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In 2002, 60 percent of both Caucasian and African-American women were active in the workforce (USDOL, 2004b), however, it is surprising to discover that *overall* women only earn three-fourths of men's earnings (USDOL, 1999). Despite unprecedented availability and accessibility of educational and career options, over 50% of young undergraduate women today are continuing to choose female-dominated careers lower in status, prestige, and compensation (National Center for Education Statistics, 2002; Spraggins, 2000). The question of why women, particularly young women making initial career choices, continue to choose career paths that place them at an economic disadvantage remains to be fully answered (McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien, Friedman, Tipton, & Linn, 2000).

A number of theories have been proposed that attempt to explain women's career aspirations, however, Social Cognitive Career Theory (SCCT, Lent, Brown, and Hackett 1994; 2000) has shown considerable promise. Of particular interest in SCCT are the contextual supports and barriers of the model that are hypothesized to influence career aspirations (Lent, Brown, & Hackett, 2000). Two important contextual variables known to be significant for women are multiple role planning attitudes (McWhirter, Torres, & Rasheed, 1998; Swanson & Tokar, 1991a; Swanson & Woitke, 1997) and wellness (Brown, 1995; 1996; Krumbolz, 1993; Smith, 2004; Super, 1957), although the true

relationship of these variables to career aspirations remains largely unknown and unstudied.

The purpose of this study was to test the relationship among career aspirations, multiple role planning attitudes, and wellness among a population of undergraduate women and to examine differences between African-American and Caucasian undergraduates. Specific goals were to determine if multiple role planning attitudes and wellness predicted career aspirations and determine if African-American undergraduate women and Caucasian undergraduate women differed on these variables.

Results indicated that multiple role planning and wellness did not predict career choice or major choice but did predict career motivation for the overall sample. In addition, cultural differences were observed in career motivation, multiple role planning, and wellness. Implications of these findings are discussed as is how counselors can use this information to facilitate women's career development process.

THE RELATIONSHIP AMONG CAREER ASPIRATION, MULTIPLE ROLE
PLANNING ATTITUDES, AND WELLNESS IN AFRICAN-AMERICAN
AND CAUCASIAN UNDERGRADUATE WOMEN

by

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

In 2002, 60 percent of both Caucasian and African-American women were active
in the workforce (USDOL, 2004b). With such meaningful numbers of American women
working and given the heterogeneity within the female population, it is surprising to
discover that *overall* women only earn three-fourths of men's earnings (USDOL, 1999).
Moreover, significant variation in earnings is also evident among female workers,
notably related to ethnicity and age (USDOL, 1999). For example, Caucasian women's
earnings are 17 percent higher than African-American women's and 39 percent higher
than Latina's earnings (USDOL, 1999; USDOL, 2004b) and older women typically earn
even less than younger women in every ethnic group (AFL-CIO, n.d.).

Although women represent a heterogeneous group, all share in being over-
represented in lower prestige, lower paying careers (Spraggins, 2000; USDOL, 2004b).
When compared with men, more women have high school diplomas, more women are
enrolled in college, and more women receive bachelor's degrees (U. S. Census Bureau,
2003). Clearly access to education is not at issue since education, especially for younger
women, is one means of helping close the gender gap in earnings. However, despite the
availability of educational and career options, more than 50 percent of young
undergraduate women today are choosing female-dominated careers that are lower in
status, prestige, and compensation (National Center for Education Statistics, 2002;

1

Spraggins, 2000). The question of why women, particularly young women making initial career choices, continue to choose career paths that place them at an economic disadvantage remains to be fully answered (Betz, 1994; Betz, Heesacker, & Shuttleworth, 1990).

In this chapter, a brief history of women's workforce participation is presented, including challenges faced by Caucasian and African-American women, particularly undergraduate women. This provides a foundation for understanding the importance of career aspirations, multiple role planning attitudes, and wellness for these populations of women. These variables are discussed with an emphasis on gaps present in the literature and the need for empirical research to fill these voids. Next, the statement of the problem, purpose of the study, and research questions are described. The chapter concludes with an explanation of the significance of the study and definitions of relevant terms.

Rationale for the Study

Currently, in the United States, 60% of both Caucasian and African-American women engage in full-time work (USDOL, 2004b). However, even though a majority of women are working, these women earn only $0.78 and $0.62 respectively for every dollar earned by a Caucasian man (USDOL, 2003a; USDOL, 2004b). This difference exists despite the fact that women have surpassed men in educational attainment at both the high school and undergraduate level (U. S. Census Bureau, 2003). Many, including the U. S. Department of Labor (2004b), believe this earnings discrepancy is at least partly related to women's overrepresentation in lower-paying occupations. These occupations,

known as traditionally female careers, are usually lower in status, prestige, and compensation (Betz, 1994; Betz & Fitzgerald, 1987; USDOL, 1999; Spraggins, 2000). Although educational attainment is positively correlated with greater occupational choice (U.S. Census Bureau, 2003), recent statistics indicate that young undergraduate women are continuing to select traditionally female majors and career aspirations that will only continue the trend for women to be over-represented in lower paying occupations (National Center for Education Statistics, 2002). This is particularly relevant since women today comprise over half of undergraduate students (U. S. Census Bureau, 2003).

Caucasian Women

Throughout the history of the United States, women have always engaged in paid work (Kessler-Harris, 1982). However, until the Industrial Revolution, the number of (Caucasian) women working outside the home was relatively small (Hesse-Biber & Carter, 2000). The rise of manufacturing and the need for inexpensive labor allowed women to utilize their spinning and weaving skills (Kessler-Harris, 1982) although this work was low-paying and typically short-term (Dublin, 1979). In the 1940s, the arrival of World War II created new vocational opportunities for all women, including married Caucasian women and women with children (Kessler-Harris, 1982). Filling voids in industry, many of these women remained in the workforce long after the end of the war so that by the 1950s, one- third of American women were in the paid workforce (Russo & Denmark, 1984). Over the last century, the percentage of women working for pay has continued to increase, growing from 18.8 percent to 60.2 percent (USDOL, 2002).

Along with women's increased participation in the workforce has come increased career opportunity as well. Although initially barred from some professional occupations in the 18th and early 19th centuries, women began to gain increased access to areas such as law, medicine, nursing, teaching, and science mostly through the creation of women's colleges (Kessler-Harris, 1982). By the 1890s, 75 percent of professional women were working in teaching and nursing and women comprised 5 to 10 percent of medical school classes (Kessler-Harris, 1982). However, those women who did work in professions alongside males (i.e., teaching) typically earned one-third less than males (Kessler-Harris, 1982).

Even though women now comprise almost half of the civilian workforce, the trends first measured in the late 19th century are still evident today (USDOL, 2002). Women continue to be over-represented in lower paying and lower prestige occupations (Hesse-Biber & Carter, 2000; Zanna, Crosby, & Loewenstein, 1987). While women have advanced in some professional areas, such as medicine and law (USDOL, 2004b), overall women still are overrepresented in traditionally female occupations (Mastracci, 2004). This has led to a continuation of the wage gap where working women overall typically earn three-fourths of what working men earn. This gap is more pronounced among older women (AFL-CIO, n. d.) and among certain populations of women, such as African-American women (National Committee on Pay Equity, 2001; USDOL, 1999).

African-American Women

African-American women have historically almost always worked (Bayer, 2001). In fact, many African-American women did not have a choice about their work status

because many arrived in America as indentured servants or slaves (Byars, 2001; Hesse-Biber & Carter, 2000). Although paid employment became increasingly available, typically it was low-paying and menial in nature, such as cleaning and cooking (Bayer, 2001; Hesse-Biber & Carter, 2000; Kessler-Harris, 1982). In 1890, 40 percent of African-American women were in the labor force compared to just 16 percent of Caucasian women (Hesse-Biber & Carter, 2000). The arrival of World War II, allowed many African-American women to move into manufacturing and "white-collar" clerical positions vacated by advancing Caucasian women (Hesse-Biber & Carter, 2000), although 90% of African-American women employed after the war were already working before it began (Kessler-Harris, 1982).

Because social and economic experiences of African-American women have differed from those of Caucasian women (Brown & Pinteris, 2001), it has been suggested that young African American women and girls are raised with the expectation to work (Bayer, 2001). Although African-American women have made tremendous gains in the last 50 years, this population continues to be over-represented in lower paying and lower status professions, perhaps a result of the effects of both gender and racial stereotypes (Bayer, 2001). In fact, 60 percent of African-American women work in the less secure administrative support, sales, and service industries (National Committee on Pay Equity, 2001). Given such occupational disparity, it is not surprising to learn that African-American women earn, on average, less than Caucasian men and women, as well as African-American men (USDOL, 2003a). This discrepancy leaves African-American women working full-time with a bachelor's degree earning only $1,545 per year more

than a Caucasian man with a high school diploma (National Committee on Pay Equity, 2001). Given the difficulties encountered by African-American and other women in the workforce, including occupational, wage, and job status disparity, multiple researchers have attempted to describe and explain women's career development process.

<center>*Theories and Models of Women's Career Development*</center>

Like early career development research combining men and women, much of the women's career research combines all women together as a group. A difficulty arises from this approach because it is known that women's experiences are very unique particularly socioculturally (Byars, 2001). While it has been suggested that it is not possible to know everything relevant to the career development of any group or population (Betz & Fitzgerald, 1987), it is also agreed that more needs to be uncovered.

While no comprehensive multicultural career development model for women exists, researchers have responded to try and understand every woman's career development. Several career development models have emerged in the past several decades that attempt to address the specifics of women's career development (Astin, 1984; Farmer, 1985; Fassinger, 1990; Gottfredson, 1981; Hackett & Betz, 1981). As a result, many factors have emerged as a result of these and other's research efforts. These factors include socio-economic status (McWhirter, Torres, & Rasheed, 1998; Miller & Kastberg, 1995), family support (Farmer, 1980; Reddin, 1997), parental influence (Lucas, 1997, O'Brien & Fassinger, 1993; Rainey & Borders, 1997), and gender role stereotypes (Fitzgerald, Fassinger, & Betz, 1995) to name a few.

Recently, a new comprehensive career development model has emerged. This model is named Social Cognitive Career Theory and was based on Hackett and Betz's (1981) career development model for women and Bandura's (1986) self-efficacy theory (Lent, Brown, & Hackett, 1994; Lent, Brown, & Hackett, 2000). Specifically, the model states that self-efficacy influences career development through complex reciprocal linkages with career interests and outcome expectations. This social learning model maintains the basic career development process is the same for all individuals with learning influencing self-efficacy and outcome expectations which influences interests, goals, and actions. The model also includes environmental or contextual influences that allow for the inclusion of constructs such as multiple role planning and wellness (Lent, Brown, & Hackett, 1994; Lent, Brown, & Hackett, 2000; Swanson & Woitke, 1997). The model also contains constructs for personal variables, such as gender and ability level that make it applicable to a variety of populations. While not created solely for use with women, the model has been tested successfully on various female populations (Brown, Reedy, Fountain, Johnson, & Dichiser, 2000; Chartrand & Rose, 1996; Flores & O'Brien, 2002), including African-American women (Byars, 2001).

Understanding Career Aspirations

While there have been notable theoretical advances in women's career development, the challenge still exists to explain why women continually underestimate their career potential and limit their career choices to lower paying and lower status jobs (Betz, 1994; Betz, Heesacker, & Shuttleworth, 1990). Attempts to answer this question usually begin with assessing career aspiration. However, successfully operationalizing

career aspiration has proven challenging. In an effort to define career aspirations for women to aid effective research, two distinct constructs have evolved. First, a body of research exists that has examined career aspiration as career choice (Wang & Staver, 2001). These studies typically classify occupational choice based on salary/prestige level (Betz, Heesacker, & Shuttleworth, 1990; Farmer, Wardrop, Anderson, & Risinger, 1995; Nauta, Epperson, & Kahn, 1998) or DOL classification (McCracken & Weitzman, 1997; O'Brien et al., 2000; Rainey & Borders, 1997). Researchers have consistently documented women's career choices as lower when compared to men's (Betz, 1994; Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980). More recently researchers have documented declining aspirations of young women as they grow older (O'Brien et al., 2000) and the continued trend of women's lack of participation in non-traditional fields (Conlon, 2002). In addition, young undergraduate women are continuing to overwhelmingly choose traditionally female fields as reflected in data collected by the National Center for Education Statistics (2002). In fact, over half of both African-American and Caucasian women are represented by just five out of 35 educational categories (NCES, 2002). This indicates that a new generation of women will continue to be clustered into lower paying, traditionally female occupations.

Secondly, career aspiration has been defined as intrinsic motivation for succeeding in one's chosen career field (Farmer, 1997; O'Brien & Fassinger, 1993; Plucker, 1998; Wang & Staver, 2001). Both operationalized definitions yield valuable information, particularly for women who may aspire to a traditional career but be highly motivated to become a leader within that field. Related to this, the construct of career

aspiration as motivation has also received validation through researchers who have identified that women can hold traditional aspirations but expect to excel within that field (Conlon, 2002; Edwardson, 1998; Rainey & Borders, 1997). Numerous researchers have also documented a dichotomy between expected and desired career aspiration (Conlon, 2002; Davey & Stoppard, 1993; McNulty & Borgen, 1988).

In summary, the importance of understanding women's career aspirations and choices is clear. Before interventions can be designed to help women of all ages and ethnicities, it is imperative to gain a clear picture of what forces underlie women's career decision making, particularly when women are making their initial career decisions. These early career decisions can have lifelong consequences and often determine a young woman's educational path and career possibilities for the rest of her life. One potential key to understanding this is clearly recognizing how women conceptualize their futures in the form of multiple role realities. These multiple role plans could be influencing young women to change their career interests and lower their future career goals.

Understanding Multiple Role Planning

Multiple role planning refers to the idea that women anticipate more than just working in a career role, but also plan on marriage and family involvement as well. Some believe women's lowered career aspirations result from women struggling with decisions to balance career and family and pre-planning their departure from the labor force to raise children (Arnold in Betz, 1994). This issue of multiple role planning has stimulated significant research interest (McCracken & Weitzman, 1997; Schaefers, Epperson, & Nauta, 1997).

While it is well known that the current trend is for women to delay both marriage and childrearing into their late twenties and thirties, or perhaps even indefinitely, the women who choose not to have children are still in the minority (US Census Bureau, 1999). In 1999, approximately four-fifths of all American women were either married (58%), divorced (11%), or widowed (11%) (U.S. Census Bureau, 1999). In addition, 58% of women ages 15 to 44 had given birth to at least one child and for women aged 40 to 44, more than 8 of 10 had given birth to a child (US Census Bureau, 1999). Clearly, women in this country are more often than not choosing to have marriage and a family and these statistics do not contain information on adoptive or foster mothers or long-term partnerships and domestic unions.

Historically, the issue of planning and managing multiple roles was not even relevant for most women. Most women, particularly Caucasian women, entered paid employment with the expectation of leaving upon getting married or starting a family (Gutek & Larwood, 1987). Employers expected this, too, and there was little advancement or career path consideration (Gutek & Larwood, 1987). In fact, many employers implemented policies known as "marriage bars" that would hire only single women and then would terminate their employment when they married (Goldin, 1990). While these attitudes may linger, it has not stopped married women from working and drastically changing the landscape of the workforce. In 1940, only 15% of married women were employed compared to 24% in 1950 (U.S. Bureau of the Census, 1996). By 1997 this number had nearly tripled to 62% (U.S. Bureau of the Census, 1999). This increase is reflective of the "new cultural imperative" for women that occurred in the

1970's whereby women began to plan and achieve not only a family life, but a professional life as well (Rand & Miller, 1972).

In addition to married women in the workforce, the number of working mothers has increased dramatically as well. Currently, 40% of working women have children under age 18 (USDOL, 2001). For African-American mothers, more work full-time than any other mother (U. S. Department of Health and Human Services, 1997). In fact, the number of women in the labor force with a newborn increased from 31% in 1976 to 55% in 1995 (US Census Bureau, 1999). Research has substantiated this trend by showing that more and more women *and men* are actively planning for both career and family roles (Greenhaus & Parasuraman, 1999; Sanders et al., 1998; Spade & Reese, 1991). However, while this trend affects both men and women, men's career development seems to be less affected by the realities of multiple roles (Swanson & Woitke, 1997; Weitzman, 1994).

The idea that multiple roles affect women's career development is not a new one. Betz and Fitzgerald (1987) indicated that one of the most consistent findings in the literature is the incompatibility between the wife and mother role and women's career development. Some believe that this explains why women choose traditional and lower paying careers because they are often perceived as most complementary to raising a family (Betz, 1994; Weitzman, 1994). Some research even suggests that women may choose such careers even when there is little interest in the career itself (Koski & Subich, 1985; Feather & Said, 1983). This would seem to indicate that even though women may plan on working in the labor force, many view this role as secondary to the family role.

Research substantiating this idea has been mixed. Some have cited research that indicates women are placing more emphasis on career than family (Betz, 1993; Farber, 1996) while other research conflicts and finds that women are not changing traditional ideas about motherhood or family (Baber & Monaghan, 1988; Farmer, 1997a; 1997b; McCracken & Weitzman, 1997; Spade & Reese, 1991). Such conflicting research might indicate that women may be incorporating non-traditional ideas about career while maintaining traditional ideas about family and motherhood (McCracken & Weitzman, 1997). Or perhaps there is significant variation in the research because there is significant variation between women on the issue of family and career planning. Another possibility is that women simply are not concerned with future plans about combining work and career.

In order to gain more information about the influence of multiple role plans, Weitzman (1994) proposed a multiple role realism model, complete with an instrument (Attitudes Toward Multiple Role Planning Scale) that makes examining women's multiple role planning attitudes easier. While some research exists examining these attitudes as influential on career aspirations, overall the findings have been equivocal (Conlon, 2002; McCracken & Weitzman, 1997; Peake & Harris, 2002).

In summary, while it is known that women *more often than men* are expected to work to combine career with family responsibilities (Fassinger, 1990; Frankel, 1993; Hochschild, 1989), it is unclear how this may or may not be influencing their career choice. This gap in the literature has led to a continued need for more research on the perceptions young women hold regarding multiple role plans and the balance between

12

family and career (O'Brien et al., 2000; Flores & O'Brien, 2000; McCracken & Weitzman, 1997; McWhirter, 1997). In addition, it is unknown how these future work and family plans correspond to a woman's holistic well-being.

Understanding Wellness

Another area that has emerged as particularly important to women is the area of holistic well-being. This construct, often known as wellness, has been found to relate to multiple areas of life, including career (Hammarstrom & Janlet, 1997; Creed, 1999; Hotaling, 2001; Miller, 2002; Patton, Creed, & Muller, 2002). However, much of this research examines wellness as on outcome measure rather than as an influence on career development. This is true despite the emergence of several career models (e.g. Brown, 1995; 1996; Hansen, 1997) that advocate for holistic theories of self in understanding career development.

Holistic wellness, most often understood as the interrelationship of the mind, body, and spirit, combined with a movement towards promotion of health has been gaining in popularity in recent years. In the United States, increasing disease rates have led policy makers to refocus on prevention of sickness as a way to promote the overall health of the population (CDC, 2000). This combined with a growing movement away from traditional Western medical therapies has also led to increased awareness of the multifaceted nature of self (U. S. Department of Health and Human Services, 2002).

For women, the variable of wellness is particularly relevant since more women are working in career and family roles than ever before (Brett & Hayes, 2004; U. S. Census Bureau, 1999). Women in the United States are also suffering from increasing

rates of disease, particularly heart disease, cancer, and cardiovascular disease (Office on Women's Health, 2003). Partially because of this, research examining wellness and women has occurred with a goal to understand women's wellness and variables that relate to it. As a result of this, numerous researchers (Connolly, 2000; Gamma & Angst, 2001; Myers & Mobley, 2004) have documented that women have decreased holistic wellness when compared to men. While explanations for this vary, this trend seems similar to the trend apparent in women's lowered career aspirations. Unfortunately, much of this research has utilized predominately Caucasian populations, which makes drawing conclusions about the wellness of minority women, such as African-American women, difficult. Studies specifically comparing holistic wellness of African-American and Caucasian women are nonexistent, much less studies looking at specific populations (undergraduate) of these groups as they relate to additional variables.

Like the wellness research on Caucasian and African-American women, a closer look at the women's wellness literature relating to multiple roles and career aspirations reveals a significant lack of empirical research designs. While it is known that women currently in multiple roles experience more threats to holistic wellness (Gjerdingen, McGovern, Bekker, Lundberg, & Willemsen, 2000; Bjornberg, 1998; Klein, Hyde, Essex, & Clark, 1998), less if any, is known about the relationship between wellness and multiple role planning attitudes. Similarly, the literature on women's wellness and career aspirations reveals that while several related career constructs (i.e. career maturity, career decision-making), have been shown to be positively correlated with wellness, no studies exist that have specifically examined career aspiration. There is a great gap in the

14

literature concerning how wellness relates to multiple role planning attitudes and career aspiration. Intuitively, it would seem that higher levels of wellness would correspond to multiple role planning attitudes and may even predict career aspiration, but the true nature of this relationship remains unknown.

While wellness is not a new concept, theoretical models of wellness have only been in existence since the 1950s. Most of these models (Ardell, 1977; Donaghy, 1985; Zimpfer, 1992; Myers, Sweeney, & Witmer, 2000; Myers & Sweeney, 2003) discuss the individual as the aggregate of the physical, mental, social, and spiritual selves (Witmer & Sweeney, 1992). The most promising of these models is Myers' and Sweeney's (2005) Indivisible Self Model. This comprehensive model consists of one higher-order wellness factor, five second-order factors, and 17 third-order factors (Hattie, Myers, & Sweeney, 2004; Myers & Sweeney, 2005). This model and its accompanying instrumentation, the 5 Factor Wel, provide a firm foundation for examining the holistic wellness of both African-American and Caucasian women.

In summary, while women's occupational status and compensation has increased in the last century, there is still a sizable gap when compared to men. For certain populations of women, this gap is even more pronounced. Solid theoretical advances, most recently Social Cognitive Career Theory, have greatly increased understanding of women's career aspirations and career development process; however, there is still a need for additional research. In particular, the influence of several constructs, notably multiple role planning attitudes and wellness on women's career development process remains unclear. Even though solid theoretical models and instrumentation exists, research has yet

to be undertaken that answers the question of how multiple role planning attitudes and wellness of different groups of women, particularly Caucasian and African-American women, affect their career aspirations and the outcomes of the career development process. By examining multiple role planning and wellness within a Social Cognitive Career Theory foundation, valuable information could be learned about how these variables influence the career development process and could also provide an important first step in understanding how African American and Caucasian women experience these variables.

Statement of the Problem

While research and theorizing on women's career development has expanded in recent decades (Astin, 1984; Farmer, 1985; Fassinger, 1990; Gottfredson, 1981; Hackett & Betz, 1981), the prevalence of women in lower-paying occupations has continued (USDOL, 2004b). Although some increases have been noted, mainly in professional areas, these advances are shadowed by the disparity evident between women and men in the labor force, particularly in terms of occupational status and earnings (USDOL, 2003a; USDOL, 2004b). Moreover, these differences can become even more pronounced when discussing different populations of women, such as African-American women (National Committee on Pay Equity, 2001). In order to help women overcome this occupational disparity that has life-long consequences, it becomes necessary to understand how young women today are forming their career aspirations and what factors are influencing them.

Several factors have emerged from the literature as relevant to young women forming their career plans. First, career aspiration is recognized as the most important

variable affecting later work experiences (Wang & Staver, 2001). These early career decisions can have lifelong consequences and often determine not only educational paths and career possibilities in the immediate future but also potentially for the rest of a woman's life. Further, since women's career aspirations tend to decrease with time (Betz, 1994; Hollinger & Fleming, 1992; O'Brien et al., 2000; Swanson & Woitke, 1997), it is particularly important to understand what factors contribute to their formation.

Secondly, consistent with the work of Super (1957) and Krumboltz (1993), other life roles, either current or planned, have been hypothesized as having an influence on career plans. For women, many researchers (e.g. Betz, 1994; Weitzman, 1994) have proposed that plans for future multiple roles, particularly family roles, are at least partially to blame for women's lowered career aspirations although research evidence for this has been equivocal (Conlon, 2002; McCracken & Weitzman, 1997; Peake & Harris, 2002). This has lead to a continued need for more research on the perceptions young women hold regarding multiple roles and the balance between family and career (O'Brien, Friedman, Tipton, & Linn, 2000; Flores & O'Brien, 2000; McCracken & Weitzman, 1997; McWhirter, 1997).

Thirdly, with so many women currently functioning in the multiple roles of family and career (U. S. Census Bureau, 1999), there has been an increasing interest in women's health and wellness (Brett & Hayes, 2004). Researchers have documented lower wellness of women when compared to men (Connolly, 2000; Gamma & Angst, 2001; Myers & Mobley, 2004), however less is known about how these wellness levels affect women's career development. While several career-related variables have been

17

shown to be positively correlated with wellness (Hotaling, 2001; Miller, 2002), until now no research exists that has examined holistic wellness and it's impact on women's career aspirations. In addition, no research exists that has compared holistic wellness of African-American and Caucasian women.

Finally, there is a substantial absence of literature regarding African-American women and career related variables (Pope-Davis & Hargrove, 2001). Because of this, it remains largely unknown how African-American and Caucasian women's career development processes are similar or differ. Before interventions can be created and implemented to help women increase their career aspirations, it becomes necessary to have a more comprehensive understanding of factors affecting their career aspiration.

This study examined the previously unknown relationship between multiple role planning attitudes and wellness, particularly as it relates to and influences the career aspirations of young women. In addition, how multiple role planning attitudes and wellness of different groups of women, particularly Caucasian and African-American women, relate to their career choices and the outcomes of the career development process was unknown. This research design was the first to examine the relationship among career aspirations, multiple role planning attitudes, and wellness in two populations (Caucasian and African-American) of undergraduate women. If it could be shown that multiple role planning and wellness are related to and have an impact on career aspirations, counselors could be able to use this information to facilitate women's career development process and develop interventions to aid career choice.

Purpose of the Study

The primary purpose of this study was to address identified gaps in the literature regarding the relationships between career aspirations, multiple role planning attitudes, and wellness among African-American and Caucasian undergraduate women. More specifically, the goals of this study were to: (a) examine differences and similarities among career aspirations, multiple role planning attitudes, and wellness; (b) determine if differences in these variables were accounted for by group differences; and (c) determine if multiple role planning attitudes and wellness contributed to career aspirations.

Research Questions

This study examined the relationship among multiple role planning attitudes, wellness, and career aspirations for both Caucasian and African-American undergraduate students. The specific research questions were:

Research Question 1: What is the relationship among multiple role planning attitudes, wellness, and career aspirations among female undergraduates?

Research Question 2: Are there differences in career aspirations, multiple role planning attitudes, and wellness for specific populations?

Significance of the Study

It is clear that more and more women are working for pay and that this trend will not soon be disappearing (Toossi, 2002). As a result, the career development needs of women are changing with women taking a more dominant presence in the workforce. However, women are still over-represented in low paying occupations and earn approximately three-fourths of what their male counterparts earn (USDOL, 1999,

USDOL, 2004b). African American women experience an even more pronounced wage disparity (USDOL, 2004b). While young women may initially aspire to career goals equivalent to their male cohort, research has shown that women tend to lower their career aspirations with time (Betz, 1994).

Caucasian and African-American undergraduate women face an abundance of choices. Developmentally, undergraduate students (particularly-traditional aged students) are not only in the process of defining their futures, but of defining themselves as well (Erikson, 1968). Career choice and multiple role plans at this stage of life not only significantly contribute to the ego identity formation described by Erikson (Cohen, Chartrand, & Jowdy, 1995), but these choices also have the potential to guide the remainder of a woman's career development. Therefore, there is an increased need to understand and identify the career development needs of women, specifically factors that contribute to women lowering their aspirations and ultimately their career goals. It is important that counselors understand what factors influence a woman's career decision making and also what obstacles are stifling their options. It is necessary to obtain this information to aid the development of interventions or educational programs to assist women in choosing careers that will better their economic and social circumstances.

Definition of Terms

The following terms are defined as they were applied in this study:

Career aspirations as both educational and vocational ambitions (Wang & Staver, 2001) and as an intrinsic level of career inspiration or motivation for furthering

one's education, being a leader, and pursuing career opportunities (O'Brien & Fassinger, 1993).

Multiple role planning attitudes was defined as the orientation and specific attitudes an individual has towards planning for multiple roles (Weitzman, 1994).

Wellness was defined as "a way of life oriented toward optimal health and well-being, in which body, mind, and spirit are integrated by the individual to live life more fully within the human and natural community. Ideally, it is the optimum state of health and well-being that each individual is capable of achieving" (Myers, Sweeney, & Witmer, 2000, p. 252).

Organization of the Study

In this chapter, a rationale for the study of career aspirations, multiple role planning attitudes, and wellness among Caucasian and African-American undergraduates was presented. The statement of the problem, purpose of the study, research questions, significance of the study, and the definition of terms were explained. In Chapter Two, a comprehensive review of literature related to Caucasian and African-American women and career development is presented, with specific emphasis on undergraduate women and the variables of career aspirations, multiple role planning attitudes, and wellness. In Chapter Three, research methodology used in the study is described including research hypotheses, subjects, instrumentation, procedures for conducting the study, data analyses, and thee results of the pilot study. Chapter Four presents the results of the study. Chapter Five includes the results and implications of the study, including potential limitations.

CHAPTER II

REVIEW OF RELATED LITERATURE

In 2002, over half of all women were active in the full-time workforce (USDOL, 2004b). Given this, it is surprising to discover that *overall* women only earn three-fourths of men's earnings (USDOL, 1999) and there is variation within this group related to educational level, age, and ethnicity (USDOL, 1999). For example, Caucasian women's earnings are 17 percent higher than African-American women's and 39 percent higher than Latina's earnings (USDOL, 1999; USDOL, 2004b) and older women typically earn even less than younger women in every ethnic group (AFL-CIO, n.d.). Although women represent a heterogeneous group, all share in being over-represented in lower prestige, lower paying careers (Spraggins, 2000; USDOL, 2004b). In addition, more women than men have high school diplomas, more women are enrolled in college, and more women receive bachelor's degrees (U. S. Census Bureau, 2003). However, despite the availability of educational and career options, more than 50 percent of young undergraduate women today are choosing female-dominated careers that are lower in status, prestige, and occupational earnings (National Center for Education Statistics, 2002; Spraggins, 2000). The question of why all women, but particularly young women making career choices, continue to select career aspirations that place them at an economic disadvantage compared to men remains to be fully understood (Betz, 1994; Betz, Heesacker, & Shuttleworth, 1990).

Several theories have been proposed that attempt to explain women's career aspirations and their unique career development process (Astin, 1984; Farmer, 1985; Fassinger 1990, Gottfredson, 1981; Betz & Hackett, 1981). Although providing a much-needed departure from male-based theorizing, these theories describe all women as a group without taking each woman's unique experiences into account. These experiences, particularly differing socio-cultural experiences, would logically render women's career development processes different as well (Byars, 2001). Lent, Brown, and Hackett (1994, 2000) filled this theoretical void, creating a career development model that accounts for cultural variation and allows for culture as an influence on the career development process. Social Cognitive Career Theory (SCCT), based on the work of Bandura (1986, 1989) and Hackett and Betz (1981), incorporates not only core career concepts (such as interests and goals), but includes unique demographic variables, learning experiences, and environmental variables that allow SCCT to be both gender and culture specific. Of particular interest are the contextual supports and barriers of the model that are hypothesized to influence career aspirations (Lent, Brown, & Hackett, 2000). Two important contextual variables known to be significant for women are multiple role planning attitudes (McWhirter, Torres, & Rasheed, 1998; Swanson & Tokar, 1991a; Swanson & Woitke, 1997) and holistic wellness (Brown, 1995; 1996; Hansen, 1997; Niles, 2002; Krumbolz, 1993; Smith, 2004; Super, 1957).

Currently in the United States, the majority of American women are engaging in multiple roles, including spouse, parent, caregiver, and employee (U. S. Census Bureau, 1999). For example, approximately four-fifths of all American women were married,

divorced, or widowed and approximately two-thirds have given birth to at least one child by age 44 (U. S. Census Bureau, 1999). With so many women in home and family roles, career development researchers have questioned the impact this role involvement has on career progress and well-being with often conflicting results (Niles & Goodnough, 1996). Others have attempted to determine if and how younger women are planning for these multiple family roles in conjunction with career (Weitzman, 1994). Some research findings suggest that women are placing more emphasis on career than family (Betz, 1993; Farber, 1996), while others find that women are *not* changing traditional ideas about motherhood or family (Baber & Monaghan, 1988; McCracken & Weitzman, 1997; Spade & Reese, 1991). Moreover, there is some evidence that well-being and career development have a complementary and interdependent relationship (Hotaling, 2001; Krumboltz, 1993; Super, 1957). What remains unclear is how multiple role planning, operationalized as multiple role planning attitudes, are related to the way young women of today are conceptualizing their futures in conjunction with their career goals or aspirations, and how women's overall well-being affects these attitudes and career aspirations.

Well-being, defined as optimum functioning in all areas of self, is not a construct unique to women. However, when compared to men, women's general well-being or wellness, as well as individual factors of wellness, is often lower (Connolly, 2000; Gamma & Angst, 2001; Gill, dissertation in progress; Myers & Bechtel, 2004; Myers & Mobley, 2004). A further concern regarding wellness arises when one considers that some groups of women, notably African-American women, frequently experience even

lower levels of health and wellness than their Caucasian counterparts (CDC, 2002, Office on Women's Health, 2003). While it is known that participation in the multiple roles of home and career influences wellness often negatively (Baruch & Barnett, 1986; Cooke & Rousseau, 1984; Greenberger & O'Neil, 1993; Weitzman, 1994), less is known about how wellness influences these roles. In particular it is not known how wellness influences ideas and plans for future family and career aspirations. There has been limited research examining wellness as a factor in career aspirations, though many believe wellness and career are interdependent (Brown, 1995; 1996; Hansen, 1997; Hotaling, 2001; Krumboltz, 1993; Super, 1957). Even less research exists examining the impact wellness has, if any, on multiple role planning attitudes.

To address this void in research, this chapter first includes a historical overview of women's career participation, including changing workforce trends. Also, current data on women's career participation will be discussed with an emphasis on the professions women choose and the salaries they earn. African-American women's historical and current career experiences will be shared, followed by a discussion of today's cohort of young undergraduate women. This history of women's career participation will be outlined followed by a comprehensive review of significant theories pertaining to women's career development. The applicability of these theories to both Caucasian and African-American women will be discussed. Next, career aspirations as they relate to career development are explored. Women in multiple roles are discussed and multiple role planning attitudes and their relevance to career aspirations are explained. Wellness is defined and theoretical models of wellness are summarized and considered in relation to

women, multiple role planning attitudes, and career. The chapter concludes with a summary of the research on career aspirations, multiple role planning attitudes, and wellness and a discussion of the further need for research to determine how career aspirations are affected by multiple role planning attitudes and wellness.

<center>A Historical Perspective on American Women and Work</center>

Women currently comprise 51 percent of the American population (U. S. Census Bureau, 2000). Of these women, approximately 60 percent (age 16 and over) work in the labor force (USDOL, 2002, USDOL, 2004b). For many, these statistics may not seem surprising, but women's labor force participation has not always been so significant. In the last 50 years, the number of women working outside the home has increased by approximately 250 percent (AFL-CIO, n.d.). While there has been a large numeric change in the numbers of women working, the careers in which women are employed have remained fairly consistent (USDOL, 2002). Increased opportunities have given the next generation of female professionals the chance to enter careers once restricted for women; however many young women seem to be continuing the occupational trends common among women of earlier cohorts (USDOL, 2002). Despite widespread advances in the career arena, young women of all races continue to select occupations that place them at a lifelong economic disadvantage.

In this section, the history of women and work in the United States is discussed beginning with the settlement by colonials. Occupational patterns and participation rates for women from colonial times forward are outlined as well as how these have changed based on socio-cultural and historic influences. Next, current labor participation rates are

<center>26</center>

discussed as well as women's current career choices and salary statistics. The history of labor participation for African-American women is reviewed including relevant statistics, career choices, and salary information. Finally, the current undergraduate female population is described, with a particular emphasis on the young or traditional-aged student. These parameters form a foundation for examining women's career development, first from a theoretical perspective, then in terms of three key variables career aspiration, multiple role planning attitudes, and wellness.

