having a career as a professional athlete might include many sub-goals such as breaking previously-held times, gaining corporate endorsements, financially aiding one's parents, and being a role model for children (Park & Folkman, 1997).

The extensive program of research of Deci, Ryan, and colleagues (Ryan & Deci, 2000) does not explicitly use the construct of life meaning, but their construct of basic psychological needs, like the life meaning construct as it has been developed in other positive psychology research, includes a component that addresses the pursuit and attainment of culturally congruent aspirations (goals) and life values. These aspirations, which include intrinsic goals such as affiliation, personal growth, and community and extrinsic goals such as wealth, fame, and image, are remarkably similar to both Yalom's (1980) "terrestrial meaning" and the values articulated in the studies from the vocational development literature, for example, Super's and Ŝverko's (1995) Work Importance Study. While most of the research in the positive psychology literature has focused on the relationship between personal goals and general well-being, one study by Baard, Deci, and Ryan (1998) looked at performance and well-being in the workplace as a function of fulfillment of the basic psychological needs of autonomy, competence, and relatedness. The results of the study showed that employees' experiences of satisfaction of these basic

needs in the workplace predicted both employee performance and well-being at work.

Again, parallels can be drawn between these findings and those connecting values/sources of life meaning with salient life roles.

One summary of findings that is particularly relevant to this project is that "people's goals represent their current identity and their future ideal selves" (Park & Folkman, 1997, Global Meaning: Purpose section, ¶ 1). Goals thus reflect and contribute to individual meaning-making and self-actualization. Consistent with this, the positive psychology goal literature makes reference to a hierarchy of goals, with some being superordinate and distal, and others being more situation-specific and proximal (Park & Folkman, 1997). Typically, individuals pursue proximal goals that contribute to reaching distal, superordinate goals such as pleasure, autonomy, relational intimacy, career achievement, power, generativity, and self-transcendence (Csikszentmihalyi, 1990; Emmons, 1996). Although individuals are not always explicitly aware of their own distal or proximal goals (Martin & Tesser, 1989; Vallacher & Wegner, 1987), having a goal orientation provides a sense of purpose and contributes to overall well-being (Cantor & Sanderson, 1999; Zika & Chamberlain, 1992). This approach to goals presented in Park and Folkman (1997), particularly the understanding of distal goals, is virtually identical to the discussion of extrinsic and intrinsic goals by Ryan and Deci (2000) as part of their construct of basic psychological needs, and therefore also parallels the relationship between values and the life meaning construct explored in previous sections of this manuscript.

Holahan's (1994) investigation of the Terman Study female participants represents an important link between women's goal achievement behaviors and life meaning/purpose in life. Begun in 1922, the Terman Study (1959) eventually included 1,528 gifted children (672 girls and 856 boys) who were in the top 1% of the population with regard to intelligence (IQ > 135). As a group, the men in the study reached exceptional levels of achievement; the women, despite their equal intellectual gifts, as a whole attained dramatically lower levels of achievement (Holahan, 1994). Holahan's study tracked the early life goals and later patterns of achievement and well-being of three groups of Terman women who self-identified at the average age of 62 as follows: homemakers (n = 165), career workers (n = 172), and income workers (n = 77). Homemakers had stayed at home throughout their lives; career workers were those who had pursued a career through most of adult life or pursued a career except when raising a family; and income workers worked for needed income and did not see themselves as pursuing careers.

Holahan (1994) found that the achievement orientations of the career workers were distinct from the other two groups across the life-span. At age 11, these individuals were rated as possessing more desire to excel, perseverance, and achievement motive; at age 30, the career women reported higher persistence; and at age 40, these women were more likely to report having a definite purpose for their life. Holahan surmised that the starkly different achievement profile that characterized career workers was due to personality traits that facilitated their occupational advancement. These personality traits of achievement motivation and sense of purpose, which are related to goal pursuit,

corresponded with later achievement and greater psychological well-being for the Terman women. "Their story illustrates more generally the enduring benefits of articulated career goals to women's achieving full and satisfying lives" (p. 64).

### Cosmic Meaning

Investigations of cosmic meaning, (i.e., the fundamental belief that life is guided by a coherent universal plan and that one has a particular role to play in that plan), frequently explore the relationship between individuals' fundamental assumptions and expectations about the order of the world, and their sense of personal (terrestrial) meaning. For example, a positive sense of personal life meaning as measured by the Purpose in Life Test (PIL, Crumbaugh & Maholick, 1964) was found to be associated with deeply held religious beliefs that played a central role in individuals' lives (Yalom, 1980). Also, PIL scores were correlated with matriculation into the Dominican convent; successful matriculating students scored higher on the PIL than those students in the unsuccessful cohort (Yalom, 1980). As another example, Park and Folkman (1997) emphasized the need to look at the powerful impact of goal systems (terrestrial meaning) in the lives of individuals as they play out in the realm of global (cosmic) meaning, for example, in the development of beliefs about causation and agency, or in connection with people's fundamental need for cognitive stability and coherence.

Additional studies explored how individuals' deeply-rooted beliefs about the world inform their behaviors and current and future identities. McCann and Pearlman (1990) found that people tend to seek out experiences that confirm their global beliefs, even if these experiences confirm beliefs that are negative. In a related example, Swann,

1992) indicated that people gravitated toward social relationships in which their interaction partners viewed them in a manner that is consistent with how they saw themselves.

Yalom (1980) included a developmental perspective in his life meaning construct, suggesting that individuals' sources of meaning change over the course of their lives.

Park and Folkman (1997) referred to "situational meaning...the meaning that is formed in the interaction between a person's global (cosmic) meaning and the circumstances of a particular person-environment transaction" (Introduction, ¶ 5). An individual's global meaning system can be affected through experiences in her environment, for example, events that impede her central goals (which are expressions of her deepest personal values and commitments) could fundamentally diminish her sense of purpose and direction in life and thus challenge her sense of global meaning (Park & Folkman, 1997). *Cosmic Meaning as "Flow"* 

Cochran (1990), in his book *The Sense of Vocation: A Study of Career and Life Development*, offered a definition of meaning that fully captures the rich implications of Yalom's (1980) cosmic meaning. Applying Csikszentmihalyi's (1990) concept of "flow," he articulated what it means to have a vocation by observing individuals whom he perceived to have "a mission in life." Cochran suggested that exploring the meanings of individuals' lived experiences of vocations provides a more fruitful understanding of the nature of work than quantifiable measures that reduce meaning to mechanical and lifeless definitions.

For Cochran (1990), meaning entails an ongoing engagement with life and an accompanying sense of fulfillment and completeness, a feeling of being "right with the world." Meaning is dynamic activity rather than a static state and, as such, Cochran suggests it is more accurate to speak of "fulfilling" versus fulfillment.

A person completes an act, but does not complete an activity. Activity is open, not something to complete, but to engage in, perhaps delight in, and give oneself to....As Csikszentmihalyi found, a rock climber feels at one with the cliff. In strong prayer, one is at one with God. A person takes on a sense of otherness in becoming himself for herself (Cochran, 1990, p. 179).

Individuals experience a feeling of completeness when they participate in meaningful activities that "sum up a life." According to Cochran, this sense of flow is captured often in expressions found in religious literature, for example, attaining control by giving up control, assuming a subordinate status to be freed to go outside oneself, and achieving harmony not through striving to realize desires but through detachment from desires and doing what needs to be done. Acts are transformed into activities, and completion becomes a process rather than an end; in this way, individuals experience and express a fullness of being that is always developing.

According to Cochran (1990), individuals with a vocation "have wholeheartedly incorporated a coherent position within a meaningful dramatic vision" (p. 191-192). In the true sense of Yalom's (1980) cosmic meaning, everything in life leads up to and leads from a central enactment. They act centrally from within their life stories and this provides their lives with vibrant meaning (Cochran, 1990). This sense of meaning thus

distinguishes a person with a vocation from someone who just likes her job; work is experienced as essential to one's life plan (Cochran, 1990).

### Summary: Life Meaning Construct

The life meaning construct, as it has been explored here, is informed by a number of disciplines that have pondered the sources of meaning and motivation in the lives of individuals, particularly women. From role salience, to values expectation and realization, to goals and life purpose, to explications of cosmic meaning, these various perspectives have contributed to the project of articulating women's beliefs about what is most essential in their lives, and the vocational choices that may flow from these fundamental commitments.

#### Role Models and Mentors

Social support and influence provided by role models and mentors may be another key condition that facilitates women's access to and development within educational and work pursuits, and thus positively influences women's life/career paths.

As noted in the introduction, Crosby (1999) defined role models as individuals who model skills that can affect the personal and/or professional development of others. This modeling can be intentional or unintentional. It is probable that role modeling includes not only behaviors (skills) but also attitudes. Mentoring, as defined by Kram (1985) and refined by others (e.g., Fassinger, 1997; Schockett & Haring-Hidore, 1985), includes both instrumental and psychosocial elements, and involves an active and personal investment on the part of both the mentor—an experienced colleague who provides career-related advice, instruction, and guidance—and the mentee, the less

experienced protégé. The mentoring relationship is conceptualized as mutually beneficial, enhancing the growth and advancement of both the mentor and the protégé (Kram, 1985). Mentoring is distinguished from role modeling in that mentoring requires an interpersonal relationship (Fassinger, 1997). While mentors may serve as role models, they also engage in active relational behaviors such as: advising, supporting, coaching, sponsoring, instructing, exposing, advocating, endorsing, praising, encouraging, socializing, and protecting (Fassinger, 1997; Kram, 1985; Schockett & Haring-Hidore, 1985).

#### Role Modeling

Role models have been shown to contribute to the choices individuals make regarding their life/career paths. Lent et al. (2002) conducted a qualitative study of supportive and hindering influences on career choice behavior in two co-ed college student samples. The first sample (N = 19; 5 men and 14 women) was drawn from a large metropolitan state university sample and included 2 African Americans, 1 Hispanic American, 12 European American, 3 Asian American, and 1 multiracial participants (both undergraduate and graduate students). Students in the second sample (N = 12; 6 men and 6 women) attended a small technical training college near an inner-city area and came from low to middle class backgrounds. Demographics were as follows: 6 European Americans, 2 Hispanic Americans, and 4 African Americans. Lent et al. found that nearly all students mentioned social support or encouragement as a critical support factor, with a moderate number (33%-67%) of respondents specifically reporting access to role models as a positive influence. The absence of support, by role models or in general, was not

mentioned as a barrier to career choice, but a moderate number (33%-67%) of the students cited negative social or family influences as impediments.

Perrone, Zanardelli, Worthington, and Chartrand (2002) investigated role-model influence on the career decidedness of college students using the Social Learning Theory of Career Decision-Making (Krumboltz, 1981), which hypothesizes that career indecision is related to a lack of learning opportunities, including vicarious learning through role models. Participants were 405 (280 female and 125 male) undergraduate students from a large southeastern university between the ages of 18 and 25. The racial groups represented in the sample were Causcasian (238 participants), African American (101 participants), Asian American (44 participants), and Native American or Latina/o (22 participants). Perrone et al. found that role model supportiveness and a high-quality relationship with one's role model predicted the level of career decidedness.

Cohen's and Gutek's (1991) survey of two Divisions of the American Psychological Association (Society for the Psychological Study of Social Issues and Psychology of Women) described men's and women's careers in psychology, including the prevalence and gender of role models in psychologists' graduate school experiences. The sample (N = 530), which included the first large cohort of women to enter the field of psychology, consisted of 369 women (69.6%) and 161 men (30.4%); four respondents did not specify their sex. The mean age ranged from 47 years (women) to 50 years (men). More men (80.7%) than women (55.7%) were married and greater numbers of women (16.3%) compared to men (5.0%) were never married. The majority of the participants were heterosexual (more than 85%) and Caucasian (93%).

According to Cohen and Gutek (1991), more men (79.5%) than women (61.5%) reported having a role model during graduate school. Role models of both male and female graduate students were predominantly male, but a sizable minority of the women (38.1%) and four men (3.1%) indicated they had had a female role model. The authors indicated that these results were likely due in part to the fact that, for the cohort being sampled, the majority of their graduate school faculty members were men. They also surmised that self-selection by both faculty and students probably occurred. Of all the psychologists surveyed, 96% reported being role models for others, with similar sex segregation patterns to those described in their graduate school years (11 men and 119 women reported being role models only for their own sex.). Cohen and Gutek suggested that sex-segregated employment activities or self-selection could have contributed to this differential.

Specifically related to women's life/career choices, Eccles (1994) suggested that role models can contribute to women's achievement by legitimating novel and/or gender role deviant options. According to Eccles, while these "social agents" have the influence to either encourage or discourage individuals from selecting stereotypical gender roles, they typically guide individuals to consider choices that are consistent with gender role norms.

Supporting Eccles' (1994) optimistic theoretical assertion, Nauta et al.'s (1998) test of predictors of higher level career aspirations among college women with majors in mathematics, science, or engineering confirmed that positivity of role model influence (mediated by role conflict and self-efficacy) was correlated with higher-level career

aspirations. Women who had been influenced positively by role models were more likely to believe that careers in math, science, and engineering were compatible with commitments to marriage and family, a belief linked to increased levels of career aspirations in these fields (Nauta et al., 1998). In addition, the positive influence of role models was related directly to increased discipline self-efficacy, that is, as a result of positive role model influence, women expected to achieve specific academic accomplishments deemed critical to success in most mathematics, engineering and science majors. This confidence in one's ability to complete important academic milestones also was correlated positively with aspirations to leadership positions in these non-traditional fields. In addressing the age restriction in their sample, Nauta et al. acknowledged that their model might show a different fit for women with more life experience and women who were married or parenting. For example, the relationship between role model influence and higher level career aspirations might be attenuated if women in a later life stage relied less on role models and more on their life experiences. Longitudinal studies like the present study are therefore needed to track the potential changes in influences on individuals' career behaviors. In addition, research focusing on the positive and negative impacts of role models on women's life/career decisions will add depth to the current social support constructs found in the career development literature.

### Mentoring

Theoretical writing and empirical research on mentoring began in the late 1970s in the business arena; since then, interest in mentoring has spread to educational settings.

Some theoretical frameworks have been proposed (Benishek, Bieschke, Park, & Slattery, in press; Burke, McKeen, & McKenna, 1993; Fassinger, 1997; Hollingsworth, 2000; Hunt & Michael, 1983; Kalbfleish & Keyton, 1995; Kram, 1985), but these models, for the most part, have not been operationalized as testable hypotheses or have received only limited testing (Hollingsworth, 2000). While this lack of programmatic research limits a more complete understanding of mentoring relationships, the growing body of research on mentoring has contributed important findings to individual pieces of these models (Hollingsworth, 2000). The following sections will describe briefly the existing models of mentoring and will review the empirical mentoring literature in both business and education in light of the organizational structure offered by these models. *Models of Mentoring* 

According to Hollingsworth (2000), three primary conceptual models have predominated in the literature: Hunt's and Michael's (1983) mentoring framework, Kram's (1985) model of mentoring functions, and Burke et al.'s (1993) predictive mentor model. Hollingsworth (2000) expanded and adapted these models for her investigation of the graduate research training environment. In addition, critiques of existing models of mentoring have resulted in new theoretical models that consider the contributions of minority status, power relations, and collaboration and reciprocity between mentor and mentee (Benishek et al., in press; Fassinger, 1997; Kalbfleish & Keyton, 1995). These models will be discussed below.

Hunt and Michael (1983) proposed a model with four interrelated components to describe the antecedents, process, and outcomes of mentoring relationships. The four

components included (a) cultural context (understood as organizational and occupational environment), (b) mentor and protégé characteristics (e.g., gender and age) and their relationship to power in an organization, (c) stages of the mentoring relationship (Initiation Stage, Protégé Stage, Break-up, Lasting Friendship), and (d) outcomes of the mentoring relationship (e.g., promotions, higher salaries, increased work satisfaction). While this model has served as a useful organizational heuristic for aspects of the mentoring relationship, it has not been operationalized or tested empirically (Hollingsworth, 2000).

Kram's (1985) model was less comprehensive than the model offered by Hunt and Michael (1983) but it has had more influence on the literature in terms of inspiring research designs and instrument development (Hollingsworth, 2000). This model focused on one aspect of mentoring relationships: the mentoring process. Basing her constructs on data from an in-depth qualitative study in a large organization, Kram proposed two categories of mentor functions in the mentoring relationship: career-related functions (behaviors that assist the protégé in learning skills and strategies that enhance career advancement, for example, sponsorship, exposure-and-visibility, coaching, protecting, and providing challenging assignments) and psychosocial functions (aspects of the relationship that enhance the protégé's sense of competence, identity, and professional effectiveness, for example, role modeling, acceptance-and-confirmation, counseling, and friendship) (Kram, 1985). Career functions arise from the senior person's experience, organizational rank, and influence; psychosocial functions grow out of an interpersonal relationship that fosters mutual trust and intimacy (Kram, 1985). According to Kram, all

of these mentoring functions enhance the growth and advancement of both the mentor and the mentee.

The model offered by Burke et al. (1993) can be seen as a complement to Kram's (1985) model, in that it described the relationship between antecedents of the mentoring relationship (i.e., factors such as gender and race) and mentoring functions (Hollingsworth, 2000). Burke et al. hypothesized that four factors contributed to a mentor's use of particular mentoring functions: the mentor's personal characteristics, the protégé's personal characteristics, similarity between the mentor and protégé, and descriptive characteristics of the mentoring relationship itself. The authors' empirical testing of the model suggested that the use of career-related and psychosocial mentoring functions by mentors was associated with a given mentor's age, gender, and organizational tenure; protégés' gender; mentors' perceptions of similarity between themselves and their protégés; and organizational components of the relationship. However, the lack of additional testing of this model, the use of a predominantly male sample (81 out of 94 mentors were male) in the initial testing, the failure to consider race or ethnicity in both model construction and data collection, and its exclusive focus on the experiences of the mentor have been cited as limitations of the model (Hollingworth, 2000).

Hollingsworth (2000) adapted and expanded the existing mentoring models for her study on student-faculty mentoring relationships in counseling psychology research training. She incorporated the mentoring literature in both business and education, as well as the current research training literature. Her model described antecedents of faculty-

student mentoring relationships, resulting mentoring behaviors, and outcomes of the mentoring relationship for students and faculty. Hollingsworth proposed five exogenous latent variables (Protégé Mentoring Attitudes, Protégé Research Attitudes, Research Climate, Mentor Research Attitudes, and Mentor Mentoring Attitudes) and four endogenous variables (Protégé Perceptions of Mentoring Behaviors, Mentor Perceptions of Mentoring Behaviors, Protégé Outcomes, and Mentor Outcomes). Her model presented the most comprehensive empirical approach to the mentoring relationship to date.

Consistent with the hypothesized model, Hollingsworth's (2000) final structural model indicated three latent independent variables: Mentoring Attitudes, Research Training Environment, and Past Research Attitudes. Mentoring Attitudes were significantly correlated with Research Training Environment, which predicted a dependent latent variable, Mentoring Relationship. Past Research Attitudes predicted a second dependent latent variable, Current Research Attitudes and Behaviors. In addition, the dependent latent variable Mentoring Relationship also predicted Current Research Attitudes and Behaviors. The results of Hollingsworth's model testing thus provided support for a connection between research-related mentoring relationships and doctoral students' research attitudes and behaviors. The significant role of faculty mentors in the Research Training Environment was evidenced by the lack of a direct relationship between Research Training Environment and students' Current Research Attitudes and Behaviors; these two variables were related only indirectly, through the mediating Mentoring Relationship.

Three additional conceptual models have been presented: a relational/interpersonal model of mentoring (Kalbfleisch & Keyton, 1995), a model of feminist mentoring (Fassinger, 1997), and a model of multicultural feminist mentoring (Benishek et al., in press).

Citing the limitations associated with traditional models of mentoring, Kalbfleisch and Keyton (1995) advocated a mentoring model that acknowledged both the variety of career paths taken by individuals and the impact of the work environment on those with minority status in specific professional contexts. They emphasized the benefits of an interpersonal mentoring model, including mutually enhancing relationships characterized by authentic involvement on the part of mentors and mentees. Citing the many challenges associated with cross-gender mentoring, Kalbfleisch and Keyton predicated their model on the assumption that only women should mentor women. This restrictiveness has limited the utility of the model, given a lack of mentors for women and other marginalized groups (Benishek et al., in press).

Fassinger (1997), citing the research on mentoring that highlights the benefits for the protégé as well as the challenges faced by the women and persons of color in obtaining productive mentoring relationships, identified issues of power as a central theme in the research literature. The mentor, who is presumed to have power in a particular organization, welcomes the mentee into those particular networks of power. Because distributions of power in organizations and professional fields are likely to change slowly, Fassinger argued, new conceptions of mentoring are needed to address the systemic power issues identified in the mentoring literature.

Fassinger (1997) differentiated between external and internal sources of power, that is, between traditional notions of mentoring as conferring power that is held because of gender, race, age, position, or socioeconomic status, and a feminist model of mentoring founded on empowering others to recognize their own knowledge, authority, and capacity to maximize their own potential. Her feminist mentoring framework included the following elements: re-thinking of power (sharing power vs. hierarchies of power; mutuality, equality, and respect), emphasis on the relational (congruent sharing of self, mutual feedback, connections encouraged with other potential mentors, valuing of mentee's personal relationships), valuing of collaboration (joint projects with mentees, bringing mentees into professional networks), commitment to diversity (proactive stance in valuing marginalized voices in one's organization/field and in challenging "isms" in oneself and others), integration of dichotomies (congruent sense of self and knowledge: linking of abstract knowledge to personal experience, recognition of contextual construction of knowledge), and incorporation of political analysis (personal is political: challenging patriarchal values in individuals and institutions). Each element in the model accorded benefits to both mentor and mentee, including (for the mentor) gaining a colleague, obtaining task assistance, increased productivity, broadened perspectives, reinforcement of self-congruence, re-empowerment of self, and impact on the status quo. and (for the mentee) an increased sense of competency and self-respect, support, direct experience, networks, the development of a self-image as a professional, role modeling, self-congruence, and empowerment to work for social change.

Benishek et al. (in press) proposed a revision of Fassinger's (1997) feminist mentoring model that incorporated multicultural issues throughout the model rather than as a single dimension of the model. Additions to the model included: an examination of privilege within the mentoring relationship and the environment, the responsibility of the mentor to raise multicultural issues with all mentees, participation on projects not prescribed by majority culture, encouraging of diverse perspectives, and valuing of experiences gained in a non-majority culture. The authors conceptualized multicultural feminist mentoring (MFM) as an interactive process in which differences are clearly identified and explored in relation to the mentor-mentee relationship and the professional development of each individual. This process has as its goal a relational exchange that is respectful of differences. This conception of mentoring also requires a continuing awareness and willingness to address the tensions existing between feminism and multicultural issues to foster more satisfying and productive mentoring relationships.

#### Empirical Research on Mentoring

The majority of the empirical research on mentoring to date has addressed individual components of the models mentioned above, even if these theoretical connections have not been made explicitly. These findings will be presented according to the organization offered by the models of Hunt and Michael (1983) and Hollingsworth (2000): (a) antecedents to mentoring (access to mentors), (b) the mentoring process, and (c) outcomes associated with mentoring relationships. Within each of these sections, the research literature from business and educational settings was reviewed separately. All studies reported on relate to the educational and career development of women.

Antecedents to mentoring: business/professional arena. Kanter's (1977) tokenism theory has been used in the business arena to predict differences between the work experiences of men and women at higher organizational levels, where skewed gender ratios affect interactions between the dominant group (men) and the token group (women) (Lyness & Thompson, 2000). For example, the theory hypothesizes that, because women (compared to men) experience more barriers to career advancement such as exclusion from informal networks and a lack of mentoring, facilitators such as performance, developing (non-mentoring) relationships with senior managers and peers, and managing one's career become more salient for women's advancement (Lyness & Thompson, 2000).

Using this tokenism framework, Lyness and Thompson (2000) compared the career histories of matched samples of 69 female and 69 male executives in one organization; among the factors explored were perceived barriers and facilitators of advancement. Contrary to one hypothesis of the authors, results of the study showed that female executives were *not* more likely than male executives to report a lack of mentoring as a barrier to their career advancement. Consistent with a second hypothesis of the study, however, successful women (i.e., those who achieved a high level of organizational status and compensation) were less likely than their successful male counterparts to report mentoring as a facilitator of their career development. In addition, women who achieved more success in the organization attributed less importance to mentoring than those women who achieved lesser success in their careers.

These findings are informed by earlier studies that showed mentoring to be less frequent and less effective for women in business organizations. Dreher and Cox (1996), comparing men and women with master's degrees in business administration (MBAs), found that fewer women MBAs reported having White male mentors. Mentoring relationships with White male mentors were correlated with career success (as measured by compensation), whereas relationships with female or minority mentors were not associated with lucrative careers. Overall, male mentors possessed comparatively greater organizational power and access to valuable resources; these benefits were used to more effectively sponsor and promote their mentees (Gilbert & Rossman, 1992). Another study by Ragins and Cotton (1991) indicated that, in spite of the fact that women professionals reported a greater need for mentors, they faced more barriers in obtaining mentors compared to their male counterparts. (In referring to mentors, Ragins and Cotton [1991] implied male mentors). Specifically, women reported that they had limited access to potential mentors, that more experienced organization members were unwilling to mentor them, and that mentoring relationships presented a risk because they could be misconstrued as sexual relationships by others in the organization.

Some researchers have begun to address more directly the role of female mentors. While women might benefit from having female mentors to help them navigate workplace barriers, the availability and effectiveness of mentors is slim due to the underrepresentation of women in senior management, and to the comparative lack of organizational power held by those females who are in a position to mentor (Dreher & Cox, 1996; Lyness & Thompson, 2000). According to Gilbert and Rossman (1992),

another potential challenge facing female mentors is organizational views toward sponsorship of female mentees. For example, implicit mandates may discourage overidentifying with or championing the causes of women. Also, women who are in a position to mentor often do not have the time or political capital to devote to mentoring a younger mentee. They are under terrific pressure to maintain their high levels of performance while being "good team players." In addition, they may feel scrutinized by colleagues and supervisors who may regard their failures, particularly with regard to the development of their mentees, as a statement about all women (Gilbert & Rossman, 1992).

Thus, the research on mentoring in the professional arena suggests a troubling null environment for women, particularly those who have reached the glass ceiling in their career tracks. They do not typically receive equal attention compared to their male counterparts from those male mentors who possess the most sponsorship power in organizations. In addition, women mentors are less available—both in terms of their numbers in higher levels of management, and in terms of their own time and political capital. Indeed, in studies of the career development of highly achieving African American/Black and White women, Latinas, lesbians, Asian American women, and women with disabilities (Gomez et al., 2001; Noonan et al., 2004; Prosser, 2001; Richie et al., 1997), many participants reported having made their way in their early careers without the help of traditional mentors. What these studies also highlighted, however, was women's resourcefulness in accessing career support and information primarily by

networking with colleagues and friends, and within social movements and women's or minority-focused professional organizations.

