

ABSTRACT

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AN INSTRUMENT DEVELOPMENT STUDY

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The purpose of the present study was to develop a scale to measure the extent to which people take into consideration future children and romantic relationships when deciding on a career (i.e. The Planning for Career and Family Scale) and to assess the psychometric properties of this instrument. Participants included 325 women. Data suggested that two subscales comprise the measure, the Incorporating Future Family Scale and the Choosing a Career Independent of Family Scale. Internal consistency estimates of subscales ranged from .78 to .83. Convergent and discriminant validity was supported for the Incorporating Future Family in Career Plans subscale and the Choosing a Career Independent of Future Family subscale. Test-retest reliability estimates were adequate, suggesting stability regarding the measurement of these constructs. Directions for future research and the limitations of this study are discussed.

PLANNING FOR CAREER AND FAMILY: AN INSTRUMENT DEVELOPMENT
STUDY

By

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CHAPTER 1

Introduction

“I have yet to hear a man ask for advice on how to combine marriage and career.”
- Gloria Steinem

There has been a great deal of research on women’s career development over the past few decades. Women tend to choose stereotypically female professions that reflect lower levels of career achievement, educational attainment, and career aspiration when compared to men who have the same educational level (Betz, 1993; Leung, Conoley, & Schell, 1994). Research consistently has shown that women continue to be underrepresented in fields such as math, science and engineering (Betz, 2006). Moreover, women are concentrated in low-paying, low status occupations (Betz, 2006; Gilbert & Kearney, 2006; U.S. Department of Labor Bureau of Labor Statistics, 2007). In fact, the highest proportions of women with a college education are registered nurses and primary and secondary school teachers (Gilbert & Kearney, 2006). Even young women interested in science chose to pursue nursing because they think this career would fit well with having and rearing children or being a divorced head of the household (Farmer, 1997). In fact, researchers have hypothesized that women select low-paid, low-status careers because of a desire to balance family and career (Farmer, Wardrop, Anderson, & Risinger, 1995; Savage & Fouad, 1994). It seems likely that women may be anticipating future multiple roles when making career decisions. Thus, the purpose of this study was to develop a measure that assesses the degree to which women consider future family and romantic relationships when selecting a career and investigate the psychometric properties of this instrument.

History of Women's Career Development

By the year 2006, women represented 59% of the national labor force but only 12% of engineers, 26 % of computer and math scientists, and 34% of chemists (Frome, Alfred, Eccles, & Barber, 2006; U.S. Department of Labor Bureau of Labor Statistics, 2007). Although women are entering the labor force in higher numbers, much attention has been focused on women's underrepresentation in science, engineering, and technology fields as a national concern. Career opportunities in fields like computer engineering, computer technology, and system analysis are growing, further widening the occupational gap between genders (U.S. Department of Labor Women's Bureau, 2000b). The U.S. Department of Labor Bureau of Labor Statistics (2004; 2007) reported that women's representation in managerial and professional specialty occupations has increased over the past few decades (from 22% in 1983 to 34% in 2002 to 50% in 2006), however, women are still overrepresented in the lowest-paid occupations within this category. For example, women comprised only 22% of dentists and 32% of physicians and surgeons, but 91% of registered nurses and 98% of preschool and kindergarten teachers (U.S. Department of Labor Bureau of Labor Statistics, 2007).

Some researchers suggested that societal norms may be contributing to the concentration of men in male-dominated careers (Betz, 2006; Marks & Houston, 2002). Society tells women that they should be the primary caregivers of their children and that they need to either stay at home with the children or be a "working mother" (Betz, 2006). However, men are not expected to stay at home with the children. In fact, men are supposed to have a career and are never referred to as

“working fathers” (Betz, 2006). These societal messages may influence women’s choice of careers that will enable them to manage work and family responsibilities. In fact, a study examining adolescent girls found that the education and career plans of these young women were influenced by their anticipated role as a mother and their perception of social pressure to leave work to care for their children (Marks & Houston, 2002). Despite strong intentions to have a career and gain further educational qualifications, the perceived acceptability of combining work with motherhood influenced the certainty with which young women formed their plans (Marks & Houston, 2002). Historically, and currently, women have been expected to alter their occupational aspirations knowing that responsibilities in the home and family would fall more to women than to their partners (Friedman & Greenhaus, 2000). Interestingly, research has shown that work is a positive influence on women’s mental health, and multiple roles contribute to physical and psychological health (Betz, 2006).

How Do Women Make Career Decisions?

Numerous researchers over the years have proposed models of women’s career behavior (Fitzgerald, Fassinger, & Betz, 1995). To obtain a holistic picture of women’s career development, models have been developed that identify both internal and external factors contributing to women’s life and career decisions. Hypothesized internal factors included attachment, ability, self-efficacy expectations, self-esteem, gender role attitudes, personal values, optimism, multiple-role realism, and multiple role self-efficacy; and hypothesized external factors included maternal employment, family responsibilities, societal expectations, workplace barriers, cultural identity,

educational experiences, and social support (Betz & Fitzgerald, 1987; Eccles, 1994; Farmer, 1985; Fassinger, 1985, 1990; Gomez, Fassinger, Prossor, Cooke, Mejia, & Luna 2001; McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien & Fassinger, 1993; O'Brien, Friedman, Tipton, & Linn, 2000; Rainey & Borders, 1997; Richie, Fassinger, Geschmay Linn, Johnson, Prossor, & Robinson, 1997; Schaefers, Epperson, & Nauta, 1997). Quimby (2002) reviewed existing women's career development models and identified salient variables that received consistent empirical support for their ability to predict constructs related to women's vocational development. These variables included ability (mediated by self-efficacy), career decision-making self-efficacy, multiple role self-efficacy, gender role attitudes, perceived barriers, and perceived social support.

Alternatively, a multidimensional model of career and achievement motivation proposed that levels of aspiration, mastery strivings, and career commitment could be predicted by background factors (e.g., gender, race, age, socioeconomic status, and ability), personal characteristics (e.g., academic, self-esteem, independence, values, and attributions), and environmental variables (e.g., support from teachers and parents; Farmer, 1985). Farmer found that educational and career aspirations were predicted strongly by background factors. In addition, personal variables contributed the most to both mastery strivings and career commitment in the students.

Fitzgerald et al. (1995) stated that the history of women's traditional roles as homemaker and mother continued to influence every aspect of their career choice and

adjustment. Women continue to make career decisions based on their perceived future roles in the family.

Research Related to Women Planning for Career and Family

Women continue to choose more traditional and less prestigious careers to combine work and family roles (Farmer et al., 1995; Savage & Fouad, 1994). In fact, research suggested that women, at a very young age, may decide to pursue less prestigious and less lucrative occupations because women are anticipating the responsibilities that accompany marriage and children (O'Brien et al., 2000). Women also rate family pursuits as more important than career pursuits, another factor that may influence women's choices of careers that underutilize their abilities (O'Brien et al., 2000). For example, women are opting out of careers in surgery because of the perceived difficulties of combining a family with a surgical career (Williams & Cantillion, 2000).

Surprisingly, even gifted women who excel in academics in high school seemed to select careers that were compatible with having a family (Arnold, 1993; Grant, 2000). A longitudinal study of gifted women revealed that planning for career and family began as early as sophomore year in college with most of the women planning to reduce or interrupt their careers to raise children by their senior year (Arnold, 1993). Among the same group, several women left pre-medicine majors in college because they considered medicine incompatible with their future roles as parents. For example, a female valedictorian who won a top prize in mathematics in high school abandoned computer science as a college sophomore with the explicit reasoning that physical therapy could be more easily combined with child rearing.

Even high achieving women may be altering their career plans to have children. It is clear that women are anticipating career and family conflict and may be revising their career choices due to anticipated conflicts.

Clearly, many women limit their career options because of their desire to have a family. Women who aspire to male-dominated careers in high school often change their occupational aspirations to female-dominated fields or neutral careers to balance work and family (Frome et al., 2006). Many women are willing to put their careers on hold or change their career plans to raise children, thus limiting their career options.

Measurement of Planning for Future Family

Research has not definitively shown the degree to which young women are considering future family responsibilities when selecting a career, in part because no scale exists to measure this construct. However, several existing scales assess related constructs.

The Career and Marriage Attitude Inventory (Parker, 1966) measured the attitudes of college women toward marriage and career. Although the instrument examines both attitudes toward a family and attitudes toward career, the measure itself is dated. For example, the questions were derived from questions previously used by Ginzburg, Ginzburg, Axelrod, and Herma (1951), Hoyt and Kennedy (1958), and Super (1957) and included items such as Y.M.C.A Secretary, Housewife, Steno-Secretary, and Home Economics Teacher. This measure fails to adequately assess young women's attitudes today with regard to altering their career choices to plan for a family.

The Home-Career Conflict Measure (Farmer, 1984) was intended to assess the subconscious elements of the home and career conflict. The Home-Career Conflict Measure uses four story cues, such as, “Mary, a young woman, is sitting in the kitchen at a table with a type writer. Her child is seated on a high chair. In the background something can be seen cooking on the stove” and “Judy is arriving home. A child is waiting for her.” Participants write stories that are evaluated for home-career conflict. Although this measure demonstrates adequate validity and reliability, the measure only assesses subconscious elements of home and career conflict as opposed to the conscious decisions women make regarding planning for careers and family.

The Life Role Salience Scales (Amatea, Cross, Clark, & Bobby, 1986) were designed to assess men's and women's personal expectations concerning occupational, marital, parental, and homecare roles. Two aspects of personal role expectations were assessed by means of the scales: (a) the personal importance or value attributed to participation in a particular role, and (b) the intended level of commitment of personal time and energy resources to enactment of a role. Example items include “I expect to devote a significant amount of my time and energy to the rearing of children of my own,” “I expect to work hard to build a good marriage relationship even if it means limiting my opportunities to pursue other personal goals,” and “It is important to me to feel successful in my work/career.” Although this measure assessed expectations in occupational roles, marital roles, parental roles, and homecare roles, planning for career and family responsibilities was not included in this instrument.

The Family and Career Scale (Battle & Wigfield, 2003) measured family versus career orientation ideas about women's roles. Although the Family and Career Scale is a recent measure that demonstrated adequate reliability and validity, ideas about women's roles rather than projections for future role-taking are assessed. For example, items included "I think that women should earn money, and contribute to the family income, even after they have children," "I believe that women can manage the combining of a career outside the home with the responsibility of taking care of a family," and "I think women should put their careers 'on hold' when they begin to have a family."

Finally, the Career Aspiration Scale (O'Brien, 1996) measured the degree to which participants valued their careers and aspired to advancement and leadership positions within their careers. Example items include "I hope to become a leader in my career field," "I hope to move up through any organization or business I work in," and "I do not plan to devote energy to getting promoted in the organization or business I am working in" (O'Brien, 1996). Although this measure demonstrates adequate reliability and validity, it examines the degree to which participants value their careers and aspire to advancement and leadership positions and does not include items that examine the extent to which women consider their future family when selecting a career.

Summary and Conclusion

To summarize, many women seem to consider their future family responsibilities when deciding on a career, but no measure assesses the extent to which women alter their career plans to allow for work-family balance. To study the

extent to which women actually plan their career based on their family plans, an instrument was developed. Initially, we hypothesized that the measure would consist of two scales: future parenting and future partner subscales, and that the measure would demonstrate adequate reliability (internal consistency and test-retest reliability), and adequate validity when used with a sample of college women.

The findings from this study could expand our knowledge regarding women's career development by elucidating the importance of considering future family when young women are engaged in career planning. Counseling psychologists, social workers, and mentors may be able to develop vocational interventions to assist young women struggling with multiple role concerns. Perhaps women may learn that they do not have to choose lower paid and less prestigious occupations because they desire to balance work and family.

CHAPTER 2

Review of Literature

The review of literature is organized into subsections. The first section addresses the history of women's career development. The second section addresses how women tend to make career decisions. The third section discusses research related to women planning for a career and family. The final section outlines the strengths and limitations of measures related to assessing career planning.