History of Workforce Participation

Throughout the history of the United States, women have worked (Kessler-Harris, 1982). While this work was not always in a paid workforce, the role and value of a woman as a worker is undisputed (Kessler-Harris, 1982). To successfully understand women and the workforce, it is necessary to examine the evolution of women and work in this country beginning with colonial times. Workforce participation trends and statistics will be discussed from the colonial period to the present day. Particular emphasis will be placed on understanding how specific populations of women, notably Caucasian and African-American women, experience work both historically and currently. Finally, future trends for women and work will be discussed by examining young undergraduate women and their future career choices.

The Colonial Era

Beginning with the settling of what would become the United States of America by colonials, women have been able to engage in paid employment. However, most colonial women (of European descent) came to America with their husbands or fathers

and their focus was on home and family, not employment. The typical division of labor involved men farming or working for pay in a setting such as a lumber mill, while women were responsible for running the home, including growing and preparing food, weaving and sewing, and tending to farm animals (Kessler-Harris, 1982). While exact numbers are unknown because records are anecdotal, it is definite that only a small minority of women worked outside the home (Hesse-Biber & Carter, 2000). Common professions for this minority colonial women included innkeeping, spinning yarn, dressmaking, and midwifery (Kessler-Harris, 1982). Although rare, there are records of a few individual women working as lawyers, running large farming operations, and being involved in industries such as whaling (Kessler-Harris, 1982). It should also be noted that a very large proportion of women did work in other family's homes, however these women entered America as indentured servants bound to work for periods of time over which they had no control and for which they received no earnings (Kessler-Harris, 1982).

Under English common law adopted by the colonies, women had severely limited financial power. Those who did own land, usually through inheritance, lost their property rights to their husbands upon marriage (Kessler-Harris, 1982). Women's primary role was to marry and bear children; outside this structure, there was little opportunity for employment (Kessler-Harris, 1982). As a result, women working outside of the home continued to be the exception rather than the rule (Betz & Fitzgerald, 1987).

The Industrial Revolution

At the beginning of the 19th century, industrialization came to the colonies, which heightened an already existent labor shortage. Out of financial necessity, many women, particularly unmarried women, began working in factories, usually textile mills (Betz & Fitzgerald, 1987; Kessler-Harris, 1982). This factory work allowed women to utilize their spinning and garment making skills, although the mills often paid low wages and working conditions were poor (Dublin, 1979). Typically women worked in the mills until marriage, usually three to five years, at which time they left the paid labor force (Dublin, 1979; U. S. Department of the Interior, n. d.).

In 1840, 10 percent of women (10 years and older) took employment outside the home typically working as factory workers (2.25 percent), domestics (6 percent), teachers or writers (1 percent), book binders/printers (<1 percent), and nurses (<1 percent) (Kessler-Harris, 1982). Another significant activity of women at this time was work within the home. Many women took in work, usually sewing or weaving, to help supplement the family income (Kessler-Harris, 1982). In attempts to protect the "purer sex" and preserve the focus of motherhood as the ideal womanly activity, women continued to be excluded from most professional careers including apprenticeships (Betz & Fitzgerald, 1987; Hesse-Biber & Carter, 2000; Kessler-Harris, 1982). As a result, women found themselves excluded from many professions once previously practiced, including midwifery and law, when schools prohibited the admission of women (Kessler-Harris, 1982). Those who did work in professions alongside males, such as teaching, typically earned one-third less than males (Kessler-Harris, 1982).

By 1860, 15 percent of women were engaged in paid labor (Kessler-Harris, 1982).

By 1890, this figure had increased to 18 percent of women working outside of the home

(Hesse-Biber & Carter, 2000). Again, factory and domestic work dominated with many

women, as well as children, working in sweatshops with substandard wages and difficult

working conditions (Dublin, 1979). These women were often pitied for having to work in

such a socially inferior arena (Keller-Harris, 1982). It should be noted that at this time

women (mostly middle-class women) were slowly advancing in the professional arena,

notably in areas such as law, medicine, nursing, teaching, and science (Kessler-Harris,

1982). This was a reflection of increased educational opportunities, due to the opening of

women's colleges and the growing coeducational movement in traditional colleges;

however, this increase was gradual at best (Kessler-Harris, 1982). In the 1890s, 75

percent of professional women worked in teaching and nursing while women were

limited through quotas to comprise 5 percent to 10 percent of medical school classes

(Kessler-Harris, 1982).

The Twentieth Century

By the 1920s, women continued to make advances in their rates of labor force

participation and representation across occupations, however women's wages averaged

only 57 percent of men's at this time (Kessler-Harris, 1982). This growth trend continued

until the Great Depression, an economic catastrophe that caused many women to lose

employment ground that had been gained (The Labor Site, n. d). Many believed

available jobs should be given to men, considered the major family breadwinner, and

some employers refused to even hire women (The Labor Site, n. d.). Many men saw

women as competition in the labor force, despite the fact that women were barred from supervisory positions and earned less than men for the same occupations (Kessler-Harris, 1982).

A major change occurred for women with the arrival of World War II. Many working-aged men were quickly drafted into military service and the country found itself with an employee shortage compounded by a wartime production increase. Actively recruited by the U. S. government, many capable women were willing and able to fill America's workforce vacancies. Women entered the workforce in record numbers and worked as never before in "unfeminine" industries such as defense and munitions (Hesse-Biber & Carter, 2000). More importantly, many of these women were married and older than women workers of the past (Kessler-Harris, 1982). By the end of 1946, half of working women were over the age of 35 (Kessler-Harris, 1982). While women had filled an employment void that occurred during World War I, those women were quickly displaced when able men returned to fill their vacated positions (Hesse-Biber & Carter, 2000; Kessler-Harris, 1982).

The women's workforce movement following World War II was significant, because women did not return to home as they had before. Opportunities for increased education, decreased fertility rates, and the rise of white-collar clerical jobs allowed many women to pursue employment as never before (Goldin, 1990). The gains women made during this time were further realized in the coming decades. In the 1950's, one- third of American women were in the paid workforce (Russo & Denmark, 1984). By the 1990's, this number had grown to almost two-thirds of women working for pay (Hesse-Biber &

Carter, 2000). Over the course of the last century, the percentage of women working for pay had rapidly increased from 18.8 percent to 60.2 percent (USDOL, 2002). This means that women's workforce participation has increased 257 percent since 1950, compared to men's 72 percent increase. Women have become the fastest growing segment of the American workforce (Toossi, 2002).

In summary, women have experienced a rich and varied history of workforce participation in the United States. The nature of women and work seems to have been influenced by a myriad of socio-political, historical, and cultural factors. It is clear that significant advances have been made particularly in terms of numbers of women working for pay; however, examination of the types of jobs in which women are currently employed reveals significant gender differences in types of labor force participation.

A Gendered Workforce

Over the past centuries to modern times, women working outside the home have gradually become the norm rather than an aberration. Currently, women in the United States have more opportunity in the workplace than ever before; however, many of those with the opportunity to work for pay are choosing not to work or are choosing to work in professions where females are over-represented (USDOL, 1999). These "gendered" careers tend to be lower in both prestige and pay (Hesse-Biber & Carter, 2000; Zanna, Crosby, & Loewenstein, 1987). This has led to the continuation of a "gendered workforce" whereby men continue to work in male-dominated professions and women continue to work in female-dominated professions. This occupational segregation has also led to a significant wage gap between men and women whereby women have

considerably less current and long-term economic power. To further understand the gendered workforce and how women are affected, in this section women's current workforce participation is discussed, as well as trends in women's occupational choices. Women's earnings are also discussed in the context of their career choices.

Current Laborforce Participation

The new millennium began with the continuation of women's increased workforce participation; however, a downward trend was soon evident. In 2000, women composed 46.6 percent of the American workforce (USDOL, 2002). In 2001, women comprised 44.4 percent of the workforce and the following year it dropped again to 43.3 percent (USDOL, 2002). This is significant because it marks the first time women's labor force participation rates have declined in over 100 years. And this decline comes at a time when the female population is more educated than ever before (National Center for Education Statistics, 2003b; U. S. Census Bureau, 2003). This statistically significant decline has been attributed to an increase in women leaving the workforce to raise children (Wallis, 2004). However, even with this decline it is relevant to remember that while women compose only 43.3 percent of the workforce when compared to men; this group constitutes almost two-thirds of the American female population (USDOL, 2002). In other words, 6 out of 10 American women today are working outside of the home in a workforce that is larger and more diverse than ever before (Spraggins, 2000; USDOL, 2002). However, while this participation rate is high, the areas of women's participation continue to be gendered and unchanging.

Current Occupational Trends

While a majority of women continue to work for pay, it seems that many are entering fields that remain mostly segregated by gender (Hesse-Biber & Carter, 2000). Some believe this to be a reflection of a fixed U. S. job market separated by gender (Zanna, Crosby, & Loewenstein, 1987). It has even been suggested that women are bound by "pink-collar ghettos" (England, 1993; Howe, 1977; Mastracci, 2004). These pink-collar occupations comprise just 5.6 percent of all occupations, yet 50 percent of women in the labor force work in them (Mastracci, 2004). For instance, women are four times as likely as men to work in administrative support positions (USDOL, 1999). Other female-dominated fields include education (teaching) and healthcare (nursing) (National Center for Education Statistics, 2002). In 2001, 83 percent of elementary teachers, 93 percent of registered nurses, and 90 percent of nursing aides were women (USDOL, 2002). The top 10 occupations in which women are employed in rank order by number are: 1) secretaries, 2) elementary school teachers, 3) registered nurses, 4) nursing aides, 5) cashiers, 6) customer service representatives, 7) managers of administrative support, 8) managers of retail sales workers, 9) bookkeepers, and 10) receptionists (USDOLc, 2003). Females continue to be over represented in these and other careers, which typically afford less compensation, prestige, and power (USDOL, 1999; Spraggins, 2000).

Perhaps a further reflection of a gendered workforce, there are many careers where women are drastically underrepresented. The U. S. Department of Labor defines a career as "non-traditional" for females if there are less than 25 percent females currently working in the profession (USDOL, 2003b). In 2003, there were 113 careers officially

designated as non-traditional for women. Notable on this list were aircraft pilots (3.4 percent women), mechanical engineers (5.6 percent women), civil engineers (8.6 percent), electrical engineers (7.2 percent), and aerospace engineers (11 percent) (USDOL, 2003b). Unfortunately, these and other professional specialty fields offer the highest earnings for full-time working women not to mention significant occupational status and prestige (USDOLa, 2003).

While women remain underrepresented in non-traditional fields, there have been some advances in the past three decades, in 2002, particularly among specialty professions, 30 percent of medical doctors, 51 percent of pharmacists, 43 percent of college professors, and 30 percent of lawyers were women (USDOL, 2004b). This trend is also seen at the educational level among future professionals with more women choosing to pursue graduate education in previously male-dominated professional fields as well. Among law and medical schools in 2002, 51 percent and 49 percent of the first-year students were female respectively and 45 percent of all doctorates earned were granted to women (Smallwood, 2003; Women in Higher Education, 2002).

These professional advances are reflected in women's increasing economic earnings. From 1979 to 2002, women's real earnings (adjusted for inflation) actually increased by 27 percent compared to men's increase of 1 percent (USDOL, 2004b). However, after taking into account this significant gain, women still continue to earn significantly less than men, even when occupation and education level are equivalent.

Earnings and Wage Gap

In 1979, full-time working women as a group earned three-fifths of what men earned (USDOL, 1999). By 1998, this gap had lessened but women still only earned three-fourths of men's earnings (USDOL, 1999). In other words, working women in the United States earn $0.78 for every dollar earned by a man (USDOL, 2003a). For women in specialty professions the gap is slightly higher with women earning $0.75 for every dollar earned by their male counterpart (USDOL, 2004b). These numbers are generated by calculating the weekly salaries across all professions of full-time working women versus working men. While the wage gap has slightly narrowed, up 2 percent from 2001, it is important to consider the significant discrepancy that still remains. Interestingly, the most recent census data shows that there are only two occupations where overall women earn more than men, hazardous material removal workers and telephone line installers (U. S. Census Bureau, 2004). Further, there are only three occupations where overall pay is equitable for both genders: meeting and convention planners, cafeteria workers, and construction trade helpers (U. S. Census Bureau, 2004).

This wage gap becomes even more pronounced when discussing older women workers (USDOL, 1999). Among this growing segment of the American workforce, older women experience a greater wage discrepancy when compared to men (USDOL, 2004a). In fact, the older a woman becomes, the greater the wage gap. In 2000, women between the ages of 25 and 29 earned 85 percent of men's earnings, for women between the ages of 35 and 39, however, the wage gap was 71.9 percent, and for women between the ages 45 and 49, it was 73.9 percent (AFL-CIO, n. d.). Clearly, women are at an increasing

economic disadvantage particularly as they grow older. Because of this, it is important for younger cohorts of women to recognize the importance of their early career choices.

While overall women's workforce participation has increased, it seems occupational segregation and the ensuing wage gaps have not (Goldin, 1990). Women have made notably important professional gains; however, half of all women who currently work continue to be over-represented in lower-paying occupations. Given this historical trend, the importance of young women's early career choices cannot be understated. The wage gap between men and women continues to be not only widespread across job category, but longstanding and amplified in certain populations of women, such as older women. Other populations who experience more pronounced occupational segregation and wage discrepancy are ethnic minorities. The gains women have made in the U. S. labor force are most evident in Caucasian women, a closer look at African-American women reveals a somewhat different picture.

<center>African-American Women</center>

Currently, approximately 13 percent of the U. S. population identifies itself as Black or African-American (U.S. Census Bureau, 2001). Of these numbers, 52 percent (or 19 million) are Black women (U. S. Census Bureau, 2001a). This African-American population is not only sizable but it is increasing at a faster rate than the total population (McKinnon, 2001). It is important to note this significant minority group when discussing women and workforce participation because women's experiences in the United States are not equal. In order to obtain an accurate picture of African-American women and

their labor involvement, it is necessary to examine this group's special cultural and workforce history noting how it differs from the majority culture.

History of Workforce Participation

African-American women have a unique cultural heritage and typically have different socioeconomic experiences than Caucasian women (Brown & Pinterits, 2001). In addition to widespread experiences with racism and discrimination, African-American women have historically almost always worked (Bayer, 2001). In fact, many African-American women did not have a choice about their work status. This is because many African-Americans arrived in America as indentured servants or slaves (Byars, 2001; Hesse-Biber & Carter, 2000). Three distinct time periods, discussed earlier, provide a useful context for examining the work experiences of African-American women: the colonial era, the Industrial Revolution, and the twentieth century.

The colonial era

In the late 17th and early 18th centuries, slavery was an accepted practice throughout the United States. African-American women worked in both agricultural fields and domestic service for people who viewed them as biologically inferior property (Hesse-Biber & Carter, 2000). Because of this, African-American slave women were easily the most exploited of all women (Hesse-Biber & Carter, 2000). Those women who were fortunate enough to not be in servitude faced a limited job market that discriminated based both on sex and race (Kessler-Harris, 1982). When work could be found it was typically as a domestic servant, washerwoman, cook, spinner, weaver, and rarely a

seamstress (Hesse-Biber & Carter, 2000; Kessler-Harris, 1982)

The Industrial Revolution

In 1890, nonwhite, married women were ten times more likely to be employed than white married women (Goldin, 1990). At this time 40 percent of African-American women were in the labor force compared to just 16 percent of Caucasian women (Hesse-Biber & Carter, 2000). Many of the jobs held by African-American women were menial, domestic, and low paying such as cooking, cleaning, or washing (Bayer, 2001; Harley, 1978). Many African-American women were prohibited to work in factories or stores because of prejudice stemming from the belief that American-born Caucasian women had higher virtue and higher standards of living (Kessler-Harris, 1982). If work was found in these areas, it was only in the face of severe labor shortages where the work was rejected by others for being too menial (Kessler-Harris, 1982). While it was acknowledged that they were some of the hardest working women, African-American women were typically also the most poorly paid (Kessler-Harris, 1982)

The Twentieth Century

The rise of industrialism continued well into the twentieth century, however African-American women reaped few rewards from the expanded industrial job market. In 1910, the cotton textile industry's female workforce consisted of only 5 percent African-American women and these were mostly sweepers and scrubbers (Kessler-Harris, 1982). In 1920, 75 percent of employed African-American women worked in agricultural labor, domestic service, and laundry work (Kessler-Harris, 1982). Higher paying professions for women were generally occupied by Caucasian women.

World War II provided an opportunity for many women to enter the workforce for the first time; however, this was not the case for African-American women because many African-American women were already working (Kessler-Harris, 1982). The occupation boom created by the war did allow some to move into manufacturing and clerical positions vacated by advancing Caucasian women (Hesse-Biber & Carter, 2000). This was a very dramatic change that improved the position of African-American women workers substantially (Kessler-Harris, 1982).

By the end of the war, the number of African-American women involved in domestic work decreased by 15 percent while their factory participation doubled (Kessler-Harris, 1982). Like Caucasian women, African-American women did not vacate those positions gained during wartime; however, unlike Caucasian women, 90 percent of African-American women working during and after the war were already employed before it began (Kessler-Harris, 1982). In the decades following the war, their job prospects continued to improve with more and more women moving into "white-collar" office jobs as well as professional occupations in areas such as healthcare and education (Hesse-Biber & Carter, 2000).

Current Labor Force Participation and Trends

Currently, African-American and Caucasian women have an equivalent full-time labor force participation rate of 60 percent. However, while Caucasian women gradually joined the paid workforce over the last century, African-American women have always been there. African-American women's constant workforce participation has been attributed to young African-American girls being raised with the expectation to work

(Bayer, 2001, Vaz, 1995). It has been suggested that this differs from young Caucasian women because African-American women perceive future economic needs not realized by their Caucasian counterparts (Smith, 1981). However, similar to Caucasian women, African-American women are still more likely to be over-represented in traditionally female occupations like teaching and nursing (Bayer, 2001).

In 1996, the largest number of African-American women worked in technical, sales, or administrative positions (USDOL, 1996). Five years later, the trend remained consistent with 60 percent of African-American women working in the low paying and less secure administrative support, sales, and service industries (National Committee on Pay Equity, 2001). While 18 percent of all full-time employed women work in the service industries, African-American women are over-represented in this group (U. S. Census Bureau, 2003). Almost three in ten (28 percent) full-time employed African-American women find their full-time employment in the low-paying and high turnover service industries (USDOL, 2004b).

Earnings and Wage Gap

With such occupational segregation, it is not surprising that the wage gap experienced by women is actually significantly more pronounced for African-American women. African-American women earn 91 percent when compared to African-American men; however, African-American men earn 34 percent less than their Caucasian male counterparts (USDOL, 2003a). This translates to African-American women earning $0.62 for every $1.00 a Caucasian male earns (USDOL, 2003a). This discrepancy is evident even despite educational advances. African-American women working full-time with a

41

bachelor's degree earn only $1,545 per year more than a Caucasian man with a high school diploma (National Committee on Pay Equity, 2001). The wage gap also exists in comparisons with Caucasian women. In a 1999 study, African-American women earned 17 percent less than Caucasian women (USDOL, 1999). Three years later, the difference had narrowed, but only slightly to 16 percent (USDOL, 2003a). This means African-American women on average earn 84 percent of what Caucasian women earn and 62 percent of what Caucasian men earn.

As African-American women age, their situation does not improve. Many experience an even wider wage gap, particularly because their careers began in an era with limited choices. As recently as 1980, 50 percent of African-American women over the age of 65 were employed as domestics (Betz & Fitzgerald, 1987). While Caucasian and African-American women currently have almost identical workforce participation rates, their earnings and historical experiences with work clearly are not identical (USDOL, 2004b).

African-American women have not only a unique cultural heritage, but also a unique history of work. Unlike Caucasian women, African-American women have almost always worked outside of the home. Smith (1981) suggested that this history of work has led to different cultural ideals about working than those found among the Caucasian culture. While African-American and Caucasian women have had divergent paths, currently they share the same workforce participation rates and struggle with similar disadvantages in the labor force. However, the added barrier of race creates a wage

discrepancy that is even more pronounced and longstanding for African-American women, particularly among older workers.

In summary, the statistics cited in this section make it clear that women of all ages, both Caucasian and African-American, find themselves at an employment disadvantage in the American workforce. Both populations of women are more likely to work in less stable, less prestigious, and lower paying jobs than Caucasian or African-American males (U. S. Census Bureau, 2004, USDOL, 2003a; USDOL, 2004b). One key to understanding employment and early career choices is education. Currently, record numbers of both Caucasian and African-American women are continuing their schooling to receive post-secondary degrees and, importantly, these are not only younger women but women of all age groups. These women are at a time in their lives where vital career and educational choices are being made. For younger women, the longitudinal effects of career choice may span as much as six to eight decades. Given this unprecedented access to education, it is important to understand what the career aspirations are for these undergraduate women, and also how factors such as multiple role planning attitudes and well-being may be influencing these aspirations.

Undergraduate Women: A Heterogeneous Population

Women today comprise over half (56 percent) of all undergraduate students (U. S. Census Bureau, 2003), with significant within group variation across college settings. Most notable are differences between traditional (age 24 and under) and non-traditional (age 25 and over) students. In this section, statistics on women and education are presented, followed by demographics of the undergraduate population of women.

Similarities and differences between traditional and non-traditional female undergraduates are examined, as are the unique experiences of Caucasian and African-American undergraduate women. Finally, the course of study and career aspirations of these groups of women will be discussed.

Educational Participation

Education is an important first step for career aspirations and later career solvency. With increased education comes a wider range of career choices, increased economic earnings, and more potential for advancement (U. S. Census Bureau, 2003). In the United States, 84 percent of women over the age of 25 currently hold a high school diploma. This figure is only slightly lower than the high school education rates for men (U. S. Census Bureau, 2003). Younger women seem to have even higher completion rates. In 1999, among younger women aged 25 to 29, 90 percent had high school diplomas compared with 87 percent of men (U. S. Census Bureau, 2001b). With more women completing high school, this creates the possibility of more women pursuing secondary education and entering occupational fields once reserved for men.

Currently, 56 percent of undergraduate students are women. In addition, more women than men have received bachelor's degrees in this country every year since 1982 (U. S. Census Bureau, 2003). In fact, in the 2001-2002 academic year, women received 60 percent of associate's degrees, 57 percent of bachelor's degrees, and 60 percent of master's degrees (National Center for Education Statistics, 2003b). Minority women have also seen their enrollment increase with women of every racial group outnumbering men of the same group (National Center for Education Statistics, 2003c). African-American

44

women actually accounted for 63 percent of all African-Americans enrolled in undergraduate institutions and received more degrees *at every level* than their African-American male counterparts (National Center for Education Statistics, 2003c). This means that not only are more young women pursuing undergraduate degrees, but many women over the age of 25 are also returning to continue their education.

Traditional and Non-Traditional Students

The National Center for Education Statistics (2003a) classifies undergraduate students as either "traditional" or "non-traditional". Traditional students are those students aged 16 to 24 who are engaged in a full-time credentialed post secondary education program (U S Department of Education, 2003a). In contrast to many traditional students, adult or non-traditional learners have typically not entered college immediately after completing high school. These students are age 25 and older and may be entering college for the first time, returning to complete a degree, or getting an additional degree in a different field (Association for Non-Traditional Students in Higher Education, no date). It is estimated that 47 percent of current college students are non-traditional (ANTSHE, no date).

In addition to differences between the ages of traditional and non-traditional students, there are other important distinctions as well. Most commonly, non-traditional students are more likely to be actively engaged in additional roles, such as spousal or parenting roles, while traditional-aged students may be merely planning for them (Association for Non-Traditional Students in Higher Education, no date; Benshoff & Bundy, 2000; Benshoff & Lewis, 1992; Medyed & Heisler, 2002). Many also work full

or part-time in addition to being students (Association for Non-Traditional Students in Higher Education, no date). As such, non-traditional students are developmentally different than traditional students with different stressors, most commonly family and financially related (Benshoff & Bundy, 2000; Benshoff & Lewis, 1992). While some traditional-aged students may also be engaged in multiple roles and working full-time, this characteristic is more representative of non-traditional students. However, while their needs or motivations may be different, their aspirations and career choices are similar.

Educational and Career Aspirations

Although record numbers of women are receiving an undergraduate education, potential changes in workforce equity are related more to career choice than to mere numbers. The National Center for Education (2002) classifies fields of study into 35 categories. Examining what women are studying is an important first step to understanding their career aspirations and ultimately career choices.

Recent statistics show that undergraduate women are still choosing college majors and aspiring to careers where women are over-represented (National Center for Education Statistics, 2002). Women continue to select "feminine" majors such education and healthcare and are greatly underrepresented in majors such as computer science, engineering, and the physical sciences (National Center for Education Statistics, 2002). These "traditionally female" majors coincide with career aspirations that are usually lower in status, prestige, and compensation (Betz, 1994; Betz & Fitzgerald, 1987; USDOL, 1999; Spraggins, 2000) and perpetuate the "gendered" workforce.

According to the National Center for Education Statistics (2002), in 2001, the top

five bachelor's degrees conferred for Caucasian women were in business (17 percent),

education (13 percent), social sciences (9 percent), healthcare (9 percent), and

psychology (8 percent) respectively. Approximately 56 percent of Caucasian women

graduating received bachelor's degrees in these five fields. For African-American

women, the top five degrees conferred were in business (22 percent), social sciences (11

percent), healthcare (9 percent), psychology (9 percent), and education (7 percent)

respectively (National Center for Education Statistics, 2002). A total of 58 percent of

African-American women graduating in 2001 received bachelor's degrees in these areas.

It seems that many Caucasian and African-American women are heavily represented in a

small number of fields, in that over half of each group is represented in just 5 out of the

possible 35 educational fields recognized by the National Center for Education Statistics.

In contrast, some of the least conferred professional bachelor's degrees for both

Caucasian and African-American women were in architecture, engineering, physical

sciences, communications technologies, and religious studies (National Center for

Education Statistics, 2002). Of all Caucasian women earning degrees, 1.7 percent earned

degrees in architecture, 1.4 percent earned degrees in engineering, 0.03 percent earned

degrees in physical sciences, 0.05 percent earned degrees in communications

technologies, and 0.5 percent earned degrees in religious studies (National Center for

Education Statistics, 2002). Similarly, when examining all African-American women

graduating in that same year, 0.5 percent of degrees conferred were in architecture, 1.4

percent of degrees conferred were in engineering, 0.9 percent of degrees conferred were

in physical sciences, 0.1 percent of degrees conferred were in communications technologies, and 0.2 percent of degrees conferred were in religious studies (National Center for Education Statistics, 2002). Of these traditionally male-dominated areas, it should be noted that males had a higher percentage of graduates in each field of that same year. Engineering in particular was the third most conferred degree for both Caucasian and African-American men (National Center for Education Statistics, 2002).

In summary, it seems clear from the literature discussed in this section that undergraduate women comprise a heterogeneous population defined by variables such as age, adult role participation, and cultural heritage. While this group has many developmental and socio-cultural variations, it is evident that all women face disparity in the U. S. labor force based on their career representation and the ensuing compensation gap (U. S. Census Bureau, 2004, USDOL, 2003a; USDOL, 2004). It is important to acknowledge that the situation for women has improved somewhat, with increasing numbers of women receiving higher education and moving into male-dominated professions; however, many undergraduate women seem to be selecting career paths similar to their working counterparts (National Center for Education Statistics, 2002). The challenge to understand why women continue choosing career directions that place them at an economic disadvantage continues. Of particular importance is understanding the career choices of young traditional-aged students who are just beginning their career process and are also actively planning for other areas of their lives as well. Career development theories, discussed in the next section, provide a foundation for understanding career choices of Caucasian and African-American traditional-aged

undergraduate students. Several of the factors identified through these theories, notably career aspirations, multiple role planning attitudes, and wellness are discussed in more detail in subsequent sections.

Women's Career Development: Theoretical Advances

Interest in women's career development has grown considerably as women's workforce participation has increased (Betz & Fitzgerald, 1987). Beginning in the later half of the twentieth century, theorists have struggled to describe and explain women's vocational experience and career development process. In this section, a brief overview of the career development field and the five theoretical movements identified by Osipow (1973,1987) is discussed followed by a chronicle of the rise of the women's career development movement. Finally, relevant theories describing women's career process beginning with Gottfredson's Developmental Model and concluding with Social Cognitive Career Theory is explained and critiqued, including significant contributions and criticisms.

Overview of Career Development Theory

Since the release of Frank Parson's landmark book, *Choosing a Vocation*, in 1909 researchers working within the vocational guidance movement have attempted to define, explain, and theorize about career development (Brown, 2002). Samuel Osipow (1973,1987) classified the career development field into five broad categories with Parson's trait and factor being the first and oldest. This approach that matches abilities and interests to vocations is a century old but still widely used in interest inventories such as the Strong-Campbell (Osipow, 1973, 1987). The second and third approaches contain

sociological models that emphasize the importance of society and behavioral theories that emphasize the interaction between environment and the individual. The fourth category utilizes personality theories in career choice and is expressed through the work of Anne Roe (1956) and John Holland (1959). Roe (1956) suggested that personality factors as determined by parental attitudes were significant in choosing an occupation, while Holland (1959, 1985) believed career choice was merely an extension of personality and created occupational typologies that are still in use today. The final category is characterized by the works of Ginzberg (1952, 1972) and Super (1957). These theorists introduced a developmental element to career theorizing. Ginzberg (1952) defined the career development process with stages, while Super (1980) described career as a lifelong combination of multiple roles illustrated in his "life-career rainbow". Worker is only one of nine major life roles, and career is seen as a way to implement self-concept.

While some of these classic career development concepts have endured, many of the theorists have been criticized for failing to create theories that are universally applicable to people of differing genders, ages, ability levels, and cultural backgrounds. These criticisms stem from the fact that many of the classic theories were based on empirical designs containing almost exclusively male subjects (Brown, 2002; Diamond, 1987). Some of these theories were later applied to women with some modifications for marriage and childbearing, but the empirical base remained men, usually white males (Diamond, 1987). Betz and Fitzgerald (1987) suggested that theorizing from a strictly male perspective stemmed from the widespread belief (rooted in women's historical workforce participation) that women's main role in life was as wife, mother, and

homemaker. As a result of this notion of woman as homemaker, the concept of women's career development as separate and unique from men's development was not adequately addressed until the middle of the twentieth century. Since that time, a myriad of theorists have attempted to describe, explain, and predict women's career development.

Early Research in Women's Career Development

Career development as a concept has been in existence since the turn of the twentieth century. However it was not until record numbers of women entered the workforce during World War II that interest was piqued in women and their career development. Specifically this influx into the labor pool brought many wives and mothers instead of single women who had typically worked outside of the home (Kessler-Harris, 1982). Researchers responded to this cultural shift by gradually examining women and questioning first why they wanted to work and then later attempting to create theories to examine their career processes. This research continues today with theorists still attempting to describe women's career development in terms comprehensive enough to encompass all women's experiences. In this section, an overview of early trends in women's career development research will be presented and the need for separate theories for women discussed.

Early Trends in Women's Career Development Research

In the 1950s, early studies on women's career development were sporadic. Most researchers attempted to explain why women chose to work versus pursuing a life of homemaking (Betz & Fitzgerald, 1987). Working and having a family were considered to be mutually exclusive and researchers attempted to explain why women chose to do one

or the other. For example, Hoyt and Kennedy (1958) using the Strong Vocational Interest Bank and the Edwards Personal Preference Schedule with 407 freshmen women found that career-oriented women scored higher on occupations traditionally dominated by men, while women oriented toward homemaking scored higher on traditionally female occupational scales. Most women studied during this time indicated a preference for homemaking and not working outside of the home (Betz & Fitzgerald, 1987).

Over the next two decades, significant change in these patterns became evident. Having paid employment no longer meant that women did not want to have a committed relationship or a family or keep a home. Studies undertaken in the 1970s echoed this trend with the majority of women planning to combine marriage and career (Rand & Miller, 1972; Watley & Kaplan, 1971). Because of this, it was no longer useful to dichotomize homemaking and career-orientation in research (Betz & Fitzgerald, 1987). Nature and degree of career orientation along with career patterns of women became important (Betz & Fitzgerald, 1987). A significant approach to outlining the nature of career orientation came in the form of classifying career preferences. Rossi (1965) began identifying and studying traditional versus non-traditional or "pioneer" choices for women. Many math and science careers, particularly the physical sciences, were identified as non-traditional choices for women (Fox, Brody, & Tobin, 1980; Humphreys, 1982). The goal of this research was to identify the attitudes of the female career pioneers (Nagely, 1971; Rossi, 1965). Nagely (1971) studied women working outside the home in both traditional and non-traditional occupations. Using self-created instruments to measure attitudes, she found that women working in pioneer fields were more likely to

experience high commitment to work and have liberal ideas regarding women's roles in society.

Another area of research examined women's career patterns and how a career influences other life roles. Super (1957) was one of the first to identify and name seven career patterns for women. These patterns reflected the widespread belief of the centrality of home and family and were described as 1) stable homemaking, 2) conventional, 3) stable working, 4) double-track, 5) interrupted, 6) unstable, and 7) multiple-trial. Zytowski (1969) also proposed a model of career patterns based on the central premise that vocational and homemaker participation were mutually exclusive. His model classified women with either mild, moderate, or unusual career patterns. Other theorists, notably Harmon (1967), Zytowski (1969), Wolfson (1976), and Betz (1984) also contributed significant research on women's career patterns that introduced new variables, such as degree of participation and time of entry.

An extension of the research examining career patterns of women was research examining the well-being of women participating in the multiple roles of worker and homemaker. Burke and Weir (1976) studied 189 husband and wife pairs using a questionnaire to assess satisfaction with life, marriage, and work and also personal well-being. Their findings indicated that working women were more satisfied and functioned better than the non-working women, but the working women's husbands reported lowered levels of satisfaction and well-being when compared to the husbands of homemakers. Mellinger & Erdwins (1985) studied 220 women from ages 29 to 60 classified as either homemaker, married career, single career, or student and found no

differences in well-being either based on age or role classification. These findings were important because they contradicted earlier notions that homemaking and working were mutually exclusive; however, it became increasingly clear that theories of men's career development were inadequate to explain women (Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980; Hackett, 1997).

The Need for Separate Theorizing

While advances in the understanding of women's career development were occurring, disagreement arose as to whether existing career development theories could ever be adequately modified to reflect women's experiences (Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980; Hackett, 1997). Carol Gilligan (1979) was one of the first to argue for separate and specific theories to explain the unique development of women. She asserted that fitting women into male norms does not take into account women's unique development and life experiences.

Diamond (1987) noted that many researchers responded to this call for separate theorizing and began to identify and examine variables unique to women such as sex role stereotyping and gender socialization in their theoretical development (Diamond, 1987). Fitzgerald and Crites (1980) reported that similarities do exist between the career development of men and women. However, women's development is more complex because of attitudes, role expectations, and other socialization forces, such as the push towards motherhood (Fitzgerald & Crites, 1980; O'Brien & Fassinger, 1993). This belief has fueled several "gendered" theories that place prominent women's issues into career theorizing (Hackett, 1997) and has led to the development of multiple models relevant to

women (Astin, 1984; Fassinger, 1985; Gottfredson, 1981; Betz & Hackett, 1981; Lent, et al., 1994). More recently, models have attempted to go beyond only gender as the relevant construct for women. Researchers have realized that to completely capture the experience of women, it is also necessary to include constructs such as race, class, age, and ability level (Gottfredson, 1981; Lent, et al., 1994). These most recent theoretical developments offer the most comprehensive theorizing and seem to have applicability to the widest population of women.

<p align="center">*Contemporary Research in Women's Career Development*</p>

Responding to the need for gender specific research, several researchers created models and theories meant to explicitly describe women's career development. Notable among these are Gottfredson's Developmental Model, Astin's Need-Based Psychological Model, Farmer's Career and Achievement Motivation Model, Fassinger's Causal Model of Career Choice, Hackett and Betz's Career Self-Efficacy Model, and Lent, Brown, and Hackett's Social Cognitive Career Theory. Each of these theories and models made a contribution to the understanding of women's career development. In this theory section, each will be discussed, key terms defined, and research in support of each theory will be presented and critiqued.

Gottfredson's Developmental Model

Gottfredson (1981) created a career model designed to explain career aspiration using a developmental framework. Her goal was to address differences in career aspiration according to constructs such as gender, class, and race. Therefore, it is theoretically applicable to a variety of populations of both men and women. She

maintained that career development is an ongoing process that results in a gradual

narrowing of occupational options beginning almost in infancy (Gottfredson, 1981). The

range of acceptable career aspirations narrows as an individual's self-image becomes

more defined and further narrowing occurs as individuals discover the inaccessibility of

certain occupational paths.