Antecedents to mentoring: education. In the past decade, research in higher education has begun to address the topic of mentoring. Hackney and Bock (2000) identified the lack of adequate numbers of women in established academic positions as a challenge to the traditional mentoring model, a hierarchical relationship between an experienced faculty member and a mentee:

This dynamic continues to affect the retention and promotion of women faculty members. Left on their own within the often inhospitable climate of academia (Hall & Sandler, 1983; Stalker, 1994; Wunsch, 1994), women without support can easily develop uncomfortable feelings of isolation, disassociation, and alienation which can result in stunted career growth (Hill, Bahniuk, Dobos, & Rouner, 1989; Parson, Sands, & Duane, 1991) or worse, the cessation of their professional pursuits altogether. (p. 3)

Gilbert and Evans (1985), in their studies of doctoral psychology students, concluded that female students were looking to other women for new images and alternate possibilities for themselves, ranging from the integration of achievement and family life to choosing one over the other. For example, female doctoral students, compared to their male colleagues, (a) sought out same-sex faculty role models and mentors, (b) were more likely to rate relationships with same-sex faculty mentors as important to their professional development, and (c) more often rated their mentors' and role models' life styles as important to their own professional development. According to

Gilbert and Evans, women's increased status in society, as well as an understanding and valuing of female experiences, may uniquely qualify female mentors to model and to aid their protégés in envisioning these new life images and possibilities.

The mentoring process: business/professional arena. Kram's (1985) categories of psychosocial and career-related mentoring functions often are used as a template for studies on the mentoring process. Burke, McKeen, and McKenna (1990) reviewed the mentoring literature and observed that female mentees indicated that they more often desired, valued, and received the psychosocial aspects of mentoring, for example, encouragement and affective support. In their study of Canandian managers, Burke et al. (1990) reported significant differences between female and male mentors. Female managers engaged more frequently than their male peers in both psychosocial functions (i.e., personal support, friendship, counseling) and vocational functions (i.e., teaching, sponsorship, and protection).

A survey of 642 medical professionals by Koberg, Boss, Chappell, and Ringer (1994), taken from the perpective of the mentee, also revealed significant differences between male and female reports of vocational mentoring functions. Women reported less career-related mentoring from their mentors. The authors commented that this finding was not surprising in light of the disproportionate gender distributions in medical hierarchies: 78% of the women in the sample were employed in lower-status positions and 57% of the men worked in higher-status positions.

Most recently, Allen and Eby (2004) provided additional support for gender differences in mentoring functions provided. Participants were 249 members of

professional business (accounting) and engineering organizations who reported experiences as mentors; the majority of participants (92%) were European American/White. Male mentors reported providing more career-related mentoring to their mentees and female mentors reported providing more psychosocial mentoring to mentees. When the mentees were female, female mentors said they provided more psychosocial mentoring but male mentors indicated they provided a similar degree of psychosocial mentoring to both female and male mentees. In addition, the greatest degree of psychosocial mentoring occurred between female mentors and female mentees, while the least amount occurred between female mentors and male mentees.

By contrast, in a study that investigated perceptions of 181 mentees' perceptions of mentoring roles in cross- and same-gender relationships, Ragins and McFarlin (1990) found that neither mentor nor mentee gender influenced perceived mentor roles. However, gender differences were reported for role modeling and social roles. Same-gender mentees were more likely than cross-gender mentees to report engaging in afterwork, social activities with their mentors. Also, female mentees who worked with female mentors were more likely to indicate that their mentors served as role models. Finally, a study by Waters, McCabe, Killerup, and Killerup (2002) highlighted the importance of perspective in interpreting any findings from the mentoring research literature. In their study of 77 matched mentors and mentees, a comparison of mentormentee perceptions revealed that mentors considered themselves to have provided higher levels of psychosocial support than their mentees perceived they had provided.

The mentoring process: education. Similar to the literature in the business/professional arena, research in educational settings has focused on whether the mentoring process differs for male and female mentees. Paludi and DeFour (1992) surveyed 120 male and female graduate students and faculty using their Mentoring Experiences Questionnaire. Participants were from the City University of New York schools and from national professional associations including the Association of Black Psychologists, Modern Language Association, American Sociological Association, American Association of University Professors, and the National Association of Women Deans, Administrators, and Counselors; specific statistics on ethnicity were not available. These researchers found a number of results: (a) mentoring was more common for graduate students than for undergraduates; (b) women more frequently cited the psychosocial functions of mentoring (e.g., receiving advice regarding personal problems, personal development, and balancing multiple roles [the latter provided mostly by women]); (c) men more frequently endorsed mentoring's vocational aspects (e.g., receiving coaching for publication submission and career path decisions, benefiting from the advice and expertise of faculty members [usually men]); (d) women indicated that no information was shared with them regarding how to complete academic projects (an example of the null environment [Betz, 1989; Freeman, 1979] in which the absence of academic support and encouragement operates as a subtle yet powerful form of discrimination against women); and (e) more women reported problems in their mentoring relationships (especially with male mentors), including interpersonal

discomfort in conversations, sexual harassment, and exclusion from a mentor's professional network.

Recognizing both the expanding opportunities and the remaining barriers that characterize the educational and professional environments of women, Gilbert and Rossman (1992) identified three aspects of mentoring functions in which mentoring might differ depending on the gender of the mentor. These were: (a) creating new images of mentees; (b) accepting, confirming, and empowering mentees; and (c) the sponsorship of mentees. The first two aspects operate at the interpersonal level and involve the processes of mutuality and enhancement; the third aspect operates at the level of social and organizational structures. These aspects clearly reflect the spirit of Kram's (1985) psychosocial and vocational mentoring functions.

Regarding the second aspect of mentoring functions, Gilbert and Rossman (1992) cited evidence to suggest that female mentors are less likely than male mentors to define the needs of and assert power over their mentees. Nelson and Holloway (1990) examined interactions between male supervisors and female trainees in a study that addressed the connections among men's socialized need for authority, women's socialized need to defer, and gender. Male supervisor-female trainee interactions were characterized by a traditional "one up-one down" pattern, where the supervisor taught and the trainee aided this through more passive, facilitative responses. Female supervisor-female trainee interactions, by contrast, involved genuine sharing, in that power shifted back and forth in the conversation. Nelson and Holloway concluded that female supervisors were more likely than male supervisors to create an empowering supervisory environment for both

female and male trainees, where psychological empowerment occurs through a mutual, relational process that is characterized by confirmation and support.

The mentoring function of sponsorship operates at the level of social systems and organizational structures. At this level, Gilbert and Rossman (1992) argued that the traditional model of the White male mentor holds sway. Because men still predominate in positions of power and leadership, male mentors are able to provide more resources and professional support for their female protégés than female mentors. However, the traditional networks remain intact, meaning that they are still better able to assist their male mentees than their female mentees.

Mentoring outcomes: business/professional arena. Studies of mentoring outcomes generally focus on descriptive comparisons of mentored employees with their non-mentored peers. Allen, Eby, Poteet, Lentz, and Lima (2004), in their meta-analysis of 43 mentoring studies conducted in organizational settings, synthesized empirical findings regarding benefits associated with mentoring for the mentee. Comparing mentored individuals with non-mentored individuals, Allen et al. reported that compensation, number of promotions, and career satisfaction were higher for mentored employees. In addition, mentees were more likely to believe they would advance in their careers and to indicate career commitment. Both career-related mentoring and psychosocial mentoring were related positively to career outcomes. Career-related mentoring was associated with compensation, salary growth, and promotions (markers of objective career success) and with career satisfaction, job satisfaction, and satisfaction with the mentor (subjective outcomes). Psychosocial mentoring was related to compensation and promotions, career

satisfaction, job satisfaction, and intentions to remain with the organization; satisfaction with the mentor was the variable most highly related to psychosocial mentoring.

Overall, mentoring was most strongly associated with subjective indicators of career success (e.g., career satisfaction and job satisfaction) compared to objective career success indicators, a finding that contrasts with a majority of mentoring programs that emphasize mentoring primarily as a means to achieve objective career success (Allen et al., 2004). Specific studies highlighting these attitudinal outcomes of mentoring include those citing greater job satisfaction (Ensher, Thomas, & Murphy, 2001; Koberg et al., 1994) and higher levels of personal identity, self-esteem, and creativity (Atkinson et al., 1994) in persons who have mentors.

Exploring the relationship between gender and mentoring outcomes, research studies have found contradictory results with regard to differential outcomes for male and female mentees in organizational settings. Some trends in the research have suggested similar income, job satisfaction, and promotions for mentees of both genders (Hollingsworth, 2000), while other findings indicate that males who are not mentored report better outcomes than females with mentors (Bahniuk et al., 1990). Bahniuk and colleagues (1990) commented that these findings may indicate that while mentoring relationships can work to aid women's equity in the workplace, they may not always be enough to compensate for other gender-based barriers.

*Mentoring outcomes: education.* In graduate students, reported mentoring outcomes have included development of professional skills, attitudes, and identity; enhanced productivity and academic and career success; satisfaction with one's program

or career; greater income and faster promotion; and willingness to mentor others (Johnson & Huwe, 2002).

Some studies have focused on the interaction between gender and mentoring in academia. Ulku-Steiner, Kurtz-Costes, and Kinlaw (2000) examined similarities and differences in graduate student experiences as a function of student and faculty gender. For both male and female graduate students, mentor support was a significant predictor of career commitment. In female graduate students, support from mentors also was associated with academic self-concept, family issues, and stress. Specifically, women who perceived greater mentor support indicated higher self-concept, less stress, and greater sensitivity toward family issues in their departments. Mentor support was correlated (modestly) with only academic self-concept in male graduate students.

Consistent with the hypothesis of Ulku-Steiner et al. (2000), the gender of a student's mentor was found to be less important than departmental faculty gender ratios. Male and female mentors were seen as equally supportive of their female students and reported levels of career commitment, self-concept, and stress did not differ for female students with male as opposed to female mentors. What was rated as most important by the majority of the graduate students was the presence of female faculty members. A lack of female faculty was associated with negative effects for both male and female graduate students. Women in programs that had a majority of male faculty members reported lower academic self-concept, lower career commitment, and the experience of less sensitivity to family issues in their departments. The self-concept and career commitment of these women were lower than students at all other stages in their education.

Interestingly, male-dominated departments also were related to lower self-concept and career commitment in male graduate students, but not to the same degree as in female doctoral students. The authors suggested that these results indicated that both female and male students may benefit from having a majority of women on their program faculty.

Another study focused on outcomes related to education/academia was conducted by Dohm and Cummings (2002), who surveyed 616 women with Ph.D.s in clinical psychology from a national professional organization. The authors reported a positive association between participants' past experiences of research mentoring (by both male and female mentors) and (a) their current pursuit of research, as well as (b) their role as a research mentor for others.

Summary and Critique of Mentoring Research

While research on the antecedents, process, and outcomes of mentoring has increased in the past two decades, the mentoring literature remains in its youth in terms of programmatic research. Few to no studies have been done to investigate existing models of mentoring, particularly those developed within a feminist and multicultural framework (Benishek et al., in press; Fassinger, 1997). In addition, mentoring research has focused almost exclusively on the arenas of business and academia. More investigations are needed to explore the existence of and potential for mentoring outside these two areas.

Furthermore, while the traditional dyadic conceptualization of mentoring is the focus of much of the *decentralized* research literature, organizations adjusting to marketplace changes are attempting new approaches to mentorship in which the principles of mentoring are applied to small groups or teams (Fassinger & Hensler-

McGinnis, in press). In team mentoring, mentees are assigned to experts from various areas of an organization and rotate through different mentors, acquiring knowledge in a variety of content areas (Messmer, 2003). Mentoring circles consist of several senior organization members acting as mentors to a group of new or junior colleagues, who receive networking opportunities and psychosocial support (Knouse, 2001). Vertical teams, increasingly being used in academic professional training programs, are structured with a faculty mentor supervising small teams of mentees; these teams foster peer interaction as well as modeling by the faculty mentor (Hughes et al., 1993). Peer mentoring, the sharing of career and psychosocial tasks between individuals at the same career stage, offers a collaborative model for navigating potentially alienating hierarchical systems (Gram, 1992). Research is needed that can answer Hackney's and Bock's (2000) call for the inclusion of broader definitions of the mentoring relationship based less on traditional hierarchical power and more on diffuse, decentered networks of support like those described above for example, multiple mentors, formal/informal mentoring networks, peer mentors, small working groups, and collaborations among professional, academic, and community organizations (Fassinger & Hensler-McGinnis, in press).

#### CHAPTER 3: STATEMENT OF THE PROBLEM

Research on the economic status of U.S. women has highlighted continuing trends of low marketplace position and depressed earning potential despite dramatic increases in the number of women in the workforce over the past four decades; this is due primarily to persistent gender gaps in the fastest-growing, higher-paying fields of technology and engineering (U.S. Department of Labor Women's Bureau, 2000a, 2000b; U.S. Department of Labor Statistics, 2004).

These trends are reflected in the vocational development literature, which has documented lowered career aspirations in young women nationwide (AAUW, 1991, 1994; Holland & Eisenhart, 1991; O'Brien et al., 2000). The well-known study commissioned by the American Association of University Women (1991, 1994) indicated that girls in grades four to ten reduced their expectations for their careers and future status in society as they matured, and women at the collegiate level were found to prioritize heterosexual relationships over the pursuit of their careers (Holland & Eisenhart, 1991). A longitudinal study by O'Brien et al. (2000) surveyed young women from suburban Chicago in their senior year of high school and then five years later. After five years (a majority had attended college), women overall indicated a preference for more traditional and less prestigious careers that underutilized their abilities; they also showed less interest in pursuing leadership or advanced positions in their selected fields.

Given these findings, the current study aimed to explore significant influences and significant events and decisions along women's life/career paths as a means of gaining a more nuanced understanding of the life/career choices that contributed to changes in their

career ambitions in the decade following high school graduation. Specifically, there were two purposes of the study: (a) to investigate what gives meaning to women's lives and to understand how these sources of meaning may shape their life/career choices, and (b) to assess the contributions of role models and mentors to the life/career paths of women. In investigating factors that have received limited attention in the career development literature, it was hoped that this qualitative investigation might provide important idiographic data to further our understanding of women's career development theory and research, and to enhance career counseling interventions with women.

Investigating Meaning in Women's Lives and Its Contributions to

Women's Life/Career Paths

A related strength of qualitative research is its capacity for engaging variables that are neither easily quantifiable nor statically defined, for example, life meaning. While research has addressed women's challenges in balancing or choosing among their multiple—and often competing—responsibilities to home and work (Bernas & Major, 2000; McCracken & Weitzman, 1997; Nauta et al., 1998), few studies have introduced what may be a significant, implicit arbiter of women's life and career choices: that which is most meaningful to them (e.g., Claes et al., 1995; Eccles, 1994; Granrose & Kaplan, 1996). Even then, "life meaning" entails only the narrower role-salience definition, that is, the importance or value a woman assigns to her life roles and tasks. While the additional components of the life meaning construct are addressed minimally in the research literature (i.e., the cognizance of an order, coherence, and purpose in existence [Park & Folkman, 1997] and a sense of fulfillment that accompanies an individual's

beliefs about and involvement in the roles, activities, and commitments that comprise his/her life [Cochran, 1990]), previous investigations have not addressed women's experiences specifically. The present study represented the first attempt to provide a comprehensive, cross-disciplinary definition of life meaning that can be applied to the study of career development, and women's career development in particular.

As Grossman and Chester (1990) suggested,

research is needed...that looks for a deeper understanding of women workers' realities by including the meaning women make of their own experiences. It is this deeper understanding that has been called for by feminist researchers and other social scientists using qualitative methodologies. (p. 5)

Because it considers women as active agents in a meaning-seeking existence rather than solely as passive recipients of socialization, the inclusion of the life meaning construct also may have implications for additional feminist revisions of women's career development theory and career counseling with women. The emphasis on naming that which brings meaning to one's life is aligned with feminist goals of empowering women to name and embrace choices that work for them.

Assessing the Contributions of Role Modeling and Mentoring to Women's

Life/Career Paths

The second purpose of the present study bolsters counseling psychology's commitment to theories and research on human strengths and potentialities, as well as feminism's historical acknowledgement of the importance of relationships in many women's lives. While sheer determination, perseverance, and stronger commitment to

their educational and vocational goals have allowed many women to surmount null environments (Betz, 1989; Freeman, 1979) and other career barriers (O'Connell & Russo, 1988), Betz (1993) argued that this is not fair to women: "Each woman deserves the encouragement, support, and broadening ideas that will enable her to achieve her goals without carrying the entire burden herself" (p. 668). As a tenet of feminist therapy advances, individual change is necessary but not sufficient (E. Williams, 2001); changes in social structures and interpersonal relationships are required to ensure respect and support for women's contributions to the workforce, and for women's overall life/career paths, however they define them.

Indeed, social support research in the area of women's career development has lent credence to the effectiveness of various kinds of interpersonal support in shaping and supporting a woman's life/career choices and aspirations (Bernas & Major, 2000; Moya et al., 2000; Nauta et al., 1998; O'Brien & Fassinger, 1993; Pajares & Zeldin, 1999). Specifically, mentors and role models have provided both empowering and challenging environments for women's academic and career development (DeFour & Paludi, 1995; Pajares & Zeldin, 1999; Pistole, 1994; Schlegel, 2000; C. Williams, 2001). The very presence or lack of a mentor has been cited as a factor in women's advancement (Dreher & Cox, 1996; Gilbert & Rossman, 1992).

A contribution of the present study was to provide an exploration of the incidence, quality, and effects of significant social influences, particularly mentors and role models, in the life/career paths of a sample of young women post-high school. Research considering role modeling and mentoring of women outside of specific academic and

business contexts represents an important addition to the literature and practice of women's career psychology. Furthermore, findings from the present study provide additional data to contribute to an understanding of individual factors within existing, under-tested mentoring models (e.g., Benishek et al., in press; Burke et al., 1993; Fassinger, 1997; Hollingsworth, 2000; Hunt & Michael, 1983; Kram, 1985).

## **Research Questions**

In qualitative research approaches, particularly those directed by grounded theory, research questions replace formal hypotheses. These research questions guide the initial investigation while permitting exploration of additional issues that emerge during the interviewing process (Strauss & Corbin, 1998). In light of those areas of the women's career development literature identified as needing further development, the following purposes and corresponding questions were proposed for study:

Purpose 1: Investigate What Women Find Meaningful In Their Lives and How
These Sources of Meaning May Shape Their Life/Career Paths

An investigation of the sources of meaning in women's lives and their potential influence on women's life/career paths yielded the following questions: What gives meaning to women's lives? Specifically, what roles/activities/relationships/beliefs provide meaning in women's lives? How are women's life/career decisions guided by what they find most meaningful? How have women's definitions of what they find meaningful changed over the last ten years?

Purpose 2: Assess the Contributions of Influential Individuals, in Particular, Role

Models and Mentors, to the Life/Career Paths of Women

The following questions provided a guide for assessing the contributions of significant influences, particularly role models and mentors, to women's life/career paths: Which individuals have had the greatest influence on women's life/career paths? Who are women's role models and mentors? How have women's role models and mentors (or a lack thereof) influenced their life/career paths? In what ways have influential individuals, including role models and mentors, limited and/or supported women's life/career choices?

#### CHAPTER 4: METHOD

## Design

A modification of the grounded theory research methodology of Strauss and Corbin (1998) was used to identify significant events and decisions along individual women's life/career paths, and to explore the contributions of meaning-making and significant influences—including role models and mentors—to the shaping of those life/career paths. The qualitative method of grounded theory provided a systematic, inductive strategy with which to identify concepts and categories in the life/career narratives of participants. The resulting concepts and categories, drawn directly from the statements of the women being interviewed, thus are "grounded" in the data and the experiences of the study participants. The methodology for the present study was "modified" in that two components of the grounded theory method were not incorporated: theoretical sampling (i.e., ongoing selection of new participants throughout data analysis as well as ongoing revision of interview protocols to ensure the representativeness of concepts, Strauss & Corbin, 1998) and the generation of a theoretical model.

# Research Team

Qualitative research practices emphasize the importance of situating both the investigators and the participants socially, historically, and culturally so that the reader can interpret the results contextually (Morrow & Smith, 2000). The present study was conducted from 2002-2004 by a research team consisting of the primary researcher/project director, a 34-year-old (at creation of team), female, European

American graduate student in Counseling Psychology; three counseling psychology doctoral students (one was European American and two were South-Asian American); five undergraduate psychology students (all European American), and the faculty advisor, a 41-year-old (at creation of team) European American woman with a Ph.D. in Counseling Psychology who served as the auditor of the investigation. The use of an auditor was consistent with the recommendation of Lincoln and Guba (1985) and with the grounded theory study conducted by Gomez et al. (2001). Specifically, the auditor was used to increase the dependability and confirmability of the data analysis (Lincoln & Guba, 1985), which in turn contributes to the study's trustworthiness, the qualitative counterpart to the concepts of reliability and validity in quantitative research (Miles & Huberman, 1994).

The articulation of researcher bias also is a key element in qualitative approaches (Miles & Huberman, 1994; Morrow & Smith, 2000). Researcher biases and expectations were discussed by the team at the outset and throughout the course of the study. These included personal opinions and family experiences regarding advanced education for women, the intersection of family and career, gender roles in American society, and influential factors in women's career development. The team also participated in discussions about gender- and culture-sensitive research.

Research team members met and corresponded regularly throughout the duration of the study. All members received training (workshops, practice exercises, readings) in grounded theory methodology (Strauss & Corbin, 1998) as well as detailed descriptions regarding the interviewing procedures used by the primary researcher.

# **Participants**

Using the Gomez et al. (2001) study as a guide, the grounded theory practice of theoretical sampling was replaced with purposeful sampling designed to secure information-rich cases (Patton, 1990). A sample of 53 potential participants from the second phase (conducted in 1996) of the O'Brien et al. (2000) longitudinal study was identified according to the following a priori criteria (criterion-based sampling, Patton, 1990): systematic ranked selection from the sample of all participants whose levels of career orientation on two separate measures decreased from 1991 to 1996 (the five-year period following high school). Fourteen individuals agreed to participate, and 12 participants ultimately were interviewed for the study.

All participants were graduates of a Roman Catholic, single-sex (female), college preparatory high school in suburban Chicago. Vocational fields represented by the participants at the time of the present study included: entertainment industry office management, software consulting, mental health counseling, information technology, speech-language pathology, nursing, special education, managed-healthcare marketing, stock brokerage, and the law. The highest levels of education received by the participants were as follows: six had graduated with bachelor's degrees, two had pursued some graduate-level coursework, one was enrolled in a master's degree program, two had acquired master's degrees, and one had a law degree.

The sample was predominantly European American (83%), with one African American (8%) and one Latina (8%). The mean age of the sample was approximately 29 (M = 28.9; SD = 0.29). Income levels (total, combined with partner's income if

applicable) were reported as: \$30,001-\$40,000 (1), \$50,001-\$60,000 (2), \$70,001-\$80,000 (2), and above \$90,000 (6); one participant did not report her income. One participant reported no religious affiliation, two indicated that they were non-practicing Roman Catholics, one reported affiliation with both Roman Catholic and Lutheran faiths, and eight participants identified as Roman Catholic.

Of the twelve women in the study, two were single without romantic partners, two were single with romantic partners, one was in a heterosexual marriage with no children, five were in heterosexual marriages with one to two children (most children were ages 4 months to 3 years; one child was age 10), and two heterosexually-married participants were pregnant with a first child.

All participants lived in the Chicago area at the time the present study was conducted. Six of the women remained in the Chicago area for college and lived there continuously post-college; two participants lived a few hours away (within state) for graduate school or employment post-college; and four women lived out-of-state for a year or more due to college/graduate school, employment transfers, or the career pursuits of romantic partners.

Each participant was paid \$20 at the time of her interview.

## Descriptions of Individual Participants

Individualized descriptions of the study participants are provided below; the women are identified by an initial.

C. is a European American office manager in the entertainment industry, a career field she planned on from a young age. She decided independently to attend her Catholic

high school over the local public school based on her interest in getting a better quality education. She then attended a private Catholic college in California, pursuing a degree in business and working two jobs to pay for the majority of her tuition and expenses. After college, C. returned to Chicago, first living with her parents and then moving into an apartment with a girlfriend. C. now lives in a house with her partner, a skilled tradesman. She plans eventually to marry and have children; she intends to work full-time after having children.

E. is a European American software consultant who works full-time out of a home office. She is married to an accountant who works in sales and with whom she has one child (19 months old at the time of the study). E. went through a suburban Chicago public school system until transferring to her mother's alma mater in senior year of high school due to the family's return to the city to care for E.'s grandmother. E. then matriculated at a small, private college, majoring first in Art and then switching to Accounting at the encouragement of her now-husband. After college, E. worked for two years in the payroll department of a telecommunications company. She then became an independent contractor doing Y2K software configuration, a challenging and lucrative job that required weekly "white-knuckled" airplane travel (flying terrified her) during her first three years of marriage but that also provided future financial security and options given her goal of staying home with children. E. now is employed by a company that provides computer software support services. Considered full-time, her work schedule fluctuates from 10 to 40 hours per week. She has a babysitter three days a week while she works out of her home office.

A first-generation Latina, O. received strong support from her father for her educational development, despite extended family opinions that did not value education for girls. O. turned down a scholarship to a small Catholic college in Pennsylvania to remain close to family; she instead selected a local Catholic college. O. planned since childhood to fulfill her father's dreams of becoming a doctor. However, after taking biology courses and learning more about her intended specialty field of heart surgery, she changed her major to psychology. She currently works full-time on an inpatient psychiatric ward while pursuing a master's degree in clinical psychology part-time; O. plans to continue on for her doctorate in clinical psychology. She is married to a nurse; her husband intends to adjust his career to serve as a primary caregiver (with the help of parents) for their future children so that O. can have the flexibility to pursue her educational and career goals.

J. is a single, European American information technology manager. J. chose her high school due to its reputation as the best school in the area. Her high school interests in chemistry and law waned as she advanced in college, pursuing a major in History and a minor in German. She briefly considered foreign consulate work as a result of positive study abroad experiences, but then decided to pursue a doctorate in history. After completing a one-year master's degree in Social Science, J. realized she did not want to continue for her doctorate and began working on a contract basis for the postal service in their information systems division. After less than a year, J. got a position doing research and information systems design for the county social work department; at the time of the study, she had worked there five years and had been promoted to the level of manager. J.

has pursued professional development opportunities in computer networking and hopes to expand her career options. She highly values education and plans to pursue additional degrees in the future when her financial situation is more secure. J. lives with her parents, which provides her with the financial flexibility to continue enjoyable activities such as travel. J. is open to a relationship/marriage that will honor her needs for autonomy; she is undecided about having children.