History of Women's Career Development

There has been a plethora of research on women's career development over the past few decades. Women continue to be underrepresented in fields such as math, science, and engineering. Census findings further highlight this point. For example, women comprise of 12% of engineers, 26% of computer and math scientists, and 34% of chemists (U.S. Department of Labor Bureau of Labor Statistics, 2007). Though women's overall representation in managerial and professional specialty occupations increased from 22% in 1983 to 34% in 2002 and to 50% in 2006, women are overrepresented in the lowest-paid occupations within this broad category (U.S. Department of Labor Bureau of Labor Statistics, 2007). In fact, the highest proportions of women with a college education are registered nurses and primary and secondary school teachers (Gilbert & Kearney, 2006).

Many women interested in science choose to pursue nursing because this career allows for balancing family and work (Farmer, 1997). Farmer interviewed 57 women, 25 of whom had changed their 1980 aspiration for a science-related career to another career field. Most of the participants were white (92%) with 4% African

American and 4% Hispanic. Four basic reasons for the changes emerged from the interviews. One group changed because they had chosen a popular career in high school without really thinking about it. A second group had chosen a career field in 1980 that did not fit their interest and personality and had found a better fit in the 1990s. A third group also found a better fit but had to overcome many obstacles, such as discrimination, to achieve their goals. The fourth group had changed their 1980 aspiration because of some critical external event, such as sex role socialization and school experiences, or series of events that changed their plans. Of most concern for counselors who want to help women optimize their potential is the fourth group (Farmer, 1997).

Some of the women in the first group interviewed changed their aspirations because of sex role socialization in their families. These women learned that the most important thing they could do in life was to marry and raise a family (Farmer, 1997). For example, one woman in the study, Norma, was a straight-A student in high school and reported that she wanted to be a psychologist in 1980 when she was in the ninth grade. She commented,

My mom always encouraged me, just like he [her father] did. She stayed home and raised three kids before she ever went to work. I loved having her home and I wouldn't have had it any other way. I think looking to the future when I have my own kids, that was a big influence. All through high school I was thinking I don't really want to go to college for four years, get a career, and then decide to stay home and raise my children. So she was a big role model in that part of it, as far as raising children. Staying home and taking

care of them. To me it was an either/or situation. I could either have a career or stay at home to raise my children and have the career later (Farmer, 1997, p. 73).

Norma married soon after high school, went to college for two years and studied computer programming. Norma never graduated from college perhaps because her husband accepted a job in another city that required the couple to relocate. After several jobs, Norma obtained a position as a computer analyst. Farmer speculated that Norma ruled out psychology as a career when she learned that it would take about 12 years of college and graduate school. Farmer suggested that Norma's experiences in her family were influential in that decision. This example demonstrates how some women will pursue careers that seem to fit with raising children.

It is important to continue to investigate what is keeping women from entering more prestigious occupations and what is keeping women in so-called "women's careers." Women tend to choose stereotypically female professions that reflect lower levels of educational attainment, career achievement, and career aspirations when compared to men who have the same educational level. Leung et al. (1994) examined career aspirations of gifted high school juniors (69 boys and 125 girls). Ethnicity of the participants was not reported. The authors used a retrospective method to obtain information about career alternatives at various ages, where career alternatives earlier in life were compared with careers considered later in life in terms of their prestige and gender traditionality. Educational and career aspirations of boys and girls also were compared. Results showed that girls were less likely than boys to aspire to a doctoral or professional degree but more likely to obtain a bachelors or masters

degree. Leung et al. suggested that the gifted girls may perceive years of post-graduate education as non-compatible with having a career and family. Therefore, although they aspire to highly prestigious occupations, they do not have the commitment to implement their plans through post-graduate training at the doctoral or professional level. In this study, boys were more likely than girls to indicate a desire to pursue doctoral or professional training.

Betz (2006) suggested that societal norms may be contributing to women selecting less prestigious careers. For example, societal messages have told women that they are the primary caregivers of their children and that they need to stay at home with the children or be a “working mother” (Betz, 2006). These messages may influence women’s decisions to choose a career that will allow them to have a family.

Marks and Houston (2002) examined 92 high achieving young women aged 15-17 about further education, career development, having a child, and combining work with motherhood (ethnicity of participants was not reported). They found that the educational and career plans of these young women were influenced by their anticipated role as a mother and their perception of societal messages that encourage women to leave work to care for their children. These young women reported strong intentions to further their education and have a career yet the perceived acceptability of combining motherhood with work influenced the certainty with which young women formed these plans.

Relatedly, Friedman and Greenhaus (2000) stated that women have been expected to accommodate their occupational aspirations to men’s careers with the assumption that the responsibility of the family and home will fall more to them than

to their spouses. The studies mentioned above provide support for the idea that women, historically and currently, choose careers that will enable them to have a family. Currently, there is no measure available to assess the extent to which women take into consideration their future families and romantic relationships when deciding on a career; an important construct in women's career development.

How Do Women Make Their Career Decisions?

Many models of women's career behavior's have been developed (Fitzgerald et al., 1995). To obtain a complete picture of women's career development, models have focused on both internal factors (attachment, ability, self-efficacy expectations, self-esteem, gender role attitudes, personal values, optimism, multiple-role realism, and multiple role self-efficacy) and external factors (maternal employment, family responsibilities, societal expectations, workplace barriers, cultural identity, educational experiences, and social support) contributing to women's life and career decisions (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). Variables that have received consistent empirical support for their predictive capability include ability (mediated by self-efficacy), career decision-making self-efficacy, multiple role self-efficacy, gender role attitudes, perceived barriers, and perceived social support (Quimby, 2002).

Farmer (1985) examined a multidimensional model of career and achievement motivation with 9th to 12th grade girls (n= 929) and boys (n= 934) (77% White, 9% Spanish origin, 8% African American, and 6% Asian/Eskimo/American Indian) at an

Illinois high school. Farmer proposed that levels of aspiration, mastery strivings, and career commitment could be predicted by background factors (gender, race, age, socioeconomic status, and ability), personal characteristics (academic, self-esteem, independence, values, and attributions), and environmental variables (support from teachers and parents). Farmer found 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 to students.

A follow-up study by Farmer et al. (1995) found that a portion of the 173 students from the 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 fields. Farmer et al. reported the number of minority students was small (n=29) but no other demographic information was reported. Women who persisted in these fields depended on level of math self-efficacy, the number of elective science courses taken in high school, and current career aspirations. Women's career commitment in general was correlated negatively with commitment to the home. Farmer et al. also found that both women and men placed more importance on the working role for women over time, however, men still trailed behind women when asked about the importance of the working role for women, suggesting that men's and women's expectations about women's work role may play a major role in conflicts regarding the home-work interface.

A second model of women's career development was proposed by Betz and Fitzgerald (1987). This theory predicted career choice by examining the effects of previous work experience, academic success, role model influence, and perceived

encouragement on attitudes toward work, attitudes toward self, and sex role attitudes. The dependent variables mentioned above (attitudes toward work, attitudes toward self, and sex role attitudes) were hypothesized to influence life style preferences and plans, and realism of career choice.

Fassinger (1985, 1990) tested this model of career development using structural equation modeling with two samples of college women. The first study included 309 junior and senior female college students from a large Midwestern university (ethnicity of participants was not reported). Fassinger (1985) made several modifications to the original model to improve the overall fit with the data. Fassinger's model showed that family orientation (predicted by feminist orientation and career orientation) and career orientation (influenced by ability, achievement orientation, and feminist orientation) predicted women's career choices. Family orientation and career orientation were found to be reciprocally related and ability was found to have a direct causal effect on career choice and achievement orientation.

Fassinger (1990) improved her study by incorporating a new construct, mathematics orientation, into her model. In a second study, undergraduate women from two universities were sampled (N = 663). The first group (n = 315) consisted of a large number of majors in health fields and the second group (n = 348) included a majority of students in pre-law, business, and engineering fields. The sample was 83% White, which was representative of both university populations. Data analyses were conducted for each group individually as well as for the pooled sample from both universities. Fassinger's 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, reciprocal relationships were predicted between ability and agentic characteristics and between feminist orientation and family orientation, and career orientation and mathematics orientation predicted career choice.

Fassinger's (1990) final model showed that high ability, interacting with gender role attitudes and instrumental personality characteristics, predicted career choice and career orientation. Variables contributing to choosing non-traditional, science-related, and highly prestigious careers were high ability and agentic personality characteristics. In addition, agentic characteristics and liberal gender role attitudes predicted high levels of career orientation; and career orientation and career choice were reciprocally related.

A growing area of literature regarding "emerging adulthood" may amend current models of women's career development. Arnett (2000) defined emerging adulthood as neither adolescence nor young adult but theoretically and empirically distinct from both and occurring around ages 18 through 25. Arnett described individuals in this age group as exploring a variety of possible life directions in love, work, and worldviews. He noted that "[e]merging adulthood is a time of life when many different directions remain possible, when little about the future has been decided for certain, when the scope of independent exploration of life's possibilities is greater..." (Arnett, 2000, p. 469). During this period, exploration of education and romantic relationships become serious for the individual. Arnett indicated that "the absence of enduring role commitments in emerging adulthood makes possible a

degree of experimentation and exploration that is not likely to be possible during the thirties and beyond” (Arnett, 2000, p. 474). In fact, Arnett stated that the emerging adult is exploring love and work experiences before taking on enduring and limiting adult experiences. This literature might suggest that women in college may not be thinking of their family or career at this time but simply exploring their options. However, the emerging adulthood literature has not hypothesized how women plan for their career and family during this stage of development.

In examining these models, it becomes clear that we need to continue to study women’s career development, especially related to plans for work and family. Fitzgerald et al. (1995) stated that the history of women’s traditional roles as homemaker and mother continue to influence every aspect of women’s career choice and adjustment. Therefore, it is important to develop a measure that captures the extent to which women make career decisions based on their future families.

Research Related to Women Planning for Career and Family

Women continue to select less prestigious and more traditional careers because of family planning. Savage and Fouad (1994) examined 249 college women enrolled in traditionally female majors and in gender-neutral majors (ethnicity of participants was not reported). They found that the women enrolled in traditionally female majors had lower career aspirations and career commitment levels than their female counterparts in gender-neutral majors. They also noted that women in traditionally female majors indicated plans to combine work and family more often than women in gender-neutral majors. These findings suggested that women,

especially women that choose traditionally female majors, are thinking about combining work and family.

O'Brien et al. (2000) examined how women's career development related to attachment, career self-efficacy, and career aspiration from a sample of 207 young women (88% White, 6% African American, 2% Asian American, 3% Latina, 0.5% biracial, 0.5% other). Participants were surveyed in their senior year of high school and again five years later. One purpose of the study was to test a model that proposed specific relationships among attachment to and separation from parents, career self-efficacy, and career aspiration. 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. Another purpose of the study was to investigate changes in relational and career development variables over the five-year period. The results indicated that attachment to mother 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 directly affected career self-efficacy where self-efficacy affected levels of career aspiration. Most importantly for the current study, the results revealed that women rated family pursuits as more important than their career pursuits and women's career plans had changed, with the women selecting more traditional, less prestigious careers that underutilized their abilities. This study suggested that women are anticipating the responsibilities that come with marriage and children, and that they are altering their career plans to accommodate future plans for family.

What seems surprising is that gifted women seem to select careers more compatible with having a family. Grant (2000), using a multiple-case study design, explored influences on choice of major and career related decisions of seven (4 European Americans and 3 African Americans) gifted female students from the end of high school through college over a five-year period. The main research question was: “What were the background and educational factors that might have, over time, influenced the career related decisions of gifted college females whose precollege education occurred primarily in rural schools?” (Grant, 2000, p. 252). Participants in this study were chosen by two sources: those participating in a public school program for gifted in a rural county and those admitted as freshmen to an honors program at a mid-size university. The participants were identified as gifted during their elementary school years based on the criteria set by the state of Georgia and their school systems, and all went to public school. The results showed that dual career marriage and family expectations consistently were expressed over time, and changes of choice of major and institution, as well as career indecisions were experienced by these gifted women.

Another study analyzed the educational and occupational lives of (46 female and 35 male) valedictorians 5 and 10 years after high school graduation (Arnold, 1993). The predominantly white sample included five African American students, three Mexican American students, and one Asian-American student. Researchers attended the graduation exercises of the participants and conducted two-hour semi-structured interviews with each student annually from 1981 to 1985 and again in 1990 and 1991. It was found that planning for combining career and family began as early

as sophomore year in college for women academic achievers. Women also reported anticipated work and family conflict, whereas the men in the study reported no such anticipated conflict. Also, by their senior year in college, two-thirds of the women planned on reducing or interrupting their careers to raise children.