Overview of model.

The key component of Gottfredson's model is the circumscription process,

whereby occupational choices are gradually narrowed or circumscribed according to self-

concept (Gottfredson, 1981). The circumscription process produces a range of suitable

career possibilities based on an individual's self-concept, including ideas about gender,

interests, values, intelligence, abilities, and social class. Over time, those occupations

consistent with self-concept will be retained, while inconsistent ones will be eliminated.

The circumscription process is lifelong and begins as early as age three when

children begin to conceptualize adulthood (Gottfredson, 1981). The second stage of the

process involves the emergence of a gendered self-image between the ages of six and

eight. Gottfredson (1981) believed that young women may begin to rule out some career

options at this point that are inconsistent with their emerging gender identity. The next

stage incorporates ideas of social class and intelligence (ages 9 to 13) and the final stage

(age 14 and up) crystallizes ideas around attitudes, interests, and values. Throughout

these stages, occupational choices are eliminated because of their inconsistency with how

an individual is defining herself.

A further narrowing of career aspirations occurs when choices that are acceptable are determined to be inaccessible and are therefore "compromised". The results of early studies by Krefting, Berger, and Wallace (1981) and O'Dowd and Beardslee (1960) revealed that occupational choices are based on occupational images that people hold. These images include not only ideas about the job's tasks, but also information on the lifestyle the job affords and the type of person who holds such a job. Gottfredson (1981) conceptualized these images as being organized around two dimensions; the perceived sex type of the job and the perceived prestige level of the job. She argued that a person's range of acceptable career alternatives can be directly traced to three criteria. The first criterion is a person's developing gender identity and compatibility with chosen career alternatives. The second is perceived status of a job and compatibility with chosen career status. The third is the willingness to exert the necessary effort to obtain each career. In other words, aspirations are usually compromised according to interest, prestige, and sex type. For example, a young woman may choose a profession of low interest and deny another of high interest in order to comply with sex-typing appropriate gender roles for women.

Research support.

Gottredson's theory has been hailed for her inclusion of career compromise as a construct, particularly when attempting to explain the lack of women in non-traditional fields (Hesketh, Elmslie, & Kaldor, 1990; Pryor & Taylor, 1989). It has also been recognized for her integration of developmental and decision-making perspectives as well as the inclusion of choice as major strengths of the model (Pryor, 1985; Pryor & Taylor,

1989). However, while Gottfredson's model has several theoretical strengths, research validating her model has yielded equivocal results.

Henderson, Hesketh, and Tuffin (1988) studied 396 children (ages 5 to 15) using an occupational card sort for career choice. Consistent with Gottfredson's theory, they found that gender was significant to occupational choice. However, they questioned Gottredson's developmental timeline, suggesting the emergence of a gender identity before the age of six. They also found that boys had more rigid gender stereotyping of occupations than girls, a finding which seems contrary to Gottfredson's theory (Henderson, Hesketh, & Tuffin, 1988). Astin (1984) also questioned the developmental timeline, particularly the fact that Gottredson's model does not allow for growth beyond early adolescence.

Taylor and Pryor (1985) studied 287 male and female high school equivalency students using the Vocational Preference Inventory. They found support for prestige and sex-typing as influences on career aspiration; however, the researchers suggested the constructs may not be independent (Taylor & Pryor, 1985). In addition, they suggested that Gottfredson's model might not adequately allow for variations in the influence of interest, prestige, and sex type across individuals. Holt's (1989) work also uncovered variations in the influence of the compromise constructs when comparing social work and engineering majors. He found that social work majors were concerned with interest over prestige while engineering majors felt the opposite way. Holt (1989) concluded that perhaps interest instead of gender was responsible for the compromise of career aspiration.

While Gottfredson is credited as advancing the understanding of women's career development (Henderson, Hesketh, & Tuffin, 1988), methodological problems including difficulties separating and measuring constructs have made validation or disconfirmation of her model difficult (Hesketh, Elmslie, & Kaldor, 1990). In addition, repeated designs have failed to fully validate her model (Pryor & Taylor, 1986; Hesketh, Elmslie, & Kaldor, 1990). However, while this model was not extensively validated, it was important because of its dynamic nature and inclusion of sociological constructs used by future researchers such as Astin (1984).

Astin's Need-Based Sociopsychological Model

In 1984, Astin proposed a women's career development model that included both psychological and sociological factors. Her basic premise stated that work motivation was essentially the same in both men and women. However, socialization experiences and structural opportunities differ which promote different career choices. Astin (1984) described this model as a need-based sociopsychological model that is applicable to not only women, but men as well.

Overview of model.

Astin (1984) proposed a four-construct model containing both internal and external variables. Her model contains the psychological factors of motivation and work expectations as well as the sociological factors of sex-role socialization and the structure of opportunity. In this model, the changing opportunity structure and how this structure shapes and reshapes occupational behavior is emphasized (Diamond, 1987). Astin believed that the degree one experiences each of these variables shapes the career

development process. The external constructs of sex-role socialization and opportunity structure influence both motivation and work expectations, which in turn influence career choice and development.

Astin (1984) described motivation as the search for survival, pleasure, and contribution. In addition, she asserted that work has the capacity to satisfy these needs, with work being defined as any activity designed to produce or accomplish something (Astin, 1984). This work can be paid employment, volunteer work, or family work. She further defined work expectations as one's perceptions of self-strengths and the kind of work that can best meet one's needs (Astin, 1984). These work expectations are initially created by the sex-role socialization process but can change as opportunity changes.

Astin (1984) believed the sex-role socialization experience for both men and women begins in early childhood and continues across the lifespan in accordance with cultural and gender norms. An example of gender-role socialization is the societal expectation of marriage and childbirth for an adult woman. Related to this socialization is opportunity structure. This is defined as the historical and physical events that shape career opportunities including family structure, environmental factors, and technology (Astin, 1984). Examples of this would be war, the economy, and the Equal Rights Amendment. Such an opportunity presence or absence is not only influenced by gender norms, but also *influences* the gender norms themselves.

Research support.

Diamond (1987) noted that Astin's model has been considered provocative by some because of its dynamic and sociological qualities. In particular, Astin was praised

for including the interactive constructs of opportunity structure and socialization, particularly as they relate to women's career behavior (Hansen, 1984; Harmon, 1984; Kahn, 1984). However, her model received extensive criticism, notably from Fitzgerald and Betz (1984), for failing to provide adequate key construct definitions and measurement suggestions. In addition, they maintained her work was incongruous with the existing knowledge on career behavior and called for more empirical research to support her assumption (Fitzgerald & Betz, 1984). Gilbert (1984) criticized Astin for failing to adequately address the realities of women's career development, specifically the incongruity between the demands of family roles and current institutional structures. While some of Astin's ideas were valued, her model itself has not received empirical validation. In contrast, Hackett and Betz (1981) developed a model with similar psychological and sociological properties which has a stronger base of empirical support.

Hackett and Betz's Career Self-Efficacy Model

Hackett and Betz (1981) believed that both psychological and sociological forces influence women's career development. They developed a model based on Bandura's (1977; 1986) self-efficacy theory which stated that psychological processes both created and strengthened ideas about self-efficacy, the belief that one holds regarding one's abilities to perform or accomplish a task or behavior. These beliefs in turn influence choice making and subsequent behavior. Hackett and Betz applied this concept to career whereby ideas about one's abilities directly influence career aspiration, career choice, and ultimately career behavior.

Overview of model.

Hackett and Betz (1981) relied directly on Bandura's (1977) work on self-efficacy for the creation of their Self-Efficacy Model. In his theory, Bandura (1977) postulated that self-efficacy beliefs stem from four sources: (a) vicarious learning or observation of others, (b) social persuasion from others, (c) performance accomplishments, and (d) physiological states and emotional arousal (anxieties). Bandura believed that all of these factors directly influence self-efficacy; which is described as behaviorally specific rather than a general psychological state. Although Bandura's theory was originally designed for use with phobias, Hackett and Betz adapted the theory to describe the career development process.

Hackett and Betz (1981) postulated that women's career development more so than men's is best explained from a self-efficacy framework. They defined career self-efficacy as the belief one has about one's ability to successfully organize and accomplish tasks needed to perform adequately in a given career (Betz & Hackett, 1981). Through the gender role socialization that women encounter lifelong, their self-efficacy beliefs regarding career are lower than men's. These beliefs form from receiving limited exposure relative to each of Bandura's four factors. For example, women gain less access to information about careers, particularly non-traditional fields, and receive less encouragement for their occupational pursuits when they defy gender norms. Hackett and Betz (1981) argued that such social learning experiences can help explain why women fail to persist in certain career arenas.

Research support.

Hackett and Betz (1981) provided support for their hypothesis in studies with male and female undergraduate students, in which significant gender differences among subjects in their consideration of male and female-dominated occupations were found. Specifically, females exhibited stronger self-efficacy toward female-dominated occupations while males exhibited self-efficacy toward all occupations. Since ability levels were equivalent for both men and women, Hackett and Betz concluded that self-efficacy rather than ability was a more important factor in determining career behavior and choices.

Replicating Hackett and Betz's work, Wheeler (1983) studied both male and female undergraduate students. His findings indicated that females' self-efficacy expectations differed in proportion to the representation of females in a specific career area. In addition, he found support for both self-efficacy and outcome expectations as significant factors in explaining career preference.

Hackett and Betz's model, designed to explain women's lowered career aspirations, contributed significantly to the career literature on both women and men. Particularly, the construct of self-efficacy as it relates to career became extensively validated as a result of their work. Self-efficacy emerged as an important factor in the following career behavior domains: mathematics (Betz & Hackett, 1983; Hackett, 1985; Lent, Lopez, & Bieschke, 1991), career decision-making (Betz, Klein, & Taylor, 1996; Taylor & Betz, 1983; Taylor & Popma, 1990), task-specific self-efficacy (Osipow, Temple, & Rooney, 1993; Rooney & Osipow, 1992; Temple & Osipow, 1994), academic

achievement (Hackett, Betz, Casas, Rocha-Singh, 1992), and vocational interests (Hackett, Betz, O'Halloran, & Romac, 1990; Lapan, Boggs, & Morrill, 1989; Lent, Brown, & Larkin, 1987). This and the subsequent theoretical creation their work stimulated was their most significant contribution. Their inclusion of Bandura's self-efficacy theory contributed to both Farmer's (1985) and Lent, Brown, and Hackett's (2000) later career models.

Farmer's Career and Achievement Motivation Model

Again utilizing Bandura's (1977) concept of self-efficacy, Farmer (1985) developed a women's career development theory that incorporated both psychological and sociological variables as important influences on the career development process. Included in her model was consideration of gender as an influential factor, therefore her model was theoretically equally applicable to both men and women. Like former theorists, she believed that both psychological and sociological variables interacted to influence career aspiration, career choice, and career behavior.

Overview of model.

Farmer (1985) hypothesized that career choice was motivated by three different types of interactive variables: background variables, psychological variables, and environmental variables. Examples of background variables would be gender and ethnicity, examples of psychological variables would be attitudes, beliefs, and self-concept, and examples of environmental variables would be a construct such as family support (Farmer, 1985). These three sets of factors were hypothesized to interact with the three motivational dimensions of aspiration, mastery motivation, and career commitment.

64

Farmer believed that these three factors of career motivation developed as a result of the interactive nature of the background, psychological, and environmental variables which ultimately led to career choice.

Research support.

Farmer studied approximately 1,800 male and female high school students using a questionnaire and confirmed significant paths between her identified variables. She concluded that the background variables, such as gender, showed the strongest influence and were more powerful predictors of motivational dimensions, particularly career aspiration (Farmer, 1985). Other significant findings were that females with high commitment to homemaking were less likely to have high career aspirations than were females with a lower commitment to homemaking. Not surprisingly, homemaking commitment was not a significant predictor of career aspiration among high school males (Farmer, 1985).

In later studies, Farmer and Chung (1995) tested the initial model on a small sample of male (n = 47) and female (n = 44) undergraduate students. The background variable of gender was again found to be significant particularly for career aspiration and motivation mastery. In 1997, Farmer again confirmed the significance of gender in relation to career aspiration when studying female nursing students.

While Farmer's theory did receive some validation through her own research, little outside research validated her model. In fact, Farmer herself believed her most significant finding was not the creation of her theory but empirical support of the significance of gender and gender role socialization on women's career motivations or

aspirations (Farmer, 1997b). This finding fueled future efforts, such as Fassinger's work, to describe women's career development process as unique and separate from men's.

Fassinger's Causal Model of Career Choice

In an effort to integrate the myriad of variables in the literature, Fassinger (1990) proposed a causal model of career choice incorporating relevant variables identified by previous theorists. Her research placed these variables into a path model that was tested and then expanded several years later. A key component of Fassinger's model was testing how variables identified as relevant to the individual interacted with one another.

Overview of model.

Fassinger's (1990) model included several variables previously identified by researchers as relevant to women and their career development. Among these variables were ability, academic success, sex role characteristics (gender role attitudes), and agentic personality traits (instrumentality and self-esteem). Fassinger believed that these variables were all predictors of career orientation and mathematics orientation. These orientations would in turn influence career aspiration and career choice.

Fassinger (1990) hypothesized that academic success, high ability level, high instrumentality, high self-esteem, and non-traditional ideas about gender roles would predict higher levels of career and math orientation. Conversely, she hypothesized that less ability, less self-esteem, less instrumentality, more traditional gender roles, and limited academic success would predict lower levels of career and math orientation. Higher levels of career and math orientation would lead to non-traditional career choice and lower levels would be indicative of traditional career choice. While each of these

variables had independently proven significant, the combined effects of the variables was unknown, particularly the interactive influence they might exhibit on women's career orientations, aspirations, and choices.

Research support.

Fassinger tested her model with structural equation modeling using 663 undergraduate females. Most significant among her findings was support for the idea that high career orientation was best predicted by liberal gender role attitudes, instrumental personality characteristics, and high ability levels (1990). Soon after, the model was expanded by O'Brien and Fassinger (1993), who examined 409 adolescent females and determined that relationship to mother was also a significant factor. Again, using structural equation modeling, the researchers suggested that moderate degrees of attachment and independence combined with liberal gender role attitudes in young women accounted for higher career orientation and career choice. O'Brien and Fassinger (1993) also found complex interrelationships among the variables. While their findings were significant, it should be noted that their designs utilized a narrow population range, notably privately schooled Caucasian females (Fassinger, 1990; O'Brien & Fassinger, 1993).

In subsequent research, Rainey and Borders (1997) did not find support for Fassinger's model as a predictor for career outcomes. They used structural equation modeling with 276 predominately Caucasian 7th and 8th grade females and their mothers and found that none of the predictor variables (i.e., maternal characteristics, relationship with mother, gender role attitudes, etc.) contributed significantly to career orientation

(career choice). However, agentic characteristics (i.e., independence, assertiveness, etc.) of the adolescent and mother-daughter relationship (perceived attachment and separation) did contribute to career aspiration (desire and value of having a career). While Fassinger's model has received limited empirical validation, her work did serve to consolidate multiple relevant variables for future researchers such as Lent, Brown, and Hackett (2000).

Lent, Brown, and Hackett's Social Cognitive Career Theory

Building on a firm foundation of women's career development theorizing and responding to a need to unify all relevant career development constructs, Lent, Brown, and Hackett (1994, 2000, 2002) created Social Cognitive Career Theory. Lent et al. (2000) were determined to create a model specific enough to describe and measure fine differences in the career development process while being general enough for use with multiple populations of both men and women. Using self-efficacy as a cornerstone, Social Cognitive Career Theory (SCCT) marks a well-defined attempt to incorporate a wide-range of theoretically relevant concepts such as gender, race, class, ability level, sociological and environmental influences, psychological influences, and other background variables into a comprehensive predictive model of career aspiration and career behavior (Niles, 2002).

Overview of model.

Using Bandura's (1986) social cognitive theory and Hackett and Betz's (1981) self-efficacy model, Lent et al. (2000) attempted to explain the processes underlying career development and career choice using both cognitive-person variables and

environmental influences. Their heuristic model, conceptually aligned with Hackett and Betz's model, is applicable to both women and men with the rationale of shifting away from focusing on group differences that may unintentionally serve to reinforce stereotypes (Hackett & Lent, 1992). They also attempted to account for not only gender differences, but differences in culture, background, and other environmental experiences. Lent, et al. (2002) believed that these constructs are not only genetic factors, but socially constructed variables that are an extremely relevant aspect of a person's development.

Lent et al. (1994) maintained that personal, environmental, and behavioral variables are all at work in the career development process. In accordance with social-cognitive theory (Bandura, 1986), Lent, et al. (2000) stated that these variables "affect one another through complex reciprocal linkages" (p.36). The goal of SCCT is to explain how people develop academic and occupational interests, make academic and occupational choices, and achieve success through school or work (Lent, Hackett, & Brown, 1999). Individuals are more likely to pursue and be successful in occupations where they perceive themselves to have high self-efficacy (Lent et al., 1994). In SCCT, the relationship between the three cognitive-person variables of self-efficacy, outcome expectations, and goals is highlighted (Lent et al., 1999; Lent, et al., 2000). These three variables were first identified by Bandura (1986) as key factors that influence behavior and also act as influences on each other.

Self-efficacy.

The first variable of self-efficacy is described as confidence in one's ability to perform a selected task. These self-efficacy beliefs are partially derived from

reinforcement in the form of personal mastery experiences (or experiences of failure),

vicarious learning (observation), social persuasion (encouragement or discouragement),

and physiological and emotional reactions such as anxiety or elation (Lent, Hackett, &

Brown, 1999). Bandura (1982) believed personal mastery experiences were the most

powerful sources of self-efficacy beliefs because they were based on personal experience.

Vicarious learning influences self-efficacy by observing modeled behavior, which in turn

can create the belief that the observer is also capable of the behavior (Bandura, 1977).

Social persuasion can come in the form of verbal encouragement or discouragement.

Finally, emotional reactions are important influences because psychological states

heavily influence perceived abilities. For instance, higher anxiety surrounding a behavior

tends to lower self-efficacy regarding that behavior. Taken together, these four factors

interact within an individual to create a self-efficacy belief regarding the ability to

perform a set task, behavior, or set of behaviors.

In addition to these four sources, Lent et al. (1994) proposed that key background

variables such as gender, ethnicity, genetic predispositions, and health status also

contribute to self-efficacy. This hypothesis is rooted in the belief that external person

variables are highly influential to a person's perception of his or her abilities. According

to SCCT, the interaction of personal background variables with Bandura's four primary

sources of information creates an individual's self-efficacy beliefs (Lent, et al., 1994;

Lent, et al., 1999). It is important to note that the interaction of these variables is

individual specific.

Outcome expectations.

The second cognitive-person variable of outcome expectations refers to beliefs about what will happen that are contingent on performance (Lent, Hackett, & Brown, 1999). Simply stated, the perceived costs and rewards of pursuing a career path are outcome expectations. Bandura (1989) defined outcome expectations as a person's belief about the outcome of a behavior. He believed that persons were motivated to engage in or avoid behaviors based on perceived positive or negative outcomes, respectively.

While outcome expectations are similar to self-efficacy in that both influence and guide one's behavior, there is a difference between the two. Self-efficacy describes expectations or beliefs about one's performance *capabilities* while outcome expectations describe expectations or beliefs regarding the *outcomes* (consequences) of behavioral efforts or performance (Lent et al., 1999). For instance, a person can believe that she has the *capability* to become a teacher, but she is not likely to pursue this if she perceives the *outcome* of her efforts to be largely negative (extensive schooling, low pay, low prestige, etc.) This is in accordance with Bandura's (1989) belief that self-efficacy moderates outcome expectations..

Interests, Goals, and Actions.

The third variable of goals refers to determination to engage in a particular task or activity (Lent et al., 1999). Bandura (1989) described goals as cognitive symbols for future events. This symbolic mechanism is the primary way in which people are able to conceptualize their future and acts as the principle way in which individuals exert control over their lives (Lent et al., 1994; Lent et al., 1999). Goals also help to organize and

regulate behavior and supply motivation for engaging in the planned behavior. Both outcome expectations and self-efficacy influence goals because an individual's belief in their abilities and the potential outcomes influences of their behavior how they set their goals. In the career realm, career plans, career-related decisions, and expressed choices are all representations of goals (Hill, 1997).

An individual's interests develop primarily from beliefs about self-efficacy and outcome expectations, which can be independent of actual aptitude or ability (Brown & Lent, 1996). As described above, these sometimes inaccurate self-efficacy beliefs and outcome expectations develop primarily from reinforced accomplishments from the person and from external sources. Outcome expectations in turn directly influence general interest in performing a selected behavior. The presence or absence of such interests in turn affects career interests, goals (aspirations), and actions (Perrone, Perrone, Chan, & Thomas, 2000).

Another aspect of SCCT concerns the relationship between (career) interests, goals, and actions. Not only are they each directly affected by self-efficacy and outcome expectations, and proximal environmental influences, but several other relationships exist as well. Most notably, career interests influence career goals, which in turn influence career actions (Lent et al., 2000). In addition, proximal contextual factors moderate the relationship of interests to goals and goals to actions (Lent et al., 2000). For instance, an external influence such as the birth of a child may influence how planned career goals are translated into career actions.

An example of this process occurs with women and math in that mathematically-talented women may show low interest in math and science occupations because of acquired low self-efficacy beliefs surrounding their math skills (Campbell & Hackett, 1986; Eccles, 1987; Hackett, Betz, O-Halloran, & Romac, 1990). Through socialization and other negatively reinforcing events, women can internalize low math self-efficacy, which leads to lowered interest and aspiration in math and science related fields. Combine this with the perceived external barriers such as limited role models and the result is few women aspiring to math and science careers and even fewer actually entering these fields.

Contextual influences.

A final feature of SCCT that makes it unique is the inclusion of significant environmental variables (Lent et al., 2000). These environmental influences, such as social, cultural, and economic factors, are believed to influence both career behavior in the form of interests, goals, and choices and the cognitive-person variables themselves (Brown & Lent, 1996; Lent et al., 2000). These environmental, or contextual influences, can be either objective or perceived (Lent et al., 2000). An example of an objective factor would be socio-economic status whereby some influence is present regardless of whether an individual comprehends its impact (Lent et al., 2000). However, Lent et al. (2000) believed the exact effects of such a factor can be moderated by how the person perceives or interprets it.

In SCCT, environmental influences can be either positive supports or negative barriers. In addition, environmental forces are separated according to their proximity to

73

the career-choice making process (Lent et al., 2000). Influences that occur early and shape the learning experiences that create self-efficacy and outcome expectations are known as choice-distal influences, or background contextual factors. An example of distal influences would be early exposure to role models, parental support, or support for extracurricular activities. The second category of environmental influence is characterized as choice-proximal. These environmental forces occur during active phases of educational or career decision-making (Lent et al., 2000). Examples of proximal influences include discriminatory hiring practices or acceptance into a graduate program. These environmental forces can be either internal or external and can both directly affect and moderate the processes by which individuals embark and follow-through on career decision-making.

Research support.

SCCT has stimulated a sizeable amount of research activity. Like Hackett and Betz's model (1981), the self-efficacy component of SCCT has received the most extensive validation, primarily in studies using the Career Decision Making Self-Efficacy Scale (Diegelman, & Subich, 2001; Flores & O'Brien, 2002; Gainor & Lent, 1998; Lent, Brown, Brenner, Chopra, Davis, Talleyrand, & Suthakaran, 2001; Lent, Brown, Nota, & Soresi, 2003; Kahn, 2001; Lent, Lopez, & Bieschke, 1993; Rivera, 2002) The next most confirmed aspect of the model has been the outcome expectations component which has also received validation through a myriad of studies (Diegelman, & Subich, 2001; Kahn, 2001; Lent et al., 2001; Lent, Lopez, & Bieschke, 1993). In turn these constructs,

particularly self-efficacy, have reemerged as particularly relevant aspects of both SCCT and career development.

Another important aspect of SCCT is that it has been successfully applied to a variety of populations. This extensive body of research includes studies involving female offenders (Chartrand & Rose, 1996), battered women (Brown, Reedy, Fountain, Johnson, & Dichiser, 2000), Italian high school students (Lent, Brown, Nota, & Soresi, 2003); adolescents (Turner & Lapan, 2002), undergraduate students (Adachi, 2001; Diegelman, & Subich, 2001; Huang, 2001; Weiss, 2001), Mexican American adolescent women (Flores & O'Brien, 2002), high school athletes (Paa, 2001), counseling psychology students (Kahn, 2001), female high school students (Nauta & Epperson, 2003), and African-American undergraduate men and women (Byars, 1998; Gainor & Lent, 1998). In fact, Pope-Davis and Hargrove (2001) noted that SCCT has been repeatedly hailed because of its proven applicability to so many diverse populations.

However, even though SCCT has generated significant empirical activity with multiple populations (Swanson & Gore, 2000), most research has focused on the cognitive-person variables (self-efficacy, outcome expectations) and less on the contextual or environmental variables in the model (Lent et al., 2000; Lent et al., 2003). The limited research that has examined the contextual variables has yielded equivocal findings. This research has mainly centered on the contextual variables of general career supports and barriers.

Lent et al. (2001) studied 66 female and 45 male undergraduate students using the Career Barriers Inventory (Revised; Swanson, Daniels, & Tokar, 1996) and found career

supports and barriers did influence math or science educational choice, although the influence was indirect. Lent, Brown, Nota, and Soresi (2003) studied 796 Italian male and female high school students using a created instrument to measure supports and barriers and found support for their influence on career choices and actions, although the influence was again indirect. Replicating these results, a study with 248 male and 68 female undergraduate students by Lent, Brown, Schmidt, Brenner, Lyons, and Treistman (2003) assessed responses to 15 support and 23 barrier conditions. The authors concluded that that the supports and barriers did influence self-efficacy and in turn career choices and actions. Contradicting the aforementioned findings, Rivera (2002) conducted a path analysis on the influence of general career barriers on Hispanic women's career considerations and found support for the SCCT construct of self-efficacy, but no fit for the influence of barriers. Most recently, Lent, Brown, Sheu, Schmidt, Brenner, Gloster, Wilkins, Schmidt, Lyons, and Treistman (2005) conducted a path analysis to determine the utility of SCCT in predicting engineering interests and goals among women attending a Historically Black College. Lent et al. (2005) found support for the model with support and barrier constructs influencing goals both through self-efficacy and also directly.

Even less research exists that has examined specific contextual influences versus general measures of career supports and barriers and this research has also had mixed results. Flores and O'Brien (2002) conducted path analysis research with 364 Mexican-American high school seniors and found that the contextual variable of parental support was predictive of career aspirations. In addition, they found that parental support and perceived future occupational barriers were also predictive of career choice prestige.

These findings support the hypothesized direct influence in SCCT of contextual influences on career aspiration and career choice. In contrast, Conlon (2002) studied anticipated multiple role conflict (as a contextual variable) among 226 female and 151 male undergraduate and graduate students and found no influence on career aspiration, which seems to contradict the tenets of SCCT.

The authors of SCCT have repeatedly advocated for further research utilizing contextual variables (Lent et al., 2000; Lent et al., 2003) and also for more research with cross-cultural populations (Hackett, 1997; Lent et al., 2003). Reiterating this need for cross-cultural research, Pope-Davis and Hargrove (2001) maintained that the extensive body of research on women and career has focused almost exclusively on Caucasian women. They asserted that women of color and notably African-American women have been left out of theoretical development except to be included retroactively. While no theories have been created solely for African-American women, SCCT is recognized as the first theory that accurately represents women of color because of its inclusion of powerful social cognitive experiences which in turn shape self-efficacy beliefs (Pope-Davis & Hargrove, 2001).

In summary, the study of women's career development began modestly, but has expanded enormously in recent decades. Perhaps the greatest advance is acceptance of the idea that gender influences career. Lent et al. (2000, 2002) created a well-defined model, SCCT, that is simultaneously comprehensive and specific. SCCT builds upon a solid foundation of women's career development theorizing and attempts to incorporate all relevant socio-cultural and psychological factors for both genders. In addition, the

extensive body of research on women has yielded many variables hypothesized to be relevant for women and career, among them participation in multiple roles and well-being. These variables will be examined in a later section, following a discussion of career aspiration.

Career Aspirations

A career aspiration is literally defined as the desire to achieve a particular vocation (Merriam-Webster, 2004). In other words, a career aspiration is commonly described as one's specific desired career choice. As such, the variable of career aspiration is typically the outcome variable of career development theorizing. Wang and Staver (2001) observed that career aspiration, for both men and women, is recognized as the most important variable affecting later work experiences. Thus, it is not surprising that a significant body of research exists that has attempted to define, explain, and measure this variable.

In this section, women's career aspirations will be described and discussed, particularly as they compare to men's aspirations. Next, common operationalized definitions of career aspirations for women, as both desired career choice and desired career accomplishment, will be discussed. Relevant research related to these constructs will be reviewed, particularly as it relates to populations of Caucasian and African-American undergraduate women. This discussion provides a foundation for examining specific factors, such as multiple role planning and wellness, which are hypothesized to influence career aspiration.

Defining Career Aspiration

A close examination of the literature on women and career aspirations reveals numerous examples of women's lowered career aspirations when compared to those of men. A variety of researchers have attempted to explain and understand why this occurs (Betz, Heesacker, & Shuttleworth, 1990; McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien et al., 2000; Rainey & Borders, 1997). In so doing, researchers have separated the construct into two interrelated but unique ideas, one measuring ambition and the other measuring motivation (Plucker, 1998).

First, consistent with the common definition, a body of research exists that has examined career aspiration in terms of educational and vocational ambitions (Wang & Staver, 2001). This research has focused on classifying career aspirations based on salary and prestige level (Betz, Heesacker, & Shuttleworth, 1990; Farmer, Wardrop, Anderson, & Risinger, 1995; Nauta, Epperson, & Kahn, 1998) or on Department of Labor classifications of traditional and non-traditional occupations (McCracken & Weitzman, 1997; O'Brien et al., 2000; Rainey & Borders, 1997). Simply stated, this career aspiration construct is a measure of career choice or career goal.

Secondly, career aspiration has been operationalized not as a specific desired career choice, but as an intrinsic level of career inspiration or motivation for furthering one's education, being a leader, and pursuing career opportunities (Farmer, 1997; O'Brien & Fassinger, 1993; Plucker, 1998; Wang & Staver, 2001). This definition is based on a low to high continuum of internal commitment rather than an objective vocational outcome (Herr & Kramer, 1996; O'Brien & Fassinger, 1993; O'Brien et al.,

2000). In other words, this construct is the intrinsic value one holds toward career (Plucker, 1998; Wang & Staver, 2001). To avoid confusion, Nauta, Epperson, and Kahn (1998) have termed this component of career aspiration as "higher level career aspiration", a term which will hence forth be used to describe motivation or aspiration to excel.

Research examining career aspiration contains multiple examples of both constructs used for men and women (Conlon, 2002; Farmer, Wardrop, Anderson, & Risinger, 1995; Wang & Staver, 2001). Having two definitions of career aspiration allows for a more thorough understanding of what an individual is hoping to achieve vocationally and also how motivated the individual wants to be within that choice. This is particularly important for women because as Betz and Fitzgerald (1984) noted, women's career aspirations (choices) are frequently rated as lower than those of men. It then becomes important to understand if women have lower career motivation as well (Rainey, 1995).

Women's Career Aspirations as Career Choice

Assessing career choice for women is undeniably an important outcome variable for understanding women's career development theorizing (Wang & Staver, 2001). In fact, this variable has become a cornerstone of women's career development theories as researchers attempt to understand and explain why women's occupational choices are consistently lower when compared with men's (Betz, 1994; Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980). This fact becomes more unusual when one considers extensive research evidence that women perform better academically than men (Betz,

1994; Hyde, 1985; Rosser, 1989). Multiple designs have operationalized career choice as career aspiration, or the career one hopes to attain (Betz, Heesacker, & Shuttleworth, 1990; McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien et al., 2000; Rainey & Borders, 1997). In addition, differences between ideal career aspiration and expected career aspiration have been found (Conlon, 2002; Davey & Stoppard, 1993; McNulty & Borgen, 1988) indicating that women may simultaneously hold more than one career aspiration.

Assessing career choice for women is not as simple as merely asking about their career aspiration. While this is an important first step, it is necessary to rate occupational choices in some way to be able to compare or rank career aspirations. This is often accomplished by examining prestige level, Department of Labor classifications, or salary level (Betz, Heesacker, & Shuttleworth, 1990; McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien et al., 2000; Rainey & Borders, 1997) within traditional or non-traditional job categories. With traditionality of occupational choice as the aspiration measure, women have repeatedly been shown to have lower career aspirations than men's (Betz, 1994; Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980). This is because traditional occupations are typically lower in status, power, prestige, and salary (Betz, 1994; Betz & Fitzgerald, 1987; Fitzgerald & Crites, 1980), therefore traditional aspirations are classified as lower. As a result, women selecting traditional female-dominated occupations will be joining fields where salaries and occupational status are lower than most of the non-traditional career fields, historically dominated by men (Mastracci, 2004; Spraggins, 2000; USDOL, 1999).

Declining Aspirations

Hackett and Betz (1981) were among the first to comment on women's predominately lower career aspirations. They believed one reason for lowered aspirations is the belief women have that they can best succeed in traditionally female career fields. This belief has been explained by women's constant experience with societal gender inequalities. These inequalities result in women who strive to enter non-traditional fields feeling discouraged or not being taken seriously (Betz, 2002).

Borrowing from a concept originated by psychologist Jo Freeman (1979), Betz (1994, 2002) described this as the null environment for women. This is an environment that neither encourages nor discourages members of either sex; however, this is "inherently discriminatory against women because it fails to take into account the differentiating external environments from which female and male students come " (p. 469-470). In other words, the belief that males and females have equal opportunities academically and vocationally is not entirely true because of the differing barriers and external circumstances that act on an individual's freedom of choice. For females, this most often means a cultural push toward more traditional educational and occupational choices (Betz, 1989). For certain populations of women, namely African-American women, this cultural push can be even more pronounced. These women often experience a "double jeopardy" of race and gender that typically results in the avoidance of careers where gender and race are perceived as obstacles (Betz & Fitzgerald, 1987; Evans & Herr, 1991; Richie, Fassinger, Linn, Johnson, Prosser, & Robinson, 1997). Interestingly, these forces are also manifested within smaller social and family systems with all women

being far more likely to experience a lack of support from their significant others for their vocational and educational aspirations (McWhirter, Torres, & Rasheed, 1998). Research examining women's performance, ability level, and career aspiration seems to lend support to Betz's hypothesis.

Research Critique

Researchers comparing boys and girls from elementary school through college have substantiated that girls perform better academically than boys at all educational levels (Betz, 1994; Hyde, 1985; Rosser, 1989); however, these same women possess lower career aspirations than males with comparable ability levels (Betz, 1994; Betz & Fitzgerald, 1987; Conlon, 2002; Fitzgerald & Crites, 1980). While the relationship of intellect to educational and occupational level for men is fairly steady (Tyler, 1978), this relationship for women begins to decline in adolescence and is usually non-existent by college age (Betz, 1994).

Horowitz (as cited in Gilbert, Hallet, & Eldridge, 1994) studied self-esteem, math and science interest, and career aspirations of boys and girls ages 9 to 15. His findings showed strong gender differences in self-esteem whereby girls' interests, aspirations, and esteem declined as adolescence progressed. Older girls tended to have a lower self-image, more limited views of the future, and less confidence in their abilities than their male peers.

Researchers studying undergraduate women have found an extension of this trend. O'Brien et al. (2000) studied 207 young women in a five year longitudinal design (mean age 22.22). Their study measured parental attachment, self-efficacy, and career

aspiration using the Department of Labor traditional/non-traditional classification. Using both correlations and MANOVA, they suggested that attachment to parents positively influenced career aspiration and more importantly that young women's career aspirations lessened during the five years measured (O'Brien et al., 2000). Contrary to their hypotheses, the participants in this study chose careers which not only underutilized their abilities but were more traditional than the career aspirations indicated five years earlier. The authors believed this was in part due to concerns about multiple roles. Even though 90 percent of the sample was single at the second time of data collection, only two participants (n=207) rated career pursuits as more important than family pursuits. It should be noted that the sample was 88 percent Caucasian and 6 percent African-American and was obtained from a Catholic high school which might not be representative of the larger female population.