A European American speech-language pathologist, K. is married and expecting her first child. A good athlete in high school, K. gave up basketball and the studentathlete crowd when they threatened continued social connections to her childhood friends. She tried out different colleges and majors until finding a local Catholic college that allowed her to be close to friends and family and that offered classes that sparked her interest. Pursuing a Speech Department major, K. was attracted to the variety of career options and potential financial opportunities available. After graduating from college and getting engaged to a boyfriend from her social circle, K. moved a few hours away to complete a master's degree in Communication Disorders and Sciences; she completed her her program despite a leave of absence after her fiancée became seriously ill following a military tour of duty. K. currently works through an agency that provides early intervention speech therapy at home to special-needs children aged one to three. K. is building a network of families whom she serves and she plans to work independently from a home office part-time after she has her child. K.'s dream is to open an interdisciplinary clinic for children with autism and related disorders after her children are older (she hopes to have three children over the next five years). An important source

of inspiration for her career has been her younger brother, a special needs child whom she has protected and supported throughout her life.

H., a European American nurse, is the eldest child of a large Catholic family. She grew up serving as a primary caregiver for her younger siblings and, comfortable in the caretaking role, fell in love with nursing after taking an elective in this field in her senior year of high school. While taking prerequisites at her local community college, H. started working as a nursing assistant at the university hospital where her aunts worked. She then went on for her nursing degree and her registered nurse certification at the same hospital. After graduating, she got a position as an office staff nurse for a private-practice pediatrician and stayed there for six years. Her new salary allowed her to move out of her parents' home and she lived first with friends and then with her husband, a mechanical engineer. Although she still works occasionally for her old employer (she brings her child with her to the office when she works), H. now considers herself a full-time mother; at the time of the study, her child was eight-and-a-half months old. She plans to have no more than three children so that she can provide college educations for all of them.

B. is a European American early childhood special education teacher. She credits a high school course/practicum in child development as the source of her career interests. Due to parental financial considerations, B. attended and boarded at a state university instead of going out-of-state to college. When she finished her coursework, B. moved home and worked part-time as a receptionist while doing her student-teaching. As soon as she secured her first job, she moved into the city with friends. Her first position, in an inner-city school, was grueling due to a lack of resources and the stressors in the

children's lives. Because her salary was so low in the years before she was married, B. worked a number of other jobs to support herself, including waitressing and serving as a nanny. In her seven years of teaching, B. has taught in four different schools; she taught first grade students in a regular education curriculum for two years and then early childhood special education for the following five years. At the time of the study, B. was pregnant and planning to take time off to be a full-time mother. While she may work occasionally as a substitute teacher over the next few years, she does not intend to return to her career full-time until her children reach school-age. B. also hopes to have the motivation to pursue a graduate degree at some point in the future.

Most recently a software quality assurance analyst, M. is a European American full-time mother whose company folded shortly after she returned to work full-time following maternity leave (at the time of the study, M.'s child was four months old). M. is enjoying her time at home and now intends to look for part-time work close to home and childcare. In selecting a high school, M. originally chose her uncle's high school alma mater, a prestigious college preparatory school in the city, but then transferred to the less-status-conscious private Catholic girls' high school that her older sisters had attended. M. pursued engineering and geographical information systems at a large instate university; she interned with the Army Corps of Engineers and traveled throughout the state as a college volunteer for MercyCorps. She met her husband in college. After college, she found a position with a corporation doing geographical information system work and later developed an interest in software testing and quality assurance, which she continued with for the next five years (until the company closed). In planning for family

over the past few years, she pursued and passed national certifications for quality assurance and software testing because she knew finding time to study would be difficult after having children. M. thinks she will return for additional certifications or a master's degree after her child is older.

S. is a European American pediatric intensive care nurse. She selected her high school for its emphasis on math and science; she knew she wanted to pursue a serious career. Due to financial considerations, her parents (who were paying for her tuition) convinced her to attend an in-state university close to home so that she could commute; her father influenced her to pursue pharmacy. After three-and-a-half years, to her parents' great surprise, S. transferred colleges and changed her major to nursing. While still living at home, she worked full-time making eyeglasses to pay for her tuition in addition to attending classes full-time. S. finds her nursing career highly rewarding and her supervisor maintained her position as shift coordinator after S. reduced her hours to part-time when her child was born (two years old at the time of the study). S.'s partner, a police officer with rotating shift-work, shares childcare responsibilities with her. S. is becoming involved with research on her unit and hopes to add teaching to her professional roles in the future.

A European American pharmaceutical marketing manager, T. loved sales long before she discovered her favorite high school subject of chemistry. Attending a large instate university, T. entered as a chemical engineering major and eventually changed to molecular biology. Her research internships in both industry and academia clarified her interests and T. accepted post-graduate employment at a major pharmaceutical company

based in the Chicago area. T. worked out of state for a few years with a primary focus on her career, but, after her father's stroke, she transferred back to Chicago and set a goal of a better work-life balance. At the time of the study, T. had recently become involved with a serious romantic partner; she hoped to be engaged soon. T. and her partner have agreed that T. will reduce her career to part-time for their first child and then quit work if they have additional children.

W., an African American lawyer by training, is currently exploring other career fields such as teaching that would allow her more time with her family (W.'s children are ten and three years of age). W. attended high school with aspirations of becoming the first African American female supreme court justice; she graduated early at age sixteen. A pregnancy just before she entered college prevented her from going away to her university of choice; she instead attended a small Catholic college for a semester, then received a scholarship to the large state school in the area. Family members helped care for her child while she attended class, and she graduated on time. Wanting to prove she could survive on her own with her daughter, W. applied to law schools outside of the Chicago area and received a tuition scholarship to attend the prestigious state school that had been her first choice for college. W. graduated law school and moved out-of-state with her fiancée and her daughter; after marrying, failing the new state's bar exam on the first try, retaking and passing the bar, becoming pregnant with her second child, and dealing with a serious accident that disabled her husband temporarily, W. moved her family back home to Chicago. Dissatisfied with working on insurance defense cases, W. is interested in establishing a part-time legal practice in addition to teaching. Long-term,

W. hopes to establish a non-profit agency to support educational advancement for teenage mothers.

V. is a European American stockbroker with undergraduate and graduate education in music performance. Having studied the oboe with a private teacher since age 12, V. attended a university in the Chicago area respected for its music program. V. then pursued graduate education in Boston that proved to be a poor match for her. Moreover, while she initially supported herself financially through performance, V. came to resent the financial instability of her music career. She started working at a Boston brokerage firm and worked her way up. When her male partner decided to move to California, she moved with him despite not being at a good point in her career. Following a year or two of disappointment in both the relationship and her job prospects in California, V. returned home to Chicago feeling embarrassed to be dependent on parents once again and to have ended her adventures after only a short time. However, V. also felt pulled to be close to family as a result of the birth of her first niece. Knowing that she wanted to settle in Chicago, V. slowly got on her feet, climbing the ladder at the Chicago brokerage firm (the same company as the Boston brokerage firm at which she had worked). She is in a lucrative position that she enjoys and that has provided her with confidence and material success. Although she would like to meet a romantic partner and have children someday, V. does not plan to limit her career involvement after children.

#### Measures

# Sampling Measures

The present study sought, in part, to explore possible contributors to changes in women's career orientation. Admittedly, there are numerous ways to assess levels of achievement and aspiration in the career development of women. For the purposes of this study, levels of career orientation were assessed using the constructs of career traditionality and career aspiration. Data measuring each of these constructs were drawn from the O'Brien et al. (2000) longitudinal study.

Measurement of Traditionality of Career Choice

Participants' career choices were operationalized as the occupations they listed for their current employment. Future career choices were those occupations named by the women as their desired occupations five years into the future. Traditionality of career choice was operationalized as the percentage of women employed in a particular career field according to the most recent census data available at that time (U.S. Department of Labor, 1997).

Measurement of Career Aspiration

The degree to which participants valued their careers and aspired to advancement and leadership positions within their careers was measured by the Career Aspiration Scale (O'Brien, Gray, Touradji, & Eigenbrode, 1996; see Appendix A for a copy of the instrument).

The scale contained 10 items measured on a 5-point Likert scale ranging from *not* at all true of me (1) to very true of me (5). Four items were reverse scored, and all items

were summed to obtain a total score. Higher scores indicated greater aspiration within a career. Sample items included the following: "I hope to become a leader in my career field," "Once I finish the basic level of education needed for a particular job, I see no need to continue in school," and "When I am established in my career, I would like to train others."

Internal consistency reliability estimates for this measure ranged from .73 to .77 (O'Brien et al., 1996). Construct validity evidence was demonstrated by positive correlations with measures of multiple-role self-efficacy and attitudes toward women's roles, and a negative correlation with this measure and a scale assessing the relative importance of career versus family (Dukstein & O'Brien, 1994).

#### Interview Measures

Two instruments were used in this study: an in-depth, semi-structured interview protocol (see Appendix B) and a brief demographic questionnaire (see Appendix C). The interview protocol, which included a one-page Life/Career Path Worksheet (see second page of Appendix B), was developed through a careful review of the existing literature. The interview questions were open-ended to minimize directing of the participants' responses; however, prompts were used to encourage participants to address the research questions of interest. An example of a prompt was an initial request of "At that time in your life, what would you say gave your life meaning or felt most important to you?" followed by the question "What made it meaningful?" The interview protocol incorporated the following topics: (a) general life/career path since high school graduation, (b) significant events and decision points along life/career path, (c)

significant influences along life/career path, (d) sources of life meaning associated with significant life events and decisions, (e) challenges and conflicts experienced in relation to important life events and decisions, (e) reflections on life/career experiences and choices, and (f) future goals.

# Pilot Study

Concurrent with participant recruitment, the interview protocol was tested and refined through a pilot study with eight women similar to the study participants in terms of age, suburban metropolitan living environment, and career and parenting statuses. The women in the pilot were approximately 30 years old; lived in the Chicago, DC, or Philadelphia metropolitan areas; had infants or young children; and represented varied career statuses. The pilot study helped to ensure that the protocol questions were clearly worded and were addressing the intended topics. Pilot participants provided feedback regarding the interview experience in general (e.g., preferred time-length of interview; emotional experience associated with being interviewed) and the effectiveness of specific protocol questions. The pilot also provided the primary researcher with practice regarding interviewing procedures (e.g., consistent tone of delivery, use of open-ended prompts, pacing the interview, and working with different verbal styles).

## Expert Consultations

Two external researchers with expertise in qualitative methodologies also were consulted for feedback regarding the interview protocol (Dr. Sue Morrow, University of Utah, and Dr. Donna Schultheiss, Cleveland State University). The protocol was changed to incorporate many of their suggestions, including tightening the correspondence

between research questions and interview protocol language; avoiding biased questioning and pre-defining of categories in protocol items, prompts, and the career/path worksheet; and identifying more clearly the aim and desired scope of the protocol.

In addition, the author's thesis committee (Drs. Ruth Fassinger, Karen O'Brien [chair], and Kathy Zamostny, University of Maryland) recommended changes to the protocol. Specifically, members of the committee suggested the design of the life/career path worksheet to activate the memories of participants regarding sources of meaning and important influences in their lives, to provide a frame for the interview discussion, and to promote efficient use of time in the interview. The committee also recommended further broadening of the language in the protocol to ensure that questions did not lead participants or pre-define categories. For example, instead of asking participants directly about "individuals who may have served as role models and/or mentors" (which might have induced participants to say that role models and mentors were very important to their life/career choices), the revised protocol asked participants to talk about "significant influences" that "directly or indirectly influenced the decisions you were making, shaped the way you thought about yourself, or influenced your life/career path." Any findings about the presence, importance, and effect of role models and mentors in the women's lives, therefore, would emerge from the data rather than be directly solicited.

# Procedure

Participants from the O'Brien et al. (2000) study whose levels of career orientation decreased (indicated by a lower score on the career aspiration measure and a higher score on the traditionality measure) over a five-year period (from 1991 to 1996)

were identified and ranked in groups according to the following minimum criteria: (a) Group One: 15 participants were identified as having at least 1.0 standard deviation decrease on the career aspiration measure (SD = 6.31) and at least 1.0 standard deviation increase on the career traditionality measure (SD = 24.01); (b) Group Two: 9 participants had at least 0.90 standard deviation decrease on the career aspiration measure and at least 0.90 standard deviation increase on the career traditionality measure; (c) Group Three: 7 participants had at least 0.80 standard deviation decrease on the career aspiration measure and at least 0.80 standard deviation increase on the career traditionality measure; (d) Group Four: 2 participants had at least 0.70 standard deviation decrease on the career aspiration measure and at least 0.70 standard deviation increase on the career traditionality measure; (e) Group Five: 15 participants had at least 0.60 standard deviation decrease on the career aspiration measure and at least 0.60 standard deviation increase on the career traditionality measure; and (f) Group Six: 5 participants had at least 0.50 standard deviation decrease on the career aspiration measure and at least 0.50 standard deviation increase on the career traditionality measure. A total of 53 potential participants were identified.

Current addresses, telephone numbers, and/or email addresses were obtained for 51 of the 53 potential participants through the most recent high school alumni directory (2001 edition) and through contact with the high school alumni office. Each of the 51 potential participants was mailed a letter introducing the project (see Appendix D) as a continuation of the Longitudinal Study of Women's Life Choices in which they participated in 1991 and 1996 (O'Brien et al., 2000). The women were invited to

participate in an in-person (Chicago area or convenient location), 1½-hour, audiotaped interview regarding their life/career experiences and decisions; they also were informed about the \$20 honorarium to be paid to participants. The letter of invitation included a response form (see last page of Appendix D); recipients were encouraged to return their response forms to indicate interest/lack of interest in participating in the study. Letters were followed by telephone (see Appendix E) and/or email invitations (see Appendix F), depending on the contact information available for particular individuals; participants were contacted according to their level of change in career orientation (i.e., highest to lowest change in career orientation level within Group One, followed by highest to lowest change in career orientation within Group Two, etc.).

Seventeen participants were identified as a result of the above recruitment efforts; three were eliminated because they could not do in-person interviews (due to distance, disability, or childcare responsibilities). Of the remaining 14 participants, 6 women were from Groups One or Two (change of 0.9-1.5 standard deviations in career orientation level) and 7 women were from Groups Four, Five, or Six (change of 0.5-0.7 standard deviation in career orientation level). All 14 participants were assigned interview dates/times and emailed the following: (a) a confirmation letter (see Appendix G) and (b) a copy of the informed consent statement (see Appendix H). The confirmation letter detailed the date, time, and location of the interview; it also provided parking instructions/map (when applicable), contact information for both the interview location and project director, and basic information about the interview process. The informed consent statement was included as an attachment to the confirmation email; participants

were informed that they would be asked to sign a copy of the informed consent statement at the time of their interview.

#### Interviews

Twelve of the fourteen participants appeared for their scheduled interviews; two could not attend (due to a family emergency and a recent childbirth). The individual interviews were approximately 1½ hours in length and were conducted at a university and various libraries in the Chicago area. Each interview was audiotaped using two cassette recorders (one as a back-up) with microphone attachments; equipment was supplied by the project director.

At the start of each interview, the project director explained the general purpose of the study; communicated an interest in learning about the experiences and perspectives of the interviewee; reviewed the study procedures and the risks/benefits of participating; asked that the informed consent statement be read and signed; and provided the participant with her honorarium. After these activities were completed, the project director answered any questions that remained for the participant about the interview process and encouraged the participant to ask questions/respond to questions throughout the interview to a degree that was comfortable for her. The project director then proceeded with the interview protocol (see Appendix B). At the conclusion of the interview, the participant was asked to fill out a brief (two-page) demographic questionnaire (see Appendix C). Upon completion of the questionnaire, each participant was given a written statement to debrief her about the study (see Appendix I) as well as information regarding career and general counseling resources in the local area (see

Appendix J). After the interviewee departed, field notes were recorded by the interviewer to document information about the interview environment, duration of the interview, individuals present, participant non-verbal communication, and perceptions about the level of rapport developed with the participant (see Appendix K). These field notes contributed to data transferability (an ability to recreate the interview), one criterion used to establish trustworthiness of the data (Lincoln & Guba, 1985).

Subsequent to the interview process, each interview was transcribed by a member of the research team and checked by the project director/interviewer for accuracy and also to ensure that any identifying information was removed. Team members were instructed to erase any computer file copies after the project director confirmed receipt of the files. Following the method of "member checking" (Lincoln & Guba, 1985), each participant was sent the transcript of her interview and provided with the opportunity to clarify or amend her statements (see Appendix L for letter written to participants regarding transcript checking). Four of the twelve women elected to edit their interview transcripts; changes included minor sentence deletions; sentences added for clarification; and corrections of typographical errors.

### Analysis

The participant-approved interview transcriptions were analyzed using a modified grounded theory method (first two levels of coding) (Strauss & Corbin, 1998). Grounded theory methodology involves three levels of coding (open, axial, and selective) in which data sources (e.g., interviews) are broken down from an empirical to a conceptual level and then woven back into a theoretical whole. The present study used open coding and

axial coding; selective coding is employed in the construction of theory, which was not a goal of this project.

### Open Coding

Conceptualization. Open coding involved two steps: (a) conceptualization and (b) categorization (Strauss & Corbin, 1998). During the first step of open coding, research team members read interview transcripts independently, systematically dividing the narratives into conceptual chunks, that is, phrases, sentences, or paragraphs that addressed discrete concepts. Each discrete concept was named; naming of concepts arose from the transcribed words of participants themselves (Glaser and Strauss [1967] called this "in vivo" coding (p. 69), because participants' actual words are used to convey meaning) or from the team member who was responding to the imagery or meaning that the concepts evoked when examined in context. As an example of the conceptualization process, a participant gave the following response to a question about what gave her life meaning at the time she was making a decision regarding which high school to attend:

A lot of my values—a lot of my ambition and drive—have come back to a book I was given by a teacher. In 7<sup>th</sup> grade, Miss W. introduced me to the author Ella

Montgomery. She [said], "Take a look at this." I developed a love for that author. This conceptual unit was labeled "educational values inspired by book given to her by teacher." After individual team members identified all of the concepts in a given transcript, they worked with a partner to compare their generated concepts and to reach consensus regarding the meaning of and labeling of each concept (e.g., clarifying their nuanced interpretations of a particular part of the narrative, brainstorming, and then

settling on a label that incorporated both interpretations of the text). Team member pair combinations differed for each transcript; pair combinations were assigned by the project director according to a rotating system that varied research experience levels and ensured that members were not paired more than once.

Categorization. In the second step of open coding (categorization), each pair generated categories from the agreed-upon concepts in their transcript. Expanding on the example above, the concept "educational values inspired by book given to her by teacher" was listed under a newly created category called "Teacher Influence." Over a period of weeks, preliminary category lists generated by the pairs for each transcript were discussed by the entire team and a master category list emerged that streamlined the categories and clarified the relationships among them. As data were added with each new transcript, coded concepts were compared to existing data and categories were added or redefined to accommodate the new data. For example, the concept "college professor discouraged interest in art/design career," was added under the category "Teacher Influence." When the concept "attention from college recruiters made out-of-state college tempting" was incorporated, however, the category name was broadened to "Educator Influence." The categories continually underwent modification to incorporate new information and were assessed on an ongoing basis by the team for coherence and explanatory capacity.

### Axial Coding

During the second level of coding, axial coding, both the relationships among the categories and the complexity within categories were further explicated. Specifically, the

constant comparison method that continues and deepens at this level of coding involved the following elements: (a) comparing and relating subcategories to categories, (b) comparing categories to new data, (c) expanding the density and complexity of the categories by describing their "properties" (general or specific characteristics that define the category) and "dimensions" (the range along which the properties of a category vary) (Strauss & Corbin, 1998), and (d) exploring variations (e.g., disconfirming instances) in the data and re-conceptualizing the categories and their relationships as necessary (Brown, Stevens, Troiano, & Schneider, 2002; Fassinger, in press). Through this process of ongoing comparison and revision by the team, individual categories were grouped into more encompassing "key" categories (Fassinger, in press), for example, the category "Educator Influence" was included with other categories such as "Educational Path" and "Educational Interests" under the key category "Educational Experiences." Data incorporation ceased when categorical "saturation" was reached, that is, when no new information emerged about the categories, when the categories appeared dense and complex enough to capture all of the variations of participants' experiences, and when the relationships among categories and key categories had been delineated to a satisfactory level (Fassinger, in press; Strauss & Corbin, 1998). At this stage, a final master category list was agreed upon by the team, typed up by the project leader, and distributed to all team members.

Team members then were assigned transcripts to code on the computer. In some cases, team members received transcripts they had reviewed in the open coding stage (i.e., one transcript out of the two or three they coded); in other cases, assigned transcripts

had not been read previously. All team members were instructed, however, to look with "fresh eyes" at the data, evaluating anew the boundaries for each conceptual fragment and coding using the developed categories from the master category list (Coding was done at the level of "category" rather than "key category."); even when team members were somewhat familiar with a particular participant's narrative, they, at this stage, had to code at a higher level of abstraction (category vs. concept) which contributed to seeing the transcripts in a different way. In Microsoft Word, team members delineated each conceptual fragment, or "record" in the transcript files with a line space and then labeled each record with the following: (a) the appropriate category name from the master category list (often abbreviated for coding efficiency), (b) the participant's initials, and (c) the record number. An example of a coded record from an individual transcript is shown below:

CV: Right. And, plus, he travels a lot, too, my boss does. So, a lot of times I'm there by myself and that's fine with me. Because then I'm just independent, and I just do whatever I need to do, and I don't have someone constantly checking on me at all. In fact, they never check on me, really. They just kind of say, "OK. This is what needs to be done." And that's it. I: So, you like your independence. CV: Definitely. [WORK ENVIRON, AUTONOMY, CV]

As seen in the above example, records whose conceptual content overlapped categories were coded with more than one category label as a strategy for making more visible nuances in the data that can emerge from different conceptual/categorical frames.

When the coding was complete, team members delivered their coded transcript files on disk to the project director (team members again were instructed to erase any backup files after the project director confirmed receipt of the files). Every coded transcript was checked twice (first by a graduate student member of the research team and then by the project director) for both consistency in categorical labeling and accuracy in formatting. Initial discrepancies observed in coding styles (e.g., varying definitions of conceptual fragment size and when to multiple-code) were addressed early in team meetings and agreed-upon benchmarks were followed thereafter. Team members arrived at consensus regarding these benchmarks through a process of both referring to coding guidelines and examples provided in the training on grounded theory method (Strauss & Corbin, 1998) and discussing the master categories list to further clarify what concepts should fall under specific categories.

Coded, checked transcripts then were imported from Microsoft Word into Folio Views (version 4.1 for Windows), a software program which facilitated the labeling and sorting of narrative categories. Boundaries between conceptual fragments ("records"), previously indicated in Microsoft Word with a line space, required the insertion of a "new record" character and category label abbreviations were re-checked for the exact spelling designated by the master category sheet (essential for accurate sorting of the data by the software program). In addition, record numbers, tracked in Folio Views, were added to each record, for example: [WORK ENVIRON, AUTONOMY, CV, 75].

After coding changes and formatting additions were complete, queries were run in Folio Views to sort the narrative data by category. A file was saved and imported back

into Microsoft Word for each category designated on the master category list. Each category packet contained all the narrative records labeled with that category name; records were grouped alphabetically by participant first initial and then numerically within each participant's group of records.

Propertizing and dimensionalizing. At this stage, a key element of axial coding was implemented to develop an understanding of the density and complexity of the categories: propertizing and dimensionalizing. The categories were described in terms of their general or specific characteristics (properties) and the location of each of these properties along a continuum or range (dimensions) (Strauss & Corbin, 1998). After team training regarding procedures for propertizing and dimensionalizing, individual research team members were assigned categories and given the corresponding narrative packets. For each narrative packet, the team member prepared a cover page with columns that listed the following: (a) those participants included and not included in the category, (b) records deemed irrelevant to the category (i.e., the topic discussed in the record was not consistent with the team-generated definition/examples for that particular category on the master categories list), and (c) and records to be added to the narrative packet (This latter column was used infrequently by the team member doing the initial propertizing. When it was used, it typically included records that had been missed due to misspelled category labels. Later, this column was used by the project director and the auditor during additional stages of checking to identify records that were missed due to coding oversights.).

In reading the category packet, the individual research team member distilled each narrative record into a summary phrase (similar to the open coding process of conceptualization). After completing the packet, the team member reviewed all of these summaries and identified two to five key themes (properties) that, when taken together, best captured the characteristics and the essence of the given category. The dimensions, or range, of the category's described characteristics then were delineated. An example of a property for the category "Educator Influence" was "educator influences on career," and this property was dimensionalized on a continuum of "positive influences" to "positive and negative influences" to "negative influences."

After establishing dimensions for the given properties of a particular category, the team member placed each participant (represented by their initials) along the continuum, recording her reasoning for particular placements for future reference. As Fassinger (in press) emphasized,

This step [propertizing and dimensionalizing] is critical in helping the researcher to consider what categories actually mean in terms of individual participants (e.g., whether they fit participants' experiences as described) and what the relationships are among categories....When we propertize and dimensionalize our categories and place participants along our continua, we can see with great clarity the patterns for each individual participant across all properties in that category, as well as the patterns in the overall sample.

Returning to the above example, placement of the study participants on the dimensions for the property "educator influences on career," allowed us to observe that those women

who spoke about educator influences on their careers had had positive experiences; however, looking at another property in that category—"educator influences on education"—indicated a mix of positive and negative experiences with educators.

Team members submitted properties and dimensions for each of their assigned categories. Team members consulted with one another and with the project director in formulating templates for similar categories; for example, the categories "Influences" and "Social Supports" used the same properties and dimensions due to their similar themes. Once completed, category properties and dimensions were checked first by the project director, who made changes to properties that did not adequately reflect major themes (or the complexity of those themes) in the data and who also attempted to eliminate redundancy across properties for a given category.

#### Auditor

Providing a final check of the study's data analysis procedures, the auditor/faculty advisor reviewed the properties and dimensions created for each category. The auditor, who had no previous contact with the narrative data, first read all the narrative text for a given category and then evaluated the properties and dimensions through two questions:

(a) Do the properties and dimensions capture the essence of the narrative data for this category?, and (b) Are the participants correctly placed along the given dimensions?

As a result of the auditor's feedback, the project manager finalized the properties and dimensions for the categories. Properties and dimensions for specific categories were refined, individual participants were positioned differently on the category dimensions, and redundancy across categories was highlighted. These three levels of review—the

original propertizer/dimensionalizer (informed by team training and discussion); the project director, and the auditor—helped to ensure that the study data were interrogated a number of times and that the generated properties and dimensions accurately reflected the themes of concern to the women in the study with regard to their life/career paths.

#### **CHAPTER 5: RESULTS**

The following section describes results from the study. Open and axial coding of the narrative data yielded 69 categories organized under 8 key categories. This paper highlights results from those categories that addressed the research questions regarding sources of life meaning and significant influences/supports for the 12 participants in the study; a total of 45 categories spanning 7 of the 8 key categories were investigated. With the exception of two categories (Family-of-Creation Influence ["influence" was defined as affecting a woman's choices/decisions] and Family-of-Creation Support ["support" was defined as providing emotional or structural aid]), all of the categories investigated were addressed by six or more participants and most of the categories were discussed by a majority (eight or more) of the participants.