The same study showed that several women left pre-medicine majors in college because they considered medicine incompatible with their future roles as parents (Arnold, 1993). For example, a female valedictorian who won a top prize in mathematics in high school abandoned computer science as a college sophomore with the explicit reasoning that physical therapy could be more easily combined with child rearing. Another woman in the study who was a top student in plant sciences published her master's thesis and was recruited for prestigious doctoral programs in agronomy. The student left graduate school when she married a military officer and is now working as an exercise instructor.

Lawrence, Poole, and Diener (2003) researched factors that influenced career decisions of medical graduates (N=305) (ethnicity of participants was not reported). Four distinct factors were important for them when deciding on a career. The factors included: interest, flexibility, women friendliness, and job security; where the first two were rated higher than the others. This research shows that even women who invest in their careers still consider the flexibility of their job when deciding on a career. The researchers speculated that these women are looking for flexibility because of their desire to have children. Lawrence et al. suggested that the medical and other related fields allow and value more flexible training and work experiences, especially during child-raising. Many gifted women who have the ability to pursue in

a prestigious career appear to consider their future family when making their career decisions.

Hensler-McGinnis and O'Brien (2004) conducted a qualitative study investigating changes in career orientation in a sample of 12 women in the decade following their high school graduation. The sample consisted of 10 European Americans, one African American, and one Latina. The study explored the contributions of life meaning and role modeling/mentoring to women's life/career paths and the results showed that major sources of meaning included family, career, education/intellectual growth, autonomy, and friendships. Family was prioritized, however, participants chose both family and career only to the extent permitted by flexible work structures and childcare options. This study indicated that family is of central importance to women and that connections and commitments to family members (i.e., families of origin, families of creation, and extended families) shaped participants' educational and career choices.

Some women limit their career options because of their desire to have a family. For example, Williams and Cantillion (2000) explored female pre-registration house officer views of surgery as a career choice. Pre-registration officers are junior doctors that spend most of their time in wards and can be based in surgical jobs, medical jobs, or general practice. The authors interviewed 15 pre-registration house officers from 3 teaching hospitals in England and found that only 3 of the 15 pre-registration house officers planned to choose a career in surgery (ethnicity of participants was not reported). The authors noted that factors such as the perceived

difficulties of combining a family with a surgical career and the lack of women in some surgical specialties were of considerable concern for these house officers.

In addition, Frome et al. (2006) examined two hypotheses regarding why some young women do not maintain their occupational aspirations in male-dominated fields from late adolescence through young adulthood (93% European American, 4% Asian American, 1% African American, and 2% other). The first hypothesis concerned attitudes towards math and science. The second concerned the desire for job flexibility. The sample of young women (N = 104) were followed from age 18 (1990) to age 25 (1997). The participants were taken from a larger longitudinal investigation of approximately 1,000 young women. Frome et al. found that 83% of their sample of high school seniors who had aspired to male-dominated careers changed their occupational aspirations to female-dominated fields or neutral careers. The same study noted that the most significant predictor for women to change her career plans was a desire to have a family. The authors suggested that the desire to have a family continue to steer young women away from male-dominated careers, despite their abilities and ambitions.

Stone and McKee (2000) also suggested that women make career decisions that place them in less prestigious occupations. The researchers began with a preliminary study that sought to explore women's perceptions of their college experiences, career plans, and influences on their life choices. The findings of the preliminary study suggested that student's ideas about being a mother would be important to investigate further and that many women were ambivalent about their professional and domestic lives. The follow up study used questionnaires and

interviews to look more closely at this phenomenon. A total of 1,181 undergraduate students completed the questionnaires and 36 students (18 female and 18 males) were interviewed on four separate occasions during the academic year (over three-fourths of the students were Caucasian). The study showed that the majority of the women in the study “did not seek permanent, full-time, high-level careers equivalent to those of males. Instead they wished to participate only briefly or sporadically in careers without making lifelong commitments to them, while developing a primary identification with the role of mother at home” (Stone & Mckee, 2000, p. 80). The authors suggested that women who claimed to want careers participated in the “...creation of an American cultural ideal that it is a woman’s duty to stay at home with her children and that work and child care are incompatible” (Stone & McKee, 2000, p.80). However, men in the study wanted and planned on having children but did not see children as interfering with their careers.

These studies demonstrated that many women seem willing to put their careers on hold or change their career plans to have a family. Gifted women who aspire to male-dominated and more prestigious careers also limit their career options because of their desire to have a family. A measure that examines the extent to which women are considering their future families when choosing a career is the next step in examining this trend.

Related Measures

There are no existing scales that assess women’s consideration of their future families in their career decision-making. There are, however, several scales that seem to be closely related to this salient construct.

Career and Marriage Attitude Inventory

The Career and Marriage Attitude Inventory (Parker, 1966) measured the attitudes of college women toward marriage and career. The Career and Marriage Attitude Inventory demonstrated adequate reliability and validity, however the measure is dated. For example, some of the items include Y.M.C.A Secretary, Housewife, Steno-Secretary, and Home Economics Teacher. Most of the subscales on this measure are not relevant to college women today. Also, the scale only taps into attitudes toward marriage and career. Today, relationships take many forms that do not only include marriage. The present study aims to develop a scale that examines the consideration of future family when deciding on a career where future family includes married couples, life partners, and children.

Home-Career Conflict Measure

The Home-Career Conflict Measure (Farmer, 1984) was intended to access the subconscious elements of home and career conflict. Farmer suggested that home-career conflict is understood to result for women when they value both career and homemaking roles while at the same time viewing these roles as incompatible. The Home-Career Conflict Measure uses four story cues, such as, “Mary, a young woman, is sitting in the kitchen at a table with a typewriter. Her child is seated on a high chair. In the background something can be seen cooking on the stove.” Participants are supposed to write a story about the cues. The stories were scored on affect (whether positive and negative feelings were described), events (whether positive or negative events were indicated), activity (the degree to which women described in the story

combined work and home roles), and denial (when a story omitted events described in the cue).

Two alternative measures were developed as part of the same study (Framer, 1984). One instrument was a multiple choice version of the Home-Career Conflict Measure that assessed affect about combining work and home roles. The measure used the same four story cues, but provided three endings representing positive, negative, or neutral affect. A second survey was developed to assess activity related to career and home roles. This measure asked participants to rate eight items on home-related values and eight items on work-related values on a 5-point Likert scale. Farmer suggested that participants responded in a similar way to story cues and to objective questions about combining work and home roles because each of the alternative measures demonstrated adequate reliability and validity.

This measure, although valid and reliable, also is dated. For instance, one of the story cues mentioned the use of a typewriter. Besides being outdated, the Home-Career Conflict Measure does not measure the extent to which women plan their careers when considering their future families.

The Life Role Salience Scales

The Life Role Salience Scales (Amatea et al., 1986) were designed to assess men's and women's personal expectations concerning occupational, marital, parental, and homecare roles. Two aspects of personal role expectations were assessed by two dimensions: (a) the personal importance or value attributed to participation in a particular role, and (b) the intended level of commitment of personal time and energy resources to enactment of a role. An example item on the parental role commitment

scale is, “I expect to devote a significant amount of my time and energy to the rearing of children of my own.” An example item taken from the marital role commitment scale is, “I expect to work hard to build a good marriage relationship even if it means limiting my opportunities to pursue other personal goals.”

Although this measure demonstrated adequate reliability and validity, it is outdated and does not pertain specifically to planning for career and family. For example, many of the items on the marital role commitment and marital role value scales pertain only to couples who are married while our measure includes items for individuals in any romantic relationship. Also, the Life Role Salience Scales does not specifically address planning for career and family.

The Family and Career Scale

The Family and Career Scale (Battle & Wigfield, 2003) measured family versus career orientation and ideas about women’s roles. Items on the Family and Career Scale assessed participant’s ideas about women’s roles. Example items included: “I think that women should earn money, and contribute to the family income, even after they have children,” “I believe that women can manage the combining of a career outside the home with the responsibility of taking care of a family,” and “I think women should put their careers ‘on hold’ when they begin to have a family.” The Family and Career Scale demonstrates adequate reliability and validity, however, it does not measure the extent to which women consider their future families when deciding on a career. A woman’s idea about women’s roles in general may be different than how she plans to combine career and family in the

future. Also, the Family and Career Scale does not include romantic relationships, but only considers children.

Career Aspiration Scale

The Career Aspiration Scale (O'Brien, 1996; Gray & O'Brien, 2007) measured the degree to which participants valued their careers and aspired to advancement and leadership positions within their careers. The Career Aspiration Scale demonstrated adequate reliability and validity, however, it does not measure the construct of interest in this study, which is the extent to which women consider their future family when deciding on a career. Sample items included: "I hope to become a leader in my career field," "I hope to move up through any organization or business I work in," and "I do not plan to devote energy to getting promoted in the organization or business I am working in." Although the Career Aspiration Scale is expected to correlate with the Planning for Career and Family Scale, the items on the Career Aspiration Scale clearly do not measure the extent to which women consider their future family when deciding on a career.

In sum, there was no scale that assessed women's career decisions and consideration of their future families, especially with regard to parenting and partner responsibilities. Many existing scales that were closely related to this measure were either outdated or did not adequately measure the construct of interest.

Conclusion

There has been a great deal of research on women's career development over the past few decades that illustrates that many women are considering their future family when planning for their career. Women continue to select less prestigious and

more traditional careers because of family planning (Arnold, 1993; Grant, 2000; O'Brien et al., 2000; Savage & Fouad, 1994) and often limit their career options because of their desire to have a family (Frome et al., 2006; Stone & McKee, 2000; Williams & Cantillon, 2000). Although consideration of future family seems salient for many women, no measure existed to measure this construct. Development of this instrument was important because researchers and therapists need to know the degree to which women are taking into consideration their future families when deciding on a career. This information would aid psychologists, social workers, and mentors to assist women in their career decisions. Young women could be educated they do not have to choose lower paid, less prestigious occupations because they see themselves having a family in the future. We hypothesized that the measure we developed to assess consideration of future family when making career plans would a) consist of two scales; the parenting and partner scales, b) demonstrate adequate reliability (internal consistency and test-retest reliability), and c) have adequate validity when used with a sample of college women.

CHAPTER 3

Method and Results

Preliminary instrument development for the Planning for Career and Family Scale

The purpose of this study was to create a measure that assessed the degree to which women consider parenting and partner responsibilities when planning for a career. Previously, a pilot instrument development study was conducted by a former graduate student, Ms. Jennifer Kaplan, and her advisor, Dr. Karen O'Brien. They developed 22 items to assess the degree to which participants considered responsibilities for partner, parenting, and household when planning for a career.

Items on the pilot scale were scored on a 5-point Likert scale where responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Nine of the items were reversed scored. A factor analysis was performed on the scale, and 18 items were retained on the scale. This scale provided the impetus for the development of items on the Planning for Career and Family scale; however none of the previously developed items were used on the newly created measure.

The newly developed scale included partner and parenting responsibilities. To create the current instrument, search engines (e.g., PsycInfo and PsycARTICLES) were used to identify research articles in the area of career development and multiple roles. Items were generated by the researcher and her advisor for each subscale by reviewing the theoretical and empirical literature.

The newly developed items were reviewed by a research team composed of six doctoral level graduate students and a licensed psychologist (the advisor). The students were asked to determine if the items adequately represented consideration of

parenting and partner responsibilities in career planning. The research team then generated additional items and commented on the comprehensiveness of the items. Modifications were made based on the feedback received. Additionally, a counseling psychologist specializing in assessment reviewed the scale items and additional modifications were made based on the feedback received.

Subsequently, the doctoral student and advisor reduced the number of items to eliminate redundancy and reflect the intent of the measure. For example, several items assessed the relative importance of career versus family but did not include content related to planning for or selecting a career. The initial proposed measure consisted of 52 items, 26 on the parenting scale and 26 on the partner scale.