Conlon (2002) studied 226 undergraduate females and 151 undergraduate males to discover how anticipated work-family conflict might influence career goals and aspirations. Her findings, using a DOL classification system, revealed that most often women's career aspirations were neither traditional nor non-traditional, but classified as moderate (40 percent) with moderate defined as those careers with more equitable numbers of men and women. Traditional occupations were next in frequency (24 percent) and non-traditional were named the least often (20 percent). Males experienced similar aspirations for moderate careers (32.7 percent) followed by traditional (27.9 percent) and then non-traditional (16.8 percent). Conlon's results indicated that overall both men and women are continuing to aspire to careers consistent with gendered participation.

Interestingly, Conlon also found that not all of her participants expected to attain their career aspirations which is not an unusual finding in the career aspiration literature. It seems that many men and women hope to achieve one career but realistically expect to achieve another.

Aspirations Versus Expectations

In research on women and career aspirations, several researchers have indicated a measurable difference between young women's "ideal" aspirations and their "expected" career aspirations (Davey & Stoppard, 1993). This difference does not represent a lowering of aspirations, but rather a dichotomy between an ideal career aspiration and one that the individual realistically plans to achieve. Women, more so than men, may wish to achieve one profession, but don't actually expect that it will ever happen.

The existence of a career aspiration and career expectation dichotomy would seem to suggest that women may be aware that their true career aspirations are unattainable. Davey and Stoppard (1993) believed this to be the case and even proposed that some women may be entering traditionally female fields despite little interest in them because they perceive these fields as accessible and attainable. Astin (1984) proposed a reason for women's often dichotomous career plans. She hypothesized that young women expect to pursue more traditional occupations than their aspirations indicate because they perceive these occupations as more accessible, perhaps because of perceptions of gender discrimination.

McNulty and Borgen (1988) studied 250 female and 250 male high school students to examine whether gender, grade, and locus of control would account for

differences between career aspirations and career expectations. Their findings indicated little agreement between career aspiration and expectation for both males and females; however, neither gender nor grade and locus of control were shown to be relevant. This illustrates that both males and females are aware of differences between their true career aspirations and their realistic goals.

Davey and Stoppard's (1993) work with 180 female high school students examining maternal employment, gender self-concept, life roles orientation, perceptions of gender discrimination, cost of education, and significant other influences on ideal and expected occupational choice had mixed findings. They found that support from significant others and financial cost of education were the only factors that created a gap between ideal career aspiration and expected career aspiration. This finding seems to indicate financial issues, not gender discrimination, may be a factor in accessibility of career aspiration. This is contradictory to Astin's (1984) hypothesis; however, the authors noted that the participants may have been too young to comprehend the experience of gender discrimination in the workplace.

In 2002, Conlon examined differences between expected career and aspired career for both male and female undergraduate students. She found that discrepancies existed for both the male and female students with 30.1 percent of the females and 22.5 percent of the males reporting a difference between the two career goals. Not only were the females more likely than males to have a discrepancy, but they were also more likely to report a non-traditional occupation as ideal. The author noted that both males and females aspired and expected to enter careers that were dominated by their own gender. These

results should be interpreted with caution however, because coding difficulties prevented one-seventh of the female responses and one-fourth of the male responses from being analyzed.

In summary, the literature on career aspiration as career choice is extensive. It is important to recognize the consistent finding that women have lower aspirations when compared to men. What makes this research even more thought provoking is that these aspirations are lower despite women having academic performance levels that meet and surpass their male counterparts. Betz (1989, 2002) suggested that the forces of socialization are responsible for these lower aspirations and also for the often dichotomous expected and ideal career aspirations of women. As noted above, some have argued that defining women's aspirations as lower does not entirely capture the scope and nature of women's career hopes and goals. As a result of these equivocal findings, a second operationalized definition of career aspiration was created.

Women's Career Aspirations as Motivation

Career aspiration for women has most recently been operationalized as a measure of motivation (Farmer, 1997, O'Brien & Fassinger, 1993; Plucker, 1998; Wang & Staver, 2001). This construct of higher level career aspiration does not penalize women for choosing a "lower" career, but rather measures how accomplished one wishes to become regardless of the career arena (O'Brien & Fassinger, 1993). As a result, this definition is deemed particularly useful when discussing women (Nauta, Epperson, & Kahn, 1998).

Higher level career aspiration is not an external measure of career choice, but an internal measure of career drive (O'Brien & Fassinger, 1993). This construct is defined as

a measure of intrinsic career inspiration or motivation for becoming a leader and pursuing opportunities (Farmer, 1997; O'Brien & Fassinger, 1993; Wang & Staver, 2001). Typically measured on a continuum, aspiration is rated as the drive an individual has for success and accomplishment in their chosen career field. This definition seems particularly relevant for individuals who may be highly motivated towards career, but undecided on a particular career choice. This measure of career motivation also allows women to have high career aspiration even if their career choice is in a traditionally female field. In other words, women can choose a career low in status but be highly motivated and aspire to be a leader within that field (Rainey, 1995).

Research Critique

The results of recent studies utilizing women and higher level career aspiration as intrinsic motivation, although more limited, is encouraging. For example, Rainey and Borders (1997) studied 276 female middleschoolers using the Career Aspiration Scale (O'Brien & Fassinger, 1993), through structural equation modeling, they found that overall the subjects did express more interest in traditionally female occupations but also had goals to reach high levels within these traditional fields. These findings indicated that even though the career choice was in a lowered traditional arena, these students were highly motivated to excel in these female-dominated fields. The young girls in this study hoped to achieve significant career success despite their choices to pursue traditional career avenues.

Edwardson (1998) studied 102 women working in engineering and 102 women working in education to investigate the influence of multiple role self-efficacy on

multiple role expectations, goals, and accomplishments with a Social Cognitive Career Theory framework. She used the Career Aspiration Scale to assess whether the two groups of women, one group employed in a male-dominated field and the other in a female-dominated field differed in career motivation, she discovered that there were no significant differences between the two groups on higher level career aspiration. Her findings provided further support for the concept that women can be highly motivated to succeed or lead while choosing a female-dominated field. The converse that women who chose a male-dominated field aren't necessary more motivated to excel is also true.

In Conlon's (2002) research mentioned earlier, level of career aspiration was also assessed using the Career Aspiration Scale. She found both the male and female groups had moderately high levels of career aspirations and that the differences between the two groups were not significant. Based on this research, it seems that even though women may choose traditional career paths, they may still desire to be at least moderately accomplished within their field. Interestingly, the male and female subjects showed similar levels of career motivation which seems to lend credence to Betz's (1994; 2002) and Astin's (1984) ideas that other forces, rather than a desire to excel, are responsible for women's lower career choices.

In summary, there are two main operationalized definitions of career aspiration that commonly appear in the literature. While one measures an external choice factor (Betz, Heesacker, & Shuttleworth, 1990; Farmer, 1985; McCracken & Weitzman, 1997; Nauta, Epperson, & Kahn, 1998; O'Brien et al., 2000; Rainey & Borders, 1997), the other measures an internal motivational element (Edwardson, 1998; Conlon, 2002; Nauta,

Epperson, & Kahn, 1998; O'Brien & Fassinger, 1993; Rainey & Borders, 1997). Further, the choice factor has been further divided into ideal aspiration and expected aspiration, a dichotomy that has been proven to exist (Conlon, 2002; Davey & Stoppard, 1993; McNulty & Borgen, 1988). In order to gain the most complete and accurate assessment of career aspiration for women, it seems necessary to incorporate all aspects of this construct. In addition, the duality of career aspiration is also reflective of Bandura's view of development and motivation (Plucker, 1998) so both constructs fit well with Social Cognitive Career Theory. One variable that seems to influence each component of career aspiration is how young women foresee their careers interacting with other planned life roles (Betz, 1994; O'Brien & Fassinger, 1993; O'Brien et al., 2000). Creed, Muller, and Patton (2003) and Patton et al. (2002) have also underscored the need to examine women's well-being as a factor influencing these internal and external career aspirations and subsequent life role choices. The concept of well-being is discussed in an upcoming section following a discussion of women's attitudes about multiple role planning.

<center>Multiple Role Planning Attitudes</center>

Multiple roles refers to the idea that an individual works not only in a paid career, but also has other significant commitments that may or may not be conventionally associated with his or her gender (Gilbert & Brownson, 1998). For women this most often means involvement in marital and parenting roles and also participation in a paid work role. Current statistics indicate that most women in the United States are actively involved in such multiple roles: approximately four-fifths of all American women are either married (58 percent), divorced (11 percent), or widowed (11 percent) (U. S.

Census Bureau, 1999). In addition, in 1999, 58 percent of women ages 15 to 44 had given birth to at least one child and among women aged 40 to 44, more than 8 of 10 had given birth to a child (U. S. Census Bureau, 1999). Based on these figures, 80 percent of women in the United States will at some point in their lives be involved in spousal and motherhood roles. Combine this with the 60 percent of women who engage in paid work and it becomes clear that the majority of American women are currently functioning in multiple roles. While such role involvement is reflective of a cohort of women in their forties, there is a new generation of young women who are not only forming their career aspirations, but planning for multiple roles as well. This planning process stems from women's multiple role planning attitudes, which are important especially as they relate to and influence career aspirations.

To best understand multiple role planning attitudes, a brief history of women and multiple role involvement will be provided. Next research on the effects of multiple role participation on both career and well-being will be discussed, including research on multiple role strain. An overview of career development theories relating to life roles will be outlined. Finally, relevant research related to multiple role planning attitudes will be presented, as will research relating to multiple role plans.

Women in Multiple Roles: Past and Present

Historically, the issue of planning and managing multiple roles was not even relevant for most women. Most entered paid employment with the expectation of leaving upon getting married or starting a family (Gutek & Larwood, 1987). Employers expected this too and there was little advancement or career path consideration (Gutek & Larwood,

91

1987). In fact, many employers implemented policies known as "marriage bars" that would hire only single women and then would terminate their employment when they married (Goldin, 1990). While these attitudes may linger, it has not stopped married women from working and drastically changing the landscape of the workforce.

In 1940, only 15 percent of married women were employed compared to 24 percent in 1950 (U. S. Bureau of the Census, 1996). By 1997 this number had nearly tripled to 62 percent (U. S. Bureau of the Census, 1999). This increase is reflective of the "new cultural imperative" for women that occurred in the 1970's whereby women began to plan and achieve not only a family life, but a professional life as well (Rand & Miller, 1972).

In addition to married women in the workforce, the number of working mothers has increased dramatically as well. Currently, 40 percent of working women have children under age 18 (USDOL, 2001). In fact the number of women in the labor force with a newborn increased from 31 percent in 1976 to 55 percent in 1995 (U. S. Census Bureau, 1999).

African-American women are also predominantly engaged in multiple roles, as they have for centuries. Currently, African-American women account for almost half (47 percent) of single parent households headed by women (Fields, 2003) and more African-American mothers work full-time than other mothers (U. S. Department of Health and Human Services, 1997). In fact, the current trend for young mothers to stay home is only representative of Caucasian, well-educated women over 30 (Wallis, 2004). While recent trends have reported a slight decline in marriage and childbearing for women, the

majority of women are still involved in marriage and family roles (Spraggins, 2000) and these statistics do not even include adoptive and foster mothers or long-term partnerships and domestic unions. With so many women now in multiple roles, researchers have repeatedly examined the effects one role has on another, particularly for women who most often experience the demands and possible strain of multiple roles (Cooke & Rousseau, 1984; Reddin, 1997; Schwartzberg & Dytell, 1996).

Multiple Role Strain

Multiple authors have noted that women engaging in multiple roles experience role stress or strain (Cooke & Rousseau, 1984; Reddin, 1997; Schwartzberg & Dytell, 1996). In studies examining women's multiple role stress, the most frequently examined roles are work and family since these are the life roles where most people have involvement. This area of research is based on the belief that work and family are central to life, therefore are central to an individual's mental and physical well-being (Schwartzberg & Dytell, 1996). In this section, a review of the research examining the effects of women and multiple roles on both career and well-being will be presented. This research is divided into three sections based on the evolving research. The first area of research involves work-family conflict and the career consequences of multiple roles. The second area relates to the scarcity and enhancement hypotheses involving multiple roles and wellbeing. The third area relates to how multiple roles interface to influence either career or family. This research, although equivocal, illustrates the connection between career, multiple roles, and well-being for women involved in both career and family responsibilities.

Work-Family Conflict

Many women believe career and home balance is particularly difficult since work commitments don't change the responsibility for home that has conventionally fallen on women (Baruch & Barnett, 1986; Betz & Fitzgerald, 1987; Schwartzberg & Dytell, 1996). Women's multiple role participation is feared to cause role overload, role conflict, roll spillover, anxiety, sadness, frustration and guilt, while for men the opposite is true with multiple roles seen as beneficial (Baruch & Barnett, 1986; Betz & Fitzgerald, 1987; Farmer, 1984). Farmer (1984) believed, for women, engagement in multiple roles creates home-career role conflict due to their perceived incompatibility. Reddin (1997) agreed and found women's struggles in multiple roles to be indicative of an ever-present societal influence that career and motherhood are important yet incompatible. Early researchers examining work and family conflict have documented the negative association between family, particularly motherhood, and career progress for women using longitudinal research designs (Betz & Fitzgerald, 1987; Cooney & Uhlenberg, 1991; Houseknecht, Vaughn, & Statham, 1987; Spenner and Rosenfeld, 1990; Waite, Haggstrom, & Kanouse, 1986). Specifically, these researchers examined longitudinal data to determine the correlation between presence of familial roles such as spouse and mother, and the impact these roles had on the career paths of women. This research is briefly described below to illustrate the link between family and career.

Using data from the National Longitudinal Study of the High School Class of 1972, Waite, Haggstrom, and Kanouse (1986) attempted to discover the effect that parenting had on career orientation for both men and women. Data were collected at five

points in time between 1972 and 1979, and only data from married high school subjects was analyzed. The researchers concluded that following the birth of a first child, only 40 percent of the women returned to work, and many who did return did so with reduced hours. When compared to women who did not have children, women who were mothers had less job status and a marked decline in earnings.

Houseknecht, Vaughn, and Statham (1987) mailed questionnaires to professional women (n = 660) who had received advanced degrees between 1964 and 1974 from a large Midwestern university to determine the relationship between family and career. Their results indicated that women who remained single were more likely to hold higher prestige positions than the women who married either before, during, or after graduate school. The researchers believed this finding to be consistent with other studies that have found women at this level of education are more likely to be single than any other level. Citing the absence of work-family conflict for single women as the reason for their advancement, Houseknect, Vaughn, and Statham (1987) determined that multiple role conflict had a direct impact on career development.

Spenner and Rosenfeld (1990) also conducted a longitudinal analysis of data collected from 2,536 women in 1966 and again in 1979. Their analysis suggested that marriage and children were the strongest inhibitors for women entering career roles. Cooney and Uhlenberg (1991) found similar patterns while analyzing census data from 1970 and 1980. Their analyses indicated that women who were married with children were least likely to be involved with work while this association was positive for men who were more likely to be actively involved with career if a spouse and children were

present. The authors concluded that even though women are making advances in the career arena overall gender differences are still present when work and family are combined. This is believed to result from work and family conflict and the idea that women are more negatively affected by multiple roles, however upon further analysis, there is considerable disagreement about this.

While the preliminary research outlined above on work family conflict indicates that women may experience career difficulties or delays when roles are combined, a more recent review of the research examining the effects of women and multiple roles is extensive and more equivocal. Numerous researchers have created diametrically opposed hypotheses using multiple variables resulting in conflicting results (Baruch & Barnett, 1986; Cooke & Rousseau, 1984; Greenberger & O'Neil, 1993). This research will be briefly summarized with a particular emphasis on works examining the career progress and well-being of women currently engaging in multiple roles.

Scarcity and Enhancement Hypotheses

Cooke and Rousseau (1984) reviewed the literature on work and family conflict and reported a recurrent theme that the more time one spends in work and family roles, the more conflict one will perceive. This principle is based on the scarcity hypothesis (Goode, 1960) whereby human energy is believed to be finite so adding additional roles is thought to deplete energy and by extension well-being (Baruch & Barnett, 1986). A competing enhancement hypothesis was proposed by Sieber (1974) who believed that multiple role involvement increased self-esteem, status, and personal options, and therefore the involvement was beneficial to well-being.

Baruch and Barnett (1986) also reviewed the literature related to the impact participation in multiple roles has on women and determined several important research trends. First, they discovered that women who repeatedly engaged in the paid worker role experienced higher well-being either as a result of the job itself or as a buffer against stress experienced in other roles. However it was unclear whether these women gained employment as a result of their high well-being or if their high well-being resulted from the employment. In terms of well-being being related to the role of wife, Baruch and Barnett reported conflicting findings. Some reported finding greater happiness and well-being among married women (Baruch, Barnett, & Rivers, 1985; Campbell, Converse, & Rodgers, 1976), while others reported married women experience lower subjective well-being (Haring-Hidore, Stock, Okin, & Witter, 1985). They surmised the quality of the spousal role was perhaps more predictive of well-being than the presence of the role itself. Finally, in reviewing literature related to motherhood, Baruch and Barnett (1986) found no evidence that participating in a mothering role enhanced well-being, although they contend this association was still unclear and was perhaps dependent on the age of the child or children.

In an effort to provide further clarity to the scarcity and enhancement hypotheses, Baruch and Barnett (1986) tested 171 predominately Caucasian women who varied across marriage, working, and childrearing dimensions. Using the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the depression subscale of the Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), a pleasure scale, and a role quality questionnaire, they found that role quality rather than quantity was related to

well-being. This finding lends support for neither the scarcity or enhancement hypotheses since the number of roles was not found to be relevant when compared to the quality of those roles and how they were experienced. While participation in multiple roles inevitably brings both gains and challenges to well-being, overall the researchers believed that participation in multiple roles would enhance wellness depending on the quality of the role experience.

Gilbert and Brownson (1998) also hypothesized that the quality of women's role experiences shapes the positive or negative effects of participating in and negotiating those roles. They noted that involvement in multiple roles enhances the lives of women and their families. However, in their review of the literature on multiple roles for heterosexual married women, they proposed that enduring myths about gender and parenting greatly affect women's experiences. Specifically, societal ideas about men working and women parenting can negatively influence women. These long held "traditional" beliefs are responsible for women feeling guilt for working and "abandoning" their children, since women are biologically believed to be better suited for nurturing. Conversely, men are often perceived to be biologically incapable of nurturing and therefore better suited to provide economically for the family. This seems to be in agreement with Farmer's (1984) and Reddin's (1997) ideas that work and family are perceived as incompatible because of longstanding societal gender roles which result in role confusion and role conflict for women.

In conclusion, it seems the presence of multiple roles alone does not explain women's experiences in these roles. Both the scarcity and the enhancement hypotheses

fail to account for role quality which some argue is the most relevant aspect (Baruch &
Barnett, 1986; Gilbert & Brownson, 1998). Similarly, other researchers have attempted to
move beyond the one-dimensional presence or absence of conflict to delineate the type of
conflict perceived by women in multiple roles.

Role Interface

While some researchers reported women experiencing career conflict when
involved in multiple roles (Cooney & Uhlenberg, 1991; Houseknecht, Vaughn, &
Statham, 1987; Spenner and Rosenfeld, 1990; Waite, Haggstrom, & Kanouse, 1986),
other researchers have studied more specifically how these roles interface and the type of
conflict perceived. Gutek, Searle, and Klepa (1991) were the first to conceptualize the
joining of the work and family roles along two components. They hypothesized a family
interference with work (FIW) component and a work interference with family (WIF)
component. They further hypothesized that women would be more likely to experience
greater FIW since family is societally the woman's domain while men would experience
greater WIF since men tend to spend more hours at work than home.

An examination of questionnaires completed by psychologists and senior
managers in multiple roles found no relation between hours spent in a role and either
FIW or WIF. Also, both men and women reported higher WIF than FIW. The researchers
believed their results spoke not to quantity of the role, but the quality of how the role is
experienced. This experience is directly traced to expectations, which are predictable and
typically sex-role oriented (Gutek, Searle, & Klepa, 1991). Casper, Martin, Buffardi, and
Erdwins (2002) reported that in general WIF and FIW are associated with life and work

dissatisfaction as well as psychological strain. The authors concluded that how one perceives her roles and the attitudes she has about them affect how the roles interface. Specifically, they reported that women attributing the worker role to economic need rather than want seemed to experience less guilt as a result of the work interfering with family conflict. Betz and Fitzgerald (1987) reiterated this idea and stated that wives and mothers who were working tended to have a psychological advantage over their non-working counterparts, particularly when they were working by choice.

Both Baruch and Barnett (1986) and Gutek, Searle, and Klepa (1991) urge caution when generalizing their results based on the composition of their predominantly Caucasian samples. Baruch and Barnett (1986) specifically warned against generalizing multiple role research using Caucasian women to African-American women. This is because cultural variations lead African-American women to place differing emphasis than Caucasian women on the worker, marital, and motherhood roles. As a result of a longstanding history of work, difficulties finding stable marital partners, and the centrality of motherhood, African-American women most likely experience different levels of well-being for each of these dimensions (Baruch & Barnett, 1986).

While there are several notable trends in the research concerning women currently experiencing multiple roles, a consistent finding seems to be that participating in multiple roles increases the potential for work and family conflict that can negatively impact career or family. Another key finding is that participation in a role does not guarantee a positive or negative impact on well-being. More importantly, the quality of these roles and how they are experienced seems most influential. These qualitative differences are

100

perhaps best explained by measuring attitudes about the roles and how they are combined, even prior to the role experience itself. A discussion of this multiple role planning follows a review of theorists who have attempted to incorporate a holistic view of multiple roles to career development.

Theories and Research on Career and Multiple Roles

Many career development theorists have recognized the significance of multiple life roles. Theorists taking a holistic and developmental approach, such as Donald Super, understood the comprehensive nature of work and its influence on all areas of life. Pursuant to Super's seminal writings (Super, 1980; Super & Nevill, 1984; Super & Nevill, 1988, several emerging theories have reiterated the importance of various life roles or plans for life roles in the career development process. These holistic theories are particularly relevant for women who often struggle with managing life roles, particularly the frequently incompatible roles of worker, wife, and mother (Betz & Fitzgerald, 1987). In this section, theories and research relating to multiple roles and career will be presented, with a particular emphasis on emerging holistic theories.

Super's Life Career Rainbow

Super was one of the first to identify the various life roles a person experiences in his or her lifetime. He conceived of nine major roles: son or daughter, student, leisurite, citizen, worker, spouse (partner), homemaker, parent, and pensioner that when combined across a lifespan create a career (Super, 1980). Ideally, these roles act in harmony but in reality life role balance is very difficult to achieve (Niles, 2002). Super believed that effective life role participation was often elusive because of conflicting demands and

expectations in each of the realms. This balance can be particularly precarious for women who seem to place more emphasis on home and family roles than men (Eschbach, 1991; Munson, 1992; Peters, 1991; Super & Nevill, 1984; Super & Nevill, 1988).

Researchers using Super's framework and instrumentation (Salience Inventory and the Values Scale) have found support for Super's Life Career Rainbow and also support for gender differences on the salience of those roles. For example, Super and Nevill (1984) studied 382 high school men and women and found that women reported a greater commitment to homemaking than men. In a follow-up design conducted in 1988 using undergraduate males and females, Super and Nevill again found women reporting more participation and commitment to home and family than men. Women also valued their home and family roles more than men. Interestingly, women also reported a greater commitment to work than men, although their participation in work was lower than their male counterparts. This finding seems to reflect the high commitment many women have to both the worker and family roles.

Replicating Super and Nevill's (1984, 1988) findings, Munson (1992) investigated 251 male and female high school students using the Values Scale and the Salience Inventory. He found that female students had higher values expectations for home and family while men scored higher than females on participation in work. This finding seems to indicate that the female students placed more value on home and family pursuits while the male students placed more value on work related endeavors. He attributed this gender difference to the socialization process that emphasizes the importance of home and family for women and work for men.

In a study of 311 undergraduate women, Peters (1991) found that women who placed greater value on the worker role planned to have significantly fewer children and begin their motherhood roles later when compared with women who placed greater or equal value on their home and family roles. Again, based on results using the Salience Inventory, he suggested that women planning to emphasize the career role were not erasing their plans for home and family, but were attempting to integrate these plans with their work plans. In another study designed to further understanding of the interrelationship between work and family roles, Eschbach (1991) examined 112 undergraduate students. As was true in previous studies, his results indicated that women were again planning for both worker and home roles. However, the women in his design valued the home and family arena as possessing more opportunity. These women were planning for both work and career, but the role they emphasized was the family role.

In summary, researchers utilizing Super's framework have repeatedly found that women place different emphasis on various life roles when compared to men (Niles & Goodnough, 1996). Particularly, women place more emphasis on home and family roles while men place more emphasis on worker roles. While Super's Life Career Rainbow is still widely used as a comprehensive view of career and life roles, the instrumentation he developed to measure these roles has come into question due to poorly defined psychometric properties (Impara & Plake, 1998). The greatest contribution of Super's Life Career Rainbow was the concept of life roles as a backdrop to career identity (Niles & Goodnough, 1996; Niles & Harris-Bowlsbey, 2002) Super's work also greatly

influenced other career researchers, such as Brown (1995, 1996) to study the importance of values and roles.

Brown's Values-Based, Holistic Model of Career and Life-Role Choices and Satisfaction

Brown (1995, 1996) expanded on the life role work of Super to create a values model of career and life role choice. His model was based on the premise that values are the foundation for career and life role choices. Each individual has different values based on culture, gender, socioeconomic status, genetic background, and environmental influences. As these values crystallize, they guide, justify, and explain an individual's behavior. He believed that high-functioning people have well defined values and that making choices consistent with one's values is critical.

Brown (1995, 1996) also developed a hypothesis concerning multiple roles. His concept of life roles differed from Super who believed that life was the sum total of the various life roles. Brown believed that these life roles have an essential interactive component which creates overall life satisfaction. Rather than examining the total picture of roles across the lifespan, one needs to examine how the roles are interacting positively or negatively. He also stated that success within one role is dependant on ability and aptitude for navigating the role. Therefore, since the roles are interactive, it is necessary to actively plan for not only a career role, but the other roles as well.

While the concepts of this model have received little or no empirical validation, it is important for introducing the interactive component of life roles. Rather than viewing life roles in the aggregate, this model proposed that multiple roles are value based and very influential on career and life plans. This seems to suggest that career aspirations and

outcomes are intertwined with life and family aspirations and outcomes. Such a holistic view of life and career seems particularly relevant for women. In addition, this view has led to the development of even more comprehensive life career theories, such as Hansen's Integrative Life Planning Model (1997).

Hansen's Integrative Life Planning Model

Expanding on the holistic nature of Brown's model, Hansen (1997) proposed a new worldview to understanding career and life planning. Her model incorporated the idea of the mind, body, and spirit and encouraged people to realize the connections between various interrelated aspects of life. Hansen believed that individuals need to integrate their thinking to recognize connections in their own lives and in their communities. While self-knowledge in the form of interests and abilities have traditionally been a component of understanding career aspiration and development, she proposed that a broader, more holistic kind of self-knowledge was needed. This holistic self-knowledge is critical to understanding her broader view of career that includes not only the worker role, but other important life roles, identities, and tasks. These concepts form the foundation of her career model, rooted in social justice, connectedness, social change, diversity, and spirituality.

Hansen (1997) believed that all adults have six developmental career tasks to accomplish. The first task is finding work that will result in a more socially just world. The second task is constructing one's life into a meaningful whole. This includes weaving career and other life roles together and making choices about these life roles holistically. The third task involves connecting family and work. This task involves

integrating the important family and life roles in a meaningful and complementary way. Aware of gender differences present in society, she advocated for both men and women to value connectedness and self-sufficiency and to experience a true partnership at home and in the workplace. The fourth task values and celebrates diversity and the development of multicultural competencies for both work and life activities. The fifth task involves accepting the constancy of change and being able to cope and transition accordingly. The final task speaks again to the holistic nature of self. This task concerns exploring spirituality and life's meaning. She believes this to be very relevant to career since choices are spiritual in the sense that they are an extension of the unique aspects of an individual.

While Hansen's model is provocative, it has not received empirical validation. However, Hansen's model is unique and relevant for several reasons. First, her model emphasizes the interactive nature of career and other life roles, particularly the worker and family role. Secondly, her model acknowledges gender differences in these life roles and advocates for systemic changes toward equality. Finally and most importantly, she incorporates a holistic view to career development that examines all aspects of self and community as relevant to career aspirations, goals, and outcomes. Based on this idea, it seems that simply examining career aspirations in the context of work is not sufficient. When trying to understand career aspirations and goals, it becomes necessary to examine the holistic components of the individual and also to examine their aspirations for other life roles.

Lent, Brown, and Hackett's Social Cognitive Career Theory

Another career development model that incorporates a more holistic view of the individual and the importance of multiple roles is Social Cognitive Career Theory (Lent, et al., 1994, 2000, 2002). As described in an earlier section, Lent et al. incorporated Bandura's (1986) social-cognitive theory to create a holistic and comprehensive model of career development. Briefly, SCCT utilized self-efficacy and outcome expectations to predict career interests, goals, and actions. The variables of self-efficacy and outcome expectations are uniquely influenced by personal and environmental or contextual factors, both past and present. These factors can be either objective or perceived and can directly affect or moderate the processes by which individuals embark and follow-through on career decision-making. Multiple roles or attitudes about them are one such contextual factor.

Lent et al. (2000) conceptualized multiple roles or ideas about them as a potential barrier to career development. Citing research by Swanson, Daniels, and Tokar (1996) and Swanson and Woitke (1997), Lent et al. expressed how career barriers are particularly relevant for women and minority groups because they are hypothesized to explain the gap between achievement and ability. Swanson and Woitke (1997) described barriers as "events or conditions, either within the person or in his or her environment, that make career progress difficult" (p. 434). According to Swanson and Woitke (1997), both external influences, such as sexual and racial discrimination, and internal forces, such as multiple role conflict and lack of confidence, influence career goals and outcomes. Swanson and her colleagues (Swanson, Daniels, & Tokar, 1996; Swanson &

107

Woitke, 1997, Swanson & Tokar, 1991) also believed that multiple role plans are vital to women's later success in life. Their work on career barriers classifies those events that potentially hinder women's career development along three continuum: social-interpersonal, attitudinal, and interactional. Included along the social-interpersonal continua are perceived multiple role conflict and conflict between the demands of work and children. These perceived barriers can impact a woman's career development, therefore Swanson and Woitke (1997) believe that young women should plan for these potential barriers. Using Social Cognitive Career Theory as a foundation, they proposed that perception of barriers or potential barriers can directly and indirectly impact a woman's self-efficacy beliefs, interests, goals, and ultimately career and life outcomes.

Researchers testing multiple roles as a component of SCCT have predominately used the Career Barriers Inventory (Swanson, et al., 1996) as a measure. In initial efforts to validate this scale using male and female undergraduates, Swanson and Tokar (1991), discovered that females were more likely to perceive barriers relating to children interfering with career than were males. Later Swanson et al. (1996) pooled CBI validation studies and found that of 1637 undergraduate students surveyed, women reported significantly more multiple-role conflicts and conflicts between children and career than did men.

While ideas about multiple roles are a potential barrier to career development, Lent et al. (2000) conceded that they can also serve a supportive function. The authors believed that how one perceives and experiences a barrier dictates the effect that barrier has on career development. While one person may perceive participating in multiple roles

as a major career obstacle, another may experience it as added motivation for career. The unique characteristics and learning experiences of the individual dictate the impact. Another important factor is how the individual conceptualizes his or her future roles, in other words, how one plans for future roles is relevant to how career development will be affected.

Planning for Multiple Roles

It has been suggested that more and more women *and men* are actively planning for both career and family roles (Greenhaus & Parasuraman, 1999; Peake & Harris, 2002; Sanders et al., 1998; Spade & Reese, 1991). However, while this trend affects both men and women, many believe men's career development is less affected by the realities of multiple roles (Swanson & Woitke, 1997; Weitzman, 1994). In this section, gender differences in multiple role planning are discussed as well as differences among women. This provides a foundation for understanding how women make their multiple role plans and their attitudes about them. These plans are not only integral to women's career development (Swanson & Woitke, 1997; Weitzman, 1994), but also to their future well-being (Brown 1995, 1996; Hansen, 1997).

Gender Differences in Multiple Role Planning

Rand and Miller's (1972) term, "a new cultural imperative" for women labeled the phenomena that most young women anticipated active participation in both work and family roles. Early researchers such as Blaska (1978) and Bronzaft (1974) substantiated this fact and also discovered that attitudes about these roles shape future home, family, and career plans (Weitzman, 1994). However, with more women responding to the

cultural imperative defined earlier, it became relevant to question how their multiple role planning attitudes differed or were similar to their male counterparts who were also affected by the growing trend for women to work in both family and career domains. Farber (1996) stated that women have a "split dream" characterized by both career and family while the typical male dream focuses on primarily a successful career. A brief look at how young men and women differ on these work and family constructs is necessary before examining variations between women.

Shann (1983) studied 297 male and 260 female graduate students in both male-dominated (law, medicine, business) and female-dominated (nursing, social work, education) fields and assessed their career and life plans. While gender differences in planning were observed, within group differences were also observed. Her findings suggested that females in male-dominated fields had career and life plans that more closely resembled males' plans than the plans of females in traditional fields. In addition, females in male-dominated fields did not differ significantly in their career and family plans except on the childcare aspect. This would seem to indicate that females in male-dominated fields, but not female-dominated fields, have similar attitudes about combining home and career roles as some of their male counterparts.

Post, Williams, and Brubaker (1996) studied 202 eighth graders using a revised questionnaire from the Oregon Department of Public Instruction. Their results indicated that boys and girls differed in how they viewed their work and childrearing plans combined. Girls were more likely to view their work diminishing with the birth of a child and perceived themselves as working part-time or working only when the children were

110

older, in comparison to boys who perceived themselves as working fulltime. Thus, the girls' career plans were more impacted by their plans for other roles, namely childrearing. These future plans also tended to correspond to how their mother's had combined work and family roles.

Luzzo (1995) studied 401 male and female undergraduates to assess gender differences in career maturity using the Career Maturity Inventory-Attitude Scale (Crites, 1978), the Decision-Making Scale of the Career Development Inventory (Super, Thompson, Lindeman, Jordaan, & Myers, 1981), and the Vocational Preference Inventory (Holland, 1978). His findings revealed that women had significantly higher career maturity than men and when asked in a subsequent interview about future barriers to their career goals, over 60 percent of the women indicated concerns about multiple roles. Specifically, women cited the timing of childbearing, managing work and family roles, and sacrificing career goals for children. In comparison, only 6 percent of men cited these as potential barriers.

Livingston and Burley (1996) compared 120 male and 136 female predominately unmarried university students on gender identity, marital commitment, work commitment, and their impact on multiple role planning attitudes (operationalized as anticipated work-family conflict). While career aspiration was not assessed, career commitment and life role salience were. Using the Interrole Conflict Scale (Kopelman, Greenhaus & Connolly, 1983), the Life Role Salience Inventory (Amatea, Cross, Clark & Bobby, 1986) and the Bem Sex Role Inventory (Bem, 1974), the researchers found that males and females did not significantly differ on work commitment. However, males

high in masculinity expressed more occupational commitment while females high in femininity expressed more marital commitment. In conjunction with high femininity, females who also expressed low occupational commitment experienced the least anticipated work-role conflict. The authors concluded that females with less career commitment were not planning on their work and family roles conflicting. While Livingston and Burley (1996) hypothesized that masculinity (in both males and females) would correspond to higher work-family stress or conflict, they found the opposite was true. Higher femininity in both males and females was associated with lower anticipated work-family stress. They concluded that the female traits associated with home and family relate positively to well-being while an emphasis on the masculine traits of work relate negatively to well-being.

In a qualitative study with 9 male and 15 female participants aged 27 to 30, Tipping (1997) found that most participants believed that the mother would provide most of the contact with the children and that women began planning for this quite early. Planning for family and caretaking actually occurs before decision making about relationships or jobs, with the planning becoming more specific with time (Tipping, 1997). In contrast, men did not plan for a family in the same way as women, instead focusing on their provider role versus an emphasis on caretaking (Gilbert, 1993; Tipping, 1997).

Farmer (1997a; 1997b) conducted a longitudinal study to assess factors that contribute to math and science careers among culturally diverse high school men and women at two points in time, 1980 (n=1863) and 1990 (n=459). Following the second

data collection, Farmer and her colleagues conducted interviews with several individuals in math and science careers to obtain more qualitative information (n=153). Her research revealed that while both men and women valued home and professional roles, the more women valued their home role, the less they valued their career role (Farmer, 1997a). Using occupational prestige as a career aspiration measure, she found that high career aspirations in females were not predictive of later high career choice, while the opposite was true for men. She explained this difference as the influence of multiple role planning on the career development process of women and not men (Farmer, Wardrop, & Rotella, 1999). Farmer also found significant variation between women in her design. Interestingly minority women, both African-American and Hispanic women, had significantly higher career aspirations at both data collection times and were also more likely to persist in these math and science related careers.