Rather than reporting on each of the 45 categories individually, narrative data from various categories have been integrated and organized to address the research questions of interest and to reduce redundancy. Therefore, while section headings below sometimes correspond directly with titles of categories (e.g., Autonomy) or key categories (e.g., Social Influences/Supports) from the master categories list, this is not always the case (e.g., the "Family" section under Sources of Meaning is a compilation of data from categories such as Valuing Family, Significant Life Events/Decisions, and Geography). Section headings reflect the major themes that emerged through data analyses, that is, themes addressed by a majority of women in the study. In particular sections, however, the full range of perspectives shared by participants is included, that

is, a point of view provided by one woman within that theme may be shared alongside the views of the majority on a given topic.

In the reporting of the results, participants are identified by ethnic identity and work/career title ("work/career" being inclusive of labor in the domestic sphere) the first time they are mentioned. Thereafter, participants are referred to by work/career title and, only when important to context, ethnic identity.

The first two sections below provide an overview of the participants' life/career paths. The first section outlines the educational/career trajectories of the participants in the context of traditional and nontraditional career expectations for women. The second section summarizes the significant life events and decisions reported by the women that framed their discussions about the sources of meaning, influence, and support in their lives. The remaining sections summarize the narrative findings relevant to life meaning and social influence/support.

#### Educational/Career Interests Over Time

The women in the sample traced their educational/career interests across different stages of their lives: middle school through high school, college, and post-college. Five of the women, across all stages of their life/career paths, expressed interest in and pursued academic majors and careers typically considered non-traditional for women. These educational/career evolutions included (a) music industry interest, to business and law, to music industry management; (b) chemistry to history/law to computer science; (c) engineering to engineering (geographical information systems) to engineering (software analyst); (d) chemical engineering to biology/marketing to pharmaceutical product

management; and (e) music performance to professional musician to stockbroker. Two participants in the study reported interests in traditionally-female educational tracks and careers across all stages of their life/career paths; both women—a European American special education teacher and a European American medical office nurse—were committed to their career interests since high school. One participant, a European American woman who originally pursued a traditionally-female art curriculum, changed her major to accounting and became a high-paid business consultant post-college (a field and a level of success more traditionally associated with men). Four women started out with educational/career interests in non-traditional fields but later changed to majors/careers more traditionally associated with women: (a) biology/medicine to psychology major to mental health counselor; (b) veterinarian (middle school) to English/philosophy major to speech pathologist; (c) general science to pharmacy to nursing; and (d) goal of being Supreme Court justice, to lawyer, to substitute teacher.

Participants' descriptions of their educational/career trajectories were compared with written data regarding present occupations provided by participants on their surveys during the second phase of the study, that is, five years post-high school (O'Brien et al., 2000). Hard-copy data were available for only six women (participants were selected for the current study based on the complete data sets available in the computer database). The six women included (according to the categories described in the paragraph above) three women who had pursued non-traditional academic/career paths across all stages of their lives, two women who reported traditional educational/career paths across all stages of their lives, and one woman who reported a change from non-traditional to traditional

career interests in her lifetime. These data from five years post-high school showed participants' occupations to be, respectively, (a) receptionist, (b) student, (c) student/secretary, (d) nurse, (e) receptionist, and (f) student/research assistant. When compared with participants' descriptions of their academic/career paths (detailed above), these hard-copy data indicated that apparent decreases in career orientation for some of the participants selected for the present study were due to continuing education (i.e., student status) or career transitioning post-college.

Participants in the present study also described current career status and future career goals, often in the context of plans for children (the intersection of careers with family is addressed more fully in the section titled "Career-Family Interface"). Of the five women who consistently pursued non-traditional educational/career paths, one—the European American engineering software analyst—was currently unemployed due to a layoff and intended to return to her engineering career only part-time due to childcare preferences; she said she would pursue a managerial position as the next step in her career. The other four were employed full-time; three of these women planned to continue in their careers full-time and/or pursue advanced degrees in the future whether or not they had children and one indicated that she intended to halt her career and her plans for an MBA temporarily (for a few years) to have children. Of the two women who had consistently pursued traditionally-female career interests, the medical office nurse was working part-time for her previous employer while caring full-time for her new child (the employer allowed her to bring her baby into work) and the early childhood special education teacher planned to stop teaching in a few months after having her first child,

with goals of returning to teaching and pursuing graduate education after having a few children. The participant who switched from a traditional to a non-traditional major/career (art to accounting to software consultant) reported that she has worked full-time from home as a computer consultant since having her first child; she expressed interest in changing her career in the future to nursing or another career that would be more meaningful to her than business.

All four of the participants who previously had non-traditional educational/career interests but later pursued more traditional interests reported aspirations for furthering their careers as well as plans for family. The Latina full-time mental health counselor/master's degree student intended to pursue a doctorate and then a private practice in clinical psychology, with plans for children after completing her degree. The European American full-time speech pathologist aimed to start her own practice after having her first child and then eventually open a clinic for autistic children. The European American pediatric intensive care nurse, who was offered her high-status supervisor position part-time after having her first child, said her goals included graduate work in nursing and continued advancement in her field though teaching and research. Finally, the African American lawyer/substitute teacher's goals included teaching full-time, opening a part-time legal practice, and eventually starting a non-profit organization for teenage mothers.

### Significant Life Events and Decisions

When asked about significant choices and experiences in their lives, the women in the sample described educational, family, career, geographical, and relational decisions and events that had shaped their life/career paths. Five of the twelve women discussed all of these areas. Four of the participants discussed mostly career and educational events and decisions such as choosing schools, switching majors, being exposed to valuable learning opportunities, deciding on a career path, switching jobs, or becoming self-employed. Three of the twelve primarily discussed family and relationship events and decisions such as marriage, pregnancy or birth of children, and moving to be closer to romantic partners, family, and friends.

Addressing their sources of motivation for life decisions, seven of the women said they were motivated by both themselves and outside influences, four participants described themselves as highly self-motivated in their decisions, and one woman said she was mostly other-defined when it came to important choices in her life.

# Life Meaning

Sources of *life meaning*—the sense of purposeful existence and fulfillment that accompanies one's beliefs about and involvement in the roles, activities, and commitments that comprise one's life—were identified explicitly by participants each time they described distinct significant events or decisions along their life/career paths. Participants' selection of "the most significant" events and decision points in their lives also provided an implicit identification of what they found meaningful. Narrative data from all seven categories under the key category, Life Meaning (Life Meaning, Significant Life Events/Decisions, Regrets, Greatest Accomplishments, Life in Five Years, Life in 30 Years, Goals), as well as additional categories (e.g., Valuing Family, Valuing Relationships, Valuing Career, and Autonomy), inform this section. In analyzing

all data relevant to life meaning, four themes emerged: (a) sources of meaning for individual participants, (b) changes in life meaning over time, (c) general life satisfaction, and (d) the significance of goals in the assessment of life satisfaction.

## Sources of Meaning

Participants collectively identified 15 sources of meaning when asked to name what was most important, significant, meaningful, and positive in their lives both currently and at self-defined critical junctures along their life/career paths. These included: family, partner/marriage, children, education, intellectual growth, autonomy, friendships, career (i.e., enjoyable and/or meaningful work), finances/material success, goal fulfillment, social support, values (e.g., helping others), music, travel, and health. Five categories reflect the sources of meaning identified by a majority of women in the sample: (a) family (including family of origin and family of creation, i.e., partner and children), (b) career, (c) education and intellectual growth, (d) autonomy, and (e) friendships.

#### Family

This section addresses findings related to the following themes: overall importance of family, increased significance of family over time, family's impact on geographical location, goals and family, and significant life events and decisions related to family.

Overall importance of family. All of the participants spoke of family as a key source of meaning. In some cases, "family" was expressed generally, as in "family is very important to me," "having a duty to family," or "family relationships are the most

positive aspects of my life." In most cases, however, the women spoke about specific family connections and their own commitments to maintaining these bonds. For example, the mental health counselor explained how important it was to her to maintain a strong relationship with her family of origin after she married, even if her husband did not become close to them; she said she felt blessed that her Filipino husband not only has been assimilated into her Mexican American family but also has become an active caretaker for her aging parents. The early childhood special education teacher shared that she and her husband so valued their memories of holiday traditions with family members that they now host the family holiday celebrations. The full-time mother/unemployed software quality assurance analyst voiced how important it was to her that her infant son know both sets of grandparents before they die; she reported that she and her husband put effort into making regular visits to their parents' homes.

Increased significance of family over time. For 10 of the 12 participants, family became more important over time; the 2 remaining women reported family as a source of meaning throughout all periods of their lives. The early childhood special education teacher explained,

I'm closer now with my family than I have ever been...When you're going through high school and college, you just tend to be your own person and not want your family; you want to be with your friends and do that kind of thing. And now you realize you need your family and your family is not so bad to hang around with. We actually do a lot with my family...it's important to my husband, it's important to me, that we have our family around."

Similar to this participant, for most of the ten women, the increasing significance of family—both families of origin and families of creation (i.e., partners and children)—grew alongside the women's plans for families of their own. Six of the women said that their lives had taken on a family-centered focus since they had married and started having children. Examples included growing closer to partners rather than friends at this stage of life, deepening relationships with older sisters who offered knowledge and support about weddings and childrearing, adopting father-inspired family safety protocols, and promoting healthy relationships and quality time spent within the nuclear family.

Family's impact on geographical location. The meaningful role of family shaped ten participants' decisions to remain in or return to the Chicago area. A European American stockbroker reported surprise at the intensity of her feelings about missing the birth of and early development of her niece while living away from family; she credited this event as a "wake-up call" that signaled the importance of family relationships in her life and contributed greatly to her decision to move back to the Chicago area. She said, "Now, if I did get laid off, I don't think I would move somewhere for a job. I would stay here, because of the family. Whereas, before, I would have gone anywhere for my career." A European American pharmaceutical marketing manager shared how her father's stroke made clear how critical family was in her hierarchy of needs and inspired her request for a transfer back to Chicago; this participant had chosen her Chicago-based employer because of the likelihood that she would want to settle eventually near family. After being depressed for a few years while living out-of-state for her fiancé's career, the

mother and part-time lawyer/substitute teacher expressed her deep relief about returning home:

It was coming back where I wanted to be because, you know, my family was in Chicago—I wanted to be by them. My friends are in Chicago also. So, I'm like, 'I just want to go home.' So that's a big deal for me, you know, to be back here.

Other participants reported deciding to stay in the Chicago area for college to remain close to family, switching jobs to settle near their own and their partners' families, and associating the Chicago area with quality relationships and the potential for finding a

compatible life partner and raising children.

Goals and family. Every woman in the study had included plans for heterosexual marriage and children among her life goals, another indication of family as a key source of meaning. Four of the participants were not married but said they hope for this in their futures; two of the four were in serious, committed relationships. Two women from this unmarried group (one was in a relationship, one was not) said they were in no hurry to marry. In contrast, two of the unmarried women (one in a relationship, the other not) articulated a sense of urgency regarding finding life partners and starting families; both had been affected by family members or friends who were pregnant or trying to get pregnant. As the stockbroker shared,

Before it was fine if I dated a guy for a few months and we broke up—it was no big deal. But now I'm, like, should I date this guy that long, am I wasting time, do I need to move on? I feel like every decision I make could have a bigger impact on my life than before. And that's just recent. Probably since my friend got

pregnant. It's, like, well shoot, I should probably start thinking about if I want marriage and kids and all that stuff.

The pharmaceutical marketing manager whose family members were struggling with the challenges of infertility, realized, "It takes a lot of effort to have a family!...I realized it's not going to come to me. Somebody's not just going to land. I have to go find it."

Of the eight women who were married, all but one had children or a child on the way; this latter participant, the mental health counselor, described her intention to have children as something that would "complete the puzzle." Five of the participants from the study made reference to schemas defined earlier in their lives regarding marriage and children, including ages by which they were to have achieved these milestones. All of the women who already had children expressed an interest in having additional children. While identifying their long-term (30-year) goals, five participants expressed interest in having grandchildren to continue the family legacy, or, as one woman put it, to "keep the family thing going."

Significant life events/decisions related to family. When listing significant events and decisions along their life/career paths, a majority of the sample (nine women) identified experiences related to family, including family of origin, marriage, and children. Events related to families of origin included the birth of younger siblings and serious medical conditions, for example, a father's stroke and growing up with a brother who had a brain tumor.

Eight participants listed marriage among the most important events of their lives; some of the women spoke of their decisions to marry and their commitments to their

marriages despite challenging times. For example, the speech-language pathologist talked about her decision to get engaged just as she was moving away for graduate school; she worried about the strain this distance would put on her relationship with her partner and her friends from home. Family cultural values were at play in the marriage proposal of the Latina mental health counselor to her Filipino fiancé; his Catholicism bridged the cultural gap and eased his acceptance into the family by her father and brother.

Those participants who had children (seven women, including two who were pregnant at the time) described the experience as "momentous," "an amazing process," "the single biggest thing in my whole life that ever happened," and "the most special thing in the world to have a baby." One woman said, "It's, like, that defining moment. You're having a kid, and yeah—I mean, it's crazy, it's bizarre—I think it really changes you." Four of the five women who already had given birth ranked their children among their greatest life accomplishments.

## Career

All of the women in the study indicated that career had been an important source of meaning during some or all periods of their post-high school lives, and seven of twelve participants included their careers among their greatest life accomplishments. Participants explored the themes of career passion, work ethic, and career benefits.

Career passion. A majority of participants (eight women) expressed passion for their current careers, saying that they loved or really enjoyed their jobs. For example, the early childhood special education teacher said, "I love teaching, I love what I do, I love

being with the kids every day" and "It's part of who I am." The mental health counselor said that she loves her work so much that she won't ever retire: "I wanna die and I still want to be working on my career...[and] be known as taking an active role out there in psychology." A ninth participant, the European American information technology manager who overall indicated frustration with her lack of career advancement, even acknowledged, "I really like what I'm doing right now." The remaining three women in the study—the software consultant, the unemployed software quality assurance analyst, and the lawyer-now-substitute teacher—reported they had been passionate about their careers before having children (the section titled "Career-Family Interface" addresses this theme more fully).

Work ethic. Consistent with their career passion, the work ethic of the women in the sample was self-reported as high. A majority of participants said they were "very into my job" and worked long hours to do the best job they could. One participant, the newly-pregnant special education teacher, shared that her guilt makes it hard for her not to go to work even when she is sick. Another participant emphasized how much she valued coworkers and managers who demonstrated a solid work ethic.

Career benefits. Describing what they valued about their careers, a majority of participants said that their work provided a sense of goal fulfillment as well as interpersonal support and comraderie. Half to a majority of the women cited other benefits of their careers, including interpersonal rewards resulting from helping others, career self-confidence, the enjoyment of challenging work, and money/financial independence. Finally, five of the women emphasized their preferences for careers that

provided personal fulfillment in contrast to external rewards. These career benefits are described in more detail below.

Most of the women in the sample (eight participants) spoke about a feeling of accomplishment arising from the fulfillment of long-term or short-term career goals. Five women said that having a career (or pursuing a specific career) always had been an important part of their life plans and that achieving their desired careers was a source of pride. As the pediatric intensive care nurse/mother explained, "I always knew I was going to get a career and do something with my life." The lawyer/substitute teacher recounted how her teenage pregnancy only accelerated her drive to accomplish her childhood goal of becoming a lawyer, which she achieved as a young, single mother. Three other participants spoke of the sense of accomplishment they derived from meeting short-term goals in their jobs.

A majority of women in the study (eight participants) reported that their careers also provided an important source of interpersonal support and comraderie. Participants said they felt valued, appreciated, and encouraged by supervisors and coworkers. The women also reported enjoying learning and sharing knowledge with work colleagues; one participant commented that her coworkers at a previous job were "like a little family."

The rewards of helping others through one's career was a theme addressed by half of the participants (six women) in the study. For example, the speech-language pathologist stated, "That's my biggest accomplishment in my career—helping other people," when she described how fulfilling it is to receive positive feedback from the parents of special-needs children and to know that her work is helping to address the

injustice and discrimination experienced by disabled individuals. The part-time medical office nurse/full-time mother talked about her enjoyment of caring for patients, saying, "I loved taking care of people. I loved talking to these people and making them feel better." Commenting that she is "in so much awe" of her clients' therapeutic process, the mental health counselor shared that she sometimes feels she is benefiting more than her clients. The intensive care pediatric nurse/mother said she derives great meaning from her work with the families of sick children, particularly since she had her own child: "If I can be that person that someone says, 'Thank you for helping my child today,' then that's where I need to be."

Career self-confidence was another benefit identified by several of the participants (six women) in the study. The women spoke of how rewarding it was to rely on their own knowledge and judgment in making important work decisions, and to know that they were "good at what [they] do."

Four of the women said they valued the challenge of their careers. The software consultant/mother described the "adrenaline rush" she experienced when she was challenged to learn new information quickly for her clients; the stockbroker and the pediatric intensive care nurse/mother also expressed their enjoyment of the challenge of having to keep pace in constantly changing work environments. The information technology manager explained how much she appreciated thoughtful, interesting work: "That is what makes networking meaningful to me, being intellectually challenged and motivated to be the best that I can be."

Six of the participants said that they valued their careers for the financial benefits they provided. The women said that their financial independence—both when they started working and now that they are more established in their careers—is a source of pride for them. Participants also indicated that their financial status provides them with some sense of security regarding their abilities to pursue life/career goals, including career hiatuses and hour-reductions for raising children, future business ventures, desired housing options, and comfortable retirements.

Five of the women in the study, however, emphasized meaning over money, that is, fulfilling, enjoyable, meaningful work over external rewards. As the speech-language pathologist clearly spelled it out, "I need to have meaning to what I do." This motivated her move from a stable and "cush" school job with poor teacher-child ratios to a "much more fulfilling" freelance position where she conducts individualized home visits with developmentally challenged children. The European American entertainment industry office manager commented, "If someone offered me a job and I was making \$10,000 more but I knew I'd hate getting up every morning, I wouldn't take it; there'd be no way." And the drive to find meaningful work is what motivated the lawyer/mother to quit her lucrative but unfulfilling corporate law job to substitute teach and do some soul-searching about how to realize her dream of creating an organization that encourages and supports the educational goals of teenage mothers.

#### Education and Intellectual Growth

Education and intellectual growth also were important sources of meaning for the study participants. All of the women included educational events and decisions among

the most significant of their lives. The following section is organized around the following topics: educational decisions, educational accomplishments, education promoting independence, motivation for educational advancement, and the general love of learning.

Educational decisions. The four major events/decisions addressed were: selection of a high school or changing high schools (5 out of 12 participants); selection of a college (7 of the 12 participants); decisions about if and where to attend graduate school (3 of 12 participants); and the choice about what major to pursue in college (9 out of 12 twelve participants). In speaking about choosing her all-girls college preparatory high school as opposed to the standard public school or local Catholic high school, the entertainment industry office manager commented,

I knew that I'd get a better education there, and I knew I wanted to further my education. So that was a big step, I think, for my age, to decide that I knew I wanted to keep going and get a better education.

The pediatric intensive care unit nurse/mother, who initially stayed in her pharmacy major at a local college she disliked because her parents were so proud of her, explained how she secretly applied to nursing school with a friend and acquired loans to pay for it herself; eventually, when her parents got over their shock a few months later, they were able to express support for her new educational path. She said, "I got As and Bs in nursing school and I love my job. That was probably the biggest change in my life."

Educational accomplishments. Six of the participants listed educational degrees and certifications among their greatest accomplishments; graduation from college was

mentioned by five of the women. The lawyer/substitute teacher/mother, for example, successfully achieved her goals of graduating from college and law school despite her unplanned teenage pregnancy: "I can't be a statistic. I can't be one of those...teenage moms you hear about....I needed to graduate and do what I had planned on doing."

Four participants spoke about the sense of accomplishment they have because they had to work to support themselves through college. The pediatric intensive care nurse/mother, who paid her own way after switching to a new major and college without her parents' approval, commented,

A couple of us were still just living at home and working. Most people that go away to school don't have to work, so it was more rewarding that I moved myself out of that gutter. I moved myself out of that position, and I think I made myself a better person because of it.

Education promoting independence. Education (for college or graduate school) was the catalyst for half of the sample (6 women) to move more than two hours away from home; for another four women, high school or nursing school brought them 30 minutes or more from home on a daily basis. The unemployed software quality assurance analyst/full-time mother recalled her determination in traveling to her new high school:

High school was a really important moment because I applied to—got into—this college prep school in Chicago. I wanted to go there so bad. It was downtown. So I took the train and three buses to get there....I didn't know downtown at all. So I had to learn. I was kind of scared the first two weeks, because I'd never been down to Chicago on my own. I had to suddenly learn the CTA system, Metra, all

that...it took a good while to learn that thing. But it was great. I felt more independent.

Other women in the sample reflected on the growth and independence they developed while living away at college. Said the entertainment industry office manager about her decision to attend college in California,

I think I just wanted to get out there and experience life. I was 18 years old and I think I was just tired of the same old environment and surroundings. I just wanted to go out and get away and see new things and meet new people and just be my own person.

Motivation for educational advancement. Half of the sample (6 participants) spoke of the positive impact of formal educational experiences (e.g., great high school courses, internships, attending a professional conference as an incoming college student, becoming excited by college courses after finding a major of interest) on their motivation to pursue further education and broader possibilities within disciplines of interest to them. Two members of the study currently are pursuing graduate work (one a doctorate in psychology and the other, graduate computer science courses), and six additional participants indicated that they would like to seek advanced degrees (or, in one case, an additional baccalaureate degree) in the future, including masters' degrees in business administration and in nursing, a law degree, a Ph.D., and a second college degree in nursing. Of the three women who indicated that they at some point had decided not to pursue advanced degrees, one had stopped because courses were rarely offered and the degree was no longer relevant to her career; one indicated that she had "no desire to go

back to school" while working full-time; and one acknowledged that having a master's in business administration probably would have made her career advancement easier.

General love of learning. A few participants in the study (four) also referred to their general love of learning, emphasizing the enjoyment they derive from intellectual stimulation, self-improvement, and the exchange of knowledge with colleagues. The women also indicated that they expect to be actively learning and reading well into the future. As the information technology manager shared, "Education's important to me…it's always been important to me. I don't ever see myself not being in school doing something."

## Autonomy

When naming the events and decisions that were most significant in their lives and also what was most important and meaningful to them at these important junctures along their life/career paths, all of the women in the study spoke about autonomy—personal, financial, relational, and/or professional. In some cases, these different expressions of autonomy intersected.

Personal autonomy. Every woman spoke about experiences of personal autonomy. Ten of twelve participants mentioned personal autonomy in the context of educational decisions and experiences, including individuation from parents, family members, and peers during decision-making about high school and college; the freedom of being on one's own time schedule away at college; excitement at learning to navigate the city solo; living alone for the first time; and asserting one's own musical style in a rigid training program. For example, the lawyer/substitute teacher spoke about the

importance she placed on her sense of autonomy as a single mother who wanted to meet her goal of a law school education: "I needed to know that I could be away and make it. I needed to know that I could be alone with my daughter." The speech language pathologist made the decision to attend graduate school a few hours from Chicago even though it meant living apart from her fiancé: "I went there and I got a little house by myself. I didn't know anybody at all. So I just went there by myself and I loved it. Absolutely loved it!"

As a second example of the sample's emphasis on personal autonomy, a number of the women in the sample (five) described themselves as independent decision-makers from a fairly young age (i.e., grade school); in two cases, the women specifically attributed this precocious autonomy to the substitute parent roles they had assumed in their families. The speech-language pathologist shared,

When I was seven, my brother was diagnosed with a brain tumor, so I think that affected the rest of my life, basically, and everything else that has happened since then...everyone else in the family just became extremely independent, so I think that kind of shaped my personality, because from the age of seven on, I was on my own, basically.

Along with her strong sense of personal autonomy, this participant adopted the role of her brother's protector.

Additional experiences of personal autonomy cited by the women included running a marathon and traveling alone. In reflecting on how her job contributed to her

increased confidence in traveling, for example, the software consultant/mother contrasted herself with her less autonomous mother-in-law:

The whole time I was traveling, I think she was just appalled that I would get on a plane and go to a strange city and rent a car by myself and find where I was supposed to go. And I think before I did it, I felt like that—like it was a big deal to go somewhere, travel somewhere, fly somewhere. And I got to the point where I didn't even have a bag anymore. It was like jumping on the train, going downtown, and in that respect, I felt very independent and confident.

Travel also was an important signifier of self-confidence and independence for the stockbroker who shared, "Going to Europe by myself was a big deal. I was so happy I did that—just being out on my own." This participant indicated that her trip provided the psychological space to make important career and relationship decisions at that life juncture.

Financial autonomy. Financial autonomy was discussed by 10 of the 12 participants. For each of these women, money was viewed not as an end in itself but rather as a catalyst—for individuation from parents; for equality in romantic relationships; for obtaining a college education; for providing better opportunities for one's family; and for fulfilling self- and family expectations regarding self-sufficiency. A few of the women recalled the excitement they felt when they got their first paychecks of their careers, a signal that they could "be out there on my own." As the full-time mother/part-time medical office nurse explained, it was "getting to live my own life now. I'm an adult and I had my career and I had money and all my own assets. It was nice to

be able to put it all together." The entertainment industry manager said she still gives a rent payment to her partner each month to maintain a sense of financial autonomy: "I've never asked my parents for any money, even if I needed it. And I've never asked my boyfriend for any money if I needed it. I like having my own thing...I still want to have that independence."

Relational autonomy. Autonomy in relationships was addressed by a majority of the sample (nine women). The information technology manager firmly stated her need for independence in relationships: "I wouldn't want to be in any kind of a suffocating relationship because I need a lot of room to pursue the things that I want to do." Attention to their own personal and educational goals, in fact, contributed to the end of romantic relationships earlier in the lives of four of the women. The stockbroker recounted an important decision point in her relationship with the man for whom she had moved across the country: "Do I stay with this guy in a place that I don't like? Or do I take care of myself and go find what I want to do?—And that's what I ended up doing." A few of the married participants commented that being in a committed relationship has limited their independence in expected ways due to the need for ongoing compromise with partners regarding daily and long-term goals.

In talking about a change in her expectations for autonomy in her primary relationships, the software consultant provided an example of how various types of autonomy intersected for women in the sample. This participant reported that, before having her child, her financial autonomy provided her with a security that she could leave her marriage if it wasn't working out. After having her child, her husband's strong

expression of commitment to the family unit clarified her own commitment to prioritizing family integrity over personal or relational autonomy. That is, though her financial status was unchanged, she no longer thought about leaving the marriage when differences arose but rather invested in solutions for the preservation of the family.

Professional autonomy. Finally, six study participants indicated that they valued autonomy in their professional endeavors, for example, being trusted to learn and problem-solve independently and having control over decisions about one's career. Providing another example of intersecting autonomies, the pharmaceutical marketing manager said she decided not to become a research scientist after observing, during internships in university and corporate settings, the inverse (and opposite) relationship between funding and intellectual freedom in academia compared to industry. This participant reported choosing corporate marketing because it seemed to offer a better balance of professional and financial autonomy.