Study 1: Factor analysis and initial reliability and validity estimates

The purpose of Study 1 was to assess the psychometric properties of the measure. Specifically, the factor structure of the Planning for Career and Family Scale was studied and the reliability and validity of the measure with a sample of college women was assessed. An exploratory factor analysis was performed and reliability estimates were calculated. Convergent validity was assessed using measures of career aspiration, career orientation, and multiple role planning. Discriminant validity was assessed using measures of career decision-making self-efficacy, life satisfaction, and subjective happiness.

Participants

Participants included 325 college females over the age of 18 from a large mid-Atlantic University. This sample size appears to be adequate according to researchers who study factor analysis (Tinsley & Tinsley, 1987). Participants were recruited

through introductory psychology courses (PSYC 100) and through various psychology, education, and women's studies courses (e.g., Helping Skills). Additional recruitment also was made by the primary researcher in sororities and women's clubs. Three hundred seventy-one surveys were distributed and 340 were completed and returned. The return rate was 92%.

Procedure

The primary researcher used the Psychology 100 pool to recruit participants and asked instructors and professors of other courses to invite their students to participate in the study. In addition, the research assistants emailed and met with sorority students and women's club members to ask for their participation in the study. Some participants were given course credit for participating and everyone had the opportunity to enter a lottery to win one of six \$50 awards. Participants completed the measures in small groups and were asked to sign a consent form (see Appendix A). The instruments included a demographic questionnaire, the Planning for Career and Family Scale, Career Aspiration Scale, Family and Career Scale, Attitude Toward Multiple Role Planning Scale, Career Decision-Making Self-Efficacy Scale, The Satisfaction with Life Scale, Subjective Happiness Scale, and the Social Desirability Scale. The eight scales were administered in random order to each participant. Once the measures were complete, the participants were thanked for their participation and received a description of the study. The lottery winners were selected randomly and received money orders in the mail.

Measures

Planning for Career and Family. The Planning for Career and Family Scale is a 52-item measure developed to measure the extent to which people take into consideration future children and romantic relationships when deciding on a career (see Appendix B). The scale was hypothesized to consist of two 26 item subscales: parenting responsibilities and partner responsibilities. The items were scored on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*).

Career Aspirations. The Career Aspiration Scale is an eight item scale developed by O'Brien (1996) to assess career aspiration on the following levels: aspiring to leadership and promotions, training and managing others, and pursuing further education (Gray & O'Brien, 2007; see Appendix C). Participants responded to items on a 5-point Likert scale ranging from 0 (*not at all true of me*) to 4 (*very true of me*). Items were summed with a high score indicating aspiration within a given career. Some sample items are "When I am established in my career, I would like to train others" and "I hope to become a leader in my career field." Two scales are hypothesized to comprise the scale: the Educational Aspirations subscale (6 items) and the Leadership and Achievement subscale (2 items). The Career Aspiration Scale correlated with career-decision self-efficacy, multiple role self efficacy, occupational self-efficacy, attitudes toward women's roles, instrumentality, and relative importance of career versus family. Internal consistency ranged from .72 to .77 (Gray & O'Brien).

In this study, the Educational Aspirations subscale exhibited poor reliability (i.e. an internal consistency of .53). The Leadership and Achievement Scale had an

internal consistency of .69. The total Career Aspiration Scale reliability was .68 so we used scores on the total scale for the analyses in this study.

Career Orientation. The Family and Career Scale is a 16-item scale developed to measure family versus career orientation and ideas about women's roles (Battle & Wigfield, 2003) (see Appendix D). The Family and Career Scale is similar to the Orientation to Occupational and Family Integration Scale (OOFI) developed by Gilbert (Hallett & Gilbert, 1997). The items on the Family and Career Scale were scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items include "I think that women should put their careers 'on hold' when they begin to have a family" and "I think that women should earn money, and contribute to the family income, even after they have children." A high score on the scale represented a strong career orientation. Factor analyses demonstrated that the measure adequately assessed different components of task value. Internal consistency for the Family and Career Scale was .89 (Battle & Wigfield, 2003).

Multiple Role Planning. The Attitude Toward Multiple Role Planning scale assesses the degree of realistic or unrealistic attitudes toward multiple roles (Weitzman, 1994, 1996; see Appendix E). The Attitude Toward Multiple Role Planning scale is a 50 item scale divided into five subscales, including: Knowledge/Certainty (about planning for multiple roles), Commitment to Multiple Roles, Independence, Involvement and Flexibility/Compromise. The items on each of the subscales were scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Twenty-four of the total items were reversed scored. High scores on the measure indicated realistic attitudes toward multiple role planning.

When appropriate items are reversed, items were summed across scales to obtain a total scale score (Weitzman, 1994, 1996). Two scales, the Independence scale and the Flexibility/Compromise scale were not included in this study. Since only the Knowledge/Certainty, Commitment to Multiple Roles, and Involvement scale were administered, the measure consists of 30 items with 10 on each scale.

The Knowledge/Certainty scale examined an individual's self perception regarding the degree of knowledge and certainty of one's ability to plan for multiple roles in a realistic fashion (Weitzman, 1996). Example items included "I don't know how to plan for combining my career and my family" and "It's easy to be certain how to manage my future career and family obligations in ways that are realistic for me." The scale was correlated with measures of uncertainty, knowledge, and lack of knowledge and had an internal consistency of .83 (Weitzman, 1996).

The Commitment to Multiple Roles scale examined an individual's commitment to a multiple role lifestyle, specifically work and family roles, and the perception of the individual to manage this lifestyle effectively (Weitzman, 1996). Sample items were "When it comes to work and family, there's no reason why women can't 'have it all' if they just try hard enough" and "The greatest appeal of balancing my career with my family obligations the opportunity it provides for a fulfilling life." The scale was correlated with life satisfaction and role commitment and had an internal consistency of .79 (Weitzman, 1996). In this study, the reliability of the measure was extremely low (.55) and thus, this measure was not included in any analyses.

The Involvement scale examines an individual's perception of the immediacy of the need to engage in multiple role planning (Weitzman, 1996). Sample items include "I seem to spend a lot of time these days thinking about how I will combine my family with my work responsibilities" and "I am not going to worry about how to combine my career with my family until I'm actually involved in both those roles." The scale was correlated with measures of immediacy, involvement, and future uncertainty and had an internal consistency of .84 (Weitzman, 1996).

Career Decision-Making Self Efficacy. This study used the short form of the Career Decision- Making Self-Efficacy Scale (Betz, Klein, & Taylor, 1996; see Appendix F). The Career Decision- Making Self-Efficacy Scale is a 25 item measure that assesses confidence in successfully completing tasks necessary to making career decisions (Betz et al., 1996). The Career Decision- Making Self-Efficacy Scale short form included items related to self-appraisal, occupational information, goal selection, future planning, and problem solving. The scale was a 5-point Likert scale ranging from 1 (*no confidence at all*) to 5 (*complete confidence*). Example items included: "Determine what your ideal job would be" and "Decide what you value most in an occupation." Scores on all the items were summed with high scores indicating confidence when making career decisions. The short form of the Career Decision- Making Self-Efficacy Scale was negatively correlated with a measure of career indecision. The Cronbach's alpha was .94 for the measure (Betz et al., 1996).

Life Satisfaction. The Satisfaction with Life Scale is a 5 item scale that measures global life satisfaction (Diener, Emmons, Larson, & Griffin, 1985; see Appendix G). The scale was a 7-point Likert scale ranging from 1 (*strongly disagree*)

to 7 (*strongly agree*). Example items included: “In most ways my life is close to my ideal” and “I am satisfied with my life.” Scores on all the items were summed with high scores indicating life satisfaction. The Satisfaction with Life Scale was correlated with other measures of life satisfaction. The coefficient alpha was .87 (Diener et al., 1985).

Subjective Happiness. The Subjective Happiness Scale is a 4 item scale that measures global subjective happiness (Lyubomirsky & Lepper, 1999; see Appendix H). The scale was a 7-point Likert scale ranging from 1 to 7 with different items having a different range. Example items included: “In general, I consider myself:” with the scale ranging from 1 (*not a very happy person*) to 7 (*a very happy person*) and “Compared to most of my peers, I consider myself:” with a scale ranging from 1 (*less happy*) to 7 (*more happy*). A single composite score was computed by averaging responses to the four items with higher scores reflecting greater happiness. The Subjective Happiness Scale was correlated with other happiness measures. Cronbach’s alpha ranged from .79 to .94 (Lyubomirsky & Lepper, 1999).

Social-Desirability. The Marlowe and Crowne Social-Desirability Scale was used to assess culturally sanctioned responses (Crowne & Marlowe, 1960; see Appendix I). The Marlowe and Crowne Social-Desirability Scale short form consisted of answering true or false to 13 items, some of which were reverse scored. The true responses were summed to produce a total score. High scores indicated a tendency to respond in a socially desirable manner. Sample items were “I sometimes feel resentful when I don’t get my way” and “I am sometimes irritated by people who ask favors of me.” The Marlowe and Crowne Social-Desirability Scale short form

was correlated with the Edwards Social Desirability Scale and with the Marlowe-Crowne long form and had an internal consistency reliability estimate of .76 (Reynolds, 1982).

Demographic Questionnaire. The demographic questionnaire was developed by the researcher and asked participants to indicate their age, race, gender, sexual orientation, relationship status, and career plans (see Appendix J).

Hypotheses

The hypotheses were as follows:

(1). The Planning for Career and Family Scale would have two subscales, the Parenting subscale and the Partner subscale.

(2). Convergent validity would be demonstrated.

(2a). Specifically, the Planning for Career and Family scale total score and subscale scores would correlate negatively with career aspiration and career orientation attitudes.

The Planning for Career and Family Scale was hypothesized to correlate negatively with career aspiration because generally women who had high career aspirations would be more motivated to pursue a career, and therefore, consider their future family role less than a woman who has low career aspirations. For example, a woman who plans to prioritize her career would be less interested in considering responsibilities associated with parenting and a relationship when making career choices.

The Planning for Career and Family scale would correlate negatively with career orientation attitudes because a woman high on career orientation and low on

family orientation would not base her career choice on plans to have a family. Likewise, if a woman had a more traditional view of women's roles and leaned toward having a family orientation, she probably saw family as more important than career and would, in turn, take future family into consideration when making career decisions.

(2b). In addition, the Planning for Career and Family scale total score and subscale scores would correlate positively with attitudes toward multiple role planning.

The Planning for Career and Family Scale would correlate positively with attitudes toward multiple role planning because women who consider parenting and partner responsibilities when deciding on a career would feel confident with regard to multiple role planning because they altered their career to ensure their ability to balance work and career. Therefore, women who have already thought about balancing career and family may have more realistic attitudes toward multiple role planning.

(3). We hypothesized that support for discriminant validity would emerge through a lack of correlations between career and family planning and career decision-making self-efficacy, life satisfaction, or subjective happiness.

The Planning for Career and Family Scale would not correlate with the career decision-making self-efficacy because whether or not women decide to base their career choice on their future parenting and partner responsibilities would not relate to confidence in making career decisions. Moreover, life satisfaction or subjective

happiness would not vary based on whether or not women consider their future families when making career choices.

Preliminary Analyses

Missing values were analyzed using SPSS 14.0. Upon examination of the data in Study 1, nine participants were deleted because there were more than five data points missing from their survey, four were deleted because they had a patterned response to the items, and two were deleted because they indicated they were male. The final sample size was 325 college women.

Analyses

The data set was randomly split in half to allow for an assessment of the stability of the factor structure, and descriptive statistics and factor analysis were computed on each half of the data set separately. Specifically, an exploratory factor analysis was computed to assess the presence of subscales. The reliability estimates of the subscales were assessed using Cronbach's alpha. The validity of the instrument was studied by calculating Pearson correlation coefficients among all measures of interest in this study.