A variety of researchers have found a difference in multiple role planning attitudes between men and women (Farmer, Wardrop, & Rotella, 1999; Livingston & Burley, 1996; Post, Williams, & Brubaker, 1996; Tipping, 1997). However, some of these same researchers have also discovered differences among women in career and family role attitudes (Farmer, Wardrop, & Rotella, 1999; Shann, 1983). Such differences between women highlight the need to look at the heterogeneity present among women, particularly as it relates to career aspiration and well-being. These within-group differences will be discussed including an overview of Weitzman's Multiple Role Realism model, which provides a framework for better understanding women's multiple role planning attitudes.

Differences Among Women

Many young women now have access to opportunities that older generations did not. Currently, not only are more career fields available to women, but also there are more options in family planning and childcare. This has led to greater decision-making and also a need for greater planning (Peake & Harris, 2002). Researchers examining how women, both Caucasian and African-American, are planning for these work and family roles have identified a variety of multiple role planning attitudes (McCracken & Weitzman, 1997; Peake & Harris, 2002) characterized by differing emphases on family and career (Baber & Monaghan, 1988, 1997; O'Brien et al., 2000). Some authors have cited research that indicates women are placing more emphasis on career than family (e.g., Betz, 1993; Farber, 1996), while other researchers have found that women are not changing traditional ideas about motherhood or family (Baber & Monaghan, 1988; O'Brien et al., 2000; Spade & Reese, 1991). Some believe that this explains why women choose traditional and lower paying careers because they are often perceived as most complementary to raising a family (Betz, 1994; Weitzman, 1994). Some researchers even suggest that women may choose such careers even when there is little interest in the career itself (Koski & Subich, 1985; Feather & Said, 1983). Before examining this literature, it is helpful to explore a framework that has been proposed for understanding women's multiple role plans.

Weitzman's Multiple Role Realism

Reflecting the growing recognition that multiple roles affect women's career development, Weitzman (1994) created a model to address the work family planning

interface. Her theoretical framework describing the process of planning to combine career and family roles is known as multiple role realism. Grounded in the assumption that planfulness will increase the quality of the multiple role lifestyle, the multiple role realism model is comprised of three parts: attitudes toward multiple role planning, multiple-role knowledge, and actual degree of multiple-role planning. All three of these variables combine to create multiple role realism.

Weitzman (1994) defined attitudes toward multiple role planning as the orientation and specific attitudes an individual has about making plans for future work and family roles. Using a scale she developed, the Attitudes Toward Multiple Role Planning Scale (ATMRP), she divided this construct into five components: knowledge/certainty, commitment, independence, involvement, and flexibility/compromise. Multiple role knowledge was based on understanding of family leave policies and consequences of career interruption, costs of childcare, negotiation techniques and anticipated multiple role conflict. Degree of planning was based on plans for career involvement, career interruption, size and timing of family, and plans for assistance. Multiple role realism is the outcome of the combination of multiple role attitudes, knowledge, and planning that can be either realistic where work and family are complementary or unrealistic where goals are unformed or unworkable.

Weitzman (1994) believed the construct of multiple role realism is "the recognition that multiple-role involvement is a complex and potentially stressful life-style, paired with awareness of the need for careful planning and consideration of the interface between work and family roles" (p.16). She also believed that multiple role

realism can result in a variety of plans from more traditional (female-dominated career choice, part-time work, emphasis on family) to non-traditional (male-dominated career choice, no career interruption, smaller family). She cautioned that problems arise when women plan for work and family roles that are incompatible and therefore difficult to integrate. Therefore, she believed multiple role plans are vital to the success of women's career and family plans, and in turn their well-being.

McCracken and Weitzman (1997) conducted a study using 131 unmarried Caucasian and African-American undergraduate and graduate students designed to measure these women's role and career plans. Using the Attitudes Toward Multiple Role Planning (ATRMP) scale (Weitzman & Fitzgerald, 1996; Weitzman, 1994), the Bem Sex-Role Inventory (Bem, 1974), and the Problem-Solving Inventory (Heppner, 1988), they found that most women were not actively or realistically planning for multiple roles. Suggesting a developmental component, the older students had higher scores on the ATRMP indicating that as the life events became closer, planning for them increased. The finding that most of the subjects were not planning for multiple roles did not mean that they were not going to occur, rather that these women did not perceive a need to plan for them.

Peake and Harris (2002) studied 66 undergraduate heterosexual couples using Weitzman's (1994) model, specifically the attitudes towards multiple role planning component. The mean age of the participants was 21.1 years and they reported a mean relationship duration of 20.8 months with none of the participants currently married. Using percentages of women employed in each field to determine traditionality of

116

occupation (>50 percent women classified as traditional, <50 percent women classified as non-traditional), the Attitudes Toward Multiple Role Planning (ATMRP) scale (Weitzman, 1994; Weitzman & Fitzgerald, 1996), and an author created multiple planning questionnaire, the researchers attempted to measure multiple role and career planning. Overall, they found no direct relationship between gender, career traditionality, and ATMRP, however several interesting findings did emerge. First, Peake and Harris (2002) discovered that women with imminent marriage plans and non-traditional career aspirations had the highest levels of commitment to multiple role planning, suggesting that these women may recognize the multiple demands involved in these roles. There was also higher concurrence between the non-traditional career couples than there was among the traditional career couples, perhaps indicating an overreliance on traditional gender roles and lack of planning. Also, approximately half of the women surveyed believed they would interrupt their careers for childrearing whereas their male partners overwhelmingly rejected this notion. While Peake and Harris did not directly assess emphasis on home versus career, it seems that at least half of the women in the study were planning on family interrupting career.

Differing Emphases on Home and Family

Baber and Monaghan (1988) have proposed that women's continued participation in female-dominated careers can be explained by those women's desires to make home and family a priority. This is based on the assumption that female-dominated careers require less educational commitment, rebound easier from interruption, and are less demanding than moderate to heavily male-dominated professions. Young women's

current selection and future involvement in these female-dominated careers is attributed to the power of socialization and role modeling. In other words, young women continue to choose traditional fields because of their desire for home and family and attitudes about combining work and family roles.

To test their ideas Baber and Monaghan (1988) hypothesized that young women more engaged in the career planning process would exhibit less planning emphasis on parenting and might even omit parenting as a future option. They studied 250 unmarried undergraduate females using a questionnaire to assess future career plans, family plans, and role orientation. Their results indicated that women planning for careers in traditional occupations did have contingency plans for parenting, compared to women planning for non-traditional occupations who were less oriented toward planning for a family. Interestingly, their research suggested that a majority of the participants were planning non-traditional careers and seemed less oriented toward family planning than expected. The authors did believe the findings indicated a shift away from more traditional attitudes regarding work and family.

Boronzaft (1991) studied 229 Caucasian, African-American, and Hispanic women enrolled in an undergraduate institution in a unique research design incorporating a diverse sample. She developed a questionnaire to assess educational, marital, and vocational plans to determine if any cultural differences existed. Her findings indicated that all three groups of women overall planned to combine work, marriage, and childrearing. A total of 83 percent of the African-American women indicated that they desired to be a career woman with a husband and children. For Caucasian women the rate

was the same (83 percent), while 87 percent of Hispanic women reported wanting both career and family. Interestingly no African-American or Hispanic women chose a life centered on home and family, while 5 percent of Caucasian women did. Conversely, 7 percent of the African-American women, 3 percent of the Caucasian women, and none of the Hispanic women indicated that they wanted to be unmarried and focus on career. From this research it appears that there are similarities, yet subtle differences in this sample based on cultural background. Byars and Hackett (1998) believed such cultural differences are accounted for by minority women's constant presence in the workforce, which by necessity has led to more flexible home and family roles not solely defined by gender. The finding that no African-American women planned on a life centered on home and family would seem to substantiate this hypothesis.

Hallett and Gilbert (1997) studied 174 predominately Caucasian undergraduate women using the Orientation to Occupational and Family Integration Scale (OOFI) and other future life scales created by Gilbert, Dancer, Rossman, and Thorn (1991) to determine how these women planned for their future work and family roles. Using role-sharing dual-career marriage versus a conventional role division dual-career marriage as categories, they found that women planning on role sharing were more committed to their future careers and had higher self-esteem than the conventional role division women. While the role-sharing women believed having a spouse active in household work and childcare was important, neither group of women foresaw any difficulty in their future role management. The authors suggested this reflects a lack of understanding on the part of both groups of women or perhaps the acceptance that managing home and family roles

will be moderately difficult regardless of the marital role division. They believed that while not all women want to integrate work and family in the same way, most young women foresee both roles in their futures.

O'Brien et al. (2000) conducted a longitudinal study of 207 mostly Caucasian women to determine the importance of parents and family to career choice. Using multiple instrumentation, including the Career Aspiration Scale and a questionnaire to assess future family plans, the researchers first administered measures when the sample was in high school and the second administration occurred five years later when most had just graduated from college. Their results indicated that not only did women's aspirations lower with time, but most moved towards more female-dominated fields. The women in the sample also moved to careers that underutilized their abilities and most considered career to be secondary to family. Contrary to their hypothesis, they found only two women out of 207 believed that career was more important than family. The researchers believed that the women's lowered aspirations were a function of the complexities involved in planning for both career and family.

Marks and Houston (2002) studied 92 high school females to determine their future intentions about home and family. Using a Likert scale questionnaire developed for their design, they revealed that the student's educational and career plans were directly influenced by their attitudes about work and the importance of caring for their future children. Over 50 percent of the sample indicated a desire to have a child and those students valued motherhood as very important to their personal development and emotional well-being. Those students who planned to combine the work and motherhood

roles also tended to have positive attitudes about their future multiple-role management and overall well-being. Interestingly, those young women planning part-time work had the highest certainty about having a child. Marks and Houston believed this indicates the power of socialization on young women and the pressures to be a mother over a worker, since part-time workers are typically less committed to their careers. Overall they believed that the young women in their sample were committed to their future motherhood roles and that they were making pragmatic adjustments to their career plans to accommodate these planned roles.

In conclusion, most women in America are currently functioning in multiple roles (U. S. Census Bureau, 1999) and most young women are currently anticipating them (McCracken & Weitzman, 1997; Weitzman, 1994). While the research on women's multiple role plans is extensive, it is also equivocal. It seems that some women are actively planning for multiple roles while others are not, and differing research methodologies make drawing definitive conclusions even more difficult. In addition, how women are planning for these roles seems to differ based on individual characteristics such as cultural and sociological background (Boronzaft, 1991), career aspiration (Baber & Monaghan, 1988), and desired well-being (Marks & Houston, 2002). While participation in multiple roles can either enhance well-being and career satisfaction or lower it depending on how the roles are experienced and managed, less is known about the impact well-being has on future role and career plans. Many recent theorists have advocated for a more holistic approach to career development (Brown, 1995; 1996; Hansen, 1997; Lent et al., 1994; 2000) grounded in the belief that attitudes and personal

factors not only shape career aspirations, but also powerfully influence future career and life outcomes. This holistic approach is exemplified in models of wellness which underlie the philosophical foundations of counseling, thus providing an important link between women's career aspirations, attitudes toward multiple role planning, and interventions to facilitate women's career choices.

Wellness

Optimum well-being, or wellness, is not a new concept. The idea of holistic wellness and striving for good health rather than merely avoiding disease can be traced back to the ancient Greeks (North, n. d.). Their idea of physical health being connected to the other realms of the body (philosophical, spiritual) created the origins of holistic health and became the future foundation of Western medicine. In more recent times, Dr. Halbert Dunn lectured on the integration of the mind, body, and spirit and became the first to coin the term, high-level wellness, defined as an integrated way of functioning to maximize individual potential within one's environment (Dunn, 1961). Since Dunn's time, there has been an explosion of interest toward wellness. Currently, there are government sponsored initiatives (e.g., Healthy People 2010, n. d.), organizations (e.g., Wellness Council of America, n. d.), and on-line community websites (e.g., Wellness.com, n.d.) all designed to increase the health and wellness of individuals and, in turn, the overall population.

Not only has there been an explosion of interest towards wellness in the last 50 years, but there has also been extensive research on this topic as well. Wellness has been found to relate to multiple areas of life, one of which is career (Hammarstrom & Janlert, 1997; Creed, 1999; Hotaling, 2001; Miller, 2002; Patton et al., 2002). Typically, this

research has focused on well-being as an outcome measure following career and other lifestyle choices (Hammarstrom & Janlert, 1997; Creed, 1999; Hotaling, 2001). Less research exists examining how wellness influences or is related to career and lifestyle role choices before or while they are occurring, despite the presence of emerging career models that focus on holistic aspects of the individual (Brown, 1995; 1996; Hansen, 1997). In this section, wellness is defined, including how it is interpreted in the United States, particularly among Caucasian and African-American women. In addition, there is a discussion and critique of relevant wellness models and theories. Next, wellness as it relates to the career development of women is explored. Finally, the importance of understanding the connection between multiple role plans, wellness, and career aspirations is explained.

Definitions and Interpretations of Wellness

The construct of wellness originated in the 1950s (Dunn, 1961), although the idea has been in existence for millennia (North, n. d.). At its most basic level, holistic wellness comprises two distinct but interrelated ideas. The first idea speaks to the holistic nature of the self or the total person approach, which defines the completeness of the self as the composite of several parts (Witmer & Sweeney, 1992). This includes differing ideas about the physical, mental, social, and spiritual self and how they are interconnected (Witmer & Sweeney, 1992). The second, and more common idea of wellness relates to achieving optimal well-being, defined as actively striving for ideal functioning (Merriam-Webster, 2004). Taken together, holistic wellness is a term that describes working toward ideal functioning in all areas of self.

While much of the early wellness paradigm stemmed from the medical sciences, other fields, such as counseling and psychology, have also contributed to the understanding of wellness. Dunn (1977) believed wellness comprises individual strengths, adaptive abilities, and coping patterns that result in higher functioning. Warner (1984) defined wellness as an active process whereby individuals make positive choices that increase their life experiences. Archer, Probert, and Gage (1987) postulated on the integration of mind, body, and spirit and also believed that optimum wellness was both a process and a goal. Another significant contributor to the field of wellness was Ardell (1988) who wrote extensively on high level wellness. He believed that a conscious and intentional approach to physical, psychological, and spiritual health would result in wellness and crossover benefits from one realm to another.

In the 1990s additional advances in the understanding and defining of wellness occurred. Donaghy (1995) defined wellness as a developmental process moving toward maximum functioning. Similarly, Westgate (1996) believed wellness was balanced openness with movement toward growth and the development of holistic human functioning. Myers (1991) and Myers, Sweeney, and Witmer (2000) also proposed a comprehensive view of wellness. They defined wellness as a quest to achieve maximum functioning in the mind, body, and spirit of all humans. She believed that this could be accomplished through positive lifestyle choices of a holistic nature.

In summary, the definitions of wellness vary but have important similarities as well. Not only do many espouse a holistic focus on the individual, but also advocate a movement towards optimum functioning that is developmental in nature. This emerging

field of study, first defined in the 1950s, grew and evolved over the next 50 years to become a significant presence in the United States.

Theories and Models of Wellness

As previously stated, well-being is not a new concept. In recent years, wellness has been brought to the forefront with numerous researchers in several fields attempting to define and explain it. While theoretical models exist from many disciplines, the wellness models from the counseling and psychology fields are most relevant for counselors. These models advocate wellness as a choice in which the individual takes an active role to promote a healthier lifestyle and decrease disease (Palombi, 1992). In this section, five of these comprehensive models of wellness, proposed by Ardell (1977, 1988), Donaghy (1985) who based her work on Hettler (1981), Zimpfer (1992), Myers, Sweeney, and Witmer (2000) and Myers and Sweeney (2003) are explained and discussed.

Ardell's High Level Wellness

Ardell (1977, 1988) was one of the first to propose a model of holistic wellness. Emphasizing the importance of the physical, mental, and spiritual aspects of functioning, Ardell conceptualized his model as a circle. Contained within this circular model were five dimensions that combine to create an individual's overall wellness. These dimensions are self-responsibility, nutritional awareness, stress management, physical fitness, and environmental sensitivity.

Self Responsibility.

The key to Ardell's (1977, 1988) model of wellness is the dimension present at the center of the circular model. This dimension is self-responsibility, which includes responsibility for one's physical health and leading a healthy lifestyle. Realizing that physical health is within one's control is a major component of this dimension. When individuals realize self-responsibility, they can manage their own physical health by educating themselves about the importance of diet and taking part in activities that promote happiness. In addition, achievement of self-responsibility leads to development of a sense of purpose.

Nutritional Awareness.

This dimension, conceptualized as a quartile of the circular model, represents the ability to select healthy and appropriate foods to maintain a suitable diet. Ardell (1977, 1988) believed nutritional awareness included boycotting certain foods such as processed foods, coffee, tea, alcohol, and other addictive drugs. He also advocated for eating uncooked fresh fruits and vegetables daily and also for enjoying a variety of foods. In order to achieve optimum nutritional awareness, Ardell advocated for personalizing a nutritional plan that will result in greater interest in nourishment which will promote well-being and decrease stress.

Stress Management.

This dimension is concerned with a person's ability to understand, accept, and cope with stress. Ardell (1977, 1988) believed the most important aspect of stress management is recognizing the stress in life is inevitable and harmful. This component of

wellness, represented in a quartile of the circular model, is based on the belief that stress can be controlled if an individual knows how to enjoy life and relax. The goal is to develop and maintain a sense of inner peace that will help the creation of a stress response plan that will lead to enjoyable stress management.

Physical Fitness.

Ardell (1977, 1988) believed that physical fitness should be a regular part of one's life and more importantly, that it should be enjoyed. His concept of physical fitness entails understanding the internal and external benefits of exercise. These benefits include aiding physiological and psychological development, in addition to the obvious physical improvements. He also advocated for getting in touch with nature during physical exercise and for enjoying yourself even during strenuous exercise which can be the most rewarding. As with earlier dimensions, physical fitness is represented in a quartile of the circular model.

Environmental Sensitivity.

The final aspect of this model is environmental sensitivity. Ardell (1977, 1988) stated that this dimension involved sensitivity to social, physical, and personal aspects which would affect well-being. Increased sensitivity requires staying current with environmental issues and participating in activities that bring environmental pleasure. For example, he recommended boycotting unhealthy environmental influences, such as fast food, and also joining organizations that were concerned with aiding or enhancing the physical environment.

Ardell (1977, 1988) believed that optimum well-being would be achieved through satisfaction in each of his five life tasks. These tasks are not only singularly important, but interact to influence development in other areas. Also, once personal well-being is enhanced, an individual can move forward to help others. Finally, Ardell stated the ultimate goal of holistic health is mind, body, and spirit integration. This concept, common to many wellness models, appears also in Donaghy's (1995) work

Donaghy's application of Hettler's Wellness Model

Hettler (1984), widely known as the father of the modern wellness movement in the United States proposed a six dimensional model of wellness composed of the components of wellness identified by Hettler (1984). It is based on the premise that development in the six dimensions of life leads to optimal functioning. These six dimensions are social, occupational, spiritual, physical, intellectual, and emotional. Like other wellness models, this model is preventative instead of reactive. Donaghy (1995) applied Hettler's model to women living in battered women's shelters. Her goal in applying the model was to create a sense of empowerment through personal wellness that could serve to reduce the chance women would be in a personally vulnerable position that could lead to domestic violence. Her goal was to emphasize the individual's personal power to make choices in the direction of growth which would lead to overall health enhancement and well-being.

Social dimension.

Hettler (1984) believed the social dimension involved the development of social intimacy. This intimacy with family, friends, and coworkers serves to give an individual a

sense of connectedness and prevents social isolation. Donaghy (1995) believed this connectedness was a primary need for abused women because it served to prevent isolation and provided opportunities for social modeling. Social relationships also serve a developmental function by creating a healthy social environment. This environment is important because of the influential nature individual's have on one another. Occupational dimension Hettler (1984) believed the occupational dimension consisted of all vocational experiences, both past and present. In addition, occupational skills, salary received, and personal satisfaction during employment are aspects of this dimension. Donaghy (1995) believed this dimension was important for battered women who frequently experience economic difficulties that help to keep them in unhealthy or abusive situations. Having a sense of occupational wellness would involve possessing skills that could lead to gainful employment and personal satisfaction.

Spiritual dimension.

The spiritual dimension was the aspect of wellness Hettler (1984) believed to be least discussed, perhaps because of its elusive nature. He believed spirituality could be expressed and experienced through a structured church setting, through an interaction with nature, through quiet contemplation, or while engaging in a simple daily activity. Spirituality is individual specific and she believed that battered women in particular might need to be encouraged to take time for themselves

Physical dimension.

Hettler (1984) conceptualized the physical dimension as encompassing various components such as exercise, nutrition, stress, sexual activity, body esteem, sleep, and

alcohol or drug abuse. These factors contribute to an individual's overall physical health. Donaghy (1995) believed that this dimension could be enhanced through assessment, discussion, education, and providing opportunities for healthy activities such as exercise. For battered women, this aspect was particularly relevant since physical health and safety are often compromised.

Intellectual dimension.

Hettler (1984) believed the intellectual dimension consisted of both formal and informal knowledge. Paramount for battered women is often the knowledge obtained through education, which can also serve to increase vocational opportunity and economic power. Donaghy (1995) believed intellectual stimulation through enlightenment or education is often achieved through sequential steps that may begin as simply as reading a newspaper or advocating bibliotherapy. Donaghy also stated that support groups were an excellent way to stimulate intellectual growth.

Emotional dimension.

The final dimension of Hettler's (1984) model involves the emotional component. This is simply the ability to take ownership of one's emotions and express them in a healthy and appropriate way. Donaghy (1995) believed that sometimes, this can be complicated, especially for battered women who often feel unpleasant emotions, like anger and pain. Recognizing their right to feel these emotions and finding an effective outlet for them can be difficult but is necessary for developmental growth.

In total, these six dimensions of wellness first identified by Hettler (1984) can be used to stimulate personal development and holistic health. Donaghy (1995) believed a

systemic wellness approach was particularly useful for abused women since it would allow them to take responsibility for themselves through increased personal health. This increased holistic health would developmentally lead to a sense of empowerment often lacking among this population. Not only would individuals remain free of abusive relationships, but their overall health would be improved as well. Zimpfer (1992) used a similar philosophy when he created a wellness model for individuals recovering from physical disease.

Zimpfer's Psychosocial Treatment of Life-Threatening Disease

Zimpfer (1992) created a wellness model to help those suffering from severe disease, particularly cancer. Underlying his model are his beliefs that the body is geared innately toward health and that attitudes and personal responsibility affect recovery. This underscores his idea of a mind-body connection and a cause and effect path that links together systems (psychological, neurological, endocrine, and immune) in the body. Because each person is unique, treatment should be tailored to fit individual needs and developmental readiness. His wellness model comprised eight dimensions of treatment that could be either sequential or simultaneous: medical treatment, immune function, life-style management, spirituality, beliefs and attitudes, psychodynamic inner peace, energy forces, and interpersonal relations.

Medical treatment.

Zimpfer (1992) believed this dimension to be particularly relevant for people with life-threatening disease. He encouraged people to become familiar with treatment options and procedures and also to be empowered to ask questions. The goal is for individuals to

be empowered about making treatment decisions and gain a sense of personal control over their medical care. He proposed that this could be accomplished through cognitive counseling techniques, role-playing assertiveness, and other behavioral techniques.

Immune function.

Zimpfer (1992) believed that immune function could be improved through the use of mind-body techniques. These techniques include guided imagery, thermal biofeedback and body massage. Through guided imagery he advocated that individuals visualize their body defeating the life-threatening disease on a cellular level. He believed this would program the body to respond to medical treatments in a more positive manner. Similarly, thermal biofeedback and body massage would increase bloodflow to muscles and parts of the body which can promote healing. In addition, massage can lead to overall sense of greater well-being and relaxation which also promotes greater health.

Life-style management

Management of lifestyle was an area that Zimpfer (1992) believed often needed modification based on the fact that people continue their lifestyles despite the presence of illness. Components of an individual's lifestyle should be balanced and include not only work, but leisure, humor, and play. He believed that work should be a positive experience and that many individuals may need assistance with their career development to move to a career where there is more intrinsic satisfaction and less stress. In addition, individuals need to be encouraged to take part in leisure activities in greater quantities than previously experienced. Exercise, nutrition, and sleep are also important components of

life style management. The goal is to create a life that is in balance and harmony so that healing will be promoted.

Spirituality.

For people with disease, Zimpfer (1992) believed questions about spirituality were paramount. People question life's meaning and frequently their relationship with a higher power. Therefore, the spiritual dimension becomes extremely important. Through the use of biofeedback and guided imagery, individuals can achieve a sense of inner peace and calm by gaining a sense of control over destiny. Prayer also increases a sense of fulfillment and reduces perceived stress, particularly when the prayers are not of a specific nature. He also believed that prayer could be effectively conducted on an individual basis or in groups.Beliefs and attitudes. Zimpfer (1992) maintained that beliefs and attitudes have a powerful influence on life. While most individuals would state the will to live, many fail to possess the attitudes necessary for a achieving a fulfilling and zestful life. He advocates living in the present and living each day to the fullest, rather than waiting to reap rewards at a later date. Beliefs and attitudes program the body to live in a certain way so altering them changes how the body reacts. He believed that through cognitive-emotive techniques, introspection, and hypnosis that these attitude changes could occur. Once attitudes change, then individuals should be encouraged to try out and rehearse behavioral manifestations of their new beliefs.

Psychodynamic inner peace.

The component of psychodynamic inner peace involves freeing oneself from past negativity. Zimpfer (1992) believed that individuals hold onto past resentments,

133

disappointments, obligations, and feelings of guilt either consciously or unconsciously. These negative experiences affect individuals on a daily basis and impact how the body responds to life. Examples include previous experiences with sexual abuse, cycles of violence, or harmful internalized parental messages. These events affect an individual's inner peace and keep the self stuck in cycles of loss. Through dream analysis, hypnosis, projective drawing, and other counseling techniques, individual's can be aided to realize their hidden internalized feelings. By resolving these and restoring a sense of inner peace, the body is free to focus on health and healing rather than protection from conflict.

Energy forces.

While Zimpfer (1992) acknowledged that although most people, including those in the medical profession, are still learning about the power of energy forces, he maintained they are nonetheless important. The idea is that energy fields and body rhythms are very influential to the body's ability to fight infection. He advocated for the use of acupuncture, healing touch, chromatographic healing, and crystals to aid the body in healing. The first step may be educating and increasing understanding about the disease process and useful tools for healing. Counseling can be used to encourage individuals to keep an open mind about the power of balance and the collective unconscious.Zimpfer's (1992) comprehensive model of wellness consists of eight dimensions that he believed, if effectively implemented, could increase the overall well-being of those battling life-threatening disease. A strength of his model is it's holistic nature and extensive practical applications for achieving each of the components. He advocated the model be implemented in a two-year plan with focus on one area at a time.

While the models of Ardell (1988), Donaghy (1995), and Zimpfer (1992) provide a comprehensive view of wellness, they also contain some limitations. Specifically, the models lack empirical validation which makes their utility questionable. These models also lack the developmental nature present in other wellness models, such as the models proposed by Myers et al. (2000) and Myers and Sweeney (2003). Moreover, these models developed from theoretical constructs and empirical research in cross-disciplinary fields such as psychology, anthropology, religion, education, behavioral medicine, and sociology (Witmer & Sweeney, 1992) and consist of a wide range of wellness factors that can be useful when addressing women, career aspiration, and multiple roles

Sweeney and Witmer's and Myers, Sweeney, and Witmer's Wheel of Wellness

Initially, Sweeney and Witmer (1991) and Witmer and Sweeney (1992) described five life tasks related to an individual achieving optimum health. These five tasks, based on Adler's individual psychology (Sweeney, 1998) were spirituality, self-regulation, and its 7 subtasks, work, love, and friendship. Using this as a foundation, Myers et al. (2000) conducted research and expanded the model based on their results. This spherical model contained multiple dimensions embedded in environmental and cultural contexts. In addition, the task of self-regulation was renamed self-direction and 5 subtasks were added through which an individual masters the other life tasks of spirituality, work and leisure, love, and friendship.

Life task 1: Spirituality.

Spirituality is hypothesized to be at the center of the Wheel of Wellness. Myers et al. (2000) believed spirituality to be a force that transcends material life and provides a

sense of connection to the larger universe. The dimensions of spirituality include belief in a higher power, prayer/meditation, hope, purpose in life, moral values, compassion for others, and a sense of oneness in the universe. Individuals who master this task can develop a sense of harmony with nature and the universe, a sense of timelessness, and a feeling of inner peace.

Life task 2: Self-Direction.

Myers et al. (2000) defined this life task as the manner in which one regulates, disciplines, and directs oneself in daily activities. Individuals who achieve this task have a sense of self-control and self-worth and are mindful and intentional in meeting life's demands. The self-direction life task is composed of 12 subtasks: sense of worth, sense of control, realistic beliefs, emotional awareness and coping, problem solving and creativity, sense of humor, nutrition, exercise, self-care, stress management, gender identity, and cultural identity. The sum total of these are sometimes known as positive personality traits that help to create a stress-resistant personality (Sweeney & Myers, 2005).

Life task 3: Work

Myers et al. (2002) believed that the life task of work consisted of work satisfaction, feelings of competence, and the positive meaning work has for an individual. People who achieve success at work realize financial reward for services, understand and develop positive working conditions, and find pleasure in meeting work goals and achieving rewards. In addition, time spent working must be balanced between time spent in other areas, such as spending time with family and friends, and time spent in leisure activities. This leisure component is important and comprises achieving pleasure through

136

physical, social, intellectual, and volunteer activities. Although achieving balance between work and leisure can be challenging, the end result will be an enhanced life experience.

Life task 4: Friendship.

Myers et al. (2002) conceptualized the friendship task as consisting of all social relationships that involve a connection to others, excluding marital, sexual, and familial relationships. They believed that positive social interactions and attachments are primary to the health and happiness of individuals. Therefore, the friendship task is concerned with having appropriate social support and being able to provide it through friendship and altruistic activities. This also prevents feelings of isolation and loneliness and enhances self-esteem through feelings of connectedness in the face of stressful life events.

Life task 5: Love.

The final life task is concerned with healthy love relationships. Myers et al. (2000) believed these healthy relationships are based on trust, intimacy, shared values, good communication, cooperation, and compassion. Even though these relationships tend to be small in number, they also tend to be longer term. Individuals who successfully accomplish this task have relationships that depend on reciprocation of affection, nurturance, caring, physical closeness (e.g., touch, sexual intimacy), and self-disclosure. Those individuals who are in committed positive relationships are more likely to feel loved and valued by others and in turn more likely to be healthy (Sweeney & Myers, 2005)

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The Wellness Evaluation of Lifestyle.

To measure the five life tasks outlined above, Myers et al. (2000) created an instrument, the Wellness Evaluation of Lifestyle (WEL; Myers, Sweeney, Witmer, 1996). Considerable research activity has been stimulated using the WEL and Myers et al.'s conceptualization of holistic wellness. The WEL contains 132 statements and responses measured on a 5-point Likert scale ranging from strongly agree to strongly disagree. Research using the WEL has been conducted using a multitude of additional variables with a wide variety of populations, such as Korean-American adolescents (Chang, 1998), adult gay males (Dew, 2000), adolescent females (Hartwig, 2003), Native American high school students (Garrett, 1996), undergraduate students (Sinclair, 2001; Vecchione, 1999), African-American male undergraduates (Spurgeon, 2002), women at midlife (Degges-White, 2003) Caribbean-American adolescents (Mitchell, 2001), and minority and non-minority adolescents (Dixon-Rayle, 2002; Makinson, 2001). This research has resulted in the advancement of the concept of wellness and has greatly contributed to the understanding of holistic well-being. Several studies that utilized college aged Caucasian and African-American populations will now be briefly discussed to illustrate empirical support for the WEL with these populations.

Sinclair (2001) studied objectification experiences, sociocultural attitudes toward appearance, objectified body consciousness, and wellness in 195 heterosexual Caucasian undergraduate women. Using objectification experiences and sociocultural attitudes toward appearance questionnaires and the Wel (Myers et al., 2001), she found a negative relationship between wellness and body shame. Other significant findings from her

138

regression analyses revealed that sociocultural attitudes toward appearance and objectification experiences accounted for a statistically significant proportion of the variance in all components of objectified body consciousness.

Spurgeon (2002) studied the relationship among ethnic identity, self-esteem, and wellness in African-American males at historically Black colleges/universities and predominately White colleges/universities. Instrumentation used was the WEL (Myers et al., 2001), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and the Racial Identity Attitudes Scale (Helms & Parham, 1990) with a sample of juniors and seniors aged 19 to 49. Using regression analyses and MANOVAS, he reported that self-esteem and racial attitudes did not predict wellness. In addition, a significant negative relationship was found between pre-encounter racial identity attitudes and self-esteem.The Wheel of Wellness model described by Myers et al. (2000) is comprehensive and takes into account various aspects of life. It also is the first holistic wellness model grounded in counseling theory that has a corresponding psychometrically sound instrument (WEL) with a strong research base. However, research conducted by Myers and her colleagues led to the formulation of another holistic model of wellness, the Indivisible Self Model.

Indivisible Self Model (IS-WEL)

Myers and her colleagues (Hattie, Myers, & Sweeney, 2004; Myers & Sweeney, 2005; Sweeney & Myers, 2005), revised the Wheel of Wellness model based on data obtained by factor analysis of numerous research studies. Based on this analysis, the Indivisible Self Model was created. Contained in this research-based model are one higher order wellness factor, five second-order wellness factors (Essential Self, Social

Self, Creative Self, Physical Self, and Coping Self), and 17 third-order wellness dimensions. These 17 dimensions are consistent with the original factors in the Wheel of Wellness. They are spirituality, self-direction, work, friendship, love, self worth, control, realistic beliefs, emotions, thinking, positive humor, nutrition, exercise, self-care, stress management, gender identity, and cultural identity. In addition, each of these factors of wellness exist in an environmental context (local, institutional, global, and chronometrical).

Higher Order Wellness Factor.

Based on the factor analysis conducted by Hattie et al. (2004) using the WEL database, a higher order wellness factor was created. This higher order wellness represents what Adler (1954) described as understanding the holism present in an individual. Basically, he believed that people are greater than the sum total of parts and as such can not be divided. Higher order wellness represents a holistic wellness factor (Myers & Sweeney, 2005)

Second Order Factor: The Creative Self.

This factor is described by Myers and Sweeney (2005) as "the combination of attributes that each individual forms to make a unique place among others in our social interactions" (p.31). This component is comprised of five third-order factors: thinking, emotions, control, positive humor, and work. This construct is based on the proven interrelationship between thinking, feeling, and the body. Goals for the creative self are positive humor, ability to think clearly, meaningful work, and sense of control.

Second Order Factor: The Coping Self.

According to Myers and Sweeney (2005), the coping self is composed of four third-order factors. These factors are stress management, realistic beliefs, self-worth, and leisure. Each of these factors regulate responses to life events. Stress management speaks to an individual's ability to control and cope with stress. Realistic beliefs means possessing ideas that are not irrational, which could lead to stress. Self-worth is enhanced through effective coping and leisure enhances the creative and spiritual dimensions of self.

Second Order Factor: The Social Self

The social self is composed of the two third order factors of friendship and love (Myers & Sweeney, 2005; Sweeney & Myers, 2005). These factors represent the interpersonal relationships that enhance life and prevent isolation. The cornerstone of these relationships is typically family, although family need not be biological to have a positive impact on the social self. Goals for this factor include having appropriate and positive social relationship.

Second Order Factor: The Essential Self.

Myers and Sweeney (2005) conceptualized the essential self as consisting of spirituality, self-care, gender identity, and cultural identity. Spirituality is viewed as providing a sense of meaning and purpose to life. Gender and cultural identity serve as means through which life experiences are perceived. Self-care includes efforts to promote good health and well-being. Together these constructs influence how an individual experiences and makes meaning of life.

Second Order Factor: The Physical Self.