### Friendships

Another major source of meaning for the women in this sample was their relationships with friends. Seven of the women listed friendships among the most important and positive aspects of their lives, saying that friends were "like family," and "a very big part of my life." Participants indicated that their friends played an especially significant role during the high school and college years, when being part of social circle meant meeting new people, adventuring into the city and out-of-town, and partaking in fun group activities like dancing and volunteering.

Most of the participants (nine women) reported that they highly valued and nurtured the continuity of their friendships over time. Examples included staying in close contact with high school friends when away at college through high phone bills, care packages, and road trips; calling three best friends from college "godmadres" (godmothers) to recognize their important past and future roles during key life events and crises; keeping in touch with dear colleagues after leaving a job; and maintaining friendships that had lasted since grammar school. One participant had, at two separate times in her life, made choices to remain connected to her long-time neighborhood friends rather than pursue long-term relationships with newer groups of friends. In high school, she quit her favorite sport of basketball as well as other activities like acting in the plays (where she had begun to socialize with more intellectual and athletic circles) so she would not lose connection with her neighborhood friends; in graduate school while planning her wedding, she struggled internally but then decided not to include in the wedding party any of her classmates who had become close friends but who were from small towns and "were so different from me." This participant acknowledged that she wonders about what direction her life might have taken had she branched out with these other groups, but she also said she has no regrets: "I like how I went, though, because how many people can say that they have six best friends that they've been friends with all their life? If I went in the other direction, I might not still have that." Consistently, this woman's 30-year goals included having the same "good, solid, strong relationships" that she has nurtured all her life.

Close friendships, like families, clearly constituted significant, meaning-filled relationships in the lives of these women.

## Changes in Life Meaning Over Time

Each woman in the sample was asked whether her opinions about what was most meaningful in her life had changed over the past decade since graduating from high school. Although a few said they felt they had been consistent in their definitions of meaning throughout that time span (e.g., valuing relationships with friends and family, caring about education), most described shifts in their life meaning definitions. Some started out driven by educational and career goals and more recently found themselves focusing more on family and relationships; some searched for many sources of meaning across the last ten years, starting with popularity with peers, then money and career, then career and relationships, and now family and relationships. For every woman in the study, however, regardless of the priorities with which she began, family—be that family of origin, extended family, and/or created nuclear family—ranked as one of the crucial sources of meaning in her life today.

### Life Satisfaction

With the exception of one participant who reported feeling uncertain about her next life/career path choices and a second who expressed a desire to work on specific areas of her life (salary and personal relationships), all of the women in the sample indicated that they were very satisfied with their lives. Participants spoke, for example, about their confidence in having made the right choices along their life/career paths. One of the nurses said, "I made the right decisions…I can never say that I regret what I've

ever done. I really don't." The subject of "what ifs" was mentioned by a number of the women, but they did so from a context of curiosity or practicality (i.e., not helpful to spend too much time thinking about it) rather than regret, or from a perspective of what they would miss from their current lives if they had taken different paths. Even the lawyer-now-substitute teacher who was experiencing a tough transition period in her life and work shared that she would not change any of her decisions: "I've learned something from all of my experiences, so, I'm sure I've gained something from all of them, so I don't think I would change anything."

### Goals and Life Satisfaction

In expressing the contentment they feel about their current lives, seven of the twelve participants assessed their life satisfaction in relation to life-long plans or goals. These women explained that they were "doing what I always wanted to do" or that this was "where I thought I'd be." The medical office nurse who is now home full-time with her children, commented.

This is exactly where I wanted to be. I kinda always had my own little plan. I knew I wanted to be married by now. I made sure I graduated from college in four years. That was my goal. I mean there was no other choice. I knew I wanted to be married by a certain time. I knew I wanted have kids by a certain time. And I basically stayed in that—what I wanted. And my husband thinks it's hilarious. He always says, "You and these plans. I wanna have a child by this age, I wanna have another one by this age." He's, like, "Oh, you don't mess with the women's plans.

You know they have their plans for what they wanna do." I mean, basically, this is exactly, by 29, where I wanted to be.

The stockbroker talked about her new living space that she had saved up for in a similar way: "It's like I finally got the place I always wanted. It was a nice feeling, to move in there."

Conversely, not living up to one's internalized life plan appeared to detract from a sense of life satisfaction for three of the women. The pediatric intensive care unit nurse/mother who loves her job and continues to work part-time so she doesn't get behind in her field shared, "I wanted to be done with kids by the time I'm 30. I'll be 30 next year, and I'm not (laughing). I just have one. You know, your ideal is to—when you're in high school, you wanna have this by this age, this by this age." Also addressing this issue, the lawyer/substitute teacher said,

I guess the problem is that I am so used to knowing what I want to do and going for it and accomplishing it, and people saying, "Oh, that's great. Look at what she's doing." And so now, it's kinda like, "What am I doing?" I don't know!

The stockbroker mentioned above, who said she had felt like a failure coming back home a few years before, reported that having a plan has contributed to a return in her life satisfaction:

Now I feel very happy. There were definitely a few years in there when I was shaky, where I didn't know what was going to happen. But now it seems that all the pieces are in place. I like my job, I am happy with my friends, and I like where I live. And—it seems to have all fallen into place.

Life satisfaction, for several of these women, thus appears fundamentally connected to life goals and internalized scripts for how their lives should unfold.

## Career-Family Interface

Each of the 12 study participants spoke about the intersection of career and family. In this section, family is defined more narrowly as "family of creation" (all women in this sample referred to their current and projected families of creation in terms of heterosexual marriage and children). Of the group, eight women were married (five had one or two children and two were pregnant with a first child). For all of the women, family and/or plans for family interacted with their careers in various ways, including shaping their priorities regarding family and career, exposing their values regarding childcare, and creating the need to balance family and career demands. These topics, as well as the role of finances and the role of partners in the career-family interface, are addressed in the following section.

#### Prioritizing Family Over Career

Nine of twelve participants indicated that they currently prioritize family over career or plan to prioritize family over career once they are married and have children. The early childhood special education teacher said it clearly: "I think family comes before my career. I have made that decision. For some people, career is career, but for me, family comes before career."

The seven women who had (or were going to have) children were particularly expressive in communicating the importance of family over career. The recently unemployed software quality assurance analyst and new mother explained that she and

her partner decided to start their family after September 11, 2001, when she realized what really mattered to her wasn't money and career, but rather family connection and support. This sentiment was echoed by many of the participants with children, who said things like "my job is just not as important after kids" and "family, not career, is the most fulfilling thing." The software consultant, who works out of her home, explained that time with her child was more meaningful than anything, that she "wouldn't want to miss savoring the day-to-day" with him:

It (work) doesn't matter as much, the job doesn't matter as much....I have a battle with myself sometimes: Do you wanna do this stupid work that doesn't—so ridiculous, you know—or go down and play trains with him? Yeah, hands down. It would be more meaningful to read him books or play with him or whatever he wants to do.

The medical office nurse, who is home full-time with her children and works occasionally for her previous employer, stated emphatically,

You couldn't pay me a million dollars a year to work full-time again. I have girlfriends who are not married and have no kids and you know, work, work, work, work, work, and that's their life. And that's fine, if that's what they want. That was not what I wanted.

# Effect of Parenthood on Career

With the exception of one participant who was not certain that she wanted to have children, all of the women in the study addressed whether their careers have been or will be affected by having children. A majority of participants (eight women) indicated that

they had modified their careers or planned to modify their careers as result of having children—through reduction of hours worked, flexible scheduling, working from home, limiting job searches to locations near home, changing to (or initially selecting) careers or jobs they identified as more compatible with raising school-age children, or putting their careers on hold ("I see myself just floating," said one pregnant woman who planned not to work until her child was in school.).

Two of the women with children (one works full-time from her home and the other works part-time) and one who plans to reduce her hours to part-time when she has a child in the future commented that they would further modify or pause their careers if they had additional children. For example, the pharmaceutical marketing manager, who identified work-life balance as the key challenge of her life over the past few years, stated

We've [she and her boyfriend] discussed the fact that...if I have one child, I might be able to work part-time. I don't think I'm gonna want to go to work full-time after having one child. And then, maybe after two, giving it up completely, until I'm ready to go back to work. Um, and I'm pretty happy with that decision, in the fact that he supports that, so, he's willing to strap it up and be a provider.

The pediatric intensive care nurse, who was permitted to keep her head nurse position in a part-time role after having her son, assessed the potential effects of another child on her career:

I think it might be more difficult having more than one child—on how I work.

Because right now I work two [12-hour] days a week, and I think it might be harder on me to work two days and be at home with two. So if I have to step

down in my position, I will....I can't see myself not going back to work, but I might have to cut my hours back a little more. I'm waxing and weighing in my head if that's what I wanna do. But I also don't want my son to be an only child, so it gets back to the family. That's important to me. Career—I wanna keep going but I can kinda take a step back to give him a very strong family life. So that he can be a strong person also.

Three participants (all hoped to be parents someday) indicated that they do not plan to modify their careers when they have their children; two of these women planned for a spouse or family member to provide childcare and the third planned to have a full-time nanny for her child but recognized, "That may change when I actually have the husband and baby."

# Values Regarding Childcare

A majority of participants (eight women) articulated values regarding childcare that had shaped or would shape their career decisions. These values can be summarized as follows: (a) "It's important to be home to raise my children," (b) "I do not want strangers raising my children," and (c) "Family members provide childcare when backup support is needed."

Importance of Being at Home to Raise Children

Five of the eight women said they felt it was important to be at home to raise their children. The pregnant special education teacher who planned to quit her job as soon as her baby was born explained, "Being around a lot of different families and a lot of different kids, I just really want to be home with my kids....I don't want to miss things; I

want to be there." A number of the women specifically emphasized their desire to be at home when their children got home from school. As the European-American full-time mother/part-time medical office nurse stated, "I don't care what kind of job I have...my children will not come home from school and have no one there."

# Opposition to Hired Childcare

Strong opinions about not having strangers raise their children were shared by five participants, including the pediatric nurse above, who said she "didn't believe in daycare." The speech-language pathologist reflected on how her values about childcare differed dramatically from her career-oriented sister:

I wouldn't want to work sixty or seventy hours a week like my sister. I love her to death, and I love her baby, but she has three nannies for her child. That's her choice. We talk about it all the time. That would never be mine, but she said she would be unhappy if she wasn't working so much, where I would hate to have someone else raise my child.

Working with children and parents in the context of their careers also served to strengthen some of the women's negative views about hired childcare. Observing the absence of parents in the doctor's office where she worked, for example, the full-time mother/part-time nurse remarked,

A lot of [the patients] had nannies, and a lot of them had babysitters. And I saw the parents didn't have a lot of interaction with their children. They didn't even know their children. The nanny knew more about their children than they did.

And I just knew that was not something that I wanted to deal with. My parents

raised me; I never had babysitters or nannies...the parents didn't even come in with their sick children. I am not letting some other person—I want my child to know that I'm their mother, and that they can come to their mother.

## Childcare Provided by Family Members

More than half of the sample (seven women) endorsed childcare by someone other than themselves or their spouses either directly (stated their views on the subject) or indirectly (spoke about childcare arrangements they had made). However, only two of the seven women considered hired childcare an option (the stockbroker, who planned to have a full-time nanny, and the software consultant, who has a babysitter watch her child three times a week while she works in her home); the remaining five participants benefited or planned to benefit from childcare by family members. As the entertainment industry office manager shared,

My whole game plan is that, by the time I do have a kid, I'm hoping that my mom's going to be retired, and that way she can take care of my child...Because I definitely am scared of daycare. I would love to stay home with my kids. I just know, in these times, it's not really financially [feasible] to do.

The other participants had (or planned to have) their parents, parents-in-law, or, in one case, a cousin watch their children while they worked and/or attended school either part-time or full-time.

### Balancing Family And Career Demands

All women in the study reported having given consideration to how to balance the responsibilities of marriage and children with the responsibilities of career. Seven

participants claimed they have experienced very little struggle with this issue (four were unmarried without children, two were married with children, and one was married and pregnant); of those married women who had or were expecting children, two had flexible part-time work schedules and one was not working currently. Four of the participants (all were married; two had children and one was pregnant) indicated that they have struggled somewhat with balancing family and career demands and one participant reported a high level of struggle. Of these latter five participants, all but one woman, who recently was laid off from her full-time job, were employed (three work full-time and one works part-time).

Those women who indicated some or a lot of struggle with balancing work and family responsibilities reported stressors that included leaving a child for the first time when starting back to work full-time or traveling out-of-state on business, dividing time between childcare and job responsibilities during crunch times at work, making the decision to modify or leave a professional position to care for children, and not having quality time with one's partner. The mental health counselor/master's degree student, for example, saw her struggle to balance marriage, education, and career as a matter of not having enough hours in the day. The early childhood special education teacher who was expecting a child commented,

It'll be hard for me because we've decided that I'm going to stay home. Which is—I'm very excited about that—we're able and I'm able to stay home. I'm also sad because this job that I'm at right now, I'm really happy....I'm very comfortable and I enjoy the kids. I'm going to miss that.

The pediatric intensive care nurse was the only participant to discuss her career-family tensions in a sociopolitical context. She shared her frustration regarding the societal expectation that she would be the one in the marriage to compromise her career:

I love my job so much and I work so hard. Some women don't even go to college, even in this day, and I did. I did it on my own and now I have to take a step back?...I have a career that I'm good at what I do, and I have to not work—to raise the family. Why can't he not work and raise the family? Yeah, 'cause I wouldn't make as much full-time as he did at the time. So he needed to work. Yeah, I was—I was mad—why women always have to be the ones that give up their time.

### Role of Finances

Almost all of the participants mentioned financial concerns as important to their decisions regarding balancing career and family. Topics addressed included the financial context for decisions about starting a family and long-term goals regarding financial support of one's children.

Financial Context for Childcare Decisions

Of the seven women who were (or would be shortly) raising children at home, six indicated that the family finances were adequate with only one or one-and-a-half incomes. A few had purposely waited to have children until they were financially able to live on one income. The full-time mother/part-time medical office nurse commented, "I told my husband, 'Number one, we're not having children until we financially [can] afford it—on one salary." The one mother still working full-time (the software consultant

who worked from home) said that her second income eased any worries they might otherwise have regarding owning a bigger home and planning for their son's college tuition. The other participants, who had chosen not to work (one woman) or to work only part-time (five women) while raising children, indicated that they were willing to give up some material comforts to have more time at home raising their children. A few of these women had savings from previous jobs that made their decisions to remain at home with children less financially burdened. Only one woman, the pediatric intensive care nurse, reported having considered being the primary household salary; because her husband made a higher salary, however, they decided that she would reduce her hours to part-time and be the primary caregiver for their child.

Goals Regarding Long-term Financial Support of Children

Participants also reported that they felt strongly about providing long-term financial support for their children, including paying for their college educations. Three women talked about not wanting their children to struggle financially as their own parents and therefore they had. One woman, the entertainment industry office manager, even said she would change from her enjoyable, lower-paying job to a less satisfying but lucrative full-time job once she had children to provide well for them:

If you're a parent, I think that your kids are your total motivation and I don't think you do things, necessarily, because it makes you happy. I think that's almost a luxury right now. I think it's more what is going to get your family further.

The full-time mother/part-time medical office nurse, who came from a large family, said she planned to have no more than three children so she could afford to pay for their college educations.

## Role of Partners in Childcare

Four of the women in the study specifically addressed the roles their husbands currently play or will play in providing childcare while they work. The pediatric intensive care nurse indicated that her husband watches their son on his days off (which rotate each week); these are the two days she works at the hospital. She shared,

That means a lot to me, that he wants to raise him. There's so many guys that your wife stays home and raises the kids and works, and so that's almost made us closer as a family unit that we're able to do that.

Less flexibility in her husband's work schedule, by contrast, means that the software computer consultant's partner tries to help out on the two days she does not have babysitter coverage, but she indicated that this is not reliable; this participant commented that she is saddened that her husband is missing out on daily interactions with their child. The European-American software quality assurance analyst remarked on the long-distance trip her husband took each day to drop off and pick up their child at the home of her mother-in-law, who watched their child when she returned to work full-time briefly. Finally, the mental health counselor, who said she wants children in the future, explained that she and her husband have planned that her husband, a nurse, will pursue more home health positions on weekends so that he can be with their children more and she can be freed up to pursue her career.

### Social Supports and Influences

All twelve participants in the study identified significant influences on them during key events and decision-points along their life/career paths. The complete list of influences included family members, intimate partners, friends, educators, work managers, themselves, book characters, religious faith, and unique life events. With few exceptions, the major sources of influence and support for the women in the sample were individuals. For 11 of the 12 women, the majority of influences named were family members, peers, and intimate partners. The participants spoke about being affected and shaped by these varied influences/individuals in areas of key importance in their lives, including overall life influence; educational decisions and achievement; career choices, achievement, and satisfaction; pregnancy and parenting; and the interface of family and career.

#### Overall Life Influences

The majority of women in the study reported that their most important overall influences, either in the past or the present, were family members, that is, families of creation (their own spouses and children; reported by 9 participants), families of origin (parents and siblings; reported by 8 participants), and in-laws (reported by 1 participant).

Influences on Educational Decisions and Achievement

The women's educational decisions and achievement were influenced by four sources: family (including parents, siblings, and extended family), romantic partners/spouses, peers, and educators.

### Family

Parents. The social/cultural expectations and financial resources of the participants' families heavily influenced college decisions, for example, whether the family could afford or was open to the woman attending a school outside the local area, which type of school (small, academic vs. large, socially-focused) the woman should attend, which major to pursue, and whether the woman had to work while going to college. Parents largely directed the college choices and/or majors (at least initially) of six of the women and a seventh participant said her selection of graduate school was made easier by the fact that her father liked the school's location. The software consultant recounted her college "decision":

I wanted to go to a state school, a big school....I think [my mom] was worried that all partying and no—she was probably right now that I look back on it. I was, like, I don't wanna go there, are you kidding?...We went and visited it [a small private college] one day and my mom really liked it and I didn't really like it, but—"you're paying for it." I think I didn't want to rock the boat and I think in my gut I knew she was right, that I could get a better education there....And it worked out actually—great.

The mental health counselor explained that, though she had gotten a scholarship and was being recruited for an out-of-state university, her sense of commitment to her parents and brother—who expressed support but also concern about her going away—ultimately influenced her decision to attend college locally. The entertainment industry office manager, by contrast, was determined to go to California for college to pursue her career

interests even though her parents expressed concern and she had to work two jobs throughout college to afford the tuition and the lifestyle of her well-off peers.

A majority of the women (eight participants) commented on the financial support provided by parents for their educations. Three of the eight indicated that their parents had paid for all of their college expenses; four said that parents had paid for some of their tuition and they had contributed substantial portions; and one participant, who came from a large family, said that she had paid for her college nursing degree on her own.

A few of the women spoke of their parents either individually or collectively as great supporters of education in general. The entertainment industry office manager shared, "My dad, to this day, tells all of us—even my sister who's 31, 'You need to go back to school and take business courses—business courses!' The mental health counselor described the important influence her father had in encouraging her pursuit of educational opportunities despite the extended family's expectations to the contrary regarding women and education:

I think that was the first point that I really realized how much backing [I had] from—especially my dad—in terms of education....I'm actually first generation and I'm the oldest daughter. My dad was born in Mexico. He came here when he was in his early twenties. He's probably the one on his side of the family with the most education....And a lot of his family felt that he should be backing up more of my brother than the girl because, of course, there was still the understanding that "if she's just going to get married, why are you going to spend all this money for her...might as well send her to public school; don't invest all that money."

And he's, like, "No, no, no! I want to make sure that she can still fund herself whether she gets married or not." His whole thing was, "Get an education. That's one thing that no one can take away from you."

In addition, most of the participants (eight women) indicated that parents had provided valuable emotional support throughout their educational careers. This included supporting transfers to different high schools and colleges as well as shifts in college majors; attending every music lesson and concert; and providing motivation for both continuing with college and bringing home good grades after a teenage pregnancy. Three women, however, reported times in their lives when parents initially were not supportive of their educational interests or decisions. The entertainment industry office manager commented that her parents were "really, really skeptical" about her going to school in California; the pediatric intensive care nurse said her father did not speak to her for three months after she told him she was changing majors and transferring to another college; and the stockbroker said her parents, especially her father, were shocked and disappointed when she decided to drop out of her graduate music program.

Three women specifically mentioned their mothers' roles in providing emotional support regarding difficult educational conflicts they experienced internally or with their parents. For example, the pediatric intensive care nurse said her mother was quietly supportive during the period when she started nursing school: "She was very quiet about the whole thing and didn't really talk to him [her father] about it, but would ask me how I was doing in school and things like that. By the time it was all done, they were very proud of me." The lawyer/substitute teacher remarked that, during the time period when

her pregnancy had upset her plans for attending college, she knew she could "always talk to her [mother]"; this was in contrast to her father, who was shocked and "not happy" and "did not say much" (though she believed that ultimately he too was there for her). The mental health counselor, who feared she would devastate her father when she told him she no longer wanted to major in biology to become a doctor, found solace in her mother's urging to "do whatever is best for you, what you want. If he wasn't able to reach his dreams, I'm sure he doesn't want you to just do it for him." As reported above, the participant later talked to her dad and found that he was very accepting of her choice and emphasized his primary concern for her to be educated and be able to support herself.

Siblings and extended family. Participants also mentioned support received from siblings and extended family regarding their educational goals. The siblings of four of the participants had influenced high school selection, choice of major in college and graduate school, and confidence regarding navigating college for the first time and changing educational direction. Three participants said their high school and college decisions had been inspired by respected aunts or uncles who attended those schools, and the lawyer/substitute teacher received encouragement from extended family members to continue her education after having her baby.

### **Partners**

Eight participants mentioned romantic partners while discussing educational decisions and future educational goals. Six of these women remarked on their partners' encouragement of their educational development. The software consultant, for example, said that her husband (then boyfriend) coached her to change her college major from art

to business and to pursue the more challenging accounting degree that later distinguished her in the job market. The mental health counselor reported that her high school boyfriend gave her good advice and supported her moving away for college; she said her husband also is supportive of her current educational goals to pursue a doctorate. Other women also reported support from partners regarding their goals to return to school for advanced degrees. While the above participants experienced the influence and support of intimate partners, others commented that they had made decisions about educational opportunities independent of the influence of their romantic partners. Four women said they made major decisions about changing colleges, changing majors, or going to school outside the Chicago area without the influence of their boyfriends at the time; one of these woman, in particular, the pharmaceutical marketing manager, spoke about the resistance she met from her boyfriend (who excelled at their shared major and with whom she felt a lot of competition) when she decided to change to a major that better suited her.

Participants in the study attributed peers with both positively and negatively influencing their educational decisions and commitments. Although two women shared that their socially active friends distracted them from taking their high school and college educations as seriously as they might have, eight commented that friends had encouraged them to pursue and remain committed to educational opportunities like moving away for college, selecting majors they enjoyed, completing challenging degree programs, and pursuing advanced degrees. The pediatric intensive care nurse described the highly supportive influence of her nursing school friend:

You could not separate us...it was a joke in the school that these two came from the city—everyone else went to school there and we would commute....We did all of our clinicals together. And it was a joke that everyone was, like, "Ok, are they going to graduate at the same time though our last names were different?" And we did—I snuck in line and graduated right behind her. So it was kind of, we pulled each other through, we made each other study, and we both made the honors list the whole way through. She was a high influence on me and I was, I think, the same on her.

The speech-language pathologist recounted how she and the other graduate assistants created an organized system for note-taking to help each other excel in their program, and the software consultant remembered how she and her roommate suffered through their accounting major together: "One more hour, you know?...It's just so dry and boring. But if you've got someone else there that you can joke about it with....Going through a rough thing with your best friend was not as bad."

Half of the sample, however, relayed experiences during their educations where they felt a lack of support from peers. These women reported feeling isolated at the start of high school and graduate work and also when peers had gone away for college or graduated from college earlier than they; a few women also said they missed the support of friends when pursuing educational endeavors that differed from those of their peers. *Educators* 

Seven participants talked about teachers or educators who had influenced their educational directions and decisions. Five women reported positive influences. For

example, the pharmaceutical marketing manager remembered a biology instructor who guided her when she was struggling with the decision to change majors from engineering: "She definitely influenced me in my career change....I think the mere fact that she loved what she did helped me a lot, you know, realizing that that's what I needed in order to succeed." The information technology manager appreciated the intellectual independence and encouragement she got from her graduate school advisors. Another participant, the mental health counselor, remembered a grade school teacher who had changed her life—first, by introducing her to the positive female role models in Ella Montgomery's books, and second, by encouraging her to consider the more rigorous private high school that her extended family had thought a waste of money for a girl:

A lot of my ambition and drive have come back to a book I was given by a teacher. In 7<sup>th</sup> grade, Miss W.—I still remember her name—she introduced me to the author Ella Montgomery....I developed a love for that author. I followed all the books, and I took one of the characters as a positive role model to reflect an independent woman with an ambition for learning and a love for life. And I've tried to live up to those....The same teacher...she encouraged the girls a lot. She was very active in our looking for high schools and she would bring out brochures, she'd be talking to us so, we got a lot of encouragement.

Yet another participant, the special education teacher, said that two of her high school teachers who ran an educational daycare center within the school were "the only reason I went to school senior year."

Not all teachers were affirming influences, however, according to four participants. The information technology manager remembered being turned away from an AP Chemistry course (that she later excelled in) by a teacher who would not bend the rules about test score minimums. She also encountered sexual harassment in a computer programming course:

It was an all-female class, and we were doing interactive programming, and he just made totally inappropriate comments like, "Oh, do I need to bring some men in here to show you how this is done right?" And, we went out as a group after one of our finals, and he made very, very sexist remarks.

The lawyer/substitute teacher reported her initially negative experience with the law school dean when trying to change course sections so that she could arrange daycare for her daughter. The dean at first was very resistant but then accommodated her after she argued her case. Other examples included teachers who made disparaging remarks about a participant's artistic acumen and who demonstrated inflexibility when encountering a student's different musical style.

Influences on Career Choices, Achievement, and Satisfaction

The career choices, career achievement, and career satisfaction of the women in the study were influenced by family members (including parents, extended family, and siblings), romantic partners/spouses, peers, educators, and work colleagues.

#### Career Choice

Family. Study participants reported that family members provided both positive and negative influences on their career choices. All but one of the women (who had

known she wanted to work in the entertainment industry since childhood) indicated that family members had influenced their career choices. Four of the women said their fathers' own careers (lawyer) or encouragement regarding specific careers (doctor, pharmacist, musician) shaped their initial career interests, however, none of the four ultimately pursued those father-inspired careers; an additional woman said her father's career as an accountant showed her what she did *not* want to do. Two women said their mothers had influenced them generally by modeling that women could have careers they enjoyed. Two other participants, however, shared that their mothers had discouraged their career interests—one early in life when she talked her daughter out of being a veterinarian because "it was too hard to do" and the other who cried every day her daughter, early in her teaching career, went to teach in an inner-city school. Finally, two women reported that their initial interests in well-paying careers were influenced by watching their parents struggle financially when they were growing up.