Study 1: Results

Demographic information for Sample A

Sample A consisted of 143 female participants. Participants ranged in age from 18 to 30 years old with a mean age of 19 ($SD=1.6$), and a mean GPA of 3.36 ($SD=.43$). Forty-three point four percent of the women belonged to a sorority while the remaining 56.6% did not. Thirty-three point six percent of the data were collected from Psychology 100 courses and upper level psychology courses, 12.6% were

collected from University 100 courses, 2.8% were collected from the Black Business Association, 2.1% were collected from the Asian American Student Union, 1.4% were collected from the Circle K International group (a group dedicated to improving schools and communities), 1.4% were collected from the Queer Straight Alliance, 1.4% were collected from the Alternative Spring Break group, and 1.4% were collected from the Indian Female Dance Group. Participants reported a total of 12 different racial backgrounds, including White-non Hispanic (72.0%), Asian/Asian-American (13.3%), African American (4.9%), Hispanic/Latina (2.1%), Indian (1.4%), White/Hispanic/Latina (1.4%), American Indian (0.7%), Biracial/Multiracial (0.7%), Middle Eastern (0.7%), Nigerian American (0.7%), American Indian/biracial/multiracial/white, non Hispanic (0.7%), and American/American Indian/White, non-Hispanic (0.7%). In Sample A, 0.7% of participants did not report their race.

Regarding class levels, 21.0% were first year students, 28.0% were sophomores, 31.5% were juniors, and 19.6% were seniors. Participants were asked to indicate their current relationship status and 79.0% were single, 19.6% married/partnered, 0.7% widowed, and 0.7% did not indicate their relationship status. Participants who indicated they were single were asked if they planned to get married and/or be in a committed relationship; 89.9% indicated yes, 1.4% indicated no, 0.7% indicated maybe, and 14% of the data were missing. In Sample A, 95.8% of participants identified themselves as heterosexual, 2.1% identified as bisexual, 0.7% identified as gay, 0.7% identified as bisexual/queer, and 0.7% did not report their sexual orientation. Of the current sample, 90.9% indicated they planned on having

children, 6.3% indicated they did not plan on having children, 0.7% indicated they might have children, and 2.1% did not respond.

Almost all of the participants had chosen a major (90.9%), 8.4% had not, and 0.7% did not report. A total of 70 majors and combination of majors were listed for those who decided with the top five being: psychology (9.8%), hearing and speech science (6.3%), communications (4.9%), accounting (3.5%), and community/public health (3.5%). Participants listed a total of 29 different educational plans and the top five were MS/MA degree (19.6%), undergraduate and MS/MA degree (18.9%), undergraduate degree (14%), Ph.D. degree (8.4%), and medical degree (6.3%); 0.7% did not answer the question.

More than half of the participants had chosen a career to pursue after graduation (59.8%), 39.2% indicated they had not, and 1.4% did not answer the question. The participants who had chosen a career listed 50 different careers, with the top five careers being speech and language pathologist (5.6%), teacher (4.2%), medical doctor (3.5%), nursing (3.5%), and physical therapist and lawyer were tied for the fifth spot (2.8%). For those who had not chosen a career, the top five choices were psychologists (4.9%), accountant (3.4%), do not know (3.4%), social worker (2.8%), and attorney (2.8%).

Factor Analyses for the Planning for Career and Family Scale: Sample A

The factorability of the data set for Sample A was assessed prior to running the factor analysis. The Kaiser-Meyer Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity were used to assess the use of factor analyses. The KMO assessed the probability that a particular data set contained factors and not only

correlations based on chance. The score on KMO can be between 0 and 1, with values closer to 1 indicating a greater likelihood of the presence of factors. A KMO score of .06 is the minimum score needed to determine that the sample was sufficient for a factor analyses. The KMO score for sample A in the present study was .87.

Bartlett's (1950) test of sphericity tests the null hypothesis that the correlation matrix is in fact random. Bartlett's test is sensitive to the case to item ratio where the ratio should be between 1:3 and 1:5. The case to item ratio for the scale (52 items) in Sample A (143 cases) was close to this range. Bartlett's test was used and the results were significant, χ^2 (df 1326, N=143) = 4516.49, $p < .01$. Thus, the KMO score and Bartlett's test confirms that the data set for Sample A was factorable.

To examine the factor structure of the Planning for Career and Family Scale, exploratory factor analyses were used with Principal axis factor analysis as the extraction method. Principal axis factor analysis examines only shared variance among the items. The Promax rotation was selected because the factors on the Planning for Career and Family Scale were expected to be correlated. Kahn (2006) recommended the Promax procedure instead of the oblique procedure because the Promax rotation with orthogonal and correlated factors can provide a truer fit for the data.

The Principal axis factor analysis with the Promax rotation (number of factors unspecified) was computed on the Planning for Career and Family Scale for Sample A. The scree plot from the analysis was examined to determine the point at which the variance contributed by the factors leveled off. The results suggested a four factor

solution. The three factor solution accounted for 43.2% of the total variance and the four factor solution accounted for 46.4% of the variance.

Four Principal axis factor analyses with Promax rotations were computed, with one, two, three, and four factors extracted. Each factor solution was considered to determine the most promising solution, with the highest loading items with the fewest cross-loadings and the greatest variance explained while maintaining parsimony. The four factor solution had very few items on factor four and many multiple loadings, therefore the three factor solution was examined. There also were many multiple loadings on the three factor solution. The researchers then independently examined the one factor and two factor solution and both researchers selected the two factor solution as the best fit for the data.

With the two factor solution, items loading greater than .40 on both factors or less than .30 on any factor were eliminated. To be more stringent, items loading less than .35 on both of the factors were removed, resulting in 32 items being retained.

Based on Sample A, the Planning for Career and Family Scale contained 32 items and two subscales. To retain only the most robust items in the two factor solution, all items loading below .50 on any factor were eliminated. This resulted in the retention of 28 items. Finally, we removed items loading greater than .30 on both factors, which resulted in the retention of 20 items (ten items on factor 1 and ten items on factor 2).

Demographic information for Sample B

Sample B consisted of 182 female participants. Participants ranged in age from 17 to 23 years old with a mean age of 19 (SD=1.21), and a mean GPA of 3.34

(SD=.44). 34.1% of the women belonged to a sorority while the remaining 65.9% did not. Thirty-nine point six percent of the data were collected from Psychology 100 courses and upper level psychology courses, 15.9% were collected from University 100 courses, 2.7% were collected from the Circle K group, 2.2% were collected from the Black Business Association, 1.6% were collected from the Alternative Spring Break group, 1.6% were collected from the Indian Female Dance Group, 1.1% were collected from the Asian American Student Union, and 1.1% were collected from the Queer Straight Alliance. Participants reported a total of 10 different racial backgrounds, including White-non Hispanic (61.0%), Asian/Asian-American (14.3%), African American (11.5%), Hispanic/Latina (5.5%), Biracial/Multiracial (2.7%), Indian (1.6%), West Indian (0.5%), Sri Lankan (0.5%), Asian/Asian American Indian (0.5%), and other (0.5%). In Sample B, 1.1% of participants did not report their race.

Regarding class levels, 24.2% were first year students, 26.9% were sophomores, 30.8% were juniors, 15.4% were seniors, and 2.7% of the sample did not report their year. Participants were asked to indicate their current relationship status and 86.8% were single, 12.1% married/partnered, 0.5% widowed, and 0.5% did not indicate their relationship status. Participants who indicated they were single were asked if they planned to get married and/or be in a committed relationship; 87.4% indicated yes, 3.8% indicated no, 0.5% indicated maybe, and 8.2% of the data were missing. In Sample B, 95.1% of participants identified themselves as heterosexual, 1.6% identified as lesbian, 0.5% identified as pansexual, and 2.7% did not report their sexual orientation. Of the current sample, 90.7% indicated they planned on having

children, 6.6% indicated they did not plan on having children, and 2.7% did not respond.

Almost all of the participants had chosen a major (90.7%), 9.3% had not, and 0.7% did not report. A total of 78 majors and combination of majors were listed for those who decided with the top five being: psychology (15.4%), communications (5.5%), psychology and criminal justice (4.4%), neurobiology/physiology (3.8%), and biology (3.3%). Participants who had not chosen a major were considering finance (1.1%), business (1.1%), journalism (1.1%) and 25 other majors (0.5%). Participants listed a total of 28 different educational plans and the top five were undergraduate degree and MS/MA degree (18.7%), MS/MA degree (17.0%), undergraduate degree (15.9%), Ph.D. degree (8.8%), and medical degree and law degree were tied for fifth place (6.6%); 1.6% did not answer the question.

More than half of the participants had chosen a career to pursue after graduation (53.8%), 45.1% indicated they had not, and 1.1% did not answer the question. The participants who had chosen a career listed 73 different careers, with the top five careers being: lawyer (7.1%), medical doctor (5.5%), psychologist (4.9%), teacher (4.4%), and physical therapist (2.2%). For those who had not chosen a career, the top five choices were psychologists (12.6%), attorney (5.5%), teacher (5.5%), doctor (4.9%), and do not know (3.8%).

Factor Analyses for the Planning for Career and Family Scale: Sample B

A factor analysis was conducted on Sample B data. The KMO score for Sample B was .79 and Bartlett's test of sphericity was significant, χ^2 (df 153, N=182), $p < .01$, thus supporting the factorability of the data set. As with Sample A, a

principal axis factor analysis with Promax rotation was computed on Sample B. The retained 20 items on the Planning for Career and Family Scale from Sample A were included in this analysis. The two factor solution accounted for 31.6% of the total variance and the primary loadings for the items matched the established factors in Sample A, although multiple loadings existed. We eliminated the two items with the highest double loadings. Nine items remained on each factor. Factor 2 had two items with double loadings over .30 (but less than .34). We retained these items to have each subscale consist of nine items so as not to possibly compromise the reliability of the subscales. Thus, the final scale consisted of a total of 18 items, with 9 items on each factor.

Finally, a factor analysis was run with only the final 18 items on Sample A, yielding 9 items on each factor. A factor analysis also was performed on the data set from Sample B to assess the replicability of the factor structure. All items loaded on the same factors in Sample B as in Sample A. Final items and factor loadings for Sample A and Sample B are reported in Table 1.

Description of Factors on the Planning for Career and Family Scale

When the items on the Planning for Career and Family Scale were first developed, we hypothesized that two factors would emerge from the 52 original items. The two hypothesized factors included a parenting subscale and a partner subscale. Although the hypotheses about the number of factors were supported, the specific factors that emerged did not match the hypotheses. Thus, the specific hypotheses regarding the subscales and their relation to the measures included to assess validity cannot be investigated. However, the relationships among the two

Planning for Career and Family Scale subscales that emerged from the data and the scales used to assess construct validity can be examined to determine if the correlations were generally consistent with the hypotheses. The correlations used to investigate the relations among all the measures were calculated using the total sample and can be found in Table 2.

Factor 1: Incorporating Future Family in Career Plans. Factor 1 appeared to assess the degree to which individuals took into account their future family (children and partners) when planning for their careers. The reliability of the factor in Sample A was .85 and in Sample B was .81. This factor related moderately and negatively to career orientation and slightly and negatively to career aspirations. The hypothesized relations with the attitude toward multiple role planning scales did not emerge. The expected absence of relations were found between the Incorporating Future Family in Career Plans Scale and career decision-making self-efficacy, life satisfaction, and subjective happiness.

Factor 2: Choosing a Career Independent of Future Family. Factor 2 seemed to measure the degree to which individuals planned for careers independent of their future family responsibilities. The internal consistency reliability for Sample A was .83 and for Sample B was .76. Factor 2 had a low positive correlation with career orientation and a moderate negative relationship with immediate involvement in multiple role planning. No relations were found with career decision-making self-efficacy, career aspirations, and certainty regarding multiple role planning. The expected absence of relations emerged between the Choosing a Career Independent of

Family Scale and career decision-making self-efficacy, life satisfaction, and subjective happiness.

Additional Analyses for Total Sample

On average, participants endorsed between disagree and agree on Incorporating Future Family in Career Plans and Choosing a Career Independent of Family subscales. Participants tended to consider themselves happy and generally satisfied with life. Participants exhibited a moderate level of career orientation, were generally confident in making their career decisions, and had moderately high career aspiration. In addition, participant's responses indicated that they were generally unsure how they felt about the immediacy of the need to engage in multiple role planning and level of perception regarding the degree of knowledge and certainty of their ability to plan for multiple roles. Finally, the sample did not appear to respond in a socially desirable manner.