The final factor, the physical self, includes the components of exercise and nutrition (Myers and Sweeney, 2005; Sweeney & Myers, 2005). The goal of this factor is optimum physical health achieved through appropriate diet and adequate exercise. Myers and Sweeney noted that longevity is directly related to successful management of diet and exercise throughout the lifespan.

Contextual Variables.

Reflecting Bronfenbrenner's (1999) view that humans do not live in isolation, the Indivisible Self model contains four environmental contexts. Myers and Sweeney (2005) labeled these contexts as local, institutional, global, and chronometrical. Local contexts included microsystems like families, neighborhoods, and communities. Institutional contexts are educational, religious, governmental, communicative (media), or business in nature. Global contexts are political or cultural and can be characterized as global or environmental events. Finally, chronometrical context refers to the fact that individuals change over time. Each of these contextual factors impact the self through the factors of wellness described above. The inverse relationship is also true.

Myers and Sweeney (2005) created their model based on research evidence collected using the WEL (Myers & Sweeney, 1999). The Indivisible Self model represents a positive step in the understanding of holistic wellness. In addition, its ecological nature not only professes the holistic nature of self, but also addresses complex familial, local, national, and global environmental influences as well. This model's comprehensiveness and associated psychometrically sound assessment instrument the 5F-

Wel (Hattie, Myers, & Sweeney, 2004; Myers & Sweeney, 2005) make it a useful tool for addressing wellness, particularly as it relates to career.

The Five Factor Wellness Inventory (5F-Wel).

Based on the Indivisible Self model and the earlier version of the WEL, the 5F-Wel was created to assess characteristics of wellness to help people make healthier choices. This instrument resulted from structural equation modeling using a large database ($n = 3,993$) gathered using the WEL (Myers & Sweeney, 1999). The instrument measures one higher order Wellness factor, five second order factors, and 17 third order factors previously described in the Indivisible Self model. Recent research has demonstrated the utility of this instrument in empirical studies.

Research critique.

Degges-White, Myers, and Gill (in press) studied 95 midlife lesbians and bisexual women to determine the relationship among transitions, subjective age, wellness, and life satisfaction. Their study utilized the Women's Midlife Transitions Survey (Degges-White, 2003), the Subjective Age Questionnaire (Barak, 1987), the 5-F Wel (Myers & Sweeney, 1999), and the Satisfaction with Life Survey (Diener, Emmons, Larsen, & Griffin, 1985). Their results indicated that lesbians whose subjective age was less than or equal to their chronological age reported greater wellness. In addition, their total wellness was a significant predictor of life satisfaction.

Myers and Mobley (2004) compared traditional-aged (24 and under) and nontraditional-aged undergraduate students on wellness constructs measured by the 5-F Wel. Using data from the WEL database, Myers and Mobley (2004) found several

interesting results. First, traditional aged students reported greater wellness in exercise and leisure while non-traditional aged students reported greater wellness in spirituality and realistic beliefs. In addition, nontraditional students of color scored lower than Caucasian students on overall wellness and on three second-order and six third-order wellness factors. The authors also reported 10 significant second-order and third-order wellness gender differences.

Shurts (2004) studied traditional-aged, never married undergraduate students to determine the relationships among marital messages received, marital attitudes, relationship self-efficacy, and wellness. Using the 5-F Wel (Myers & Sweeney, 2005), and a relationship self-efficacy and marital messages scale, he found that marital attitudes and family marital messages predicted total wellness. In addition, scores on the Creative Self and the Social Self were also predicted by relationship self-efficacy scores. Not only did this provide construct validity for the 5-F Wel, but also indicated the utility of this instrument with undergraduate students.

These research studies provide important validation for both the 5-F Wel and the Indivisible Self model. The research base not only has successfully explored the relationship among wellness and a multitude of factors, but also has demonstrated utility with a variety of populations. This growing body of research on wellness not only supports its importance and validity as a construct, but also is reflective of a growing national trend in the United States emphasizing holistic wellbeing.

144

Wellness in the United States

Despite a strong empirical base validating holistic wellness, typically wellness in the United States has focused more on physical health than any other aspect (Warner, 1984). Despite the World Health Organization proclaiming good health and well-being to be a preventative and proactive state that encompasses the mind, body, and spirit of the individual, the U. S. focus has been more on disease response rather than health promotion (CDC, 2000). Gradually, other dimensions of wellness have been receiving increased public attention, particularly as they relate and interrelate to physical health. For instance, Time magazine reported on a growing body of evidence that a sense of spirituality can improve physical and thereby overall health (Wallis, 1996). Such findings in popular culture reflect a growing national concern to improve health, happiness, and functioning of individuals and the recognition that good health is multifaceted.

In response to this growing national concern, the Centers for Disease Control and Prevention (CDC), has recently expanded its role from the government disease response agency to a new focus on improving the overall quality of life of Americans. In fact, their mission is now to "to promote health and quality of life by preventing, and controlling disease, injury and disability" (CDC, 2000, p.7). As the U. S. struggles with epidemic health issues often associated with prosperity such as obesity, diabetes, heart disease, cancer and smoking, and stress related illnesses, a focus on wellness and increasing quality of life is much needed (Brett & Hayes, 2004; CDC, 2000).

The policy directives at the national level also seem to be spreading among the U. S. population. A recent study conducted by the U. S. Department of Health and Human

Services (2002) found that 36 percent of adults over the age of 18 were using alternative

medical treatments, such as yoga, breathing exercises, meditation, dietary treatments, and

botanical treatments. When prayer was included, the percentage rose to 62 percent. This

seems to reflect a growing national trend to recognize the interconnectedness of the

different realms of the body and a move away from traditional medicine that focuses only

upon the physical self. Interestingly this study found that women were more likely than

men to use more holistic therapies, and African-Americans were more likely than

Caucasians to use them, especially prayer. These gender and racial differences present in

the United States highlight the need to examine unique populations in terms of their

overall well-being, particularly populations of women

Women's Wellness

With a growing national concern about quality of life and wellness and so many

women currently functioning in multiple roles (U. S. Census Bureau, 1999), women's

health and wellness have been brought to the forefront (Brett & Hayes, 2004). This active

role participation combined with increasing rates of diseases in women, such as AIDS,

heart disease, lung cancer, and diabetes has led to greater concern for women's health and

overall well-being (Office on Women's Health, 2003). In this section, research relating to

women's wellness will be discussed with a particular emphasis on Caucasian and

African-American women and women currently in multiple roles.

Caucasian and African-American Women

The Department of Health and Human Services in the United States has

established a bureau on women's health. This agency has determined that minority

women, including African-American women, experience similar health problems as the majority population, however, as a group, they experience poorer health and disproportionately high rates of disease, premature death, and disability. Many also face socio-economic, cultural, and other barriers to achieving optimal health such as diet and limited access to healthcare (Office on Women's Health, 2003). Despite advances in education and employment, African-American women are more likely to live in poverty, hold lower-paying jobs, and receive less compensation than Caucasian women (Office on Women's Health, 2003). In addition, African-American women often experience the far reaching effects of racism that can impact health and wellness negatively (Lee, 2005).

For African-American and Caucasian women, rates of disease are similar but prevalence rates vary. Both African-American women and Caucasian women suffer from high rates of heart disease, cancer, and cardiovascular diseases (stroke), however African-American women have higher mortality rates as a result of these diseases (Office on Women's Health, 2003). African-American women also have higher rates of obesity, physical inactivity, maternal mortality, infant mortality, low birth weight infants, AIDS, STDs, diabetes, tuberculosis, and higher morbidity (chronic disease) rates. Caucasian women have higher rates of smoking, alcohol use, illicit drug use, depression, and suicide. Currently, the life expectancy of African-American women is 74.7 years compared to 79.9 years for Caucasian women (Office on Women's Health, 2003). While these rates differ, both African-American and Caucasian women have greater life expectancies than males of both races.

Research critique.

These statistical realities about the overall health of women coincide with research findings examining women's holistic wellness. Multiple researchers have documented women's decreased holistic wellness when compared to men (Connolly, 2000; Gamma & Angst, 2001; Gill, dissertation in progress; Myers & Bechtel, in press; Myers & Mobley, 2004). Much less research exists comparing the holistic wellness of Caucasian and African-American women (Myers & Mobley, 2004).

In 1993, Gamma and Angst surveyed (2001) 215 females and 192 Swiss males (aged 34 to 35) using psychiatric diagnostic criteria and quality of life survey questions based on 10 life domains. These domains were work, finances, family of origin, friends, physical well-being, psychological well-being, spouse/partner, own family, childhood, and total distress. They indicated that women generally reported lower quality of life and higher distress than men. They also reported that women's well-being was more related to social influences and psychiatric diagnostic criteria. In addition, they indicated that women's physical and psychological well-being was also related to these factors, while the men's well-being did not correlate with any of the factors measured. Gamma and Angst concluded that women's well-being was both more holistic and lower when compared to men's.

Connolly (2000) examined the relationship between holistic wellness, mattering, and job satisfaction among 82 employees at work settings in the Southeastern and Midwestern U. S. using the Wellness Evaluation of Lifestyle (Myers, Hattie, Sweeney, & Witmer, 1998), the general mattering scale, the Job Descriptive Index-Revised (Balzer, et

al., 1997), and a demographic questionnaire. Her results indicated that holistic wellness was a significant predictor of job satisfaction, but more importantly women displayed lower holistic wellness than did the men in her sample.

Myers and Mobley (2004) used the Wel database (n = 1,567) to examine differences in wellness between traditional-aged students, age 24 and under, and non-traditional students, aged 25 and over. They found no significant gender differences in overall wellness, however MANOVAS revealed ten gender differences on second and third-order factor scores. These gender differences varied, but overall women had lower wellness scores on Physical Self, including Exercise and Nutrition, and Coping Self, including Stress Management, Self-Worth, and Leisure. Myers and Mobley (2004) also observed some differences in holistic wellness based on race. Caucasian students scored higher than students of color on six factors (Social Self, Friendship, Sense of Control, Physical Self, Exercise, and Leisure), while Caucasians scored lower on Realistic Beliefs and Cultural Identity. Their sample was composed of 15.5 percent African-Americans and 19 percent Latino, Asian American, and Native Americans. While these results would seem to indicate that students of color have lower wellness, the authors caution about generalizing since the sample size was too small to make any specific conclusions about ethnicity.

It is clear that women of all races face threats to their holistic wellness. Some populations of women, notably minority populations, such as African-American women, may face the biggest challenges in terms of health and well-being. Other populations of women also encounter numerous obstacles to achieving optimum health, namely those

149

women actively involved in multiple roles. This literature is briefly reviewed in the following section.

Women in multiple roles.

With regard to women in multiple roles and overall wellness, Gjerdingen, McGovern, Bekker, Lundberg, & Willemsen (2000), reviewed the literature from multiple databases and concluded that one side effect of multiple role involvement is that women's work is more diversified and women's time is more at issue. They found that men overall work more paid hours than women, with many women electing to work part time. However, women invested more time in home than did men, usually at least twice as much time. Not only did women spend more time in home endeavors, but many also reported having the main responsibility for these household tasks. In sum, women spent an average of 10 hours more per week on workload (both home and family) than men, to average an 80-hour work week. For those women with children, the time spent working was even greater.

With such a large workload, Gjerdingen et al. (2000) questioned the impact this would have on women's wellness. They cited several researchers (Frankenhaeuser, 1991; Gjerdingen, Chaloner, & McGovern, 1993) who reported women in multiple roles, particularly mothers, are more at risk for certain symptoms and illnesses, such as sexual problems, dizziness, exhaustion, stress, and respiratory illnesses. In addition, they cited other researchers (e.g., Bjornberg, 1998; Klein, Hyde, Essex, & Clark, 1998) who reported the combination of work and family, particularly the presence of children, lowered well-being and self-esteem while depression, anxiety, and anger increased.

Gjergingen (2000) stated that central to the multiple role experience for women is guilt, particularly among highly educated women, most frequently for not spending enough time with their children.

In summary, there has been a growing cultural awareness towards the numerous benefits of holistic wellness. Accompanying this awareness is the statistical prevalence of more women experiencing threats to health and well-being in the form of disease, guilt, and overall workload. While African-American and Caucasian women may differ on specific components of wellness, both groups of women are more active in multiple life roles than ever before. Given so many threats to holistic well-being for women, it is important to gain a better understanding of wellness, before examining the potential impact wellness has on women's career development.

Wellness and Career

Recently, some career theorists have attempted to explain the connection between well-being and career development (Brown, 1995; 1996; Hansen, 1997). Despite the presence of numerous holistic wellness models that include a work or career construct (e.g., Ardell, 1988; Donaghy, 1995; Zimpfer, 1992; Myers et al., 2000; Myers & Sweeney, 2005), most career researchers and practitioners have been slow to recognize wellness as important. In fact, Dorn (1992) argued that counselors and other researchers are not aware of or do not understand the complex integration and interdependence of work and personal identities (Brown, 1985; Brown & Brooks, 1985). Since few holistic and integrated theories of self have emerged in the career arena, few, if any, have been empirically tested. Currently, no research exists which has examined holistic well-being

151

as an influence on career aspiration, however a few studies have been conducted that examine well-being and other components of career development such as career maturity and career decision making. This research will now be reviewed to illustrate the link between well-being and career development.

Career Decision-Making and Career Maturity

Super (1957) and Krumboltz (1993) believed that career encompassed all areas of life. This interactive notion of career supports the idea that career influences all aspects of life and health and the reciprocal relationship is also true. Super himself believed that the more capable an individual is to negotiate the tasks of career development, the greater the chance he or she will be satisfied later in career and life areas. However, while this relationship is hypothesized to be true, research examining the relationship of well-being as an influence on career development has been quite limited. To date, only three researchers have examined well-being and career choice constructs. These three studies utilized career maturity and career decision-making as their variables of interest.

Vecchione (2000) studied the relationship between career maturity and holistic wellness among college students using 160 (109 female, 51 male) randomly chosen undergraduates. Subjects completed the Wellness Evaluation of Lifestyle (Myers, Sweeney, & Witmer, 1996) and the Career Development Attitude (CDA) and Career Development Knowledge (CDK) scales on the Career Development Inventory (Super, Thompson, Lindeman, Jordaan, & Myers, 1981). Vecchione reported a significant negative relationship between CDA and the five WEL life tasks, specifically spirituality. Negative correlations were also found with the other WEL life tasks and both CDA and

152

CDK, even though they are not significant. Vecchione explained these unexpected results as developmental since participants may not have viewed the relationship between wellness and career development as meaningful and may actually have viewed this relationship as detrimental due to a lack of understanding. It should be noted that this sample was small and also not ethnically diverse.

Hotaling (2001) studied 100 undergraduate men and women to determine the relationship between career maturity and subjective well-being. Using the Career Development Inventory (Super, Thompson, Lindeman, Jordan, & Myers, 1981), the Social Readjustment Scale (Holmes & Rahe, 1967) and the General Well-Being Questionnaire (Wheeler & Magaletta, 1997) as instrumentation, Hotaling found support for his research hypotheses that individuals with high levels of career maturity also had high levels of subjective well-being while individuals with low levels of career maturity also had low levels of subjective well-being. His post-hoc analyses revealed that career planning was most responsible for the relationship between well-being and career maturity.

Miller (2002) also studied undergraduate men and women (n = 394) to determine the relationship between problem-solving, career decision-making, program commitment, and psychological well-being. Using the Social Problem Solving Inventory (D'Zurilla & Nezu, 1990), The Career Maturity Inventory – Attitude Scale (Crites, 1995) and Ryff's Scales of Psychological Well-Being (Ryff, 1995) as instrumentation. Miller reported a positive correlation between problem solving orientation, career decision-making attitudes, program commitment and well-being, with career decision making attitudes

being directly related to well-being. In other words, those students with higher career decision-making attitudes also had higher levels of psychological well-being.

In summary, there is a growing holistic well-being movement occurring in the United States. Simultaneously, researchers studying holistic well-being have found that wellness relates to a variety of constructs from self-esteem to career maturity. In addition, many career development theorists have hypothesized about the holistic nature of career development and career choices, although empirical evidence for this remains sparse. Research that does exist examining these career development constructs in relation to wellness has not only been equivocal, but has focused on samples using both men and women. Similarly, limited research has examined well-being as it relates specifically to women, multiple-role plans, and career aspirations. Because of this lack of empirical evidence, the true nature of the relationship between career aspirations, multiple-role planning attitudes, and wellness among women remains unclear.

Summary of Literature Review

In summary, since the creation of the United States of America, women have worked in paid employment. While this participation was originally very limited, particularly among Caucasian women, gradually women became more of a presence in the workforce. The Industrial Revolution and World War II provided opportunities for significant advancement for both Caucasian and African-American women although their workforce experiences were unequal to men's experiences. Most recently, approximately 60 percent of both populations of women work and both have become part of what some have called the gendered workforce where women are clustered into a small number of

occupations that are typically low-paying and low-status. This has led to a wage discrepancy whereby Caucasian women earn approximately $.78 for every $1.00 earned by a Caucasian man, while African-American women earn a mere $.62 for every $1.00. While women and men currently in careers are responsible for the existence of this wage gap, educational statistics indicate that young women currently in college are continuing to choose these gendered careers despite increasing educational opportunities. While more women than men graduate from undergraduate institutions and have equal access to higher paying occupations, it appears that young undergraduate women are continuing the trend seen in the current workforce.

With the expansive presence of women in the workforce, efforts to explain women's career development have increased as well. Initial efforts to describe women and career involved applying male-based models until the need for separate theorizing for women became evident. Numerous researchers including Gottfredson, Astin, Hackett and Betz, Farmer, and Fassinger advanced theoretical understanding of women's career development. Most recently, Lent, Brown, and Hackett created a comprehensive model of career development that incorporates not only gender, but cultural variations as well. This model has shown considerable applicability with multiple populations of women and provides a firm theoretical foundation for predicting women's career aspirations.

While understanding career aspirations is a common goal of many researchers, defining this construct has proven difficult. Two primary operationalized definitions have emerged. The first definition describes career choice while the second describes internal motivation to succeed at a career. Although different, both definitions are useful for

understanding women's career ambitions because career choice may be in a lower paying career field while career motivation can be high to succeed within that field.

One variable that has been reported in the literature as significant for women is the variable of multiple role planning attitudes. This idea reflects the statistically reported fact that a clear majority of American women will be married and have a child at some point in their lives. Research indicates that these multiple roles impact women currently in careers and have been hypothesized to influence the career aspirations of women planning their careers. Several career development researchers have attempted to incorporate concepts of multiple roles in career development theories but empirical research validating these models has been sparse. Weitzman's multiple role planning realism provides the most solid attempt to incorporate this construct into women's career development, although research clarifying the influence of multiple role planning attitudes on career aspirations has been equivocal.

In addition to multiple roles, another variable found repeatedly in the literature related to women and career is holistic well-being. While most of this research has measured wellness as it relates to women currently in career and family roles, little has been generated regarding how wellness affects women planning for those roles. This is despite a surge of interest in holistic well-being in the United States. Several theoretical models of holistic wellbeing exist, including models proposed by Ardell, Hettler, Zimpfer, and Myers, Sweeney, and Witmer. Most promising is the Indivisible Self model by Myers and Sweeney, which not only has viable instrumentation but also has received

empirical validation. This research base however contains little relating wellness to career development so the nature of this relationship remains largely unexplored.

While women have made gains in the American workforce in the past 300 years, there is still a discrepancy present between men and women. This discrepancy is more evident when comparing Caucasian and African-American women who have not only differing socio-cultural experiences but African-American women experience significantly more challenges in the labor force. While theoretical advances have contributed significant knowledge to women's career development, more information needs to be uncovered. Specifically, the relationship among career aspirations, multiple role planning attitudes, and wellness remains largely unexplored, particularly among African-American and Caucasian undergraduate, traditional-aged females.

CHAPTER III

METHODOLOGY

In Chapter Two, literature related to women's career development was reviewed,

specifically relating to the variables of career aspiration, multiple role planning attitudes,

and wellness. In this chapter, the methodology for examining the relationships among

these variables is described. First, the research hypotheses are presented. Next,

information about the subjects, instrumentation, procedures, and data analyses for the

study is discussed. The chapter concludes with a discussion of the pilot study.

Hypotheses

In Chapter One, two research questions were presented. In this section, the

research questions are restated along with a brief rationale for each question.

Research Question 1: What is the relationship among multiple role planning attitudes,

wellness, and career aspirations among African-American and Caucasian female

undergraduates?

Researchers have suggested that multiple role planning attitudes account for

women's career aspirations, although empirical findings for this have been mixed. It has

been shown that women with lower career commitment (aspirations) were not

anticipating multiple role difficulties and had engaged in more multiple role planning.

Also, the more women value the home role, the less the career role is emphasized. In

addition, no research exists that has examined wellness as a function of career aspiration;

however researchers have documented the   connection between holistic well-being and other aspects of career development, such as career maturity and career decision-making.

Hypothesis 1a: Multiple role planning attitudes and wellness will predict career

aspirations for both African-American and Caucasian undergraduate women.

Researchers have described wellness as a holistic view of self with many components such as realistic beliefs, self worth, ability to think clearly, and self-control. Although no research exists that has examined the relationship between multiple role planning attitudes and wellness, it has been suggested that individuals with higher wellness are more capable to perform career related tasks, such as planning for multiple roles.

Hypothesis 1b: The variables of multiple role planning attitudes and wellness, both

together and separate, will account for more variance in career aspiration for

Caucasian undergraduate women than for African-American undergraduate

women.

Researchers have found that Caucasian women's career aspirations are more influenced by multiple role plans. Researchers have also documented the relationship between wellness and career related tasks and this relationship is not believed to be dependent upon racial variables, although no research exists specifically examining Caucasian and African-American women.

Hypothesis 1c: Multiple role planning attitudes will be positively correlated with

wellness for both African-American and Caucasian undergraduate women.

Researchers have documented the relationship between well-being and career development, specifically career maturity and career decision-making. Although no research exists that has directly examined the relationship between wellness and career aspiration, it has been suggested that individuals with higher wellness are more capable to perform career related tasks.

Hypothesis 1d: Wellness will be positively correlated with career aspirations for both African-American and Caucasian undergraduate women.

Researchers have documented that multiple role planning has an influence on career aspirations for women and that most women are currently planning for both career and family roles. In addition, women with more traditionally female career aspirations have been found to be more involved in multiple role planning.

Hypothesis 1e: Multiple role planning attitudes will be negatively correlated with career aspirations for both African-American and Caucasian undergraduate women.

Research Question 2: Are there differences in the variables of interest for African-American and Caucasian women?

According to statistical data and a few researchers, it has been suggested that African-American women have lower overall wellness when compared to Caucasian women, although no research exists that has specifically examined these group differences.

Hypothesis 2a: African-American undergraduates will have lower overall wellness than Caucasian undergraduate women.

Researchers have found that Caucasian women, more than African-American women, plan for future marital and family roles.

Hypothesis 2b: African-American undergraduates will be more active in multiple role planning than Caucasian undergraduate women.

Researchers have found that African-American women are more likely to possess higher career aspirations than Caucasian women.

Hypothesis 2c: There will be a significant difference in level of career aspiration between African-American and Caucasian undergraduate women, with African-American women possessing higher career aspirations.

Participants

The population of interest in this study was Caucasian and African-American traditional-aged undergraduate women. A power analysis was conducted to determine the minimum number of participants needed. Based on this analysis, it was determined that approximately 150 African-American and 150 Caucasian participants were needed to achieve a power rating of at least 0.9 with $p<.05$. Sampling occurred at three universities in the Southeastern United States.

Samples of convenience were recruited from currently enrolled undergraduate students at the University of North Carolina at Greensboro (UNCG), North Carolina Agricultural and Technical State University (NCAT), both in Greensboro, North Carolina, and Western Kentucky University (WKU) in Bowling Green, Kentucky. UNCG is a large urban university with approximately 14,000 students (68 percent female, 32 percent male) of whom 11,000 are traditional undergraduate students (UNCG,

2004). Approximately 20% of the undergraduate students are African-American. NCAT is a historically black university with approximately 8,300 students (52% female, 48% male) of whom 6% are Caucasian (NCAT, 2004). WKU is a large university with approximately 16,000 undergraduate students (41% male, 59% female) of whom 7% are African-American and 87% are Caucasian (WKU, 2004).

Data was collected from all students present in preexisting, intact undergraduate classrooms from across the respective universities. This data collection was not restricted according to age, gender, or race. All students in the classes including both males and females who agreed to participate were asked to complete the required information. For purposes of this study, only those data originating from traditional-aged, Caucasian or African-American women was analyzed. Data collected that did not meet these criteria was kept confidential and will be analyzed at a later date.

Recruitment of the participants was accomplished via e-mail and phone communication with selected university professors. These professors had knowledge of the appropriate rules and regulations regarding the use of human subjects. Permission to allow students to participate in the study was secured from the Internal Review Boards at the University of North Carolina at Greensboro, North Carolina Agricultural and Technical State University, and Western Kentucky University (see Appendix D).

<center>Instrumentation</center>

This study utilized several written instruments to assess career aspiration, multiple role planning attitudes, and wellness. Specifically, the Career Aspiration Scale (CAS; O'Brien & Fassinger, 1993), the Attitudes About Multiple Role Planning Scale (ATMRP;

<center>162</center>

1994), and the 5-F Wel (Myers & Sweeney, 2005) were used. In addition to instrumentation, two open-ended and several demographic questions were asked to provide more detailed information about the participants. Copies author created questionnaires are in Appendix A.

Career Aspirations

Career aspirations were assessed using both of the operationalized definitions found in the literature. First, higher level career aspiration as a measure of an individual's achievement goals and motivation (Farmer, 1997, O'Brien & Fassinger, 1993; Plucker, 1998; Wang & Staver, 2001) and secondly, aspiration as desired career choice and college major both measured on a traditionality category system based on the Department of Labor classifications.

Career Aspiration Scale

The Career Aspiration Scale (CAS) does not measure the construct of career choice, but is rather an internal measure of career drive (O'Brien & Fassinger, 1993). Developed by O'Brien, Gray, Tourajdi, and Eigenbrode (1996), this scale measures the drive an individual has for success and accomplishment in their chosen field. This operationalization of career aspiration seems particularly relevant for individuals who may be highly motivated towards career, but undecided on a particular career choice (Nauta, Epperson, & Kahn, 1998). For this study, the CAS was chosen because it reflects the fact that women may be highly achievement oriented despite choosing a traditional or low-status field.

Overview.

The CAS is a 10-item scale that assesses professional life goals. The instrument is not career specific, but rather measures plans individuals have in their chosen occupational arena. It is a self-report instrument that takes approximately five minutes to complete. This instrument is self-explanatory and easily administered to adults.

Items and subscales.

The 10-item statements are rated based on the degree to which the respondent agrees or disagrees with the item. This rating occurs on a 5-point Likert scale (5 = "very true of me" to 1 = "not at all true of me"). Examples of items include, "I hope to be a leader in my career field" and "Attaining leadership status in my career is not that important to me". There are no subscales on the CAS.

Scoring.

The CAS is scored with relative ease. Responses for each of the ten items are summed up to generate a total career aspiration score. Four out of the ten items are reverse scored. Higher scores reflect a stronger goal and achievement orientation while lower scores reflect less motivation towards career and occupational achievement. Possible scores range from 10 to 50.

Reliability and validity.

O'Brien and Fassinger (1993) reported the CAS to be internally consistent with reliability coefficients ranging from .75 to .76. Later testing revealed internal reliability consistency estimates for the CAS ranging from .73 to .77 (O'Brien et al., 1996). Evidence of construct validity has been illustrated by correlations with additional

measures using samples of undergraduate women. Specifically, the CAS total score is positively correlated with measures of multiple-role self-efficacy and attitudes toward women's roles and negatively correlated with a scale assessing the importance of career compared with family (Dukstein & O'Brien, 1994). Additional validity data shows positive correlations with higher scores on the CAS and ability, career self-efficacy, and career salience (Dukstein & O'Brien, 1994; O'Brien et al., 1996; O'Brien et al., 2000).

Single Item Questions

Participants were asked to select from a list of occupational categories and sub-categories derived from the U. S. Department of Labor classifications for jobs (USDOL, 2004b). These occupational categories range from professional and managerial occupations to farm and laborer occupations. Participants were instructed to select the one sub-category that best represents their career aspirations. These responses were compared to national data collected in 2002 that indicates percentage of males and females in each occupation. This created an index to gauge career aspiration on a male-dominated versus female-dominated career continuum. Current U. S. Department of Labor (2003b) classifications for traditional or non-traditional occupations are based on percentage of each gender working in the occupational class. The USDOL classifies occupations as traditional for women if over 75 percent of individuals currently working in the field are female. Conversely, non-traditional occupations are classified as those careers having 25 percent or fewer women currently in the field. The data was then coded based on these percentages into either traditionally female (1), moderate (2), or nontraditionally female (3) categories.

Participants were also asked to indicate their current major from a list of 35 categories. These categories correspond to the most recent data collected by the National Center for Education Statistics that reports extensive information on degrees conferred (NCES, 2002). Following the criteria established by the U. S. Department of Labor (USDOL, 2003b), and using percentages of females granted degrees in the corresponding major, the data was coded either traditionally female, moderate, or traditionally male. The USDOL classifies occupations as non-traditional for women if 25 percent or less of those employed are women. Traditional occupations are those composed primarily of women (75 percent or greater).

<center>*Multiple Role Planning Attitudes*</center>

This construct relates directly to individual's attitudes about combining future work and family roles. Using Weitzman's (1994) multiple role realism as a framework, her model is grounded in the assumption that planfulness will increase the quality of the multiple role lifestyle. Weitzman (1994) defined attitudes toward multiple role planning as the orientation and specific attitudes an individual has towards planning for multiple roles. This is a central construct of this study because it is believed that counselors have the opportunity to educate individuals about the realities of multiple roles and how to effectively plan for them.

Attitudes About Multiple Role Planning Scale

The Attitudes about Multiple Role Planning Scale (ATMRP, Weitzman & Fitzgerald, 1996) was used to assess attitudes towards formulating plans regarding work and family integration. The ATMRP is a 40-item instrument based on Weitzman's

<center>166</center>

(1994) theoretical framework describing the process of planning to combine career and family roles known as multiple role realism. The ATMRP separates the multiple role planning attitudes construct into four components or subscales: Knowledge/Certainty, Commitment, Independence, and Involvement. This instrument was designed for use with women, although it has successfully been administered to men (Conlon, 2002).

Overview.

The ATMRP is a 40-item, self-report instrument that is easily administered in an individual or group setting. This instrument is based on Crites (1978) career maturity model and his Career Maturity Inventory. The ATMRP has been used primarily with undergraduate and graduate students. Respondents are directed to indicate the degree they agree or disagree with fifty statements related to multiple role planning attitudes. These responses are made using a 5-point scale (1 = strongly disagree to 5 = strongly agree). Administration time is approximately 15 minutes.

Items and subscales.

The four subscales of the ATMRP scale each consist of 10-items. The first subscale, Knowledge, assesses knowledge about planning for multiple roles and certainty about one's abilities to live in a multiple role lifestyle (e.g., "I do not know how to plan for combining my career and family"). The second subscale, Commitment, assesses commitment and attitudes about having a multiple role lifestyle (e.g., "I want it all, to be a parent, spouse, and career person, and I am determined to manage it all and do it well). The third subscale, Independence, assesses the importance of making one's own decisions or independence in planning (e.g., Other people usually can suggest the best

167

ways to manage career and family responsibilities for those they care about). The fourth subscale, Involvement, assesses the degree of participation in multiple role planning and the perceived immediacy of planning (e.g., I can't seem to become very concerned about how to combine my career with my family plans).

Administration and scoring.

Individuals complete the instrument independently by indicating the degree to which they agree or disagree with 40 multiple role planning statements. Twenty-four of the items are reverse scored. For each of the five sub-scales, a scale score is computed based on summing the responses for the 10 item sub-scale questions. The sub-scale totals can range from 10 to 50 and indicate the degree of Knowledge/Certainty, Commitment, Independence, and Involvement toward multiple role planning.

Validity and reliability.

Weitzman and Fitzgerald (1996) reported adequate reliability for the ATMRP using high school (n = 177), undergraduate (n = 394), and graduate women (n = 354). Overall alpha coefficients ranged from .76 to .85. The total sample had internal consistency coefficients of .83 (Knowledge/Certainty), .79 (Commitment), .80 (Independence), and .84 (Involvement). In addition, a confirmatory factor analyses provided support for the four factors with $p < .001$ (Goodness of Fit Index = .92; Root Mean Square Residual = .075; chi square = 266.64). It should be noted that the ATMRP contains an additional subscale, Flexibility/Compromise, however this scale was not supported through factor analyses and reliability was low (.68). Because of the lack of empirical support, this scale was not used in this study.

Validity was also demonstrated by Weitzman and Fitzgerald (1996). Using educational level as the independent variable and scale scores as the dependent variable, Weitzman and Fitzgerald expected scale scores to increase linearly as education increased thereby reflecting an increase in planful attitudes. Using a one-way MANOVA, they found the expected linear relationship. Criterion related validity was established by comparing the content of multiple role plans with attitudes as measured by ATMRP and classifying the relationship as either compatible or incompatible. Their results indicated that participants with compatible work-family plans did, in fact, have higher scale scores than those with incompatible plans.

Single Item Questions

In an effort to ascertain how plans for balancing work and family may relate to family of origin, participants were asked to identify the pattern present in their home growing up. Responses range from both parents working full time to one parent working full time and the other part time. Another question asked respondents to indicate their mother's and father's career. In another discrete question, participants were asked to indicate the degree (if any) in which they have discussed multiple role plans with their relationship partner. Responses range from not at all to extensive planning. Related to this question, participants were asked an open-ended question to ascertain their future plans for balancing work and family roles and another question asked what influenced them to make such plans.

Wellness

Wellness or holistic well-being is a broad construct to measure. For purposes of this study, measuring overall well-being as well as individual dimensions of well-being is important. Counselors have the opportunity to impact and educate about wellness not only for the sake of improving overall health and functioning, but also, because it may influence career aspirations. For this reason, the 5-F Wel was chosen as the appropriate measure.

Five Factor Wellness Inventory (5-F Wel)

Based on the Indivisible Self model and the earlier version of the Wellness Evaluation of Lifestyle (WEL, Myers, Sweeney, & Witmer, 1996; 2001) the 5F-Wel was created to assess characteristics of wellness so people could make healthier choices. Originally derived from theoretical constructs and empirical research in multiple fields such as psychology, anthropology, religion, education, sociology, and behavioral medicine (Witmer & Sweeney, 1992), this instrument includes a wide range of holistic wellness factors. The development of 5-F Wel instrument resulted from structural equation modeling using a database of 3,993 gathered using the WEL (Hattie, Myers, & Sweeney, 2004; Myers & Sweeney, 1999;). Based on this analyses, the instrument measures one higher order Wellness factor, five second order factors (Creative Self, Coping Self, Social Self, Essential Self, and Physical Self) and 17 third order factors (Thinking, Emotions, Control, Work, Positive Humor, Leisure, Stress Management, Self-Worth, Realistic Beliefs, Friendship, Love, Spirituality, Gender Identity, Cultural Identity, Self-Care, Nutrition, and Exercise). In addition, the instrument contains

ecological questions designed to assess local, institutional, global, and chronometrical contexts.

Overview.

Self, and the 17 third order factors. In addition, 18 experimental items are included to assess the contextual variables. Administration time is approximately 15 to 20 minutes. The instrument exists in several versions, including differing reading levels and translations. For this study the adult version was used because it is appropriate for those with at least a ninth grade reading level. This instrument and its predecessor the WEL (adult form) has been used most often with undergraduate and professional adult populations of varying ages and ethnicities (e.g., Connolly, 2000; Hartwig, 2003; Mobley, 2004; Myers & Bechtel, 2003; Myers, Mobley, & Booth, 2003; Shurts, 2004; Shurts & Myers, 2002; Sinclair, 2001; Spurgeon, 2002).

Items and subscales.

The 5-F Wel contains 73 items relating to the subscales of the Indivisible Self model. There is one higher order Wellness factor, five second order factors, and 17 third order factors. The subscales group and are divided as follows: Creative Self (Thinking, Emotions, Control, Work, Positive Humor), Coping Self (Leisure, Stress Management, Self-Worth, Realistic Beliefs), Social Self (Friendship, Love), Essential Self (Spirituality, Gender Identity, Cultural Identity, Self-Care), and Physical Self (Nutrition, Exercise). Individual items are behavioral and attitudinal statement and responses are made on a 4-point Likert scale ranging from strongly agree to strongly disagree. Examples of items

include, "I believe in the existence of a power greater than myself" and "I am an active person".