Extended family influences on the career interests of four of the women included an aunt and an uncle who practiced law, aunts who assisted one woman with getting accepted to a nursing training program at the hospital where they worked, a sister-in-law who provided a valuable job connection, and a nephew with brain damage who inspired one participant to follow her career interests in special education.

Siblings, particularly brothers, provided career preparation, ideas, and encouragement for four of the study participants. The full-time mother/part-time medical office nurse said that caring for a large number of younger siblings prepared her for her job as a nurse. Three other women spoke about the influence of their brothers. One

brother had talked with his sister about career options once they both were in college; a second had encouraged his sister to think critically about her career choices and then to pursue her desired career without regard for family preferences; and a third, who was born with a disability, inspired his sister to dedicate her career to working with special-needs children. One woman reported sister influence, saying that the incredible ease with which her younger sister had learned chemistry helped her realize that, while she enjoyed the field, she wanted a career that was equally well-matched for her.

Peers. Five participants reported that peers had made a difference in their career choices or reinforced their career interests. For example, the pharmaceutical marketing manager said her lifelong friend's older sister was the person who introduced her to the field of pharmaceutical sales when she was struggling with career options in college. Her best friend encouraged her to "come be a nurse with me" when the pediatric intensive care nurse was leaving her pharmacy degree program. As an example of negative influence, the speech-language pathologist regretted that her need for acceptance by her less academically-focused high school friends may have limited her career choices and aspirations.

Educators. Educators and educational experiences shaped four of the women's career choices. Her private music teacher provided inspiration and opened doors for the stockbroker's first career in music: "I felt like as soon as I met him, that's when everything started to take off....I actually started getting paid for [music] jobs when I was in high school." A computer science instructor encouraged the information technology manager to pursue a career in networking, for which she has begun to take classes; the

early childhood special education teacher attributed her teaching career to her own high school teachers; and the pharmaceutical marketing manager followed the advice of her biology professor who encouraged her to change to a career based in biology. Internship experiences also shaped the career directions of two women. The full-time mother/currently-unemployed software quality assurance analyst said her internship with the Army Corps of Engineers changed her career interests in college from chemical to civil engineering and introduced her to the content with which she worked in her first job; the pharmaceutical marketing manager mentioned above reported that engaging with a respected lab researcher at her internship helped her know that she did not want a research bench job for her career.

# Career Achievement and Satisfaction

Family. Study participants reported that family members, particularly parents, positively influenced their career advancement through role modeling and through practical and emotional support. The software consultant said during the interview that she had not fully appreciated how much her mother's career passion achievement shaped her own career pursuits:

My mom since then went to school, got her master's in computer science....She runs the whole computer division with the four schools. So she's really sought out something new to learn and to do, a new skill set. Which is kind of what I did.

You know, there's a lot of parallels I see there.

Examples of parental support included a father who used his connections to get his daughter a job; a father who is helping his daughter create a home office so that she can

start her own business; and parents who communicated their pride and support regarding their daughter's career moves and consequent success. One participant said that her brother, whom she respects for his more advanced computer field knowledge, has provided her with limited advice about their field but has modeled for her the newer paradigm of gaining experience by changing companies throughout one's career.

Negative family influences on the women's careers included a mother-in-law who expressed disapproval of the software consultant's career and travel independence and a father whose well-meaning involvement in the music career of the stockbroker created increased pressure on her to succeed in that field.

Partners. Six women addressed the role of previous or current intimate partners in their career development. Four of these women said that previous or current partners had provided emotional support for the work they were doing (e.g., attending music performances) and/or for taking risks that would advance their careers (e.g., pushing his wife to start her own company). Said the software consultant, who left a traditional accounting track to launch into lucrative consultation projects for Y2K using some previous skills and a lot of dedication and moxie, "[My husband] was the one I talked to every day. He was always [saying], 'You can do it. You can do it.'"

Three women, however, said that partners had affected their career advancement negatively either directly or indirectly. The stockbroker moved across the country with her boyfriend at some cost to the new career she was building:

I really wanted to wait another year because I didn't have my full license yet. And I was working toward this and it was just the worst time. If I had waited another

year, it would have been much easier for me because I would have been a fully-licensed broker when I moved out there and it would have been easier to market myself for a job. In the end, he said he was going and I chickened out and said, "All right, I'm coming."

Other examples of negative effects on career included increased career uncertainty as a result of a husband's pressure to return to work and internal conflict due to fears that a new partner might be threatened by a woman with a more lucrative career.

Finally, two unmarried participants said their increased interest in finding romantic partners had begun to broaden their focus beyond career; they saw this as a positive step toward a better work-life balance. The pharmaceutical marketing manager, who recently had begun a serious relationship, commented,

It was a total relief. I felt, "OK, I can have both. I can have a personal life and a professional life and make it balanced." My choice to go home at a reasonable hour every night reflects the fact that family and boyfriend are really important to me—it's the change in focus. Last year, I couldn't even imagine what it would be like not going to work everyday. I'm, like, "Oh my gosh, this is so great. I love my job!" And now it's, "Oh, I want to stay home with you and spend more time."

*Educators*. Two women indicated that teachers had encouraged their career growth. The mental health counselor reported that her graduate school professors have been highly supportive, providing suggestions for the application of her studies to her full-time counseling position. The information technology manager said her computer

science instructors provided feedback regarding skill development that will further her career potential and offered to recommend her for jobs in the field.

Work Colleagues. A majority of women in the sample (eight participants) reported that work colleagues—both supervisors and coworkers—provided support and encouragement that increased job satisfaction and helped advance their careers. Four women said that supervisors had created empowering work environments and, in two cases, provided career mentoring. The stockbroker expressed gratitude to her manager who, like her, had entered the trade without a business degree, and who had steadily nurtured her career development: "Without him, I don't think I'd be doing this well at all. He gave me my chance and just taught me everything." Another woman, the software consultant, reported that an individual in a supervisory role had provided her with key advice about leveraging her job knowledge to get desired flexibility in her schedule.

Coworkers were identified as positive career influences by five of the participants. These work peers provided emotional support that helped to prevent burnout in service careers like counseling and special education; they also supported participants in their eventual goals of opening private practices. The special education teacher reported how her colleagues at work significantly contributed to her career development: "We just really bounced ideas off of each other. I learned so much my first two years, from her and the speech pathologist and the social worker that I worked with—stuff that, you know, in college, they just don't teach you."

Three participants reported negative influences by supervisors and/or coworkers.

These included supervisors who were, respectively, verbally abusive, lazy and

unproductive, and not motivated to develop employees' career skills. The information technology manager, for example, recalled a conversation with her supervisor about career development opportunities, "He basically said, 'You're doing a good job and everything here, but if you're doing your networking stuff, I would leave here and work somewhere else.' His attitude is 'everybody's replaceable,' so that was very discouraging."

### Influences on Pregnancy and Parenting

Family members (parents, extended family, and siblings), peers, and partners influenced and supported the participants as they entered the world of pregnancy and parenting.

### Family

A majority of the sample (eight women) spoke about the influence and/or support of family members both in preparing them for childbirth and parenting and in caring for their children once they were born. Parents, particularly mothers (cited by five of the eight women), were available to answer questions during pregnancy and the first years of parenting; they also provided (or planned to provide) childcare on an occasional or regular basis. One working mother in the study was deeply touched that her father enjoys coming to feed his grandson a few times a week. Sisters were mentioned by three participants, who said that their older siblings were role models for them in terms of parenting. Their sisters were available to provide everything from advice to maternity clothes and they greatly admired them for how they raised their children. The pharmaceutical marketing manager commented about her sister, "I see the way she's

raised her children and how great they are and [I] think that that's probably a way that I'll want to go." Another woman, the early childhood special education teacher, had profound respect for her sister's dedication to parenting and advocating for her disabled son, particularly as she compared her sister's extraordinary efforts to those of the parents of children with whom she worked. Finally, one female cousin was cited as a primary caregiver; this made it possible for the lawyer/substitute teacher to continue with college after her daughter was born since her mother worked full-time and could not have watched her child.

#### Peers

Four of the women mentioned the influence and support of peers. The stockbroker shared that seeing new aspects of her friend who had recently given birth influenced her thoughts about having a family someday. The pediatric intensive care nurse said that having children has strengthened her bonds with friends of hers who also are raising children. The lawyer/substitute teacher talked about how her law school classmates helped with childcare for her daughter and the special education teacher said she felt very confident about the support she will have from friends and family once her baby is born. *Partners* 

Almost all partners were sources of emotional and tangible support, according to six women (one woman said her boyfriend was not at all supportive or involved when she became pregnant with her first child). Examples of support included a husband who fed his newborn child during his wife's post-delivery health crisis; two spouses who provided emotional understanding and patience after their wives' miscarriages; and a husband who

expressed great excitement about their soon-to-be-born child. Moreover, a number of the women's spouses actively participated in caring for their children; this topic was addressed in the previous section, "Career-Family Interface: Role of Partners in Childcare."

### Influences on Career-Family Interface

Influences on women's beliefs and choices regarding the intersection of career and family included family members (mothers, siblings, and extended family) as well as peers and work colleagues.

### Family

Mothers played a significant role in modeling commitments to family, and, in a few cases, to both family and career. Five women talked about their mothers' influence on their expectations about being home to raise their children. As the pediatric intensive care nurse commented, "My mom stayed home with us kids. I think that was a big influence on us. That's probably where I got the 'I don't want to send my child to daycare' idea." In contrast to this, only one woman (the pharmaceutical marketing manager) said that her mother had influenced her belief that women can have careers while raising children:

She was actually a corporate officer for a trucking company....Because she was in that position for most of my school life, I never thought differently about having [a] career as my goal....I never had in my mind that I wanted to get out of school and have babies right away. I really wanted to focus on my career and that's what I did.

Integrating the modeling regarding family and career that her mother provided during two different periods in her life (a stay-at-home mother when she was growing up, and, now, a woman in her 50s who has found great reward in developing a career as a computer division head for a school system in which she used to teach), the full-time software consultant/mother was one of the women who was adamant about being at home for her children ("My mom stayed at home, my husband's mom stayed at home. That was really important to us to be at home with our kids."). But this participant also saw herself as someone who had pursued opportunities and found great rewards in her career—similar to her mother. This woman was the only mother in the study working full-time; she combined career and family by working out of a home office with support from a babysitter three days a week.

Observing older sisters with children influenced two participants in opposite ways. The European-American full-time mother/recently unemployed software quality assurance analyst said that it was watching her sister manage work and children that made her think, "If she could do it, I was thinking I could do it." The European-American stockbroker, by contrast, wondered if she too would feel strongly about not wanting to be separated from her children in their early years. The European-American full-time mother/part-time office nurse commented that interacting with her sister-in-law, whose stated goal is to be a "stay-at-home mom with a full-time job," confirmed for her that "something's gonna give" in that she often babysits for her nephew when her sister-in-law travels or is busy at work. Observing her brother with his children caused the

European-American information technology manager to think that parenting might be boring, unproductive, and limiting of her freedom.

## Peers and Work Colleagues

The European-American mother/software consultant and the European-American stockbroker both admired more senior women in their workplaces whom they felt modeled career-family arrangements that appealed to them. The software consultant went to a training class and the instructor was a girl that had worked and traveled like I did and, at that point she was at home with her kids. Still working, but working at home primarily. And I was like, "Gosh, I wanna be her." Well, you know, I want her—this is what I want. And from that point, that was what I did. The stockbroker commented,

I have a woman that I work with that I admire very much. She's very successful at her job and she just had her first baby. And she has a full-time nanny, and seems to be making it all work. I mean, I don't know how much internal conflict she has, but she makes it seem like it's working. And she says, you know, even if she does miss her kid during the day, she is happy she has this other part of her life. And that's what I would like.

This woman, however, also shared her concern that men she dates in the future might not support this goal of hers due to hearing at least one male friend expressing strong negative opinions about working mothers.

#### Role Models and Mentors

Many of the women in the study (nine of twelve participants) spoke of individuals who met the definitions of role model and mentor proposed in this paper. A *role model* was defined as a person (human or fictionalized) who directly or indirectly models beliefs, attitudes, and/or behaviors that can affect the personal and/or professional development of another individual. A *mentor* was defined as a more experienced individual who provides personal and/or professional guidance, instruction, and support to a less experienced individual; the *mentoring relationship* was described as mutually beneficial and growth-enhancing, entailing an active and personal investment from both parties.

Participants' role models and mentors included mothers, fathers, siblings, aunts and uncles, grandmothers, teachers, and work colleagues and supervisors. For the most part, participants' discussions of individual role models and mentors were incorporated above in those sections relevant to their spheres of influence (i.e., *Influences on Educational Decisions and Achievement; Influences on Career Choices, Achievement, and Satisfaction; Influences on Pregnancy and Parenting; and Influences on Career-Family Interface*). This section summarizes those varied references and categorizes them by person rather than area of influence. Thus, data from the Social Support and Influences section may be repeated in this section.

# **Educators**

Half of the sample named teachers who had served as important role models and/or mentors in their personal, academic, and career endeavors. One woman, the

information technology manager, said that teachers represented the second most significant influence in her life after family members. Participants reported that excellent teachers in specific disciplines had inspired their pursuits of majors and careers in those fields. Four out of the six women described what typically would be thought of as educational, career, and personal mentoring, though they did not always label it as such. Examples included (a) the seventh grade teacher who systematically introduced expectations regarding educational achievement for the girls in her class, through everything from empowering books to coaching regarding high school selection; (b) graduate school academic advisors who provided challenge and intellectual autonomy in a context of support as well as valuable counsel during periods of academic indecision and low confidence; (c) course instructors who provided encouragement, career development advice, and the offer of recommendation letters; and (d) college professors who provided research and internship opportunities, career advice, and inspiration regarding the importance of career satisfaction. The stockbroker, in particular, benefited from a decade-long mentoring relationship with her music teacher, who greatly influenced her development "not only in music, but [also] how to live your whole life." She continued.

He used to have me write out my goals and put it on the wall so I couldn't even touch it with my hand—that kind of thing. Even just sitting—how to walk into a room, how to sit down in a chair—to be confident. It's the kind of stuff where I look back and I [say], "Oh, he's so right." I studied with him for years; even in college I kept in touch with him. I changed teachers, but he was the guy who gave

me advice all along the way, put me in touch with all the right people....He just taught me—how to learn...even if you think you know something very well, you can always look at it in a different way....He really opened up so many doors for me.

#### Mothers

Half of the sample reported that their mothers had been role models or mentors for them. Five of the women said they had modeled their parenting values and decisions after those of their mothers, specifically the intention to stay at home to raise children. Mothers also provided mentoring for their daughters regarding pregnancy, childbirth, and infant-care. Two participants explicitly named their mothers as career role models, in that they generally modeled that women could have careers and specifically modeled career ambition as well as work-family integration.

### Siblings

Five women in the sample mentioned role modeling and mentoring provided by siblings. Sisters were cited as role models for college and career advice, parenting and childcare values, and career-family balancing; in some cases, sisters modeled values regarding childcare different from those of participants. Along with mothers, sisters also mentored women in the study regarding pregnancy, childbirth, and infant-care. Brothers modeled career options and achievement, as well as material success and independence (e.g., "having a nice, big place to myself").

### Work Colleagues

Five participants reported that work colleagues, both peers and supervisors, served as role models and/or mentors. Several women benefited from peer mentoring that improved their field knowledge and concrete job skills; more senior work peers also modeled what participants did *not* want for their careers. One woman, the stockbroker, benefited from the support of a (second) male mentor along her life/career path who provided what most closely resembles traditional career mentoring, that is, a senior work colleague in a supervisory role providing instrumental career advice and skill development, and using his/her organizational power to advance the career of the mentee. She acknowledged his key role in her career success, stating,

I don't think I would have gotten this far. I think I moved up the ladder quickly with him—because he has a lot of influence, but also because he was there right away, whereas most people struggle to figure it out for a while. Someone was showing me how to do it.

Finally, female work colleagues, both peers and supervisors, served as important role models for strategies involving balancing career and family.

## Parents

Four participants said that parents, as a unit, served as role models for marriage and romantic relationships, parenting, "good family values," volunteering, work ethic, management of finances, and retirement. The full-time mother/part-time medical office nurse said her parents' relationship had shaped her idea of what marriage should be:

"When we got married, we became the way we wanted to be—the way our parents were."

#### **Fathers**

Fathers were listed by four study participants as role models. Fathers modeled the value of education, work philosophies (e.g., loyalty to a company and work ethic), vigilance about family safety in the home, and personal characteristics desired in a husband.

### Extended Family

Three women mentioned extended family members as role models, including aunts and uncles who had provided examples of respected educational institutions and careers to pursue, as well as a feisty grandmother. The information technology manager shared,

If my grandmother is any indication of where I'll be in 30 years, I'll be a nut....She's always on the go, always doing something. I'm not one of those people who wants to see myself slowing down at all. There's just too much out there to learn about, to experience.

## Participants as Role Models and Mentors

Five of the study participants viewed themselves as role models or mentors, either currently or in the future. One participant influenced two younger siblings; her younger sister chose to attend the same high school that she had selected and her brother modeled his plans for marriage after hers: "I have an influence on him now because he's getting married, and he wants to have a house before he gets married. He told my parents that he

wants to do what my husband and I have done." A second participant, the speech-language pathologist, reported that she had coached her boyfriend (now husband) to further his education. Another woman said that she has become a role model for her friends who want to start having children: "I'm actually one of the first ones out of the group of girls that I hang around with...but it's exciting because now everybody's kind of got that itch."

Three women expressly included mentoring of younger colleagues or students among their future career goals. The special education teacher, for example, expressed her interest in mentoring younger teachers in her school, saying, "Instead of being in the classroom and teaching myself, I'd rather actually be helping others to do their job. I really enjoy that." The pediatric intensive-care nurse aimed to become a professor so that she could inspire students to enter the nursing professor just as she had been inspired. The lawyer/substitute teacher said she hoped someday to create a non-profit organization to provide educational mentoring for pregnant teens.

The previous sections reviewed the life/career paths of the participants, exploring the significant events and decisions, significant (and intersecting) sources of meaning, and important interpersonal influences in these women's lives. The following chapter will discuss these findings in the context of the literature on women's career development, life meaning, and role modeling/mentoring. Limitations of the study as well as recommendations for counseling research, theory, practice, and policy will be addressed.

#### **CHAPTER 6: DISCUSSION**

This study contributes to programmatic research on women's career development; specifically, it continues one of the few longitudinal research studies in this area and advances knowledge regarding women's life and career choices. Specifically, the qualitative methodology employed by this study made possible the exploration of variables that have been given either very limited or only recent attention in the career development literature: life meaning and role modeling/mentoring.

# Sources of Life Meaning

In exploring the role of life meaning in the career choices of young women, the present study sought to address some of the complexity inherent in the study of women's career commitment and aspirations. Specifically, this study investigated the sources of meaning in women's lives and how these individual and intersecting sources of meaning guided decisions along their life/career paths. An added benefit of the study was the development of the first comprehensive, cross-disciplinary definition of life meaning.

#### Prioritizing Family

Family was of central importance to the women in this study. Connections and commitments to family members—families of origin, families of creation, and extended families—shaped participants' educational and career choices, as well as their decisions to remain in or return to the city where they grew up. The significance of family grew over time, as women planned for and started their own families during the decade after high school. All of the participants included heterosexual marriage and children among

their life goals and all described how their commitments to their families of creation had affected or would affect their educational and career decisions.

The majority of women prioritized family over career and advanced educational pursuits. Most had modified, or planned to modify, their careers and educational plans as a result of having children—through reduction of hours worked, flexible scheduling, changing to (or initially selecting) careers they identified as more compatible with raising school-age children, or putting on hold their careers and plans for advanced degrees. For several participants, this commitment to modify career and educational pursuits was driven by strongly-held values regarding childcare, including the importance of staying at home to raise children and an opposition to hired childcare. Of the participants in the study who had children, all were, in fact, working part-time or full-time (one participant recently had been laid off and intended to return to work part-time), a reality that may emphasize that career, while secondary to family, remains salient in the women's lives.

Over half the participants reported little struggle with balancing family and career; these women did not have children or had flexible work schedules. Those women who worked full-time or part-time reported some struggle with this issue, including stress due to managing competing responsibilities, and feelings of loss when leaving children to go to work or when pausing a rewarding career. In spite of stressors present for some of the women, however, they ultimately endorsed the overall sentiment of the sample, which reflected a clarity of purpose and a deep contentment regarding the choice to prioritize family over career. That participants with children had access to childcare through their

family networks and adequate finances to support their households with one or one-and-a-half salaries clearly contributed to their capacities for balancing family and career.

These results are consistent with other research that found that women, when identifying their values, commitments, and participation in life roles, prioritized home life over work life regardless of work status (Claes et al., 1995) and specifically planned to reduce their future labor force participation to accommodate child-raising (Arnold, 1993). More generally, the data support Super and Ŝverko's (1995) role salience construct and Yalom's (1980) concept of personal meaning, which posit that individuals seek to realize deeply-held personal values through their life roles and goals. The decisions of most of the women to modify their careers for family are consistent with their clearly articulated values regarding the importance of being home to raise their children and also, for those who already were mothers, with the deep sense of meaning they derive from spending time with their children.

Both Super and Ŝverko (1995) and Yalom (1980), as well as numerous researchers of women's career development (e.g., Fassinger, 1990; O'Brien & Fassinger, 1993; Rainey & Borders, 1997), have recognized the role of socializing forces in shaping these deeply-held personal values and life role expectations. A few of the women reflected on the discomfort they experienced internally and externally when questioning traditional role expectations for women.

On the other hand, some researchers in the field of human relations have employed a situationist perspective in studies of role identity and meaning, hypothesizing that individuals identify work and family roles as sources of meaning as a result of their involvement in those roles, not because of culturally-dictated identities (Aryee & Luk, 1996). This permits a developmental, or malleable, view of the life meaning construct, which can contribute to capturing the complex, often non-linear path of women's life and work decisions. Indeed, while family was of primary importance to the women in the study, they also identified education, career, autonomy, and friendships as significant sources of life meaning at different points along their life/career paths.

# Valuing Education and Career

Educational decisions and accomplishments ranked among the most important decisions and achievements of participants' lives. As early as the years before high school, a number of the women consciously selected educational paths that would broaden rather than limit their personal development and future career opportunities. The women in the sample also persisted in their educational goals in the face of challenges such as having to support oneself financially through college, teen pregnancy, and family/cultural disapproval of women who pursue advanced education. Moreover, a majority of participants intended to pursue advanced degrees in the future.

The women also highly valued their careers. Careers were included among participants' greatest life accomplishments and every participant reported that she felt passionate about her work during some or all periods of her post-high school life. A majority said they currently loved or really enjoyed their jobs. The women prided themselves in having strong work ethics and described a number of benefits that they in turn derived from their careers, including the satisfaction of goal fulfillment,

interpersonal support, the emotional reward of helping others, self-confidence, financial independence, and the enjoyment of challenging work.

These results suggest support for the claim that involvement in life roles engenders an investment in those roles (Aryee & Luk, 1996); the women in the study clearly identified their educational and career pursuits as meaningful and rewarding, and most remained invested in developing those opportunities.

The findings also may be understood in light of the findings of Park and Folkman (1997) that individuals pursue proximal goals that contribute to reaching distal, superordinate goals such as pleasure, autonomy, relational intimacy, career achievement, power, generativity, and self-transcendence. For example, both education and career were cited by participants as sources of highly-prized autonomy. The women said that educational opportunities had been catalysts for their independence, instilling confidence as they ventured away from home for the first time, whether across town on the city public transportation system or across state lines for college or graduate school. For some participants, educational decisions marked the first significant moments of individuation from parents, extended family members, and peers. Career provided valued experiences of financial and professional autonomy for many participants. The money they earned from their careers bought them independence from their parents, a sense of equality in their romantic relationships, and feelings of self-sufficiency. Study participants also said their careers developed their confidence in independent travel and problem-solving.

As a second example, participants in the study also reported high levels of satisfaction with careers that provided relational intimacy, for example, interpersonal

support from colleagues and supervisors and opportunities to help others. Half of the sample was employed in helping professions traditionally identified with women, including counseling, special education, speech-language pathology (working with developmentally challenged children), teaching, and nursing. Most of the women in this group had started out with educational/career interests in non-traditional fields. Researchers such as Eccles and her colleagues (Josefowicz, Barber, & Eccles, 1993, cited in Eccles, 1994) consistently have reported trends that, consistent with traditional gender role expectations, show girls and women gravitating toward careers that involve relational skills and rewards. While relational careers may be highly consistent with some women's deeply-held values and thus may contribute to their capacity for reaching superordinate goals of relational intimacy and generativity, researchers over the decades have been troubled to find that enrollment in traditionally female careers often signals a lack of career motivation that ultimately is damaging to women's status and earning power in the marketplace (AAUW, 1991, 1994; Holland & Eisenhart, 1991; Kolbenschlag, 1979; O'Brien et al., 2000; Savage & Fouad, 1994).

Interestingly, some of the women in the present study who had chosen traditionally-female careers were among the most internally conflicted about limiting their career involvement to become primary caregivers for their children. These participants derived great meaning from their work as professional helpers. In addition, most of the women employed in traditionally-female careers did not appear to have reduced their plans to pursue leadership positions and advanced education in their career fields (i.e., career aspiration). This group included a nursing supervisor who planned to

get her master's in nursing and pursue research and teaching in the future; a mental health counselor who was pursuing her doctorate and who stated, "I wanna die and still be working on my career and be known as taking an active role out there in psychology"; the special education teacher who hoped to mentor other teachers someday, and the speech-language pathologist who was starting a private practice and wanted to open a multidisciplinary clinic for developmentally-challenged children. These findings reflect those of the second phase of the longitudinal study (O'Brien et al., 2000), which overall indicated constant career aspiration levels in the sample from senior year of high school to five years post-high school. Of particular note regarding the present study's sample is that the majority of the traditionally-employed women listed above who articulated high career aspirations had, earlier in their lives, expressed interest in or pursued nontraditional educational paths. This suggests that, while gender role conformity or selection of careers compatible with child-raising may shrink the spectrum of young women's perceived career options, their career motivation may be sublimated into high achievement in traditionally-female careers.

Furthermore, it should be noted that 50% of the present sample had pursued careers considered non-traditional for women, including engineering, information technology, computer consulting, pharmaceutical marketing management, entertainment industry management, and stock-brokering. Most of these women had reported interest in non-traditional career fields in high school and, at five years post-high school, had either changed briefly to less prestigious career fields (e.g., interest in chemistry and law, to graduate work in history/education, to information technology position) or were

transitioning into their careers (e.g., interest in chemical engineering, to volunteer work and a part-time job after college, to full-time engineering job). In this regard, these particular women may not be representative of the larger sample from which they were drawn, which overall included women who selected less prestigious and more traditional careers than those to which they had aspired in high school (O'Brien et al. [2000] performed post-hoc analyses on participants' future career plans [instead of current career field] at five years post-high school to confirm that the apparent decreases in prestige and increases in traditionality were not due to post-college career transitioning).