Relationships between Factors on the Planning for Career and Family Scale

The factors on the Planning for Career and Family Scale exhibited low intercorrelations. Incorporating Future Family in Career Planning was slightly negatively correlated to Choosing a Career Independent of Future Family. The low correlations ($r = -.25$) between the two factors indicates that they only share about 6% of the variance, and therefore do not appear to be measuring the same construct.

Study 2: Additional reliability estimates

The purpose of the second study was to obtain additional reliability estimates for the Planning for Career and Family scale. Internal consistency reliability estimates were assessed and test-retest reliability computed. It was hypothesized that the

Planning for Career and Family subscales would have adequate internal consistency and test-retest reliability.

Participants

Participants included 40 undergraduate women in their junior and senior year. The participants were recruited from upper-level undergraduate psychology courses from a large mid-Atlantic University. Participants ranged in age from 19 to 43 years old with a mean age of 21.6 (SD=3.54) and a mean GPA of 3.53 (SD=.34). Sixty percent of the data were collected from a helping skills course and 40% of the data were collected from a counseling psychology course. Participants reported a total of four different racial backgrounds, including White-non Hispanic (75%), Asian/Asian-American (10%), African American (5%), Hispanic/Latina (5%); 5% of participants did not report their race.

Most of the participants were seniors (90%) and the remaining were juniors (10%). Participants were mostly single (82.5%) and 17.5% were married/partnered. Participants who indicated they were single were asked if they planned to get married and/or be in a committed relationship; 82.5% indicated yes, 2.5% indicated no, and 15% of the data were missing. In this sample, 97.5% of participants identified themselves as heterosexual and 2.5% did not report their sexual orientation. Of the current sample, 85% indicated they planned on having children, 10% indicated they did not plan on having children, and 5% did not respond.

Almost all of the participants had chosen a major (95%), 2.5% had not, and 2.5% did not report. A total of 16 majors and combination of majors were listed for those who decided with the top being: psychology (40%), psychology and criminal

justice (7.5%), psychology and family studies (7.5%), psychology and neurobiology (5%), psychology and German (5%), psychology and government and politics (5%), and psychology and communication (5%). 2.5% of the sample did not report their major. Participants who had not chosen a major were considering psychology (2.5%) and business (2.5%). Participants listed a total of 13 different educational plans and the top five were MS/MA degree (30%), Ph.D. degree (20%), undergraduate and MS/MA degree (10%), undergraduate degree (7.5%), and medical degree, law degree, and other all tied for fifth place (5.0%).

More than half of the participants had chosen a career to pursue after graduation (57.5%) and 42.5% indicated they had not. The participants who had chosen a career listed 18 different careers, with the top three careers being: psychologist (25%), dentistry (5%), and medical doctor (5%). The remaining 15 careers each were 2.5%. For those who had not chosen a career, the top three choices were psychologists (25%), marketing (10%), and attorney (7.5%).

Procedure

Participants in upper-level undergraduate psychology courses were invited to participate in the study. The primary researcher contacted the instructor to advertise the study and inquire if instructors would allow the researcher to invite students to participate. The instructor and students were informed about the study and were told that the completion of a second survey would be administered two weeks later. Students were given course credit to participate. Forty female students chose to participate. The primary researcher administered the same survey to the same

participants at time 1 and time 2 in their classrooms at the end of their scheduled class time. There was a 95% response rate at Time 2.

Measures

Planning for Career and Family. Planning for career and family was assessed using the Planning for Career and Family scale, which was developed as a part of this study.

Demographic Questionnaire. The demographic questionnaire was developed by the researcher and asked participants to indicate their age, race, gender, sexual orientation, relationship status and career plans.

Analyses

Descriptive statistics were computed and internal consistency reliability estimated. Test-retest reliability was assessed by calculating the correlations among the scales at time 1 and time 2.

Study 2: Results

Means, standard deviations, and internal consistency estimates are reported in Table 3. The two subscales of the Planning for Career and Family Scale exhibited adequate reliability (alphas ranging from .76 to .83). The two week test-retest reliability estimates were as follows: Incorporating Future Family in Career Plans (.79) and Choosing a Career Independent of Future Family (.78). Both of these correlations were significant at the $p < .01$ level.

CHAPTER 4

Discussion

Overall, the results of this study provide support for a valid and reliable measure of planning for career and family when used with college women samples comprised mainly of White, heterosexual women. The final 18-item measure demonstrated moderate test-retest reliability over a two week period. Factor analysis suggested a two factor structure of the Planning for Career and Family Scale, including Incorporating Future Family in Career Plans and Choosing a Career Independent of Future Family subscales. This two factor structure was replicated with a second subset of participants, lending support to the stability of the factor structure.

It was hypothesized that the Planning for Career and Family Scale would have a two factor structure, a parenting subscale and a partner subscale. However, the two factors that emerged, as independently examined by the researchers, were incorporating future family in career plans and choosing a career independent of future family. It could be that women in this study interpreted future family to mean both partners and children and then made a decision based on whether they made their career choice independent of their future family (partners and children) or incorporating their future family. In other words, women in this study did not separate partner responsibilities and parenting responsibilities as expected. Since women in this study seemed to combine the role of partner and parent, future research should further explicate the ways in which women consider partner and parenting responsibilities when deciding on a career.

Convergent validity of incorporating future family in career plans was supported by negative correlations with career orientation and career aspiration. However, incorporating future family in career plans did not positively correlate with attitudes toward multiple role planning as hypothesized. Perhaps women in this study who consider their future family when deciding on a career may not have realistic attitudes toward multiple role planning, which is what the scale measures. In addition, women may not be able to realistically assess multiple role planning because most of the women in the study have not been involved in these roles. In fact, this study demonstrates how unsure women are about managing multiple roles.

In addition, the involvement/immediacy of multiple role planning did not correlate with incorporating future family in career plans as predicted, which might mean that these women did not feel the urgency to do the multiple role planning. More research should inquire about the feeling of urgency of multiple roles in conjunction with how women plan for their careers.

Discriminant validity was demonstrated through the absence of relations between incorporating future family in career planning and measures of career decision-making self-efficacy, life satisfaction, and subjective happiness. We did not expect incorporating future family in career planning to correlate with career decision-making self-efficacy because whether or not a woman decides to base her career choice on her future family should not relate to how confident she is in making career decisions. In addition, life satisfaction or subjective happiness should not vary based on whether or not a woman is considering her future family when making career plans.

For the Choosing a Career Independent of Family Scale, a high score indicates career plans are made independent of future family considerations. Choosing a career independent of family was negatively correlated with immediacy/involvement in multiple role planning, which makes sense because someone who is more career oriented will most likely not perceive the urgency of the need to engage in multiple role planning. Future research on this relationship would tell us more about women who tend to make their career plans independent of their future family. Specifically, researchers should examine whether women who make their plans independent of family feel any need or sense of immediacy in multiple role planning because most women will in fact engage in multiple roles. In fact, about 90% of the women in both Sample A and Sample B indicated they planned to have children. In addition, research is needed to examine how women who plan their careers based on their future family responsibilities feel about their need to incorporate multiple roles in their decisions and whether college women can realistically assess how they will manage multiple roles in the future (i.e. combining career and family roles).

Career aspiration did not correlate with choosing a career independent of future family as expected. More research needs to examine this lack of relationship because career aspiration should relate to choosing a career independent of family because women who have high career aspirations will be more motivated to pursue a career and consider their future family role less than a woman who has low career aspirations. Perhaps the low reliability on this scale precluded the emergence of relationships among variables.

Discriminant validity was demonstrated through the lack of correlations between choosing a career independent of family and career decision-making self-efficacy, life satisfaction, and subjective happiness. Again, we predicted that choosing a career independent of family would not correlate with the career decision-making self-efficacy because whether or not women decide to base their career choice on their future family responsibilities would not relate to confidence in making career decisions. Furthermore, life satisfaction or subjective happiness would not vary based on whether or not women consider their future families when making career choices.

On average, participants neither agreed nor disagreed with statements on the incorporating future family in career plans and choosing a career independent of family subscales. Future analyses should examine each item and mean response to each item to determine if some of the items elicit diversity of responses. Future research should examine if college women tend to fall in the middle of the scale because they are not yet engaged in considering future family roles. For example, most of the sample was from the Psychology 100 subject pool and upper level psychology courses, so future research should examine older and more heterogeneous samples. Women in upper level psychology courses might have a different view of women and women's roles and therefore, their responses are not generalizable to all women.

Participants were generally satisfied with life and fairly happy. Thus, the sample seemed well-adjusted. In addition, participants exhibited a moderate level of career orientation, were generally confident in making their career decisions, and had moderately high career aspiration. The fact that women generally scored moderately

on career orientation helps make sense of the way the women generally rated themselves on planning for career and family. For example, if you have a high career orientation, you might not consider your future family when making career plans. The reverse should also be true; that women who are family oriented would consider their future family when planning their career. Career orientation and planning for career and family were significantly but not highly correlated. It would be interesting to examine further the relationship between career orientation and planning for career and family.

Participant's responses indicate that they were generally unsure how they felt about the immediacy of the need to engage in multiple role planning and degree of knowledge and certainty of their ability to plan for multiple roles. It could be that women do not see their future family as an immediate concern, especially since most of the sample indicated they were single. Frome et al. (2006) shows that women in high school who had aspired to male-dominated fields changed their occupational aspirations to female-dominated fields or neutral careers. The significant predictor in this study was a desire to have a family. It could be that women change their occupational aspirations because they are unsure how to balance their multiple roles and unsure of their ability to balance multiple roles. Stone and McKee (2000) echo this idea in their study where they found that many college women were ambivalent about their professional and domestic lives. This phenomenon of ambivalence in combining multiple roles should be studied further and should be examined with planning for career and family in the college population.

Another possible explanation may be related to “emerging adulthood,” which was defined in the literature review by Arnett (2000). Arnett suggested that individuals between the ages of 18 and 25 (i.e., around college age), are delaying parenthood and marriage. Individuals in the emerging adulthood stage of life are exploring a variety of possible love and work directions before fully embracing adulthood and adult experiences (which may be perceived as limiting). The women in this sample may not feel an immediate need to engage in multiple roles because they may be in this stage of exploration of work and relationship options. Arnett also stated that there have been changes over the past century, such as the delay of marriage and parenthood, that have altered the development of individuals in the college age group. It could be that delaying marriage and parenthood may play a role in how women plan (or delay planning) for their future multiple roles. Future research should examine how emerging adulthood may affect the paths of women’s career development.

Future Research and Possible Interventions

Clearly, the results of this study need to be replicated. Our sample was mostly White, heterosexual women and future studies should examine the Planning for Career and Family Scale with other populations. It is possible that the construct of planning for career and family may not apply to other populations. For example, many of the studies cited in the literature state that women are considering future parenting responsibilities but those studies are comprised of mostly White samples or do not report ethnicity in their article. Although the U.S Department of Labor Bureau of Labor Statistics (2004; 2007) suggested that women are still represented in low

paying and low status jobs and that women are poorly represented in math and science, there may be differences between populations that keep women along these career paths that may or may not have to do with consideration of future family responsibilities. If this measure was studied in different populations and the results were replicated, we would learn more about the career development of people of color.

The Planning for Career and Family Scale also should be studied in the contexts of high school students to examine the extent to which they consider future family when deciding on a career. It has been shown that the educational plans and career plans of young women in high school were influenced by their anticipated role of being a mother (Marks & Houston, 2002). If the results of this study were replicated, school counselors could use the scale to help young women make informed career decisions. For example, a school counselor who sees a student that is concerned about planning her career around future family plans might suggest that the student not look only at traditionally female-dominated careers but also other careers that allow her to fulfill her needs for their family but also fit with her career aspirations. Addressing these issues may help the client develop a plan to pursue higher degrees and advance within her career.

Furthermore, the measure itself has implications for the use in counseling centers for college women if the results were replicated. If career counselors hypothesized that clients were choosing careers because they wanted to have a family, the counselor could administer the Planning for Career and Family Scale to better understand the extent to which the client was considering future family

responsibilities when making career choices. In conjunction with other measures, this scale can help the counselor and clients explore careers which clients might have not considered. Addressing these issues may help clients develop plans to advance their career and consider additional vocational possibilities.