Administration and scoring.

Scores are computed for each of the 17 third order factors by summing the corresponding items relating to the factor. For each of the five sub-scales, a scale score is computed based on summing the responses for corresponding third-order factor sub-scale questions. Finally, a composite Wellness score is computed by summing the total of the 73 wellness items to create a global measure of wellness. Through linear transformation, all scales are placed on a common metric, which leads to a possibility of scale scores from 25 to 100.

Validity and reliability.

Hattie, Myers, and Sweeney (2004) reported exploratory and confirmatory factor analyses supporting each of the scales of the 5-F Wel including the 17 discrete third-order factors, 5 second-order factors, and the single higher order wellness factor. The 5F-Wel has also been used in multiple studies that provide evidence of both convergent and divergent validity of the scales in relation to constructs such as ethnic identity (Dixon, 2002; Spurgeon, 2002), acculturation (Chang, 1998; Dixon, 2002), body image (Sinclair, 2001), self-esteem (Spurgeon, 2002), and gender role conflict (Mobley, 2004).

The 5-F Wel has good internal consistency (Myers & Sweeney, 2005). Using a sample of 2,093, alpha coefficients for the first and second order factors were: Total Wellness, .94; Creative Self, .92; Coping Self and Social Self, .85; Essential Self and Physical Self, .88. The reliability for the third order factors was also strong and ranged

from .70 to .87 for all but two scales: Self-Care, .66 and Realistic Beliefs, .68 (Myers & Sweeney, 2005).

Additional Information

In addition to the CAS, the ATMRP, and the 5-F Wel, participants were given several additional forms. One of these forms was a consent form to participate in the research design. Secondly, there was a demographic form, which contained multiple items designed to gain additional information about the participants related to this study's purpose.

Consent form

Several consent forms were created for use with this design. The form advised participants of the study's title, their rights as participants, and information regarding the Internal Review Board at their respective university. The consent forms are shown in Appendix B. Participants were given two copies of the form because the form contains contact information for the researcher should any of the participants have questions following their participation. This procedure was followed at all universities in which data was collected.

Demographic form

The demographic form was created based on factors that emerged in the literature as related to career aspiration, multiple role planning attitudes, and wellness. The demographic form, shown in Appendix A, was also used to describe the sample and provide data for selected hypotheses. Information related to year in college, age, relationship status, ethnicity, parent's education level, and family of origin was asked. In

addition, additional items asked about career aspiration as well as several questions about future multiple role plans.

Procedures

The administration of the instruments occurred during class time. After gaining consent from the Internal Review Boards at the University of North Carolina at Greensboro, North Carolina Agricultural and Technical State University, and Western Kentucky University, the researcher contacted instructors interested in participating through e-mail or telephone contact. The researcher met or discussed by phone with each professor, as their schedule allowed, to provide information about the purpose of the study, the procedures for administration of the instruments, the time needed to complete the research, and to answer questions about the project. Also during this time, details regarding the date, time, and place for instrument administration were decided. Efforts were made to recruit subjects from across academic disciplines in several university departments to ensure a representative sample. At Western Kentucky University, the researcher trained a research sponsor, Dr. Shawn L. Spurgeon, to follow the above procedures.

To encourage participation, the researcher provided an extra incentive to participants. This incentive was the chance to win a $5 cash prize in their class. All students in the classroom were permitted to participate regardless of their demographic fit for this study.

The researcher served as test administrator at NCAT and UNCG and the research sponsor served as test administrator at WKU to ensure standardization of test procedures.

The project was briefly explained orally without revealing the research hypothesis or research questions. Students who elected to participate in the project were asked to open the questionnaire packet and sign a consent form. Next, the participants completed the 5-F WEL, the AMRP, the CAS, and the demographic form. The order of these instruments varied to minimize the effects of test fatigue.

While participants completed the instrumentation packet, the researcher remained in the room to answer questions or address any concerns that the participants had. Notes were kept on questions asked and any unusual circumstances that could affect responses. After completing the packet, the information was returned to the envelope and sealed. The researcher collected the test packets and kept them in a secure place until the data were analyzed. This material will be kept for a minimum of 5 years in accordance with best research practices (American Psychological Association, 2001). A summary of the results was made available to the professors and to anyone participating in the study that requested a copy. Individuals that requested a copy of the results provided their name, address, e-mail address, and telephone number on a separate sheet of paper.

<div align="center">Data Analyses</div>

Those data fitting the appropriate demographic criteria (African-American and Caucasian undergraduate students under age 25 without children) were analyzed for the pilot study. This analysis included descriptive statistics for all instruments, including means, standard deviations, frequencies, percentages, and alpha coefficients. For all analyses, the alpha level was set at .05. Effect sizes were also calculated for all analyses.

The data not meeting the aforementioned criteria are being kept in a secure place for analysis at a later date.

Hypothesis 1a: Stepwise regression analyses were calculated to determine if multiple role planning attitudes and wellness predict career aspirations for both African-American and Caucasian undergraduate women.

Hypothesis 1b: Stepwise regression analyses were calculated to determine if the variables of multiple role planning attitudes and wellness, both together and separate, account for more variance in career aspiration for Caucasian undergraduate women than for African-American undergraduate women.

Hypothesis 1c: Pearson product correlations were used to determine if multiple role planning attitudes are positively correlated with wellness for both African-American and Caucasian undergraduate women.

Hypothesis 1d: Pearson product correlations illustrated if wellness was positively correlated with career aspirations for both African-American and Caucasian undergraduate women.

Hypothesis 1e: Pearson product correlations determined if multiple role planning attitudes were negatively correlated with career aspirations for both African-American and Caucasian undergraduate women.

Hypothesis 2a: A MANOVA illustrated if African-American undergraduates have lower overall wellness than Caucasian undergraduate women.

Hypothesis 2b: A MANOVA determined if African-American undergraduates were more active in multiple role planning than Caucasian undergraduate women.

Hypothesis 2c: Using a MANOVA and examining mean differences determined if

African-American undergraduate women have higher career aspirations than

Caucasian undergraduate women.

Pilot Study

In January 2005, a pilot design was conducted at the University of North Carolina

at Greensboro to test the research methods outlined above. Two intact classrooms of

undergraduate students were selected to take part in the pilot design. The goal of the

project was to achieve a sample of at least 30 undergraduate female participants to test

and obtain feedback on the procedures for the main study.

Purpose

The purpose of conducting the pilot design was to gain experience presenting the

research protocol and to refine the research procedures. In addition, the data were

analyzed to uncover any potential difficulties with the chosen statistical analyses. Finally,

participants were asked to give feedback on the questionnaire packet to help understand

the participants' experience completing the instrumentation packet. Participants' were

also asked open-ended questions regarding their thoughts about the instrumentation and

the entire process.

Participants

Participants were recruited from two intact undergraduate classrooms at the

University of North Carolina at Greensboro. These classrooms were selected based on

earlier approval granted by the Department of Counseling and Educational Development.

With the Department Chair's consent, three instructors were contacted via e-mail and it

was arranged for the researcher to come to class during regular class-time. All students in the class were eligible to participate. To encourage participation, the researcher provided an extra incentive to participants. This incentive was the chance for one student to win a $10 cash prize in each class. A total female sample size of 34 was obtained.

Procedures

The researcher was introduced to the class by the course instructor. Next, the researcher briefly explained orally the purpose of the research project and outlined the parameters of consent. This was presented verbatim according to the oral consent presentation contained in Appendix B. Next, students who elected to participate in the project were given a questionnaire packet and a pencil in a manila envelope. They were then asked to open the questionnaire packet and sign the consent form and keep the extra copy of the consent form for themselves. Next, the participants completed the AMRP, the CAS, the 5-F WEL, and the demographic form, in that order. Those students who did not participate were instructed to quietly read their course materials. Both male and female students in the classrooms were invited to participate.

While participants were completing the instrumentation packet, the researcher remained in the room to answer questions. Notes were kept on questions asked and any unusual circumstances that could affect responses. After completing the packet, participants placed the information back in the envelope and sealed it. The researcher collected the test packets as each student completed them. When all participants were finished, the packets were reordered and the course instructor selected one packet from the group. This individual immediately won the $10.00 cash prize. Participants were

thanked for their participation and encouraged to contact the researcher should they have any questions.

Data Analyses

Following the collection of data, the researcher coded each answer sheet with a code that indicated gender and classroom. The answer sheets were then taken to be optically scanned and placed in a data spreadsheet. In addition, the questionnaire packet was scanned for any write-in information and this information was transferred to the main data spreadsheet. For purposes of this study, only female participants' responses were used. Only data from African-American and Caucasian females was used in the data analyses testing the research hypotheses. Other data is being stored in a locked file cabinet for analysis at a later date. Data from the female participants was then statistically analyzed to test each hypothesis explained in the main study.

Results

Demographic information on the sample is provided in Table 1. Following the demographic information, each hypothesis is listed along with statistical results and a brief discussion.

As Table 1 illustrates, approximately two-thirds of the all female sample were Caucasian, while one-fourth were African-American. The majority of these participants (58.8%) were between the ages of 19 and 20 and were either freshmen (26.5%) or sophomores (46.1%) who identified their primary sexual orientation as heterosexual (97.1%). Half (50%) of the sample reported working part-time, while 41.2% of the sample were not working. In addition, approximately four-fifths identified themselves as

179

single and nine-tenths identified themselves as child free, although 55.9% of the

participants were planning to marry between the ages of 25 and 30 and 58.8% is planning

plan on having two children. In terms of education, 58.8% indicated that they planned to

work towards a master's degree, 2.9% towards a professional degree, and 8.8% towards a

doctorate degree. The remainder of the participants (29.4%) planned on terminating

education with a bachelor's degree. A majority of the sample (58.8%) stated that they

came from a two parent home where both parents (55.9%) worked. Related to parent's

education level, the most common response indicated that a high school education was

the level of education for both mother (41.2%) and father (47.1%) followed by associate

degree (23.5%; 11.8%) for mother and father respectively. However, the Caucasian

sample indicated more frequently that both their mothers and fathers had advanced

degrees. Finally, one important difference between the Caucasian and African-American

participants was that one-third of the African-American women indicated that they

already had one or more children compared with none of the Caucasian women.

Table 1
Frequencies for demographic variables among female participants

Variable	Total Sample		African-American		Caucasian	
	N	Percent	N	Percent	N	Percent
Marital Status						
Married/partnered	6	17.6	1	11.1	3	13.6
Single	28	82.4	8	88.9	19	86.4
Employment Status						
Employed full time	4	11.8	1	11.1	2	9.1
Employed part time	17	50.0	3	33.3	13	59.1
Not working	14	41.2	5	55.6	7	31.8

Biracial						
Yes	4	11.8	2	22.2	1	4.5
No	30	88.2	7	77.8	21	95.5

Primary cultural identity						
Native American	0	0.0				
Asian or Pacific Islander	2	5.9				
African American	9	26.5				
Caucasian	22	64.7				
Hispanic/Latina	1	2.9				

Sexual Orientation						
Bisexual	1	2.9	0	0.0	1	4.5
Heterosexual	33	97.1	9	100.0	21	95.5

Year in School						
Freshman	9	26.5	0	0.0	9	40.9
Sophomore	16	47.1	4	44.4	11	50.0
Junior	5	14.7	3	33.3	1	4.5
Senior	3	8.8	1	11.1	1	4.5
Graduate Student	1	2.9	1	11.1	0	0.0

College Affiliation						
HBCU	0	0.0	0	0.0	0	0.0
PWCU	34	100.0	9	100.0	22	100.0

Age						
18 and under	6	17.6	4	44.4	6	27.3
19 to 20	20	58.8	3	33.3	15	68.2
21 to 22	5	14.7	0	0.0	1	4.5
23 to 24	3	8.8	2	22.2	0	0.0

Parents present in home						
Both parents	20	58.8	4	44.4	14	63.6
Remarried parent	6	17.6	1	11.1	4	18.2
Father only	0	0.0	0	0.0	0	0.0
Mother only	7	20.6	3	33.3	4	18.2

Adult employment (parents and step-parents) in home						
Both parents worked full-time	19	55.9	3	33.3	13	72.2
Mother full-time; father pt-time	2	5.9	0	0.0	1	5.6
Mother full-time; father no work	0	0.0	1	11.1	0	0.0
Father full-time; mother pt-time	0	0.0	0	0.0	2	11.1
Father full-time; mother no work	0	0.0	1	11.1	2	11.1

Highest Education for Mother

Less than high school	3	8.8	1	11.1	0	0.0
High school graduate	14	41.2	6	66.7	8	28.6
Associate degree	8	23.5	2	22.2	5	17.9
Bachelor's degree	3	8.8	0	0.0	5	17.9
Master's degree	2	5.9	0	0.0	4	14.3
Specialist's degree	3	8.8	0	0.0	2	7.1
Professional degree	2	5.9	0	0.0	1	3.6
Doctorate degree			0	0.0	0	0.0
Unknown	3	8.8	0	1.0	3	10.7

Highest Education for Father

< high school	2	8.9	1	10.0	0	0.0
High school grad.	16	47.1	7	70.0	7	29.2
Associate degree	4	11.8	1	10.0	3	12.5
Vocational degree	2	5.9	0	0.0	2	8.3
Bachelor's degree	1	2.9	0	0.0	1	4.2
Master's degree	3	8.8	1	10.0	3	12.5
Specialist's degree	3	8.8	0	0.0	2	8.3
Professional degree	2	5.9	0	0.0	1	4.2
Doctorate degree	2	5.9	0	0.0	2	8.3
Unknown	3	8.8	0	0.0	3	12.5

Currently have children

Yes, one	2	5.9	1	11.1	0	0.0
Yes, two	1	2.9	1	11.1	0	0.0
Yes, three or more	1	2.9	1	11.1	0	0.0
None	30	88.2	6	66.7	22	100.0

Three instruments were used for this study, the 5-F Wel, the Career Aspiration Scale (CAS), and the Attitudes Toward Multiple Role Planning (ATMRP). Descriptive statistics for each of these instruments is provided in Table 2. A closer look at the means for each instrument reveals several important findings. First, African-American women's means on each scale of the ATMRP were either equal to or higher than their Caucasian counterparts. Each scale had a possible range of 10 to 50. Although there was also

considerable range across both groups for each of the scales of the ATMRP, the range of scores for Involvement, in particular, was restricted for the African-American participants in comparison to the Caucasian women (31-37 vs. 28-41, respectively).

For the CAS, Caucasian women had a higher mean score and greater variability (M = 36.91, SD = 6.33) when compared to African-American women (M = 31.90, SD = 2.67). Also, it should be range for the CAS was wider for Caucasian women (28-48) when compared to African-American women (38-47).

Table 2
Sample means and standard deviations for ATMRP, CAS, and 5-F Wel

	Total Sample (n = 30)			African-American Sample (n = 9)			Caucasian Sample (n=22)		
	Mean	Std. Dev.	Score Range	Mean	Std. Dev.	Score Range	Mean	Std. Dev.	Score Range
ATMRP									
Knowledge/ Certainty	31.32	4.56	24-41	33.78	4.89	26-41	30.40	15.30	24-37
Commitment to MRP	36.32	4.64	28-45	37.78	4.29	28-44	35.68	5.02	30-45
Independence	28.52	4.36	22-38	31.00	6.04	24-38	27.32	3.23	22-33
Involvement	33.79	3.82	28-41	34.00	1.87	31-37	34.00	4.55	28-41
CAS	38.14	5.96	28-48	31.90	2.67	38-47	36.91	6.33	28-48
5-F Wel	76.81	8.60	58-93	75.80	9.89	53-92	76.98	8.60	60-94
Creative	76.32	3.89	69-85	72.78	3.52	69-77	77.84	4.93	72-85
Coping	72.16	8.64	62-81	72.60	11.72	63-89	72.00	8.64	61-80
Physical	64.27	8.73	58-70	63.61	13.75	54-73	65.46	8.73	60-70
Social	88.51	4.77	84-93	82.29	3.81	75-89	89.92	4.77	86-94
Essential	81.05	6.89	74-85	85.98	9.33	84-92	78.30	6.89	71-82

Reliability coefficients for the instruments are displayed in Table 3 and compared to the published reliability estimates for each instrument. Both the Career Aspiration Scale (CAS, $\alpha = .77$) and the 5-F Wel ($\alpha = .95$) had solid reliability in this study. The Attitudes Toward Multiple Role Planning Scale displayed sub-par reliability in each of its scales, with coefficients ranging from a low of .31 for Involvement to a high of .51 for Independence and Knowledge/Certainty.

Table 3
Reliability: Alpha coefficients for the ATMRP, CAS, and 5-F Wel

	Alpha	Norm Group Alpha
ATMRP		
Knowledge/Certainty	.51	.83
Commitment to multiple role planning	.49	.79
Independence	.51	.80
Involvement	.31	.84
Career Aspiration Scale	.77	.75
5-F Wel	.95	.74

Hypothesis 1a: Multiple role planning attitudes and wellness predict career aspirations for both African-American and Caucasian undergraduate women.

A linear regression analyses was conducted to analyze if the amount of variance accounted for in career aspiration by wellness and multiple role planning was significant. The data were separated by culture into two groups (Caucasian and African-American) to provide two separate equations. Data not representing either Caucasian or African-

American women was not analyzed. Total wellness and the four subscales on the ATMRP (Knowledge/Certainty, Commitment to Multiple Role Planning, Independence, Involvement) were entered as independent variables and CAS score was entered as the dependent variable. The resulting regression coefficients were found to be not statistically significant for either the African-American or Caucasian groups as shown in Table 4. Next, the amount of variance accounted for by each variable was analyzed. The results for these analyses are shown in Tables 5 and 6.

Table 4
Separate linear regression analysis for multiple role planning attitudes and total wellness predicting career aspiration for African-American (*n*=9) and Caucasian (*n*=22) groups

Independent Variable	Beta	Standard Error	Unstandardized Coefficients	t	*p*	Sig *
African-American Women						
Total Wellness	-.680	.113	-.199	-1.768	.175	
Knowledge/Certainty	-.597	.178	-.326	-1.829	.413	
Commitment to multiple role planning	.524	.258	.325	1.262	.296	
Independence	.177	.237	.078	.330	.763	
Involvement	-.521	.734	-.743	-1.012	.835	
Caucasian Women						
Total Wellness	.332	.259	.315	1.215	.242	
Knowledge/Certainty	-.184	.466	-.298	-.641	.531	
Commitment to multiple role planning	.121	.318	.152	.479	.638	
Independence	-.112	.453	-.219	-.485	.635	
Involvement	.285	.361	.398	1.101	.287	

* *p*<.05

Hypothesis 1b: The variables of multiple role planning attitudes and wellness, both

together and separate, account for more variance in career aspiration for

Caucasian undergraduate women than for African-American undergraduate

women.

Table 5 shows the results of a stepwise regression beginning with wellness, while

Table 6 shows the results of stepwise regression beginning with attitudes toward multiple

186

role planning. This format is utilized to highlight the unique and combined variance each model illustrates. As shown in both tables, wellness accounted for 27% ($R^2 = .027$) of the variance in career aspiration alone and 79% ($R^2 = .79$) of the variance when added with ATMRP for African-American women. In contrast, for Caucasian women, wellness accounted for 19% ($R^2 = .19$) of the variance in career aspiration alone and 42% ($R^2 = .42$) when combined with ATMRP. The Attitudes about Multiple Role Planning scale alone accounted for 75% of the variance ($R^2 = .75$) in career aspiration for African-American women and 10% of the variance ($R^2 = .10$) for Caucasian women.

Table 5
Variance accounted in career aspiration by culture among Wellness and Wellness and ATMRP

	R	R^2	Standard Error of the Estimate	R^2 Change
African-American Women (*n*=9)				
Wellness	.165	.027	2.811	.027
Wellness & ATMRP	.889	.790	1.994	.763
Caucasian Women (*n*=22)				
Wellness	.199	.040	6.357	.040
Wellness & ATMRP	.421	.177	6.578	.138

Table 6

Variance accounted for in career aspiration by culture among ATMRP and Wellness and ATMRP

	R	R^2	Standard Error of the Estimate	R^2 Change
African-American Women (*n*=9)				
ATMRP	.756	.572	2.467	.572
ATMRP & Wellness	.889	.790	1.994	.218
Caucasian Women (*n*=22)				
ATMRP	.318	.101	6.67	.101
ATMRP & Wellness	.421	.177	6.578	.076

Hypothesis 1c: Multiple role planning attitudes will be positively correlated with

wellness for both African-American and Caucasian undergraduate women.

To determine the relationship between multiple role planning attitudes and

wellness, Pearson Product Moment Correlations were calculated. Analysis of the

correlations examining the hypothesized relationship between the two variables reveals

two significant correlations in the African-American sample as shown in Table 7 and

Table 8. First, the relationship between Commitment to Multiple Role Planning

(ATMRP) and the Social Self (5-F Wel) was significant ($r = .74, p < .05$). Another

significant relationship was found between the Social Self (5-F Wel) and Involvement

(ATMRP) with a significant negative correlation ($r = -.67, p < .05$). No other significant

correlations were observed.

Table 7

Pearson Product Moment Correlations for multiple role planning attitudes and wellness grouped by African-American (*n*=9) and Caucasian (*n*=22) undergraduates

	Essential Self	Sig. *	Creative Self	Sig. *	Physical Self	Sig. *
African-American (n=9)						
M R Planning Attitudes						
Knowledge/Certainty	.11		.05		.41	
Commitment to MRP	.74	*	.28		-.09	
Independence	.36		-.07		-.20	
Involvement	-.27		-.09		.17	
Caucasian (n=22)						
M R Planning Attitudes						
Knowledge/Certainty	.38		.22		.22	
Commitment to MRP	.02		-.19		-.01	
Independence	-.04		.20		-.07	
Involvement	.36		.38		-.06	

*p<.05

Table 8

Pearson Product Moment Correlations for multiple role planning attitudes and wellness grouped by African-American (*n*=9) and Caucasian (*n*=22) undergraduates

	Coping Self	Sig. *	Social Self	Sig. *	Total Wellness	Sig. *
African-American (n=9)						
M R Planning Attitudes						
Knowledge/Certainty	.33		.22		-.51	
Commitment to MRP	-.02		.32		-.28	
Independence	.00		.53		.29	
Involvement	-.21		-.67	*	-.58	
Caucasian (n=22)						
M R Planning Attitudes						
Knowledge/Certainty	.02		.28		.51	
Commitment to MRP	-.25		-.13		-.07	
Independence	-.03		.21		.00	
Involvement	-.07		.14		-.11	

p < .05

Hypothesis 1d: Wellness will be positively correlated with career aspirations for both

African-American and Caucasian undergraduate women.

For this hypothesis, the projected positive relationship between career aspirations and total wellness was not significant at the .05 level, for neither African-American undergraduate women nor Caucasian undergraduate women. This hypothesis was not supported.

Table 9

Pearson Product Moment Correlations for wellness and career aspirations

for African-American (*n*=9) and Caucasian (*n*=22) undergraduate women

	African-American Career Aspiration	Sig. *	Caucasian Career Aspiration	Sig. *
Total Wellness	-.17		.20	
Essential Self	.57		.11	
Creative Self	-.10		.06	
Physical Self	.06		-.12	
Coping Self	-.03		-.21	
Social Self	.59		.24	

p<.05

Hypothesis 1e: Multiple role planning attitudes will be negatively correlated with career

aspirations for both African-American and Caucasian undergraduate women.

An examination of the correlations between the subscales of multiple role

planning (Knowledge/Certainty, Commitment to Multiple Role Planning, Independence,

and Involvement) and career aspirations (Career Aspiration Scale) reveals that no

correlations were significant at the .05 level. This was true for both the African-

American and Caucasian samples. Therefore, this hypothesis was not supported.

Table 10
Pearson Product Moment Correlations for multiple role planning attitudes and career aspiration by culture

	Knowledge/ Certainty		Comm. To MRP		Independence		Involvement	
	r	sig.	r	sig.	R	sig.	r	sig.
African-American (*n*=9) Career Aspirations (CAS)	-.19		.57		.62		-.30	
Caucasian (*n*=22) Career Aspirations (CAS)	.03		.23		-.12		.27	

*p<.05

Hypothesis 2a: African-American undergraduates have lower overall wellness than

Caucasian undergraduate women.

A Multivariate Analysis of Variance (MANOVA) was conducted to illustrate the

profile of means between African-American undergraduates and Caucasian

undergraduates on each of the wellness factors. The MANOVA results were not

significant $\lambda(3,30) = .89$, p<.05. The univariate F test results along with the

corresponding means are shown in Table 11.

Table 11

Univariate F-tests for wellness between African-American (*n*=9) and Caucasian (*n*=22) undergraduate women

	N	Min.	Max.	Mean	Std. Dev.	Uni. F	*p*	Sig. *
Essential Self						.413	.745	
African-American	9	45	59	52.55	5.17			
Caucasian	22	36	63	51.32	6.83			
Creative Self						.362	.781	
African-American	9	57	68	62.44	3.84			
Caucasian	22	23	75	61.10	10.14			
Physical Self						.575	.636	
African-American	9	19	37	26.67	5.20			
Caucasian	22	14	32	25.73	5.07			
Coping Self						2.10	.121	
African-American	9	47	64	54.11	5.51			
Caucasian	22	37	67	56.23	7.58			
Social Self						2.30	.097	
African-American	9	22	32	27.44	3.88			
Caucasian	22	17	32	29.23	3.90			
Total Wellness						.186	.905	
African-American	9	56.12	88.70	75.42	9.10			
Caucasian	22	60.62	88.36	75.93	6.68			

*p < .05

Hypothesis 2b: African-American undergraduates are more active in multiple role

planning than Caucasian undergraduate women.

A Multivariate Analysis of Variance (MANOVA) was conducted to illustrate the

profile of means between African-American undergraduates and Caucasian

undergraduates on each of the Attitudes Towards Multiple Role Planning

(Knowledge/Certainty, Commitment to Multiple Role Planning, Independence,

Involvement) factors. The MANOVA results were not significant $\lambda(3,30) = 1.2$, p<.05.

Univariate f-statistics for each variable are shown in Table 12.

Table 12
Univariate F-tests for Attitudes About Multiple Role Planning between
African-American (*n*=9) and Caucasian (*n*=22) undergraduate women

	N	Min.	Max.	Mean	Std. Dev.	Uni. F Statistic	*p*	Sig *
Knowledge/Certainty						2.57	.072	
African-American	9	26	41	33.78	4.89			
Caucasian	22	24	37	30.40	3.91			
Commitment to MRP						.420	.740	
African-American	9	28	44	37.78	4.29			
Caucasian	22	23	45	35.68	5.01			
Independence						.097	.097	
African-American	9	24	42	31	6.04			
Caucasian	22	21	34	27.31	3.22			
Involvement						.809	.809	
African-American	9	31	37	34	1.87			
Caucasian	22	25	41	34	4.54			

*p < .05

Hypothesis 2c: African-American undergraduate women have higher career aspirations

than Caucasian undergraduate women.

A MANOVA was conducted to determine if there were significant differences

between Caucasian and African-American women on career aspiration, using the Career

Aspiration Scale, choice of major, and career choice as dependent variables. Career

choice and choice of major responses were coded either 1, 2, or 3 based on traditional,

moderate, or non-traditional careers. These categories were devised based on current

Department of Labor classifications discussed earlier. It is important to note that no

Caucasian women and only one African-American woman chose a non-traditional career.

Similarly, no women in either of the sample chose a non-traditional major. The most

common professions cited for Caucasian women were teacher (n=7), health assessment

(n=2), vocational counselor (n=2), and social worker (n=2). The most common

professions cited for African-American women were teacher (n=2) and social worker

(n=2). The MANOVA results were not significant $\lambda(3,18) = .80$, p<.05. Univariate f-

statistics for each variable are show in Table 13, along with the corresponding means.

Table 13

Univariate F-tests for Career Aspiration measures between African-American and Caucasian undergraduate women

	N	Min.	Max.	Mean	Std. Dev.	Uni. F Statistic	p	Sig. *
Career Aspirations						1.177	.346	
African-American	9	38	47	41.89	2.67			
Caucasian	22	26	48	36.91	6.33			
Career Choice						1.360	.287	
African-American	9	1.00	3.00	1.778	.667			
Caucasian	16	1.00	2.00	1.25	.447			
Major Choice						1.529	.241	
African-American	5	1.00	2.00	1.60	.548			
Caucasian	16	1.00	2.00	1.37	.50			

$p < .05$

Other data gathered by this study include the open-ended question responses represented in Appendix C. Responses are separated and grouped according to culture. Respondents were asked two open-ended questions concerning who or what influenced their career choice and how they foresaw themselves combining multiple roles in the future. Responses ranged widely. Several noted a teacher or parent had been influential in their career choice, while others mentioned that they themselves were responsible for their selection. As for the multiple role planning questions, responses ranged from those not intending to have children and plan for multiple roles to several who planned on a career in teaching to garner more time at home with family. Several also planned on being a full-time parent while several others planned on balancing family and work roles, although no specifics on how this would be accomplished were provided.

Discussion

This results outlined above lead to several interesting findings. However, before interpreting the results, it is important to note the disproportionate sample sizes between African-American women (*n*=9) and Caucasian women (*n*=22). These relatively small sample sizes limit generalizability, particularly for African-American women so these results should be interpreted with caution.

Overall, most of the hypothesized relationships among the three variables of career aspiration, multiple role planning attitudes, and wellness were not supported. However, these results are directly affected by the very small sample size of 31. While the relationships in this design were largely insignificant, subsequent study with a larger sample is warranted.

A closer look at the means for each instrument reveals several important findings. First, African-American women's means on each scale of the ATMRP were either equal to or higher than their Caucasian counterparts. This suggests that the African-American women in the sample are more inclined to be planning for a multiple role lifestyle when compared to the Caucasian women. Conversely, Caucasian women had a higher mean on the CAS than African-American women, perhaps indicating that they aspire to achieve greater levels of career involvement and success.

Two significant correlations emerged in this study both with African-American women. There were significant correlations between Commitment to Multiple Role Planning (ATMRP) and Involvement (ATMRP) with the Essential Self and Social Self scales of the 5-F Wel respectively., composed of the subscales of friendship and love.

197

The first was of a positive nature indicating that those women with a greater commitment to multiple roles also had higher essential self levels of wellness, composed of spirituality, self-care, gender identity, and cultural identity. The second relationship was of a negative nature indicating that those women currently not involved (or perceiving immediacy) in planning for multiple roles had higher social self levels of wellness, composed of friendship and love.

These results seem to indicate that African-American women with higher levels of essential self (spirituality, self-care, gender identity, cultural identity) wellness also had greater commitment to multiple role planning. Perhaps this indicates a gender or cultural or even spiritual identity consistent with combining both work and family roles as the literature has suggested. Related to this, the second significant correlation seems to indicate that those same women with higher social connections (friendship, love) also may not perceive any immediacy in planning for multiple roles, thereby accounting for the negative correlation. This may suggest that these significant relationships are in some part buffering the need to make concrete plans, again perhaps suggesting a deeper cultural understanding regarding managing multiple roles and the influence of significant others (grandparents, siblings, extended family). Taking these two finding together, it seems African-American women are committed to multiple roles, but don't necessarily perceive a great need to plan for them, perhaps because of their stronger social connectedness. Interestingly, this relationship was not observed among the Caucasian sample.

While these results are intriguing, it should be noted that reliability estimates for the ATMRP were particularly low for this sample. This instrument, designed for women without children, may have been compromised by the fact that 10% of the participants already had at least one child. Since all of the women with children in this sample were African-American, any results using the ATMRP should be viewed cautiously. For instance, the ATMRP accounted for 75% of the variance in career aspiration for African-American women while accounting for only 10% of the variance for Caucasian women. Perhaps this difference is due to one-third of the African-American sample already managing multiple roles including parenting.

Finally, it should be recognized that this sample was gathered from a classroom in the School of Education. Perhaps this is partially to account for both the high numbers of participants electing education as their major and teaching as their career aspiration. Perhaps this is also a factor in the limited number of participants choosing non-traditional careers. A more representative sample across the university community might be more reflective of female undergraduates. Further study is needed to clarify this in a larger design across university classrooms.

Conclusion

As a result of the pilot design, several modifications occurred. The only feedback received on the pilot study feedback questionnaire was two comments relating to the length of the instrumentation. To respond to this concern, the demographic questionnaire will be shortened and several non-essential items deleted to reduce the effects of test fatigue and eliminate redundant information. The items that seemed most confusing to

individuals were those items that spanned two questions where participants answered one or the other. These items will be reexamined and shortened if possible. Also, the oral consent presentation was modified to include more concrete and specific information such as asking each individual to have a witness sign their consent form before getting starting and instructing participants that it is okay to write on the questionnaire sheet in certain places.

In addition, a new coding procedure was implemented prior to the questionnaire packets being disseminated. This provided for easier administration with less confusion about placing identifying information on the scan sheet. This also facilitated data analyses.

CHAPTER 4

RESULTS

The primary purpose of this study was to address identified gaps in the literature

regarding the relationships between career aspirations, multiple role planning attitudes,

and wellness among African-American and Caucasian undergraduate women.

Specifically, there were three goals of this study. The first goal was to examine the

relationship among the variables of career aspirations, multiple role planning attitudes,

and wellness. The second goal was to determine if differences in these three variables

were accounted for by group differences, specifically between African-American and

Caucasian female undergraduates. The final goal was to determine if multiple role

planning attitudes and wellness contributed to career aspirations. In this chapter, the

results of the study are presented. Demographic information regarding the sample is

provided, followed by descriptive statistics, and reports of reliabilities for all

instrumentation. The analyses used to test the research hypotheses are then presented.

Finally, a summary of the overall results is reported.

Description of the Sample

A total of 346 undergraduate Caucasian and African-American students

completed the survey packet in intact classes. As explained in Chapter Three, men were

not included in this study. Of these 346, women comprised 262 of the respondents, of

which, 246 were Caucasian and African-American female participants for a final response rate of 71%.

There were a total of 163 African-American women and 99 Caucasian women. However, 10 respondents represented non-traditional aged females and 4 respondents were from other cultural groups, other than Caucasian and African-American, and also were not analyzed. There were also two questionnaires that were incomplete (i.e., questionnaires contained extensive missing data) and were therefore excluded. The final sample size was 90 traditional aged Caucasian undergraduate women and 156 traditional aged African-American undergraduate women. The participants were recruited from multiple intact undergraduate classrooms across a variety of disciplines at the University of North Carolina at Greensboro, North Carolina Agricultural and Technical University, and Western Kentucky University. Classrooms utilized included those within departments such as History, English, and Education. Instructors were contacted via e-mail and telephone as described in Chapter Three.

As shown in Table 14, the final sample of women contained 13.9% married or partnered women and 76.3% single women. 47.8% of the sample reported working part time, 9% reported working full time, and 35.5% reported not working. Ninety percent (90.2%) of the sample was heterosexual, 3.7% bisexual, 2.9% lesbian, and .8% gay. Analysis of the subsamples revealed 92.3% of the African-American women reported their sexual orientation as heterosexual compared to 86.7% of the Caucasian sample. Thirty-three and one-half percent of the sample reported that they were freshman, 24.5%

reported they were sophomores, 22.4% were juniors, and 17.6% were seniors. Eighty-eight percent of the sample reported being biracial and 54.7% of the sample reported attending an HBCU. Most of the sample (90.7%) reported having no children, with the next most frequent response being having one child (5.3%). Seventeen point six percent of the respondents were 18 and younger, 39.2% were aged 19-20, 22.0% were 21-22, and 13.9% were 23 to 24. Overall, the African-American group was slightly younger than the Caucasian group as described in Table 14.

Fifty-three and one-half percent of the participants reported growing up in a two parent home followed by 21.2% who reported growing up with only a mother present. Among the two groups of women, 44.2% of African-American women reported two parents present and 27.6% reported just mother present, while 69.7% of Caucasian women reported two parents and 10.1% reported just mother present. Of those respondents indicating two parents present, 50.6% noted that both parents worked full-time followed by 6.1% who indicated father worked full-time and mother part-time. Group differences were noted on this item with 74.2% of African-American women reporting that both parents worked followed by 9.7% who indicated mother worked full-time and father part-time, 6.5% who indicated the opposite, and 4.3% who indicated father worked full-time and mother did not work outside the home. In contrast, Caucasian women reported that 70.5% had both parents who worked full-time followed by 12.8% who reported father worked full-time and mother part-time, 11.5% father worked full-time and mother did not work outside the home. In terms of parental educational achievement, 33.8% of the total sample reported that high school was the highest

203

educational level achieved by mother, followed by a Bachelor's Degree at 17.6%. The

same pattern was observed for highest education achieved by father with high school

being most common (36%), followed by Bachelor's Degree (12.2%). Overall, 64.6% of

women in indicated a moderate career choice, followed by 33.8% who indicated a

traditional career choice. Similarly, 56.4% of women indicated a moderate major choice

followed by 43.1% who chose a traditional major. Only 1.5% of the participants chose a

non-traditional career and 0.5% chose a non-traditional major.