The above findings suggest that education and career, like family, have fulfilled and/or still fulfill important life values and goals for all of these women. These life values and goals include autonomy, relational fulfillment, pleasure, generativity, and career achievement. While study participants prioritized family over career, career and educational pursuits nevertheless remained very important to them. These results are consistent with the findings of the second phase of the longitudinal study (O'Brien et al., 2000). In some cases, career and education may be tapping the same meaning sources as family (e.g., relational fulfillment, generativity). In other cases, however, career and education provide meaning and a sense of purpose that family does not, including opportunities to experience autonomy and goal achievement.

While articulating clear priorities regarding family, the women who were parents remained committed to their work life in some capacity while raising their children.

While the national economic reality that middle-class households increasingly require two incomes to survive (U.S. Census Bureau, 2004) may have contributed to their

working statuses, the women in this study overall reported adequate household finances to allow for one non-working partner and did not indicate finances as a factor in their employment. Women, given the (economically privileged) choice, chose both family and career to the extent allowed by their careers (e.g., ability to work at home; ability to retain managerial status despite reducing work hours; ability to find a job in one's field close to home). This finding is consistent with long-term economic trends that show that, compared with previous generational cohorts, (a) women, especially mothers, have been increasing their time in the labor force, and (b) educated women with higher incomes are less likely to drop out of the labor force (Hartmann, 2003).

That women chose both family and career when possible, given the constraints of career, also provides additional evidence that structural barriers, in addition to the highly-meaningful role of motherhood and the cultural force of gender role expectations that shape those definitions of meaning, may be a major factor that contributes to women's decisions to limit their careers during child-bearing years. Indeed, women who were committed to their careers and had faith in their abilities to manage the time challenges that come with work and family roles cited a lack of acceptance and support of these multiple commitments by employers and institutional policies as their biggest barrier (Granrose & Kaplan, 1996). Flexible career tracks that would allow women (and men) to continue advancing in their careers while raising children, or to more easily rejoin their careers after some time off for children, would better match the needs of individuals who highly value the benefits of education and career in addition to family (Belkin, 2003; Pollitt, 2003). These more flexible work structures would permit women (and men) to

seek meaning through the pursuit of a diversity of life roles. Furthermore, research has demonstrated positive outcomes for women who possess achievement motivation and sense of purpose, including occupational achievement and greater psychological wellbeing (Holahan, 1994; Zika & Chamberlain, 1992).

# *Importance of Friends*

Another important source of meaning for the study participants was their relationships with friends, particularly female friends. Not surprisingly, friends played a significant role in the high school and college years, when activities and interests centered around participants' social circles. However, the women also emphasized the continuity of their friendships over time and the great value they placed on these relationships. Some of the women had nurtured friendships since grammar school and high school. These findings are consistent with research that highlights the relational quality of women's lives and the importance placed on interpersonal connections with other women (e.g., De Vogler-Ebersole & Ebersole, 1985).

### Goal Pursuit and Life Satisfaction

Most of the women were very satisfied with their lives and, when they reflected on their life and career choices, expressed curiosity rather than regret about paths they might have taken. The high level of satisfaction may in part be an artifact of those who would agree to participate in this study, or may be related to the participants' relatively privileged economic statuses. Participants' life satisfaction was related to the fulfillment of life-long plans and goals, a finding supported by researchers who have linked goal pursuit with a related construct, subjective well-being (Brunstein, Schultheiss, &

Grasssman, 1998; Oishi, 2000). These goals included traditional scripts about the progression of marriage into family and about working hard to achieve financial security and a desirable home. Deviating from these internalized scripts, particularly those regarding finding a partner and starting a family, was a source of anxiety for some women in the study. This is not surprising, given the enormous pressure placed on women by societal gender role expectations to secure heterosexual marriage relationships and to birth children (Fels, 2004).

Significant Supports/Influences on Women's Life/Career Paths

The second set of research questions in the study explored significant influences on the women's life/career paths. Though the interview protocol allowed for a range of responses, almost every influence identified by participants was a person (or persons). The study also investigated the specific influences, if any, of role models and mentors on participants' life and career decisions.

### *Influence of Family*

Consistent with the source of meaning identified by participants as most central in their lives, family was reported to be the most significant overall influence on the women. Family members included parents and siblings, extended family, and the participants' spouses and children. Other critical influences along the women life/career paths included friends, educators, and work colleagues.

#### Parents

In more than half the sample, parents heavily influenced the initial educational and career decisions of their daughters, including the selection of schools, majors, and career

fields. This influence was in part a result of the financial support parents provided and in part the persuasiveness of parental and cultural expectations. Researchers have documented the importance of family and other social influences in the career choice behaviors of college students (Caldera et al., 2003; Flores & O'Brien, 2002; Lent et al., 2002). Participants valued the emotional support they received from parents throughout their educations and careers, and the moments in which they diverged from perceived parental expectations, particularly their fathers' expectations, were stressful if liberating.

While fathers may not have influenced specific career choices long-term, they may have contributed to their daughters' overall career orientation, in that those women who spoke about their fathers' influential expectations had pursued non-traditional career fields, had aspirations to further their careers, and/or did not plan to reduce their career involvement when they had children. This finding is consistent with the results from the five-year study (O'Brien et al., 2000), in which attachment to father was the only variable that significantly and directly affected career self-efficacy, a factor that in turn affected levels of career aspiration.

Mothers also influenced women's educational and career pursuits, both positively and negatively, and both directly and indirectly. Mothers who worked provided their daughters with expectations that they too would work and have a career someday, and that career and family could be complementary. Some mothers, however, discouraged their daughters from taking risks in their educational and career pursuits. A number had influenced the parenting decisions of their working daughters, by modeling values regarding staying home to raise children. All of these findings emphasize the role that

maternal characteristics may play in women's career development, a factor explored by researchers who have found positive relationships between the career aspirations of daughters and the educational status, employment status, gender role attitudes, and agentic characteristics of their mothers (AAUW, 1999; Rainey & Borders, 1997).

Participants said that their parents as a unit provided practical support for their careers, including job networking, building home office infrastructures, and assisting with living expenses during career transitions. In addition, primarily mothers, but also some fathers, provided parenting advice and childcare support for those women who had children.

Siblings and Extended Family

Siblings and extended family (aunts, uncles, in-laws) inspired particular educational choices and career interests, supported educational commitment, and provided practical educational and career advice and job connections. These results are consistent with findings from a new area of counseling psychology career development research that siblings provide essential supportive functions (e.g., providing information and advice) and serve as role models for career exploration and decision-making (Blustein et al., 2001; Schultheiss, Kress, Manzi, & Glasscock, 2001; Schultheiss, Palma, Predragovich, & Glasscock, 2002).

In cases where the extended families' cultural values were inconsistent with the educational or career advancement of women, the supportive influence of the nuclear family unit was of critical importance to the women's educational/career expectations.

Both Flores and O'Brien (2002) and Gomez et al. (2001) noted the significant impact of

family cultural expectations on women's career choices; the next study in this area might explore how specific types of extended family and sibling support may influence the career expectations and career commitment of young women of various cultural and socioeconomic statuses.

Female siblings and extended family members (cousins, mothers-in-law) also had direct and indirect effects on the women's parenting experiences, values, and decisions through modeling (indirect) and through informational support and childcare provision (direct). As participants planned for career and family, they engaged in careful comparisons of themselves with the women in their families and extended families, finding models both for balancing work and parenting and for staying home full-time to raise children. This modeling of different options seems positive in light of Eccles' (1994) observation that role models, while they have the influence to either encourage or discourage individuals from selecting stereotypical gender roles, typically guide individuals to consider choices that are consistent with gender role norms. Given that most of the women had family members who represented different choices on the workparenting continuum, research investigations could shed light on the directionality and strength of role model influences, that is, do women follow the gender roles expressed by women in their families ("do as they see") or align themselves with the women in their families who most closely resemble their own multi-determined value systems regarding career and family ("see as they do")? And what makes a given role model particularly influential in a woman's life?

Moreover, the knowledge, skill-sharing, and psychosocial support that passes from female relatives to new mothers is a type of mentoring that eludes most career-focused definitions of the mentoring relationship. Given the highly-interconnected nature of career and family for many women, comparisons across domains of mentoring could inform our mentoring models and highlight new moderating and mediating variables for investigation.

### Spouses/Partners

Male spouses were largely positive influences in the lives of the women, providing emotional encouragement regarding the pursuit of educational and career opportunities such as challenging jobs and advanced degrees and, in some cases, playing an active co-parenting role when women chose to pursue both career and family, a factor that has been documented as one of the key contributors to working mothers' career success (Gilbert, 1994; Gomez et al., 2001). Negative influences of spouses or romantic partners (e.g., prioritizing a male partner's career over one's own, insecurity about career success due to projections about a male partner's gender role expectations) contributed to career-limiting decisions, increased career confusion, and stress. Additional investigation is needed to explore the degree to which spouses and romantic partners both positively and negatively affect the career choices and trajectories of women. For example, it would be interesting to track the career decisions of women in relation to their partners' level of commitment to co-parenting and to the paternity leave policies of their partners' workplaces.

### *Influence of Friends*

Friends exerted positive and negative influences on participants' educational, career, and parenting commitments. Particularly in the school years, friends' educational and career expectations challenged or reinforced participants' commitments to these endeavors. With the support of friends, the women pursued and completed difficult degree programs and ventured out-of-state for educational opportunities. Those who did not experience the support of friends reported feeling isolated during their educational endeavors. For those participants who had children, friends were a source of advice and support for parenting strategies and also served as role models for career-family issues. The key role of peer support for educational and career aspirations has been recognized in research on younger students (e.g., Lent et al., 2002). Additional studies are needed to explore the influence of adult friends on educational and career decisions and experiences later in life, for example, on graduate school persistence rates or on decisions about work-family conflicts.

### *Influence of Educators*

Educators were an important source of role modeling and mentoring for personal, academic, and career endeavors, a finding consistent with the literature on mentoring in educational settings (e.g., Clark, Harden, & Johnson, 2000; Gloria & Robinson-Kurpius, 2001; Schlegel, 2000; Ulku-Steiner et al., 2000). Teachers modeled career passion and inspired interest in their academic and career fields. Educators, both female and male, from grade school to graduate school, also provided instrumental and psychosocial mentoring by encouraging the women's intellectual development, instilling personal

discipline and resilience, helping them navigate changes and challenges along their educational paths, purposefully exposing them to positive female role models, and providing them with encouragement and access to further opportunities in their disciplines. Those women who had been mentored by educators had progressed in their careers, highly valued their educations, and reported access to mentoring later in their careers; these results add to findings that highlight the positive effects of mentoring on women's educational/career aspirations and commitments (Ulku-Steiner et al., 2000). Educators also exerted negative influences on the women's educational and career development, by discouraging innovation and the pursuit of specific disciplines and by sexually harassing women in their learning environments.

# *Influence of Work Colleagues*

Work colleagues overall were found to be a source of support and encouragement that increased job satisfaction and helped advance careers. Traditional mentoring by supervisors, that is, one-on-one instruction, encouragement, and networking to benefit a mentee's career advancement, appeared to be rare in this sample, a finding supported by research that suggests that women compared to men have limited access to mentors in the workplace (Lyness & Thompson, 2000; Ragins & Cotton, 1991), particularly White male mentors who typically hold the most institutional power (Dreher & Cox, 1996; Gilbert & Rossman, 1992). When mentoring by an established male supervisor (race unknown) did occur, it was associated with non-traditional employment, career success, career satisfaction, and the intention not to reduce career commitment after having children. These results are consistent with mentoring outcomes research that consistently has

associated mentoring with such benefits as higher incomes and more promotions (Dreher & Cox, 1996; Johnson & Huwe, 2002); greater job satisfaction (Dreher & Cox, 1996; Wallace, 2001) and career commitment (Ulku-Steiner et al., 2000); and higher levels of personal identity, self-esteem, and creativity (Atkinson et al., 1994). In particular, the results are supported by specific studies on the comparative influence of established male mentors (e.g., Dreher & Cox, 1996).

While traditional vertical mentoring (more experienced and established mentor with less experienced mentee) was not prevalent, mentoring by peers provided another avenue for career development. This finding contributes to the existing literature on peer career mentoring (Eby, 1997; Gram, 1992) and supports research that suggests that active networking with female colleagues early in their careers often substitutes for the absence of formal mentoring in successful women's career development (e.g., Noonan et al., 2004; Richie et al., 1997; Roemer, 2002; Swoboda & Millar, 1986). Especially in light of continued barriers in the workplace that prevent women from gaining the support of influential career mentors, it is essential that such alternative strategies be nurtured to empower women in their workplaces.

Peers in the workplace also served as important role models for work-family decisions. Those women with colleagues who modeled working and mothering were among the few who had, or who planned to, continue working full-time after having a child; they cited their role models as inspiration. These women were employed in non-traditional fields, an additional factor that may have contributed to their overall career

commitment. More research is needed to investigate the effect of workplace role models and other key factors on women's perceptions about work-family compatibility.

# Summary of Influences

In summary, the above results confirm the influential role of individuals in the personal, educational, and career development of the women in the sample. Families of origin, particularly parents, were powerful shapers of women's expectations about the value of education; about which educational paths they should pursue; about whether women work and which careers were appropriate for them; and about the possibilities of balancing family and work roles. Parents also provided role modeling, mentoring, and tangible support for parenting. Siblings and extended families provided some role modeling for women's educational endeavors, but their greatest influence appeared to be in the areas of parenting (role modeling and some mentoring) and decision-making about family and career (role modeling). Friends also served as role models regarding parenting and family-career decision-making. Partners, while not role models or mentors per se, played a critical role in supporting (or thwarting) women's educational and career advancement, particularly when work-family decisions were involved. Educators served as key mentors for the women's educational and career development; their role in inspiring and supporting educational and career commitment and achievement cannot be understated. Finally, work colleagues provided peer mentoring and a supportive environment that encouraged the women's career development; when traditional mentors were present, they contributed greatly to women's success in the workplace.

Consistent with the present study's findings, social support research in the area of women's career development has highlighted the effectiveness of various kinds of interpersonal support in shaping and supporting a woman's life/career choices and aspirations (Bernas & Major, 2000; Moya et al., 2000; Nauta et al., 1998; O'Brien & Fassinger, 1993; Pajares & Zeldin, 1999). Specifically, research has demonstrated the positive influence of role models on women's non-traditional career aspirations, expectations for achievement in their fields, and beliefs about the compatibility of career and family commitments (Nauta et al., 1998). Eccles (1994) also has emphasized the need for role models who can contribute to women's achievement by legitimating novel and/or gender-role-deviant options for their life/career paths. Mentors—both traditional mentors and peer mentors—also provide a rich source of instrumental and psychosocial support for women's career development (Eby, 1997; Gram, 1992; Pajares & Zeldin, 1999; Pistole, 1994; Schlegel, 2000; C. Williams, 2001).

Almost 20 years ago, Gilbert and Evans (1985) concluded that female students were looking to other women for new images and alternate possibilities for themselves, ranging from the integration of achievement and family life to choosing one over the other. The present study indicates that this still is the case. Given women's meaning-filled engagement with family, as well as with education, career, friendships, and the search for autonomy, it seems critically important that they continue to benefit from models and mentors who can demonstrate and nurture the possibilities and the rewards of these many roles and activities, both individually and in combination with one another.

### Limitations of the Study

This study contributed to an important longitudinal investigation of women's life/career paths and researched variables that add to our knowledge of women's career development. The limitations of this investigation will be discussed.

Given that this study explored the narratives of a relatively homogenous sample of 12 participants, the investigation suffered from an inherent weakness of qualitative research: generalizability—in this case, to populations with educational, financial, cultural, religious, age, gender identity/sexual preference, and geographical statuses different from this group of college-educated, middle to upper-middle class, predominantly European-American, Catholic, heterosexual, 29-year-old women from Chicago. While the study explores a demographic (educated women of economic means in their childbearing years) that in recent years has attracted much attention in popular discussions of gender and work-family decisions, it clearly did not address the experiences of a vast group of women whose life/career paths are obstructed by poverty, racism, heterosexism, disability, and/or ageism.

The participants in the present study were among the group of women from the initial longitudinal study whose levels of career orientation had decreased over the five-year period post-high school, however, self-selection ultimately determined participation. It is possible that those who agreed to be interviewed were not representative of the larger group. That is, compared to women in the initial sample, these participants may have been more confident in and satisfied with their life/career choices and achievements, may have had more time for an interview due to their family and career statuses, may have

shared certain values or beliefs given that they all chose to stay in/return to the Chicago area, or may have had particular biases toward psychological research or issues related to women's career development.

In addition, the authors of the second phase of the longitudinal study (O'Brien et al., 2000) noted challenges associated with the operationalization and measurement of the career constructs used to evaluate the career orientation of participants from the original sample. Although the current study attempted to address these problems by using only the most psychometrically-sound variables of career traditionality and career aspiration to select those participants who had changed their levels of career orientation over time, it is possible that these constructs did not accurately capture the women's career intentions and choices. Indeed, consistent with the benefits of qualitative investigations, this study revealed that apparent decreases in career orientation for some of the participants in the present study were due to continuing education (i.e., student status) or to not yet being fully transitioned into their careers at the time of the second phase of the longitudinal study, that is, one year out of college.

Because of time and logistical constraints, only one semi-structured, in-depth interview was conducted with each participant. Ideally, multiple interviews would allow time for broad, open-ended narratives of participants' life/career paths followed by refined questioning arising from participants' stories, thus providing deep description and helping to ensure that narrative categories are arrived at inductively rather than imposed by the researcher's protocol. Also due to time considerations, the interview protocol was not revised continually and participants were not added as the interviews proceeded, as

would occur in the unmodified grounded theory technique of theoretical sampling to promote the likelihood that concepts investigated by the protocol are representative of those explored by the sample (Strauss & Corbin, 1998). Attending to the above considerations, every attempt was made in both the interview protocol and Life/Career Path Worksheet not to pre-define categories, including opening the interview with an invitation to each participant to outline broadly her life/career path, and then asking purposefully broad questions eliciting participant-defined "significant life events and/or decision points" and "significant influences" along her life/career path before asking more detailed follow-up questions.

The primary investigator/interviewer was a woman of similar age, race, socioeconomic background, religious background, education and physical ability status to most of the participants; this factor in itself may have solicited certain responses to questions about career and life choices, for example, responses that might have been viewed as pleasing to a female doctoral student who cared about women's career development or as interesting and gender-appropriate for a female peer. The similarity of the interviewer to the interviewees might have prevented important follow-up questions that would have been asked by someone from a different ethnic or religious background, or a different socioeconomic status.

Moreover, differences in participants' verbal styles may have resulted in less complete information regarding certain individuals who did not provide a lot of narrative detail. This is always a possibility when using a methodology that relies on detailed narratives for data. To address this, additional probing questions were used in the case of

less verbally expansive interviewees; also, field notes from all of the participants' interviews were checked to ensure accurate inferences from the interview data.

That the majority of the interview protocol depended on participants' retrospective recall presented another challenge, given the possibility that past events and decisions, and their accompanying emotional states, may not be remembered clearly or may be labeled significant only because they are framed by current-day concerns. To minimize these effects, participants were asked to recall events and decisions in relationship to others, rather than arbitrarily or in isolation. The Life/Career Path Worksheet asked participants to generate their own timelines of significant experiences rather than imposing calendar dates or some other external structure on participants' recall process; indeed, precise dates and other minor details that are most likely to be forgotten were not important to this study. In asking participants about the most significant events and decisions in their lives, memory was contextualized and the information sought was personal, emotionally significant, vivid, and had considerable impact—all of which contribute to increased recall (Planalp & Honeycutt, 1985; Stohl, 1986). Furthermore, the evolution of time often is what provides the requisite perspective to allow individuals to comprehend the full meaning and significance of life events and decisions, and the influences that shape those experiences. This necessary distance seemed crucial given the subjects investigated by this study (i.e., life meaning, role models/mentors). Nonetheless, the significance ascribed to particular life experiences by the women in the present study clearly reflected their subjective viewpoints at that particular point in time when they were interviewed.

The possibility of bias in data interpretation also must be considered when conducting qualitative research. This challenge was addressed initially by providing participants an opportunity to review their transcripts and to change or clarify their responses to the interview protocol. During the data analysis stage, the potential for bias was reduced by reviewing the data at three different levels: individual, pair, and team; by pairing less-experienced with more-experienced researchers; by ongoing discussion and arbitration of disagreements throughout the data analysis process; and by providing two additional levels of data-checking (by the thesis author/project director and the thesis advisor/auditor) after the data was propertized and dimensionalized. However, despite these attempts to minimize bias, it is possible that team members, all of whom were psychologically-minded and personally committed to graduate-level education for themselves, may have imposed their own assumptions and values, or a deeper level of meaning than originally intended, on the words of the participants.

Finally, the applicability of the study's results could have been increased through the triangulation of data sources. In addition to the Life/Career Path Worksheet filled out by each participant and the field notes recorded by the interviewer after each interview, the study might have included additional data from the "significant influences" identified by the women or from sources such as written or recorded life "herstories," archival documents, and quantitative measures. Considering the longitudinal study as a whole and the previous stages' focus on quantitative measures, this qualitative investigation itself provides a good example of triangulation.

Recommendations for Counseling Research, Theory, Practice, and Policy

\*Research and Theory Recommendations\*

The results of the present study highlight the need for research in a number of less-established arenas. The construct of life meaning, until now represented by partial constructs in disparate research literatures, deserves attention as a variable in its own right, one that adds an important dimension to the study of career development, and women's career development in particular. Most significantly, the life meaning construct may help in explaining the often non-linear path of women's life and work decisions. As seen in this study, women negotiated family and work commitments according to meaning priorities that shifted over time with women's changing roles and life goals. Our models of career development for women and men must reflect the multiple and interdependent roles/sources of meaning that shape individuals' lives and the non-linear career paths that result from those multiple commitments.

Another variable that may be of significance to the study of women's career choices but that has not been explored much in the literature is autonomy. Given its value to the women in this study in their many roles (student, worker, family member, spouse, parent), it seems important to understand more fully how women's needs for autonomy intersect with their relational commitments and whether/how these needs are filled creatively by women balancing multiple roles.

Areas for additional research include more detailed investigations into the effects of significant interpersonal influences on women's life/career paths, for example, extended family influences (particularly within a cultural context), parents, spouses and

romantic partners, adult friendships, teachers, and work colleagues. This study demonstrated the critical role that these individuals played in advancing or thwarting the educational and career aspirations and achievements of women in their lives. Given the results of this study regarding the central importance of family and other relationships in the lives of women, it seems vital to understand how these interpersonal connections can contribute to rather than erode women's capacity for engaging in a number of meaningful life roles. In particular, more study is needed regarding the mechanisms by which certain role models in women's lives gain prominence over others, the effect of role models on women's selection of and longevity within non-traditional career fields, and the influence of role models on women's perceptions of career-family compatibility. Furthermore, research is needed that can answer Hackney's and Bock's (2000) call for the inclusion of broader definitions of the mentoring relationship based less on traditional hierarchical power and more on diffuse, decentered networks of support, for example, multiple mentors, formal/informal mentoring networks, peer mentors, small working groups, and collaborations among professional, academic, and community organizations.

Finally, it is critical that career development models explicitly acknowledge the significant contributions of structural and cultural (broadly defined) factors to individuals'—particularly women's—career decision-making (Fitzgerald & Betz, 1994). These include economic and sociopolitical climate, workplace barriers and supports (e.g., glass ceilings, access to mentors, and availability of flexible schedules/on-site childcare), social class, socio-cultural expectations, and identity-based oppression.

With regard to the methodology of the study, there remains a need for research that evaluates the utility of team versus individual approaches to qualitative investigations, and that systematizes and empirically tests various strategies to address bias within research teams (Richie et al., 1997). Comparison of results from distinct qualitative methodological approaches to the same data also would be useful (Noonan et al., 2004).

### Practice and Policy Recommendations

Should these data be replicated in future studies, some concrete practice suggestions—at the levels of the individual, organization, and system—arise from these findings. These recommendations include individual career counseling interventions that explore clients' career questions and decisions in the context of sources of life meaning, that expand individuals' horizons about what careers and life roles might be possible, and that assist clients in developing strategies for integrating family and career along their life/career paths. For example, career counseling sessions with younger women who intend to combine career and family could include education about flexible careers that also are prestigious and high-paying. Career interventions with individuals also necessarily will include providing support and advice for women when they encounter internal stressors and external barriers as they attempt to negotiate their multiple roles in family, social, and work climates that may be insensitive or hostile to these efforts. Furthermore, counselors can work with individual women to identify role models and to recruit traditional and peer mentors who will support and advance their educational and career goals.

At the organizational level, counselors can engage in consultative and psychoeducational activities that encourage women's educational and career development, and that address significant challenges in women's lives. In light of this study's findings regarding the centrality of family in life and career choices, workshops for parents (or for other family members) on how to facilitate their daughters (sisters'/nieces') career explorations could be very productive. In addition, interventions with educators at all levels are needed to emphasize their key roles as role models and mentors who can instill educational and career expectations, encourage the pursuit of non-traditional disciplines and career fields, and expose girls and women to positive female role models, including women who successfully manage career and family.

Counselors can contribute to curriculum planning, develop and evaluate psychoeducational programs for both students and faculty, and serve on school and university boards that address the educational needs of girls and women.

In their roles as consultants or members of organizations, counselors also can initiate and support the expansion of formal and informal mentoring programs for women in educational, business, and family arenas. These programs should include efforts to empower women to develop their own peer support networks as well as collaborations among the professional, academic, and community organizations to which they belong.

Counselors also should consider the many possibilities afforded by new technologies when working with organizations and individuals. Examples include web pages for information and resources about mentoring, scholarships for women, women's professional organizations, job climate, and combining parenting and careers; listservs

and chat-groups for the sharing of information, struggles, and success strategies; mentoring networks that connect mentors and mentees online; and e-learning courses for delivery of course and workshop content. For those women with access to computers, these resources can be highly efficient tools that can be used at times compatible with their busy schedules.

Finally, interventions at individual and organizational levels must be complemented by changes at the system-level, that is, at the level of social movements and public policy. Counselors can participate in critiques of socio-economic and political systems that perpetuate the exclusion of women from educational and career opportunities, the sexual harassment and abuse of girls and women, and the unequal distribution of childcare responsibilities. They can lobby for economic, educational, and social resources to support the intellectual and career development of women and to ensure the provision of safe, affordable childcare for working families. And they can work to eliminate psychological and structural barriers in families and in workplaces that prevent women from participating fully in the many roles and activities that they find meaningful.

## Conclusion

In conclusion, this in-depth exploration of the sources of meaning and interpersonal influence in the life/career paths of 12 Chicago women highlights the passion and commitment that women bring to their families, their careers, their educational experiences, their friendships, and their own expressions of autonomy. This investigation also demonstrates the influence of important individuals in women's lives

who inspire, encourage, and structurally support—that is, model and mentor—those various and intersecting passions and commitments. Finally, this study emphasizes the need for further theory-building and research to capture the complex life/career paths of women and also for multi-level practice and policy interventions aimed at fostering and sustaining women's ambitions across all life stages. Should the challenge of improving women's position and choices in society seem daunting at times, perhaps we can remember the words of one study participant, a mental health counselor and graduate student who explained why she loves her work: "There's always that capacity for change, no matter what."