With regard to the test-retest reliability estimates, the two subscales seem to be stable over a two-week time period. Future research should examine the stability of the Incorporating Future Family in Career Plans Scale and the Choosing a Career Independent of Future Family over a longer period of time.

Limitations

There are several limitations to this study. As previously mentioned most of the population surveyed were White, heterosexual women, therefore, generalizability to samples other than predominantly White college women is questionable. Most of the studies cited in the literature review had mainly White participants and we can not assume women of color have the same concerns. Future research must address the reliability and the validity of the Planning for Career and Family Scale with women of color. In addition, the sample comprised of 38.2% of women from sororities, which could also be a limitation because women who join sororities might have different ideas and views than women who choose not to join sororities. In our data set, women in sororities and women not in sororities scored about the same on both incorporating future family in career plans and choosing a career independent of future family.

Another limitation was that the Planning for Career and Family Scale may not apply to everyone. For example, some women may not have the choice to balance

family and a career, which this scale assumes. Clearly, Planning for Career and Family is a scale developed for women who do not have a family yet, so it leaves out an entire population of women that have a family. It also may not be helpful for clients who do not plan on or want to have children.

Additionally, the age of the participants in the study could be a limitation. Planning for career and family would be expected to differ among women who are in high school, just thinking about their careers, in college, needing to choose a major, and graduating from college, now looking for a career. It might also differ for graduate students as well. Another intriguing study would be to examine how graduate students plan for their careers and future family.

Finally, it may be interesting to examine the replicability of the factor structure with a male population. A comparison of planning for career and family across genders could provide additional information about the relative extent to which women and men plan for their careers and future family when deciding on a career.

Conclusion

Counseling psychologists have a long history of involvement in learning more about the career development of women. To respond to women choosing stereotypically female professions that reflect lower levels of career achievement, educational attainment, and career aspirations perhaps due to their desire to have a family, a measure that assessed the degree to which women consider their future family when making career decisions was developed. This measure, the Planning for Career and Family Scale, can help researchers and therapists know the degree to

which women are taking into consideration their future families when deciding on a career.

In addition, the development of this scale has extended knowledge of women's career development by expanding and updating the constructs available when examining women's planning for career and family. Furthermore, this study advances our understanding of the choices and challenges that women face today. The Planning for Career and Family Scale can aid psychologists, social workers, and mentors to assist women in their career decisions by studying the degree to which women are incorporating their future family into their career plans. Young women can be educated that they do not have to choose lower paid, less prestigious occupations because of their desire to have a family in the future. It is our hope that young women may come to realize that they do not have to choose between having a career *or* a family, and that counseling psychologists will work to ensure that many options exist for women who plan to prioritize family yet also desire to have a career.

Table 1

Final items retained on Challenges scale for Sample A and Sample B

Item	Factor loadings	
	Sample A	Sample B
<i>FACTOR 1: Incorporating Future Family in Career Plans</i>		
38. I will not pick a career where I will be stressed by managing work and parenting responsibilities.	.69	.69
27. Any career that I will select must enable me to be home when my children come home from school.	.68	.64
18. I will find a career where I do not have to work full-time after I have children.	.67	.62
37. When selecting a career, I will choose one where I can slow down after I have a serious romantic relationship.	.65	.61
49. I will not select a career where I feel exhausted when I come home to my children.	.64	.58
36. When considering a future career, I will choose a job that does not include travel so that I can be home with my children.	.61	.55
22. My job will need to be flexible so I can help my partner's career advancement.	.59	.55
39. My future career will allow me to have time off in the summer so I can be with my children.	.57	.54
13. My partner's career will take priority over mine.	.54	.37
<i>FACTOR 2: Choosing a Career Independent of Future Family</i>		
34. My career choice will have nothing to do with whether or not I want to be in a serious romantic relationship.	.75	.65
8. I will never change my career plans for a relationship.	.70	.59
30. I will make my career plans independently of what my partner might need.	.69	.56
40. I will not consider responsibilities I have to my future partner when I plan my career.	.66	.54
17. The wishes of my partner will not figure into my career plans.	.64	.54
5. Having a fulfilling career will be very important to me, even at the expense of future responsibilities to my partner.	.52	.50
23. Future plans for children will not affect my career plans.	.52	.47
48. Having a satisfying relationship is not as important as picking a career I love.	.48	.46
51. I will pick the best career for me because others will help me care for my children.	.47	.28

Table 2

Bivariate Correlations Among Scales and Internal Consistency Estimates, Means, Standard Deviations, Actual Ranges, and Possible Ranges of Measured Variables

Measures	1	2	3	4	5	6	7	8	9	10
1. Planning for Career and Family-Incorporating Future Family	1									
2. Planning for Career and Family-Choosing Career Independent	-.25*	1								
3. Career Decision Making Self-Efficacy	-.11	.08	1							
4. Career Orientation	-.53*	.24*	.14	1						
5. Career Aspiration	-.27*	.14	.25*	.30*	1					
6. Attitude toward Multiple Role Planning/Knowledge/Certainty	.03	-.05	.36*	.20*	.26*	1				
7. Attitude toward Multiple Role Planning/Immediacy/Involvement	.14	-.34*	.13	.00	.15*	.37*	1			
8. Subjective Happiness	.08	-.07	.19*	.07	.17*	.23*	.11	1		
9. Satisfaction with Life	.02	-.01	.36*	.03	.18*	.23*	.14*	.58*	1	
10. Social Desirability	.02	.05	.19*	.10	.01	.22*	.07	.24*	.14	1
Mean	20.55	21.04	96.35	61.92	25.81	29.95	29.83	5.30	25.58	5.90
Standard Deviation	4.80	4.53	14.10	9.17	4.41	5.78	7.61	.92	5.44	2.75
Actual Range	9-34	9-34	52-125	33-80	10-32	15-47	10-50	1.5-7	5-35	0-13
Possible Range	9-36	9-36	25-125	16-80	0-32	10-50	10-50	1-7	5-35	0-13
Alpha	.83	.80	.92	.87	.68	.70	.84	.76	.85	.66

Note. $p < .01$

Table 3

Test-Retest Reliability Estimates for the Planning for Career and Family Scales and Means, Standard Deviations, Actual Range, Possible Range, and Alpha Coefficients at Time 2

	Incorporating Future Family in Career Plans	Choosing Career Independent of Future Family
Time 1, Time 2 Correlation	.79*	.78*
Time 2 Mean	19.88	20.28
Time 2 Standard Deviation	3.81	3.34
Time 2 Actual Range	9-27	12-30
Time 2 Possible Range	9-36	9-36
Time 2 Alpha	.76	.83

Note. * $p < .01$

Appendix A

Consent Form

Page 1 of 2
Initials _____ Date _____

CONSENT FORM

Project Title	Planning for Career and Family: An Instrument Development Study
Why is this research being done?	This is a research project being conducted by Heather Ganginis DelPino and Dr. Karen O'Brien from the University of Maryland, College Park. We are inviting you to participate in this research project because you are at least 18 years old and you are a female in college. The purpose of this research project is to advance knowledge about women's career development. This study is important because there is no current measure that assesses certain experiences of women when choosing a career.
What will I be asked to do?	Your participation will involve completing an anonymous survey. The survey takes most people approximately 1 hour to complete. The survey will ask questions about your experiences and attitudes relating to career, family, and yourself. You are free to end your participation in this study at any time.
What about confidentiality?	<p>The confidentiality of your responses will be closely protected. This survey is anonymous and will not contain information that may personally identify you. Only the researchers and research assistants will have access to the surveys. We intend to write a report or article about this research project, and we will protect your identity to the maximum extent. The data will be reported only in the aggregate—thus individual responses to items will not be shared.</p> <p>Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law. In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse (current or past) or neglect or potential harm to you or others.</p>

Appendix A cont.
Consent Form

Page 2 of 2

Initials _____ Date _____

Project Title	Planning for Career and Family: An Instrument Development Study
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results may help the investigator learn more about women's career development. We hope that, in the future, other people might benefit from this study through improved understanding of women's experiences.
Do I have to be in this research? May I stop participating at any time?	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.
What if I have questions?	This research is being conducted by Heather Ganginis DelPino, Department of Psychology, at the University of Maryland, College Park. If you have any questions about the research study itself, please contact Heather Ganginis DelPino at: hganginis@psyc.umd.edu . If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu ; (telephone) 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Age of Subject and Consent	Signing your name indicates that: You are at least 18 years of age; You are in college; The research has been explained to you; Your questions have been fully answered; and You freely and voluntarily choose to participate in this research project.

Signature

Date

Appendix B

The Planning for Career and Family Scale

The following are a number of statements that reflect the extent to which you think about your future family when deciding on a career. Rate the degree to which you agree or disagree with each statement using the following scale.

Strongly Disagree	Disagree	Agree	Strongly Agree	
1	2	3	4	
1. I will select a career that allows me to slow down after I have children.	1	2	3	4
2. When selecting a career, I will consider the needs of my partner.	1	2	3	4
3. When making career plans, I will take a job with lesser pay so I can focus on future parenting responsibilities.	1	2	3	4
4. I will give up some of my career goals for my relationship.	1	2	3	4
5. Having a fulfilling career will be very important to me, even at the expense of future responsibilities to my partner.	1	2	3	4
6. I will not plan my career around future parenting responsibilities.	1	2	3	4
7. When choosing a career, I will think about whether the work load will hinder my ability to care for my children.	1	2	3	4
8. I will never change my career plans for a relationship.	1	2	3	4
9. I will take a job that I find less satisfying if it means having more time for my partner.	1	2	3	4
10. Future parenting responsibilities will be an important factor in making my career plans.	1	2	3	4
11. When planning for my career, I will think about how much energy I will have for my children.	1	2	3	4
12. When selecting a career, I will take a lesser paying job if it means I am able to prioritize my relationship.	1	2	3	4
13. My partner's career will take priority over mine.	1	2	3	4
14. I will choose a career that allows me to spend time with my partner.	1	2	3	4
15. I will choose a career that allows me to provide for my family financially even if it means spending less time with them.	1	2	3	4
16. I will have a career with flexible hours so that I can be home for the children I plan to have.	1	2	3	4
17. The wishes of my partner will not figure into my career plans.	1	2	3	4
18. I will find a career where I do not have to work full-time after I have children.	1	2	3	4
19. When planning for my career, I will think about how to balance my career with my partner's work.	1	2	3	4
20. I will choose a career that is perceived as having a light workload because I want to focus on my children.	1	2	3	4
21. Taking a less demanding job to have more energy for my partner will not be an option.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
	1	2	3	4
22. My job will need to be flexible so I can help my partner's career advancement.	1	2	3	4
23. Future plans for children will not affect my career plans.	1	2	3	4
24. When selecting a career, I will be flexible so I can make room for a relationship.	1	2	3	4
25. I will select a career that can be put on hold when my children are young.	1	2	3	4
26. Any relationship that I am in will need to realize that my career plans come first.	1	2	3	4
27. Any career that I will select must enable me to be home when my children come home from school.	1	2	3	4
28. I will not alter my career plans because I might have children.	1	2	3	4
29. When considering a future career, I will look for a job that will allow me the flexibility of being able to stay at home when my children are sick or out of school.	1	2	3	4
30. I will make my career plans independently of what my partner might need.	1	2	3	4
31. My career plans will not be as important as my relationship.	1	2	3	4
32. I would rather have a more fulfilling career than one that allows me to focus on parenting responsibilities.	1	2	3	4
33. Having quality time for raising children will be the most important consideration in my career choice.	1	2	3	4
34. My career choice will have nothing to do with whether or not I want to be in a serious romantic relationship.	1	2	3	4
35. Having time for a romantic relationship will be important when I choose my future career.	1	2	3	4
36. When considering a future career, I will choose a job that does not include travel so that I can be home with my children.	1	2	3	4
37. When selecting a career, I will choose one where I can slow down after I have a serious romantic relationship.	1	2	3	4
38. I will not pick a career where I will be stressed by managing work and parenting responsibilities.	1	2	3	4
39. My future career will allow me to have time off in the summer so I can be with my children.	1	2	3	4
40. I will not consider responsibilities I have to my future partner when I plan my career.	1	2	3	4
41. I will choose a career that allows for a satisfying romantic relationship.	1	2	3	4
42. I will eliminate intense careers from my consideration because I want to have energy to parent my children.	1	2	3	4
43. I will choose the best career for me even if it may interfere with my ability to parent my children.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
	1	2	3	4
44. I want a career where I do not experience conflict between by work and caring for my partner.	1	2	3	4
45. I will not select a career that leaves me feeling overwhelmed and too tired to enjoy my children.	1	2	3	4
46. My career choice will be based on my goals, not on my ability to balance work and love.	1	2	3	4
47. I want a career where I do not experience conflict between work and my relationship.	1	2	3	4
48. Having a satisfying relationship is not as important as picking a career I love.	1	2	3	4
49. I will not select a career where I feel exhausted when I come home to my children.	1	2	3	4
50. Selecting a stressful career that interferes with my relationship is unappealing to me.	1	2	3	4
51. I will pick the best career for me because others will help me care for my children.	1	2	3	4
52. I want a career where I do not experience conflict between my work and parenting my children.	1	2	3	4

Appendix C

Career Aspiration Scale (O'Brien, 1996)

In the space next to the statements below please circle a number from “0” (not at all true of me) to “4” (very true of me). If the statement does not apply, circle “0”. 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	Slightly True of Me	Moderately True of Me	Quite a Bit True of Me	Very True of Me	
0	1	2	3	4	
1. I hope to become a leader in my career field.	0	1	2	3	4
2. When I am established in my career, I would like to manage other employees.	0	1	2	3	4
3. I do not plan to devote energy to getting promoted in the organization or business I am working in.	0	1	2	3	4
4. When I am established in my career, I would like to train others.	0	1	2	3	4
5. I hope to move up through any organization or business I work in.	0	1	2	3	4
6. Once I finish the basic level of education needed for a particular job, I see no need to continue in school.	0	1	2	3	4
7. I think I would like to pursue graduate training in my occupational area of interest.	0	1	2	3	4
8. Attaining leadership status in my career is not that important to me.	0	1	2	3	4

Appendix E

The Attitude Toward Multiple Role Planning scale (ATMRP) (Weitzman, 1994, 1996)

Many people today are considering being involved in their career at the same time that they have children. As you might imagine, managing multiple roles (e.g., combining the roles of career and family) is often challenging. The statements below ask you about your beliefs and feelings about how to best combine a career and family. Please indicate the degree to which you agree or disagree with each statement by circling the numbers that correspond with each statement by circling the numbers that correspond with the scale:

Strongly Disagree		Unsure		Strongly Agree
1	2	3	4	5

1. I don't know how to plan for combining my career and my family. 1 2 3 4 5
2. I want it all, to be a parent, a spouse, and career person, and I am determined to manage it all. 1 2 3 4 5
3. I can't seem to become very concerned about how to combine my career with my family plans. 1 2 3 4 5
4. Figuring out how to balance my career and my family confuses me because I don't feel I know enough about myself or about the stresses involved in balancing these roles. 1 2 3 4 5
5. You should choose ways of managing your career and family obligations so that you can "do it all." 1 2 3 4 5
6. I seldom think about the ways that I might actually combine my career and my family obligations. 1 2 3 4 5
7. I can't understand how some people can be so certain about how to successfully manage career and family responsibilities. 1 2 3 4 5
8. I really want to accomplish something in my life, to have a satisfying career and to be a good parent. 1 2 3 4 5
9. I'm not going to worry about how to combine my career with my family until I'm actually involved in both of these roles. 1 2 3 4 5

Strongly Disagree	Unsure			Strongly Agree	
1	2	3	4		
10. When it comes to combining my career with my family, I can't seem to make up my mind how to do it successfully.					
1	2	3	4	5	
11. When it comes to work and family, there's no reason why people can't "have it all" (e.g., time for both work and family) if they just try hard enough.					
1	2	3	4	5	
12. I don't worry about managing my career and family responsibility because I'm sure it will sort itself out sooner or later.					
1	2	3	4	5	
13. It's easy to be certain how to manage my future career and family obligations in ways that are realistic for me.					
1	2	3	4	5	
14. The greatest appeal of balancing my career with my family obligation is the opportunity it provides for a fulfilling life.					
1	2	3	4	5	
15. There is no point in trying to decide how to deal with the demands of a career and a family when the future is so uncertain.					
1	2	3	4	5	
16. I have little or no idea of what being both a career person and a parent will be like.					
1	2	3	4	5	
17. I am committed to having a lifelong career in addition to raising a family.					
1	2	3	4	5	
18. Finding out who I am as a person is so important right now that it makes planning for combining a career and family seem unrealistic.					
1	2	3	4	5	
19. I don't know whether my plans for combining my career and my family will allow me to be the kind of person I want to be.					
1	2	3	4	5	
20. Having a challenging career is as important to me as being a parent.					
1	2	3	4	5	
21. You shouldn't worry about trying to combine your career with your family because so much depends on things that are out of your control.					
1	2	3	4	5	

Strongly Disagree				Unsure				Strongly Agree	
1	2	3	4	5					
22. I'm very clear on how to plan for combining my career and family responsibilities.					1	2	3	4	5
23. Having both a career and a family is worthwhile because it lets you have a satisfying life.					1	2	3	4	5
24. I feel it's important to "take it as it comes" when it comes to planning for combining my career and family plans.					1	2	3	4	5
25. I don't know whether my plans for combining my career with my family are realistic.					1	2	3	4	5
26. The most important aspect of balancing a career and a family is the personal pleasure that comes from doing it.					1	2	3	4	5
27. I seem to spend a lot of time these days thinking about how I will combine my family and my work responsibilities.					1	2	3	4	5
28. I know a lot of strategies for combining a family with a career in a way that minimizes the stress involved.					1	2	3	4	5
29. I'm not going to give up anything. I really want to have both a career and a family.					1	2	3	4	5
30. It's very important to me to try and figure out ahead of time how I will balance my career and family responsibilities.					1	2	3	4	5

Appendix F

Career Decision-Making Self-Efficacy (CDMSES-SF; Betz, Klein, & Taylor, 1996)

For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the key, Mark your answer by filling in the correct circle on the answer sheet.

How much confidence do you have that you could:

No confidence at all	Very little confidence	Moderate confidence	Much confidence	Complete confidence
1	2	3	4	5
1. Use the internet to find information about occupations that interest you.				
			1	2
			3	4
			5	
2. Select one major from a list of potential majors you are considering.				
			1	2
			3	4
			5	
3. Make a plan of your goals for the next five years.				
			1	2
			3	4
			5	
4. Determine the steps to take if you are having academic trouble with an aspect of your chosen major.				
			1	2
			3	4
			5	
5. Accurately assess your abilities.				
			1	2
			3	4
			5	
6. Select one occupation from a list of potential occupations you are considering.				
			1	2
			3	4
			5	
7. Determine the steps you need to take to successfully complete your chosen major.				
			1	2
			3	4
			5	
8. Persistently work at your major or career goal even when you get frustrated.				
			1	2
			3	4
			5	
9. Determine what your ideal job would be.				
			1	2
			3	4
			5	
10. Find out the employment trends for an occupation over the next ten years.				
			1	2
			3	4
			5	
11. Choose a career that will fit your preferred lifestyle.				
			1	2
			3	4
			5	
12. Prepare a good resume.				
			1	2
			3	4
			5	
13. Change majors if you did not like your first choice.				
			1	2
			3	4
			5	
14. Decide what you value most in an occupation.				
			1	2
			3	4
			5	

No confidence at all 1	Very little confidence 2	Moderate confidence 3	Much confidence 4	Complete confidence 5
15. Find out about the average yearly earnings of people in an occupation.				1 2 3 4 5
16. Make a career decision and then not worry whether it was right or wrong.				1 2 3 4 5
17. Change occupations if you are not satisfied with the one you enter.				1 2 3 4 5
18. Figure out what you are and are not ready to sacrifice to achieve your career goals.				1 2 3 4 5
19. Talk with a person already employed in a field you are interested in.				1 2 3 4 5
20. Choose a major or career that will fit your interests.				1 2 3 4 5
21. Identify employers, firms, and institutions relevant to your career possibilities.				1 2 3 4 5
22. Define the type of lifestyle you would like to live.				1 2 3 4 5
23. Find information about graduate or professional schools.				1 2 3 4 5
24. Successfully manage the job interview process.				1 2 3 4 5
25. Identify some reasonable major or career alternatives if you are unable to get your first choice.				1 2 3 4 5

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Appendix G

The Satisfaction with Life Scale (Diener et al., 1985)

Below are 5 statements with which you may agree or disagree. Using the 1 to 7 scale below, indicate your agreement with each item.

Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7
1. In most ways my life is close to my ideal.	1	2	3	4	5	6 7
2. The conditions of my life are excellent.	1	2	3	4	5	6 7
3. I am satisfied with my life.	1	2	3	4	5	6 7
4. So far I have gotten the important things I want in life.	1	2	3	4	5	6 7
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5	6 7

Appendix H

Subjective Happiness Scale (Lyubomirsky & Lepper, 1999)

For each of the following statements and/or questions, please circle the point on the scale that you feel is the most appropriate in describing you.

1. In general, I consider myself:

1	2	3	4	5	6	7
Not a						A very
very happy						happy
person						person

2. Compared to most of my peers, I consider myself:

1	2	3	4	5	6	7
Less						More
happy						happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

1	2	3	4	5	6	7
Not						A great
at all						deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

1	2	3	4	5	6	7
Not						A great
at all						deal

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Appendix I

Marlowe Crowne Social Desirability Scale Form C (Reynolds, 1982)

Listed below are statements concerning personal attitudes and traits. Please read each item and decide whether the statement is *true* or *false* as it pertains to you personally.

Please respond to the following items as being either True (T) or False (F).

- | | | |
|---|---|---|
| 1. It is sometimes hard for me to go on with my work if I am not encouraged. | T | F |
| 2. I sometimes feel resentful when I don't get my way. | T | F |
| 3. On a few occasions, I have given up doing something because I thought too little of my ability. | T | F |
| 4. There have been times when I felt like rebelling against people in authority even though I knew they were right. | T | F |
| 5. No matter who I'm talking to, I'm always a good listener. | T | F |
| 6. There have been occasions when I took advantage of someone. | T | F |
| 7. I'm always willing to admit it when I make a mistake. | T | F |
| 8. I sometimes try to get even rather than forgive and forget. | T | F |
| 9. I am always courteous, even to people who are disagreeable. | T | F |
| 10. I have never been irked when people expressed ideas very different from my own. | T | F |
| 11. There have been times when I was quite jealous of the good fortune of others. | T | F |
| 12. I am sometimes irritated by people who ask favors of me. | T | F |
| 13. I have never deliberately said something that hurt someone's feelings. | T | F |

Appendix J
DEMOGRAPHICS

AGE: _____

GENDER:

_____ Female

_____ Male

STATUS IN SCHOOL:

_____ Freshman

_____ Sophomore

_____ Junior

_____ Senior

RACE/ETHNICITY:

_____ African American

_____ Asian/Asian American

_____ American Indian

_____ Biracial/Multiracial

_____ Hispanic, Latina

_____ Middle Eastern

_____ White, non-Hispanic

_____ Other (Please Specify)

RELATIONSHIP STATUS:

_____ Single

_____ Married/Partnered

_____ Separated

_____ Divorced

_____ Widowed

SEXUAL ORIENTATION:

_____ Heterosexual

_____ Gay

_____ Lesbian

_____ Bisexual

_____ Queer

_____ Unsure

If Single: Do you plan to get married/be in a committed relationship?

_____ Yes _____ No

Do you plan on having children? _____ Yes _____ No

Have you chosen a major? _____ Yes _____ No

If YES, what major have you chosen? _____

If NO, what majors are you considering?

1. _____

2. _____

What is your overall GPA? _____

What are your educational plans?

_____ Undergraduate degree

_____ M.S./M.A. degree

_____ Ph.D. degree

_____ Medical degree

_____ Law degree

_____ Other (Please Specify) _____

Have you chosen a career which you plan to pursue after graduation?

_____ Yes _____ No

If YES, what career have you selected? _____

If NO, what careers are you considering?

1. _____

2. _____

3. _____

4. _____

THANK YOU!!!

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