# Appendix A

# Career Aspiration Scale

Imagine a scale ranging from 1 to 5 that tells how well each statement applies to you. In the space next to the statement please circle a number from 1 (not at all true of me) to 4 (very true of me). If the statement does not apply, circle 1. Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

Not at all true of me	A little bit true of me	Moderately true of me		Quite a bit true of me		Very true	of me
1	2	3		4			<u>5</u>
1. I hope to bed	come a leader in my caree	r field.	1	2	3	4	5
	stablished in my career, I						
	er employees.		1	2	3	4	5
3. I would be s	atisfied just doing my job	in a career I am intereste	ed in.				
			1	2	3	4	5
	on devoting energy to ge						
	n or business I am working		1	2	3	4	5
5. When I am e	established in my career, I	would like to train other	s. 1	2	3	4	5
6. I hope to mo	ove up through any organi	zation or business I work	in.				
			1	2	3	4	5
7. Once I finish	the basic level of educat	ion needed for a					
particular jo	b, I see no need to contin	ue in school.	1	2	3	4	5
8. I plan on dev	veloping as an expert in m	y career field.	1	2	3	4	5
9. I think I wou	ald like to pursue graduate	training in my					
occupationa	al area of interest.		1	2	3	4	5
10. Attaining lea	10. Attaining leadership status in my career is not that						
important to	-		1	2	3	4	5

## Appendix B

#### **Interview Protocol**

#### **After participant has signed Informed Consent:**

- Do you have any questions before we begin?
- I want to remind you that you may answer questions to the extent that you wish. If you have nothing to add at certain points, or don't wish to answer a particular question, feel free to say that.
- 1) As you know, this study is interested in women's life and work choices over time. As a way to begin, perhaps you could share a little about your life/career path ("life-slash-career path") since high school.

At the end of high school, you indicated that y	ou had an ir	iterest in
When we were last	t in touch w	ith you about five
years ago, you were doing		. Please describe
specifically how you moved from	to	, and
from to what you're doing	ng now.	

■ (OR) Think back to your senior year of high school. What expectations or goals did you have for your life and career? How has your life and career path unfolded since then?

#### 2) Life/Career Path Worksheet

As a way to focus our conversation about your life/career path, I'd like you to fill out this worksheet. Think about some of the significant events and/or decision points in your life. For example:

- Significant moments or experiences relating to your life and/or your career path that stand out for you
- Times in your life when you faced important decisions

On the worksheet, please write in up to 5 (you don't need to have 5) of these significant events and/or decision points along your life/career path. Place these at the approximate locations along your time line.

Below each event/decision point, in the bottom half of the page, write in the most significant influences on you during that time in your life that directly or indirectly:

- influenced the decisions you were making
- shaped the way you thought about yourself
- influenced your life and/or career path

Take about 10 minutes to do this, and then we'll pick a few of these significant experiences to discuss in more depth.

#### LIFE/CAREER PATH WORKSHEET

#### **Instructions:**

- 1) In the area above the time line, please write in significant events and/or decision points that you have experienced along your life/career path. Place these at the approximate locations along your time line. Please provide up to 5 events/decisions total.
- 2) In the area below the time line, under each event/decision point, write in the significant influences on you during that time in your life that directly or indirectly influenced the decisions you were making, shaped the way you thought about yourself, or influenced your life/career path.

SIGNIFICANT EVENTS/ DECISIONS	
BIRTH	2002
SIGNIFICANT INFLUENCES	

## 2. (CONT'D.)

You're going to keep the worksheet as we talk. For this part of the interview, we'll discuss as many events/decision points as we can, spending about 10 minutes or so on each.

To begin, please list very briefly the events and/or decisions that you've written down.

Select one that feels the most significant to you. (If this is difficult, remember that we will get to discuss a few of these.)
[Select another event/decision point...]

- a) Tell me about this particular event/experience/decision in your life and what made it significant for you.
- b) Take yourself back to that time. What feelings were you experiencing at this point in your life/as you were faced with this decision?
  - Say more about these feelings...
  - Positive or negative feelings?
  - Any other feelings?
- c) Remembering back to this important event or decision in your life, who or what was influencing you the most?

   i.e. persons/places/things that directly or indirectly

i.e., persons/places/timigs that directly of mulicetly
□ influenced the decisions you were making
□ shaped the way you thought about yourself
□ influenced your life and/or career path
In what ways did these people/things influence you?
, , , , , , , , , , , , , , , , , , , ,
<ul><li>educationally</li></ul>
<ul><li>personally</li></ul>
□ professionally
Say more about this person/place/thing. How exactly was s/he/it:
□ supportive?
□ neutral?
□ unsupportive?
□ a combination or none of these?

• [If no influences:] In what ways were you affected by the absence of influential individuals/significant influences at this particular time in your life?

- d) Again, think back. Imagine yourself at that age. At that time in your life, what would you say gave your life meaning or felt most important to you?
  - What made it meaningful?
  - What else was most important to you at that time in your life?
- e) Describe any challenges or conflicts you experienced related to this life event/decision and how these were resolved.
  - Any challenges/conflicts within yourself?
  - Any challenges from/conflicts with others (your family, friends, workplace, society)?
- f) What was happening at this time in your life with regard to your:
  - Education
  - Relationships
  - Career

What influences did these other areas of your life have on this event/decision?

# GO BACK TO 2a)

3) When you reflect on your life choices and experiences, particularly over the past ten years (since high school):

a) How do you feel about where your life is now?

- Educationally
- Personally
- Professionally
- b) What are the positive aspects of your life?
  - Educationally
  - Personally
  - Professionally
- c) What are the challenging aspects of your life?
  - Educationally
  - Personally
  - Professionally
- d) Which individuals/what other influences are most significant in your life today?
  - Educationally
  - Personally
  - Professionally

- e) Has what you have found most meaningful/most fulfilling changed for you over the past 10 years (since high school)? If so, how?
  - Trace what's changed: end of high school, five years later, now
- f) To what degree and in what ways do your current life and work experiences and/or choices reflect what is most meaningful to you?
- g) What life/career events or decisions, if any, would you change? In what way?
- h) What would you say are your greatest accomplishments along your life and career path?

# 4) <u>Future Goals:</u>

a)	Where do	you see	yourself in 5	years with	regard to:
----	----------	---------	---------------	------------	------------

- Your education?
- Your career?
- Your relationships?
  - □ partners
  - □ children
  - □ parents/family of origin
  - □ friendships
  - □ communities
- b) Imagine yourself in 30 years. Where do you see yourself with regard to:
  - Your education?
  - Your career?
  - Your relationships?
    - partners
    - □ children
    - □ parents/family of origin
    - □ friendships
    - □ communities
- c) Describe how your plans for your relationships (including having/not having children) may affect your career choices.

Describe how your plans for your career may affect your relationship decisions.

- d) What would you need to reach your life and career goals:
  - over the next few years?
  - over your lifetime?

5)	Is there anyth	ing you'd like to add?
	•	If we've talked about anything that you'd like to include on the
		worksheet (events/decisions, influences), please feel free to add those.

# Thank you very much for your time!

# A few more items before you go:

- After the interview is transcribed, we will send you a copy; you will be welcome to revise or add to any of your comments at that time.
- Please fill out this brief demographic questionnaire. Feel free to include on the back any comments you have regarding the interview experience, the questions asked, the forms used, etc.

# Appendix C

# Demographic Questionnaire

Participant's initials
1. Age
Daga/Ethnicity (places about and)
2. Race/Ethnicity (please check one) African American
A gion A moriogn
Asian American  Piracial (plants specify):
Biracial (please specify):Caucasian/European American
Latina
Latina Native American
Other (please specify):
Other (picase specify).
3. Relationship Status
Single
Married/Partnered
Separated
Divorced
Widowed
4. Do you have children? Yes No  If yes, how many children do you have (including biological and non-biological children)?
What are your children's ages?,,,,
5. Do you care for an elderly relative in your home? Yes No
6. Highest Level of Education Received  High School Diploma/G.E.D  College Coursework
College Degree (please specify degree) Major(s):
Graduate School Coursework (please specify field)
Graduate School Coursework (please specify field) Master's Degree (please specify degree) Field: Law Degree/J.D.
Doctoral Degree (please specify degree) Field:  Medical Degree/M.D.
<i>5</i>

220

(Please see other side for additional questions.)

7. Residence
Living alone
Living with significant other/husband
Living with children and significant other/husband
Living with children
Living with friends
Living with parents
Other (please specify):
8. Employment
I am employed full time outside my home.
I am employed part-time outside my home.
I am employed full time and work out of an office in my home.
I am employed part-time and work out of an office in my home.
I am employed within the home.
I am not employed.
What is your current occupation?
9. Do you do volunteer work?
Yes No If yes, how many hours/week?
10. Please check that category that includes your total, combined (if applicable) annu
income.
\$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
11 Policious Affiliation (if applicable)
11. Religious Affiliation (if applicable)

Thank you for filling out this survey. Please feel free to provide any feedback about the survey OR about your interview experience below.

## Appendix D

Letter of Introduction/Invitation: Chicago-Area Participants

{Date}
{Name} {Address}
Dear {Name}:

We are excited to be in touch with you after a number of years! You have been selected as a potential participant in the *Longitudinal Study of Women's Life Choices*. You participated previously in this study with other McAuley Liberal Arts High School students during your senior year of high school and then again in 1996. We are beginning a unique phase of this important project and would like to invite you to participate.

We will be conducting **personal interviews this summer with 12 McAuley graduates regarding their life/work experiences since high school**. Our interview questions will cover a range of topics, including significant life events and decisions, what you find meaningful in life, and influences on your life choices. The interview will last approximately 1½ hours and will be conducted in the Chicago area at a location convenient for you. The interview will be audiotaped. Your privacy will be respected and your confidentiality will be protected throughout the study. The identity of study participants will be known only to the project director and her faculty advisor. Any manuscripts describing the data collected from this study will ensure that your identity is protected.

You are among a select number of graduates receiving this invitation; we would be honored to have you participate. Because we know how busy you are, we would like to compensate you for your time; participants will be paid \$20.00 at the time of the interview.

Please take a moment to fill out the enclosed form and return it in the stamped envelope provided. If you have questions, or would like to contact us about participating in the study, please email or call either Nancy Hensler-McGinnis or Dr. Karen O'Brien (contact information below).

We hope that you will contribute to the continuation of this important study, which will further the understanding of researchers, educators, and counselors regarding women's life and career choices.

Sincerely,

Nancy F. Hensler-McGinnis Project Director Doctoral Student, Counseling Psychology University of Maryland, College Park (301) 405-5907 nhensler@psyc.umd.edu Karen M. O'Brien (McAuley Graduate '79) Faculty Advisor Associate Professor of Psychology University of Maryland, College Park (301) 405-5812 kobrien@psyc.umd.edu

# Letter of Introduction/Invitation: Out-of-Town Participants

{Date}

{Name}

{Address}

Dear {Name}:

We are excited to be in touch with you after a number of years! You have been selected as a potential participant in the *Longitudinal Study of Women's Life Choices*. You participated previously in this study with other McAuley Liberal Arts High School students during your senior year of high school and then again in 1996. We are beginning a unique phase of this important project and would like to invite you to participate.

We will be conducting **personal interviews this fall with 12 McAuley graduates regarding their life/work experiences since high school**. Our interview questions will cover a range of topics, including significant life events and decisions, what you find meaningful in life, and influences on your life choices. The interview will last approximately 1½ hours and will be audiotaped. Your privacy will be respected and your confidentiality will be protected throughout the study. The identity of study participants will be known only to the project director and her faculty advisor. Any manuscripts describing the data collected from this study will ensure that your identity is protected. Currently, the interviews are planned for the Chicago area, with the additional possibility of interviewing participants on the east coast (New York to Richmond).

You are among a select number of graduates receiving this invitation; we would be honored to have you participate. Because we know how busy you are, we would like to compensate you for your time; participants will be paid \$20.00 at the time of the interview.

Please take a moment to fill out the enclosed form and return it in the stamped envelope provided. (If you are interested in participating, but the interview locations are inconvenient, please indicate that; we will work with you to the best of our ability.) If you have questions, or would like to contact us about participating in the study, please email or call either Nancy Hensler-McGinnis or Dr. Karen O'Brien (contact information below).

We hope that you will contribute to the continuation of this important study, which will further the understanding of researchers, educators, and counselors regarding women's life and career choices.

Sincerely,

Nancy F. Hensler-McGinnis Project Director Doctoral Student, Counseling Psychology University of Maryland, College Park (301) 405-5907 nhensler@psyc.umd.edu Karen M. O'Brien (McAuley Graduate '79) Faculty Advisor Associate Professor of Psychology University of Maryland, College Park (301) 405-5812 kobrien@psyc.umd.edu

# Letter of Introduction/Invitation Response Form

# **Longitudinal Study of Women's Life Choices ~ Fall 2002**

Name:	
Address:	
Daytime Pho	one #: ()
Evening Pho	one #: ()
Preferred Da	ays/Times to be Contacted:
Email Addro	ess:
~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Yes, I am interested in participating in the third phase of the Longitudinal Study of Women's Life Choices.
	No. I do not wish to participate in this phase of the study.

## Appendix E

## **Telephone Scripts**

# SCRIPT FOR POTENTIAL PARTICIPANTS WHO HAVE NOT SENT BACK RESPONSE FORM $\cdot$

Hi, my name is Nancy Hensler-McGinnis and I'm following up about a letter I sent a few weeks ago regarding your participation in an important third phase of the Longitudinal Study of Women's Life Choices, a study about the life and career paths of Mother McCauley graduates. I'm a graduate student at the University of Maryland; I'm working on my master's thesis under Dr. Karen O'Brien, who graduated from McAuley in 1979.

You participated in the study in your senior year of high school, and again in 1996. I'd like to invite you to participate in a unique phase of this study, which will entail personal interviews with just 12 McAuley graduates. The interview will be audiotaped and will last approximately 1½ hours. It will be held at a Chicago location convenient for you. You will be paid \$20.00 for your time, and your privacy and confidentiality will be protected throughout the study. Interview questions will cover a range of topics such as significant life events and decisions, what you find meaningful in life, and who or what has most influenced your life choices.

We'd love to have you participate—is this something you'd be interested in doing?

#### IF ANSWER IS NO:

Well, OK. If you wouldn't mind, could you let me know what factors contributed to your decision not to participate?...

OK, I appreciate that, and thank you very much for your time.

#### IF ANSWER IS YES:

That's great. As I said, I will be conducting the interviews in the Chicago area (list locations). Would this location be convenient for you? What days/times are best for you in early November?

I'm in the process of contacting the other participants who will be interviewed. As soon as I confirm the days in which I'll be in Chicago, I will send you a confirmation. Do you prefer mail or email or fax? (get updated info)

Thanks so much for your interest in participating, and I look forward to meeting you!

# SCRIPT FOR POTENTIAL PARTICIPANTS WHO SENT BACK RESPONSE FORM:

Hi, my name is Nancy H-M and I'm following up about your participation in the third phase of the Longitudinal Study of Women's Life Choices, a study about the life and career paths of Mother McCauley graduates. You recently sent back the response form indicating your interest in participating.

What I'd like to do is find out your schedule in early November. I'm planning to conduct the interviews at (list location)—is this convenient for you? If not, I am happy to do the interview somewhere else that works for you.

. . .

I'm in the process of contacting the other participants who will be interviewed. As soon as I confirm the days in which I'll be in Chicago, I will send you a confirmation. Do you prefer mail or email or fax? (get updated info)

Thanks so much for your interest in participating, and I look forward to meeting you!

## Appendix F

#### Letter of Introduction/Invitation: E-mail Version

{Date}

{Name}
{Address}
{City, State Zip}

Dear {Name}:

We are excited to be in touch with you after a number of years! You have been selected as a potential participant in the *Longitudinal Study of Women's Life Choices*. You participated previously in this study with other McAuley Liberal Arts High School students during your senior year of high school and then again in 1996. We are beginning a unique phase of this important project and would like to invite you to participate.

We will be conducting **personal interviews this fall with 12 McAuley graduates regarding their life/work experiences since high school**. Our interview questions will cover a range of topics, including significant life events and decisions, what you find meaningful in life, and influences on your life choices. The interview will last approximately  $1\frac{1}{2}$  hours and will be conducted in the Chicago area at a location convenient for you. The interview will be audiotaped. Your privacy will be respected and your confidentiality will be protected throughout the study. The identity of study participants will be known only to the project director and her faculty advisor. Any manuscripts describing the data collected from this study will ensure that your identity is protected.

You are among a select number of graduates receiving this invitation; we would be honored to have you participate. Because we know how busy you are, we would like to compensate you for your time; participants will be paid \$20.00 at the time of the interview.

Please take a moment to return this email (nhensler@psyc.umd.edu) if you might be interested in participating. Please include your current contact information.

We hope that you will contribute to the continuation of this important study, which will further the understanding of researchers, educators, and counselors regarding women's life and career choices.

Sincerely,

Nancy F. Hensler-McGinnis Project Director Doctoral Student, Counseling Psychology University of Maryland, College Park (301) 405-5907 nhensler@psyc.umd.edu Karen M. O'Brien (McAuley Graduate '79) Faculty Advisor Associate Professor of Psychology University of Maryland, College Park (301) 405-5812 kobrien@psyc.umd.edu

# Appendix G

#### Confirmation of Interview E-mail

PLEASE EMAIL NHENSLER@PSYC.UMD.EDU TO CONFIRM THAT YOU HAVE RECEIVED THIS LETTER. THANK YOU!

Confirmation of Interview

{Date}

{Name}
{E-mail address}

Dear {First Name}:

Thank you for your willingness to participate in the continuation of the *Longitudinal Study of Women's Life Choices*. This letter contains the following:

- 1) a confirmation of your interview date/time (this cover letter)
- 2) an informed consent statement (this email attachment is for your reference; you will be asked to sign a copy of this statement at the time of your interview).

Your interview is scheduled for {date} at {time}. The interview will be held at St. Xavier University (3700 West 103<sup>rd</sup> Street, Chicago) in the **President's Dining Room (A108)** on the second floor of the **Warde Academic Center** (for a campus map, go to **www.sxu.edu/tour/tour.html**). Please go in the main entrance off of 103<sup>rd</sup> Street and ask the switchboard operator to direct you to a parking location near the Warde Academic Center. The telephone number for the University is (773) 298-3000. You may reach the project director, Nancy Hensler-McGinnis, on her cell phone at (301) XXX-XXXX.

The interview will last approximately 1½ hours and will be conducted by the project director. During the interview, you will complete a worksheet and be asked a number of questions about your life/career path, including significant life events and decision points, what you find most meaningful in your life, and influences on your life and work choices. At the conclusion of the interview, you will be asked to complete a brief demographic questionnaire.

The interview will be audiotaped for the purpose of data collection. Please be assured that your privacy will be respected and your confidentiality will be protected throughout this study. The identity of study participants will be known only to the project director and her faculty advisor. Any manuscripts describing the data collected from this study will ensure that your identity is protected.

We are very grateful for the opportunity to interview you. Nancy looks forward to meeting you in the coming week. If you have any questions, do not hesitate to contact us.

Sincerely,
Nancy F. Hensler-McGinnis
Project Director
Doctoral Student, Counseling Psychology
University of Maryland, College Park
(301) 405-5907
nhensler@psyc.umd.edu

Karen M. O'Brien (McAuley Graduate '79) Faculty Advisor Associate Professor of Psychology University of Maryland, College Park (301) 405-5812 kobrien@psyc.umd.edu

## Appendix H

#### Statement of Informed Consent

Statement of Informed Consent: Longitudinal Study of Women's Life Choices

This project will examine the role of personal beliefs, life experiences, and instrumental individuals in women's life and career choices. The procedures involve filling out a two-page demographic questionnaire and participating in an in-person interview that will last approximately one-and-a-half hours. During the interview, you will be asked to fill out a brief worksheet and answer a number of questions about your life/career path, including significant life events and decision points, what you find most meaningful in your life, and influences on your life and work choices.

All of the information collected during this study will be held in the strictest confidence and kept in a secure filing cabinet accessible only by the project director. Your interview will be audiotaped and transcribed; both the tape and the transcript will be identified by initials only. The identity of study participants will be known only by the project director and her faculty advisor. Any manuscripts describing the data collected from this study will ensure that your identity is protected.

The risk of participating in this project includes the possibility that you may feel uncomfortable answering some of the demographic or interview questions. You are free to say as much or as little as you like, and you need not answer every question. You also may end your participation in the study at any time without penalty. Should you have any questions or concerns about the study, you may contact either of the two investigators listed below. Questions regarding the rights of research participants can be directed to Professor Harold Sigall, Chair of the Human Subjects Committee, Department of Psychology, University of Maryland, College Park (hsigall@psyc.umd.edu; [301]405-5920).

This study is not designed to help you personally, but your participation will contribute to an important longitudinal project on women's life/career choices. The insights and experiences that you share will further understanding about women's experiences and life decisions, and may help counselors and educators design more effective interventions to support the personal, educational, and professional needs of women.

In compensation for your participation in this study, you will receive \$20.00 at the start of your interview. Immediately following your interview, you will be given a brief explanation of the project in which you participated and a list of counseling resources in the area. After your interview has been transcribed, you will be sent of copy of the transcript, which you may edit before data analysis begins.

# **Statement of willingness to participate:**

I am at least 18 years of age and I have freely volunteered to participate in this project. The researchers have informed me about what my tasks will be, what procedures will be followed in conducting the study, and how my confidentiality will be protected. I have been given the opportunity to ask questions and have had my questions answered to my satisfaction. I know I have the right to discontinue my participation in this study at any time, without penalty.

I am willing to participate in the research project described above, which is being conducted at the University of Maryland, College Park, Department of Psychology. My signature below may be taken as affirmation of all the above, prior to participation.

Participant's Name (please print):		
Participant's Signature:	Date:	

# **Project Director:**

Nancy F. Hensler-McGinnis Doctoral Student, Counseling Psychology University of Maryland, College Park (301) 405-5907 nhensler@psyc.umd.edu

#### **Advisor:**

Karen M. O'Brien (McAuley H.S. '79) Associate Professor of Psychology University of Maryland, College Park (301) 405-5812 kobrien@psyc.umd.edu

Approval period for this project: June, 2002 - June, 2003

## Appendix I

## **Debriefing Statement**

#### Dear Participant:

Thank you for participating in this special interview phase of the Longitudinal Study of Women's Life Choices. Your involvement in this project has contributed important insights to the body of knowledge on women's life and career choices.

In recent years, vocational researchers have developed statistical models to explain the career decision-making of women. One of the concerns expressed by researchers who study national trends in women's career development is that women tend to lower their career aspirations over time. Dr. Karen O'Brien's longitudinal study of McAuley graduates (O'Brien, 1996; O'Brien, Miller Friedman, Tipton, & Geschmay Linn, 2000) echoed these trends. Our interest in this study was to ask women directly about the factors that have influenced significant decisions in their educational, personal, and professional development. This will provide important information about how and why women make the choices that they do, and what level of support they receive in their personal, educational, and professional lives. Ultimately, it is hoped that the knowledge gained from this study will contribute to the improvement of educational and vocational resources for women.

In discussing significant experiences, decisions, and relationships in your life, you may have experienced a variety of feelings. If you would like to explore these feelings further, you may want to contact any of the counseling resources provided on the following page. In addition, we remind you that you will have an opportunity to review and revise the transcript of your interview before data analysis begins; please understand that the process of preparing the transcripts may take several months.

Please contact us if you have any questions or concerns about your participation in the study. In addition, if you have specific questions regarding the rights of research participants, you can contact Professor Harold Sigall, Chair of the Human Subjects Committee, Department of Psychology, University of Maryland, College Park (hsigall@psyc.umd.edu; [301] 405-5920).

# We are deeply appreciative of your time and effort in assisting us with this important study!

Sincerely,

Nancy F. Hensler-McGinnis Doctoral Student, Counseling Psychology University of Maryland, College Park (301) 405-5907 nhensler@psyc.umd.edu Karen M. O'Brien (McAuley H.S. '79) Associate Professor of Psychology University of Maryland, College Park (301) 405-5812 kobrien@psyc.umd.edu

#### Appendix J

#### Area Resources

#### **Counseling and Career Counseling Private Practitioners**

Marilyn Sussman, Ph.D. **Evanston Psychological Group Counseling Services** (847) 869-9300

Friedland & Marcus Career Counseling, Coaching, and Aptitude Testing (800) 931-1107 (312) 641-3050 www.careermotiv8.com

**American Psychological Association** State/Local Psychologist Referral Service (800) 964-2000 www.helping.apa.org

Illinois Psychological Association **Consumer Information Program: Psychologist Location Service** (312) 372-7610 www.illinoispsychology.org/

#### **College/University Resources**

College of DuPage **Career Services Center** Free career counseling

Counseling, Transfer, and Advising Office

(630) 942-2259

(630) 942-2230

www.cod.edu/Service1/CECS/CECS.htm

**DePaul University Career Center** Career counseling/testing for non-university affiliates Ed Childs, Assistant Director (773) 325-4339 (773) 325-7431 Lincoln Park (312) 362-8437 Loop www.careercenter.depaul.edu/

**Counseling Center** Will provide referrals (773) 325-7779 Lincoln Park (312) 362-6923 Loop www.condor.depaul.edu/~counsel/

## **College/University Resources**

Loyola University **Counseling Center** Will provide referrals to non-university affiliates (773) 508-2742 Lake Shore Campus (312) 915-6140 Water Tower Campus www.luc.edu/depts/counseling

#### **Internet Resource**

Mental Help Net Online mental health information, news, & resources www.mentalhelp.net/

# Appendix K

# Field Notes Form

Date:	Interviewer:
Participant Initials:	Length of Interview:
Interview Site:	
Rapport:	
Non-verbal communication (e.g., eye	contact, body language, etc.)
Hesitations, Enthusiasm, Notable Diff	ferences in Affect or Voice Inflection:
Distracters, Inhibitors (e.g., phone, other	her individuals etc )
2.00.0000,	
Other Notes:	

# Appendix L

#### Transcript Check Letter

Dear {First Name}

I hope you are well! Thank you very much again for your support of my thesis project (the longitudinal study of graduates from Mother McAuley HS). It was a great experience to meet you and to talk with you about your life and career path.

Your interview has been transcribed and, as promised, I am sending it to you for your review (see attached document). In checking the transcripts, I have tried to replace names with initials to protect your privacy; if you find that I have missed any, please let me know. You also may change, add, or delete any statements from the transcript.

If you would like to make changes, feel free to email these (with changes indicated in CAPS) or call me at (301) XXX-XXXX (I also have a fax that I can turn on at this number if you would prefer to fax changes). If you are fine with the transcript as is, you do not need to respond. If I do not hear from you in the next few weeks (by Feb 21), I will assume that you approve of the transcription.

Thanks so much—I appreciate your time!

Nancy Hensler-McGinnis Counseling Psychology Department of Psychology University of Maryland, College Park College Park, MD 20742

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