Table 14
Frequencies for demographic variables for total sample, African-American, and
Caucasian female participants

	Total Sample		African-American		Caucasian	
Variable	N	%	n	%	N	%
Marital Status						
Married/partnered	34	13.9	21	13.5	13	14.4
Single	187	76.3	120	76.9	68	75.6
Separated	7	2.9	2	1.3	5	5.6
Divorced	4	1.6	2	1.3	2	2.2
Widowed	1	0.4	1	0.6	0	0.0
Employment Status						
Employed full time	22	9.0	10	6.4	12	13.3
Employed part time	117	47.8	68	43.6	49	54.4
Retired, not working	1	0.4	0	0.0	1	1.1
Retired, working part-time	2	0.9	0	0.0	2	2.2
Not working	87	35.5	64	41.0	23	26.7
Biracial						
Yes	25	9.4	17	10.9	8	8.9
No	216	88.2	137	87.8	80	88.9
Sexual Orientation						
Gay	2	.8	1	.6	1	1.1
Lesbian	7	2.9	4	2.6	3	3.3

Bisexual	9	3.7	4	2.6	5	5.6
Heterosexual	221	90.2	144	92.3	78	86.7

Year in School

Freshman	82	33.5	69	44.2	13	14.6
Sophomore	60	24.5	41	26.3	19	21.3
Junior	55	22.4	21	13.5	35	38.9
Senior	45	17.6	23	14.7	22	24.4
Graduate Student	0	0	0	0	0	0

College Affiliation

HBCU	130	54.2	126	80.8	8	8.9
PWCU	106	44.2	29	18.5	80	88.9

Highest Level of Education

Less than High School	0	0	0	0.0	0	0
High School Graduate	206	85.8	137	87.8	74	83.1
Trade/Technical/A. Deg.	11	4.6	4	2.6	7	7.9
Bachelor's Degree	13	5.4	6	3.8	7	7.9

Age

18 and under	43	17.6	36	25.5	7	8.1
19 to 20	96	39.2	62	44.0	34	39.5
21 to 22	54	22.0	21	14.9	33	38.4
23 to 24	34	13.9	22	15.6	12	14.0

Parents present in home

Both parents	131	53.5	69	50.0	62	70.5
Remarried parent	31	12.7	17	12.3	14	15.9
Father only	3	1.2	2	1.4	1	1.1
Mother only	52	21.2	43	31.2	9	10.2
Other	9	3.7	7	5.1	2	2.3

Adult employment (parents and step-parents) in home

Both parents worked full-time	131	74.2	69	74.2	55	70.5
Mother full-time; father pt-time	31	9.7	9	9.7	2	2.6
Mother full-time; father no work	3	6.5	6	6.5	2	2.6
Father full-time; mother pt-time	52	5.4	5	5.4	10	12.8
Father full-time; mother no work	9	2.6	4	4.3	9	11.5

Highest Education for Mother

Less than high school	14	5.0	11	6.4	3	2.8
High school graduate	94	33.8	58	33.5	36	34.0
Associate degree	39	14.0	25	2.9	14	13.2
Vocational degree	5	1.8	4	2.3	1	0.9

Bachelor's degree	49	17.6	26	15.0	23	21.7
Master's degree	25	8.9	14	8.1	11	10.4
Specialist's degree	15	5.0	11	6.4	4	3.8
Professional degree	11	4.0	7	4.1	4	3.8
Doctorate degree	4	1.0	1	0.6	3	2.8
Unknown	22	7.9	16	9.3	6	5.7

Highest Education for Father

Less than high school	25	9.5	18	11.2	7	6.8
High school grad.	95	36.0	61	37.9	34	33.3
Associate degree	23	8.7	15	9.3	8	7.8
Vocational degree	12	4.6	5	3.1	7	6.9
Bachelor's degree	32	12.2	19	11.8	13	12.7
Master's degree	16	6.1	7	4.3	9	8.8
Specialist's degree	16	6.1	12	7.9	4	3.9
Professional degree	10	3.8	4	2.5	6	5.9
Doctorate degree	7	2.7	1	0.6	6	5.9
Unknown	27	10.3	19	11.8	8	7.8

Currently have children

Yes, one	12	5.3	7	5.0	5	5.7
Yes, two	6	2.7	3	2.2	3	3.4
Yes, three or more	3	1.3	3	2.2	0	0
None	206	90.7	126	90.6	76	90.9

Career Choice

Traditional	66	33.8	42	35.6	24	31.2
Moderate	126	64.6	73	61.9	53	68.8
Non-Traditional	3	1.5	3	2.5	0	0.0

Major Choice

Traditional	81	43.1	52	44.8	29	40.3
Moderate	106	56.4	63	54.3	43	59.7
Non-Traditional	1	0.5	1	0.9	0	0.0

Descriptive Statistics for Instruments Used in the Study

As described in Chapter 3, three instruments were used in this study. The ATMRP

consisted of four scales (Knowledge/Certainty, Commitment to MRP, Independence,

Involvement) where responses could range from 10 to 50. As depicted in Table 15, responses from the total sample ranged from 14-45 (Knowledge/Certainty), 13-50 (Commitment to MRP), 12-49 (Independence), and 13-49 (Involvement). One significant difference between the samples was observed on the Commitment to MRP scale with African-American women's mean at 25.64 compared to Caucasian women's mean at 36.09.

Similar to the ATMRP, the possible range of scores for the CAS is 10-50. The total sample had a mean of 31.53 and a range of 6-43. A closer look at both groups revealed the African-American sample had a slightly higher mean (38.58) than the Caucasian sample (36.50).

The 5-F Wel has a possible range of scores from 25 to 100. There was considerable range on scores of this instrument across both samples. Mean scores for the 5-F Wel (Total Wellness) for the two samples were 78.21 for the African-American sample and 76.70 for the Caucasian sample.

Table 15

Means and standard deviations for ATMRP, CAS, and 5-F Wel for total sample, African-American females, and Caucasian females

	Total Sample (N=242)			African-American Sample (n = 156)			Caucasian Sample (n=86)		
	Mean	Std. Dev.	Score Range	Mean	Std. Dev.	Score Range	Mean	Std. Dev.	Score Range
ATMRP									
Knowledge/ Certainty	26.05	5.06	14-45	25.64	5.1	14-45	26.76	4.89	17-38
Commitment to MRP	38.78	7.44	13-50	25.64	5.13	18-50	36.09	8.16	13-50
Independence	29.13	5.29	12-49	29.14	5.01	17-49	29.11	5.77	12-24
Involvement	26.78	6.01	13-49	26.90	6.07	13-49	26.55	5.94	13-39
CAS	39.12	6.43	21-50	38.58	6.80	21-46	36.50	4.95	33-40
5-F Wel	77.66	7.71	44-97	78.21	7.64	51-97	76.52	7.71	4390
Creative	62.39	8.20	23-80	78.50	10.31	23-80	61.62	9.93	23-79
Coping	55.39	7.01	37-74	73.72	8.62	41-74	54.07	7.45	37-68
Physical	26.25	5.48	13-40	64.08	13.63	13-40	27.57	5.27	14-40
Social	28.42	3.54	11-32	28.64	3.40	15-32	28.04	3.75	11-32
Essential	28.42	3.54	11-28	85.99	9.83	35-64	51.81	5.94	36-64

Reliability Analysis for Instruments Used in the Sample

Reliability coefficients for the instruments are displayed in Table 16 and compared to the published reliability estimates for each instrument. Both the Career Aspiration Scale (CAS, $\alpha = .78$) and the 5-F Wel ($\alpha = .87$) had solid reliability in this study. The Attitudes Toward Multiple Role Planning Scale displayed low reliability in each of its scales, with coefficients ranging from a low of .22 for Independence to a high of .49 for Involvement.

Table 16

Initial Alpha coefficients for the ATMRP, CAS, and 5-F Wel

	Alpha	Norm Group Alpha
ATMRP		
Knowledge/Certainty	.38	.83
Commitment to Multiple		
Role Planning	.43	.79
Independence	.22	.80
Involvement	.49	.84
Career Aspiration Scale	.78	.75
5-F Wel	.87	.91

Further analysis of the ATMRP revealed several items disproportionately contributed to low reliability. These following items were removed from analyses to increase reliability of the overall instrument. The Knowledge/Certainty scale retained 8 of the 10 items. Item numbers 21 and 25 were removed to achieve $\alpha = .736$. The Commitment to Multiple Role Planning scale retained 8 of 10 items also. Item numbers 14 and 38 were removed to achieve $\alpha = .784$. The Independence scale retained 7 of 10 items. Items 23, 27, and 31 were removed to obtain $\alpha = .611$. The Involvement scale retained 6 of 10 items. Items 24, 28, 36, and 40 were removed to obtain $\alpha = .752$. It should be noted that the reliability estimates for each scale were lower for the African-American females than for the Caucasian females as illustrated in Table 17.

Table 17

Adjusted Alpha coefficients for ATMRP for total sample, African-American sample, and Caucasian sample

	Total Sample	African-American Sample	Caucasian Sample
ATMRP			
Knowledge/Certainty (N=233)	.736	.664	.780
Commitment to Multiple Role Planning (N=230)	.784	.695	.823
Independence (N = 234)	.611	.591	.642
Involvement (N=234)	.752	.725	.807

Hypothesis Testing

Each hypotheses identified in Chapter three was tested. It should be noted that sample sizes for each analysis varied in accordance with missing data.

Hypothesis One

Hypothesis 1a: Multiple role planning attitudes and wellness will predict career

aspirations for both African-American and Caucasian undergraduate women.

A stepwise regression analysis was conducted to analyze whether the amount of variance accounted for in career aspiration by wellness and multiple role planning was significant. The variable of children was dichotomized (0=no children, 1=children). Career choice and college major were also dichotomized (0 = traditional career or major, 1 = moderate or non-traditional career or major). Total wellness and the four subscales on the ATMRP (Knowledge/Certainty, Commitment to Multiple Role Planning, Independence, Involvement) were entered as independent variables and CAS score was entered as the dependent variable. The data were separated based on presence or absence

210

of children and cultural group (African-American and Caucasian). The results for these can be found in Tables 18 and 19.

Several regression equations were found to be statistically significant. The first was the equation for total participants (F=3.08, p=.004). Point three percent (R^2=.003) of the variance in CAS was accounted for in the total sample by wellness and 11.8% (R^2=.118) by multiple role planning attitudes and wellness. When career choice and major choice were added to the equation, no additional variance was contributed (R^2=.118) of the variance was explained. Significant variance was contributed by both the Knowledge/Certainty and Commitment to Multiple Role Planning Scales (t = 3.06, p = .003, t= 2.38, p = .019, respectively).

Another significant equation was found for the participants without children (F=2.51, p=.033) for Total Wellness and ATMRP. For the participants without children, 0.2% (R^2=.002) of the variance was accounted for in CAS by total wellness and 8.2% (R^2=.082) by both multiple role planning attitudes and wellness. There was a significant relationship between Knowledge/Certainty and CAS (t = 2.46 p=.02) and Commitment to Multiple Role Planning and CAS (t = 2.17 p=.03. The regression equation for Wellness, ATMRP, college major, and career choice was not significant for this group without children (F=1.81, p=.091). Regression equations for the group with children were also not significant (F=1.94, p=.20).

Table 18

Regression analysis for multiple role planning attitudes, total wellness, college major, and career choice predicting career aspiration (CAS) for total participants (N=170) and with (n=19) or without (n=147) children

Independent Variable	Beta	Standard Error	Unstd. Coeff.	R^2	R^2 Change	t	P	Sig *
Total Participants (n=170)								
Total Wellness	-.01	.04	-.01	.003	.003	-.18	.86	
Knowledge/Certainty	.24	.07	.22	.075	.072	3.06	.00	*
Commitment to multiple								
role planning	.18	.07	.17	.111	.036	2.38	.02	*
Independence	.03	.08	.03	.112	.001	.36	.72	
Involvement	.08	.07	.07	.118	.006	1.07	.29	
College Major	.01	.75	.12	.118	.000	.16	.87	
Career Choice	-.01	.79	-.06	.118	.000	-.08	.94	
With Children (n=19)								
Total Wellness	.12	.15	.07	.060	.060	.49	.64	
Knowledge/Certainty	.49	.25	.38	.410	.350	1.55	.17	
Commitment to multiple								
role planning	-.16	.37	-.15	.463	.053	-.41	.69	
Independence	-.00	.31	-.00	.474	.011	-.01	.99	
Involvement	.54	.24	.44	.620	.145	1.82	.11	
College Major	-.19	3.12	-1.96	.652	.032	-.63	.55	
Career Choice	-.11	3.04	-1.20	.660	.008	-.39	.70	
Without Children (n=147)								
Total Wellness	-.03	.05	-.02	.002	.002	-.35	.73	
Knowledge/Certainty	.21	.08	.20	.047	.044	2.45	.02	*
Commitment to multiple								
role planning	.18	.08	.17	.081	.033	2.17	.03	*
Independence	.00	.09	-.00	.081	.000	-.03	.97	
Involvement	.05	.07	.04	.082	.001	.55	.59	
College Major	.04	.83	.33	.083	.000	.40	.69	
Career Choice	.00	.89	-.37	.084	.001	-.42	.67	

Regression equations for the sample separated by culture were not found to be significant. With CAS as the dependent measure, the resulting regressions were not significant for either the African-American (F=0.85, p=.55) or Caucasian participants (F=1.43, p=.21). For the African-American group, 5.9% (R^2=.059) of the variance was explained and for the Caucasian group, 14.7% (R^2=.147) of the variance was explained.

Therefore, hypothesis 1a was partially supported. Multiple role planning attitudes and total wellness were found to be predictors for career motivation, but only when the sample was examined as a whole or separated based on presence of children, career choice, or major choice. Culture was not a significant variable.

Table 19

Regression analysis for multiple role planning attitudes, total wellness, college major, and career choice predicting career aspiration (CAS) for African-American (n=104) and Caucasian (n=64) women

Independent Variable	Beta	Standard Error	Unstd. Coeff.	R^2	R^2 Change	t	P	Sig *
African-American (n=104)								
Total Wellness	.13	.04	.05	.021	.021	1.22	.23	
Knowledge/Certainty	.14	.09	.12	.041	.020	1.34	.18	
Commitment to multiple role planning	.11	.08	.09	.052	.010	1.10	.29	
Independence	.02	.09	.02	.052	.000	.18	.86	
Involvement	.02	.07	.02	.052	.000	.23	.82	
College Major	.08	.74	.57	.056	.004	.77	.45	
Career Choice	-.06	.77	-.44	.059	.003	-.60	.57	
Caucasian (n=64)								
Total Wellness	-.20	.08	-.13	.013	.013	-1.60	.12	
Knowledge/Certainty	.21	.12	.20	.059	.046	1.64	.11	
Commitment to multiple role planning	.14	.11	.13	.093	.034	1.11	.27	
Independence	-.07	.16	-.09	.093	.000	-.52	.61	
Involvement	.17	.11	.15	.126	.032	1.33	.19	
College Major	-.02	1.5	-.18	.128	.002	-.12	.90	
Career Choice	.16	1.6	1.84	.147	.019	1.14	.26	

* $p<.05$

Hypothesis 1b: The variables of multiple role planning attitudes and wellness, both

together and separate, account for more variance in career aspiration for

Caucasian undergraduate women than for African-American undergraduate

women.

As previously shown in Table 19, wellness accounted for 1.3 ($R^2 = .013$) of the variance in career aspiration for African-American women. When added to multiple role planning attitudes the variance increased to 5.2% ($R^2 = .052$) for African-American women. When college major and career choice were added, the variance increased to 5.9% ($R^2 = .059$). For Caucasian women, wellness accounted for 1.3% ($R^2 = .013$) of the variance in career aspiration alone and 12.6% ($R^2 = .126$) when combined with ATMRP. When college major and career choice were added, the variance increased to 14.7% ($R^2 = .147$) Therefore, the variables of multiple role planning and wellness did account for more variance in Caucasian women than African-American women, however this relationship was only evident with both variables together. Therefore, this hypothesis was partially supported.

Hypothesis 1c: Multiple role planning attitudes will be positively correlated with wellness for both African-American and Caucasian undergraduate women.

To determine the relationship between multiple role planning attitudes and wellness, Pearson Product Moment Correlations were calculated. Analysis of the correlations examining the hypothesized relationship between the two variables reveals several significant correlations in both the African-American and Caucasian samples as shown in Table 20. For the African-American women, the Essential Self (5-F Wel) and Commitment to Multiple Role Planning (ATMRP) were positively correlated ($r = .207, p < .05$). Secondly, the Total Wellness (5-F Wel) was positively correlated with Knowledge/Certainty ($r = .169, p < .05$) and Commitment to MRP ($r = .163, p < .05$).

For Caucasian women, there was a significant positive relationship between the

Essential Self (5-F Wel) and Knowledge/Certainty ($r = .244$, $p < .05$) and Involvement (r

$= .298$, $p < .05$). There was also a significant relationship between the Creative Self and

Knowledge/Certainty ($r = .251$, $p < .05$) as well as the Coping Self (5-F Wel) and

Commitment to MRP ($r = .371$, $p < .01$). The Social Self (5-F Wel) and

Knowledge/Certainty ($r = .240$, $p < .05$) were also significant as was the relationship

between Total Wellness and Knowledge/Certainty ($r = .240$, $p < .05$). No other

significant correlations were observed. As a result, this hypothesis was partially

supported.

Table 20
Pearson Product Moment Correlations for multiple role planning attitudes and wellness
grouped by African-American (n=153) and Caucasian (n=77) undergraduates

	Essential Self	Sig*	Creative Self	Sig.*	Physical Self	Sig.*	Coping Self	Sig.*	Social Self	Sig*	Total Wellness	Sig.*
African-American (n=153)												
M R Planning Attitudes												
Knowledge/Certainty	.017		.089		.038		.019		.016		.169	*
Commitment to MRP	.207	*	.157		-.023		.154		.080		.163	*
Independence	-.056		.025		-.009		.056		-.057		-.007	
Involvement	.035		.002		-.033		-.060		.028		-.002	
Caucasian (n=77)												
M R Planning Attitudes												
Knowledge/Certainty	.244	*	.251	*	.083		.060		.240	*	.240	*
Commitment to MRP	.094		.177		.003		.371	**	.131		.131	
Independence	-.056		.172		.190		-.135		.170		.170	
Involvement	.298	**	.204		.082		.051		.203		.203	

*p<.05
**p < .01

Hypothesis 1d: Wellness will be positively correlated with career aspirations for

both African-American and Caucasian undergraduate women.

For this hypothesis, the projected positive relationship between career aspirations

and total wellness was not significant at the .05 level, for either African-American or

Caucasian undergraduate women. This hypothesis was not supported. Correlation

coefficients are shown in Table 21.

Table 21
Pearson Product Moment Correlations for wellness and career aspirations
(CAS) for African-American (n=153) and Caucasian (n=85) undergraduate
women

	African-American Career Aspiration	Sig. *	Caucasian Career Aspiration	Sig. *
Total Wellness	.060		-.064	
Essential Self	-.003		-.041	
Creative Self	.060		-.056	
Physical Self	.081		.047	
Coping Self	.028		-.127	
Social Self	.006		-..134	

*p<.05

Hypothesis 1e: Multiple role planning attitudes will be negatively correlated with career

aspirations for both African-American and Caucasian undergraduate women.

An examination of the correlations between the subscales of multiple role

planning (Knowledge/Certainty, Commitment to Multiple Role Planning, Independence,

and Involvement) and career aspirations (Career Aspiration Scale) among African-

American and Caucasian women reveals no significant correlations at the .05 level. This

hypothesis was not supported.

Table 22

Pearson Product Moment Correlations for multiple role planning attitudes and career aspiration by culture

	Knowledge/ Certainty		Comm. To MRP		Independence		Involvement	
	r	sig.	r	sig.	r	sig.	r	sig.
African-American (*n*=154) Career Aspirations (CAS)	.071		.124		.049		.025	
Caucasian (*n*=89) Career Aspirations (CAS)	.125		.134		-.102		.058	

*p<.05

Hypothesis Two

Hypothesis 2a: African-American undergraduates have lower overall wellness than

Caucasian undergraduate women.

A Multivariate Analysis of Variance (MANOVA) was conducted to illustrate the

profile of means between African-American undergraduates and Caucasian

undergraduates on each of the wellness factors. The MANOVA results were significant

($\lambda(6,223) = 6.254$, p<.001). As shown in Table 23, two significant univariate F test

results were also found for the Essential Self (F=8.01, p=.005) and Physical Self (F=9.84,

p=.002). No other significant differences were found on subscales of wellness or on total

wellness. This hypothesis was not supported because African-American women were not

found to have lower overall wellness than Caucasian women. However significance was

found on two subscales of wellness with African-American women having lower

Physical Self wellness than Caucasian women but higher Essential Self wellness.

218

Table 23

Univariate F-tests for wellness between African-American (*n*=142) and Caucasian (*n*=84) undergraduate women

	N	Min	Max.	Mean	Std. Dev.	Uni. F	*p*	Sig. *
Essential Self						8.01	.005	*
African-American	146	35.00	64.00	55.15	6.18			
Caucasian	84	36.00	64.00	51.81	5.95			
Creative Self						.39	.535	
African-American	146	23.00	80.00	62.84	8.34			
Caucasian	84	23.00	79.00	61.62	7.95			
Physical Self						9.84	.002	*
African-American	146	13.00	40.00	25.46	5.48			
Caucasian	84	14.00	40.00	27.57	5.27			
Coping Self						1.85	.174	
African-American	146	41.00	74.00	56.18	6.64			
Caucasian	84	37.00	68.00	54.07	7.45			
Social Self						.21	.645	
African-American	146	15.00	32.00	28.64	3.40			
Caucasian	84	11.00	32.00	28.04	3.75			
Total Wellness						2.58	.110	
African-American	146	51.37	96.92	76.52	7.71			
Caucasian	84	43.84	90.41	76.52	7.71			

p < .01

Figure 1
Profile Plot comparing mean scores of African-American and Caucasian women on
Wellness
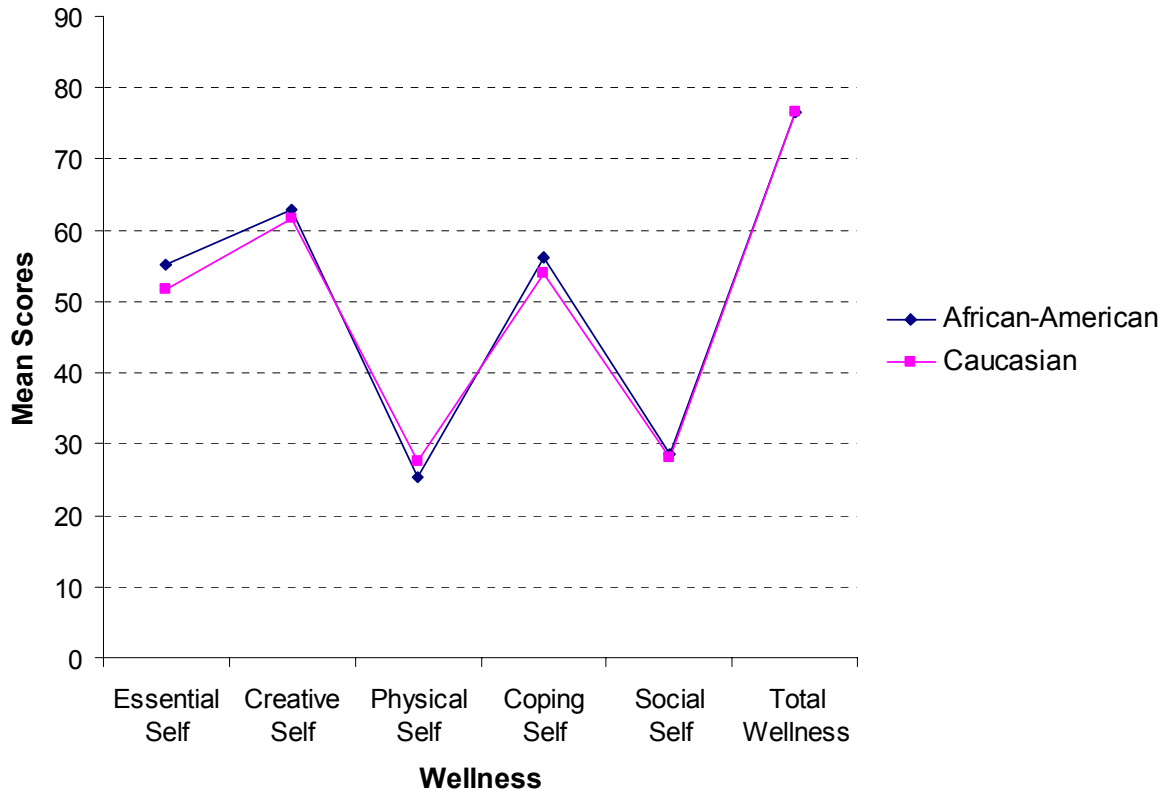
Hypothesis 2b: African-American undergraduates will be more active in multiple role

planning than Caucasian undergraduate women.

A Multivariate Analysis of Variance (MANOVA) was conducted to illustrate the

profile of means between African-American undergraduates and Caucasian

undergraduates on each of the Attitudes Towards Multiple Role Planning

(Knowledge/Certainty, Commitment to Multiple Role Planning, Independence,

Involvement) factors. The MANOVA results were significant ($\lambda(4,235) = 7.414$, $p<.001$).

Specifically, two significant differences were found between the two groups. As shown in

Table 24, these differences were on Knowledge/Certainty ($f = 18.08$, $p<.001$) and

Commitment to MRP ($f = 11.70$, $p<.001$). Therefore, this hypothesis was partially

supported because the hypothesized direction of African-American women being more

active in multiple role planning was substantiated for two of the four scales of multiple

role planning attitudes.

Table 24

Univariate F-tests for Attitudes About Multiple Role Planning between African-American (n=150) and Caucasian (n=86) undergraduate women

	N	Min.	Max.	Mean	Std. Dev.	Uni. F Statistic	p	Sig *
Knowledge/Certainty						18.08	.001	*
African-American	153	9.00	40.00	27.59	5.23			
Caucasian	87	9.00	39.00	24.49	5.77			
Commitment to MRP						11.70	.001	*
African-American	153	12.00	40.00	31.84	5.71			
Caucasian	87	10.00	40.00	29.03	6.76			
Independence								
African-American	153	11.00	33.00	21.04	4.54	3.06	.082	
Caucasian	87	11.00	30.00	19.98	4.49			
Involvement								
African-American	153	4.00	30.00	19.98	5.09	.03	.874	
Caucasian	87	7.00	30.00	20.66	5.25			

*p < .01

Figure 2

Profile Plot comparing mean scores of African-American and Caucasian women on Attitudes Toward Multiple Role Planning
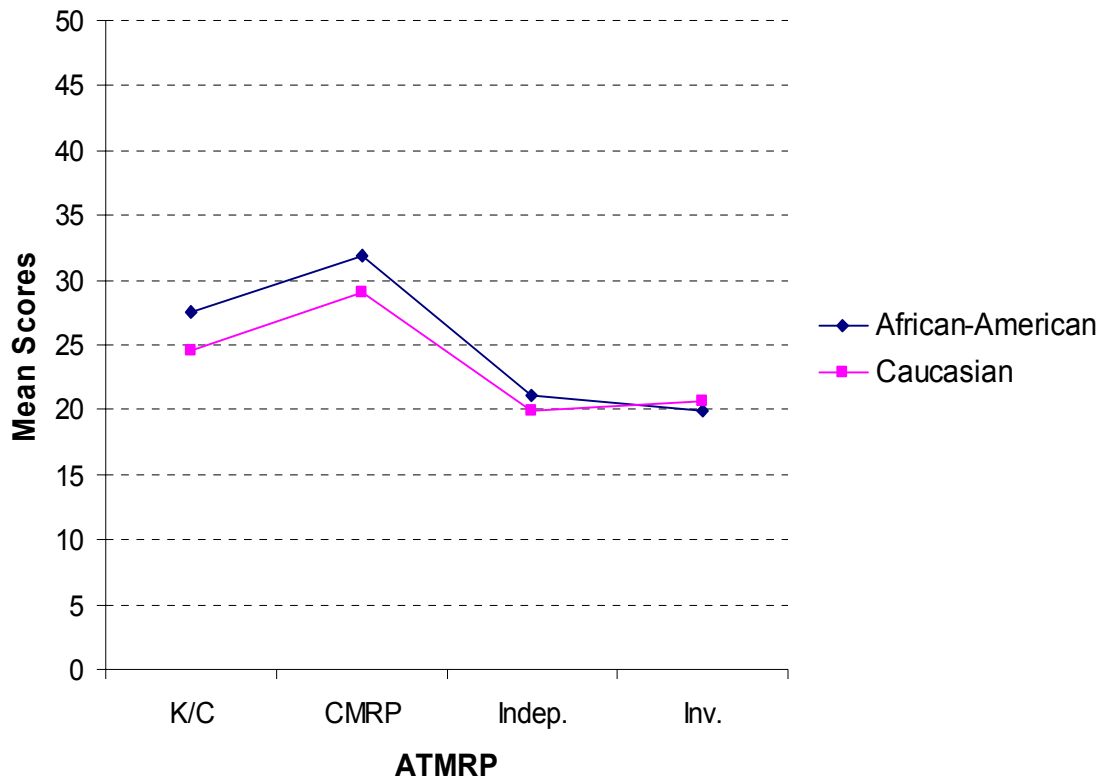
Hypothesis 2c: African-American undergraduate women will have higher career

aspirations than Caucasian undergraduate women.

A MANOVA was conducted to determine if there were significant differences

between Caucasian and African-American women on career aspiration, using the Career

Aspiration Scale, choice of major, and career choice as dependent variables. Career

choice and choice of major responses were effect coded either -1 (traditional), 0

(moderate), or 1 (non-traditional). The categories for career choice and choice of major

were devised based on current Department of Labor classifications discussed earlier. The

MANOVA results were significant ($\lambda(3,174) = 10.05$, p<.000). Specifically, career

aspiration operationalized as CAS was significant (f=29.59, p=.000). There were no

significant differences between the two groups of women on either career choice or

choice of major. Univariate f-statistics for each variable are show in Table 25, along with

the corresponding means. This hypothesis was partially supported because significant

differences were observed among African-American and Caucasian respondents on the

CAS. Specifically, African-American women overall had higher career motivation than

Caucasian women.

Table 25
Univariate F-tests for Career Aspiration Measures between African-American and Caucasian undergraduate women

	N	Min.	Max.	Mean	Std. Dev.	Uni. F Statistic	P	Sig. *
Career Aspirations (CAS)						29.59	.000	*
African-American	156	21.00	40.00	32.34	3.56			
Caucasian	77	13.00	37.00	29.28	4.20			
Career Choice						.46	.497	
African-American	118	-1.00	1.00	-.33	.52			
Caucasian	69	-1.00	0.00	-.31	.47			
Major Choice						.39	.535	
African-American	116	-1.00	1.00	-.44	.52			
Caucasian	72	-1.00	0.00	-.40	.49			

*p < .05

Other data gathered during this study included several additional questions designed to assess different variables related to career aspirations and multiple role planning attitudes. A summary of these results is found in Table 26. Of particular note is that 37.5% of the sample reported not being in a monogamous relationship followed by 36.7% who reported being in a monogamous relationship for greater than 6 months. Most respondents planned to marry between the ages of 25 and 30 (55%), followed next in frequency by ages 18 to 24 (25.4%), and over age 30 (4.6%). This was consistent across both groups.

Less than half (46.3%) of the participants reported desiring to have 2 children. African-American women in the sample were more likely to desire 3 or more children (23.1%), while Caucasian women in the sample were more likely to not desire any children (7.9%). The level of degree most reported planning to receive was a master's degree (40.8%) followed by a bachelor's degree (22.5%). Less than 1 in 5 (18.6%) of African-American women in the sample were planning on obtaining a doctorate degree compared with 10.1% of Caucasian women. One fourth (26.1%) of the participants reported their mother's career was classified as a traditional career for women while 24.9% reported their father's career as a non-traditionally for women classified career

Table 26

Frequencies for additional questions related to work and family

	Total Sample		African-American		Caucasian	
Variable	N	%	N	%	n	%
Current Relationship Status						
Not involved in mon rel	92	37.5	56	35.9	36	40.4
Divorced (no rel.)	2	.8	2	1.3	0	0
Married	5	2.1	2	1.3	3	3.4
Mon rel < 6 mos	31	12.9	24	15.4	7	7.9
Mon rel > 6 mos	90	36.7	50	32.1	40	44.9
Discuss future plans						
Not at all	29	11.7	19	12.2	10	11.2
A little	35	14.6	23	14.7	12	13.5
A moderate amount	42	17.5	29	18.6	13	14.6
A lot	45	18.8	25	16.0	22	24.7
Not applicable	63	26.3	38	24.4	26	29.2
Age Plan to Marry						
Already married/partner	6	2.5	2	1.3	4	4.5
Don't plan on marriage	5	1.7	3	1.9	2	2.2
Btw. 18 and 24	62	25.4	31	19.9	31	34.8
Btw. 25 and 30	134	55.0	90	57.7	44	49.4
Over 30	11	4.6	6	3.8	5	5.6
Plans for Children						
I don't desire children	9	3.8	2	1.3	7	7.9
I desire 1 child	21	7.9	14	9.0	7	7.9
I desire 2 children	113	46.3	65	41.7	48	53.9
I desire 3 or more child.	51	21.3	36	23.1	15	16.9
I haven't thought about	14	5.8	7	4.5	7	7.9
Plan's for Education						
Bachelor's Degree	54	22.5	29	18.6	25	28.1
Master's Degree	99	40.8	60	38.5	39	43.8
Specialist Degree	7	2.9	4	2.6	3	3.4
Professional Degree	14	5.0	6	3.8	8	9.0
Doctorate Degree	38	15.4	29	18.6	9	10.1
Mother's Career						
Traditional	64	26.1	41	26.3	23	25.8
Moderate	55	22.4	40	25.6	15	16.9

Non-Traditional	8	3.3	5	3.2	3	3.4

Father's Career

Traditional	5	2.0	3	1.9	2	2.2
Moderate	45	18.4	27	17.3	18	20.2
Non-Traditional	61	24.9	36	23.1	25	28.1

Other data gathered by this study include responses to two open-ended questions. Only about half of the respondents answered these open-ended questions. The first asked who or what had influenced their career choice. There was wide variation across both samples on answers to this question. Responses ranged from "no one" to "family", "mother", "teachers", "interests", "father" and "friends". One difference that was notable is that several African-American women noted that a religious leader had been instrumental to their career choice, while no Caucasian women noted this. Also, the most common theme indicated by respondents was to name a single person as most instrumental to career choice rather than interests, abilities, or desires. The identity of this person varied from a family member to a neighbor to a teacher, but many indicated that one person had been most important as their career influence.

The second question asked about plans for the future in terms of balancing career and family roles. This question also received a wide range of answers. Many respondents indicated that they did not know how to combine the roles, but were sure they would work it out when the time arrived. Others indicated that they had never even thought about it because they were focused on other things right now. While responses did vary, several themes emerged.

227

For both groups, the most popular response was to combine work and family roles with the spouse sharing equal responsibility for home and family duties. Some were quite intentional about how this would happen. Two such responses were, "Well as a teacher I may get time off to have my baby. My spouse will work full time and I will have daycare and family to lend support when I am unable to care for my child." and "As a news anchor I will leave for work at 3 or 4 and be off by 12 noon. If my husband could get the kids ready for school then he can go to work and I will be there in the afternoons and evenings ". Others weren't quite sure what this balancing would encompass as indicated by the following responses, "I see myself and my husband working full-time and sharing the responsibilities of home and family.", and "My husband will help a lot but beyond that I'm not really sure."

The next most common theme reported in the answers was a degree of uncertainty about balancing multiple roles, but a general lack of concern about this. Samples of these responses include, "We will cross that bridge when we come to it.", "I am not focused on career and family because it is hard enough trying to pass my classes.", "I have not thought in detail on this subject.", and "This is not something I really think about right now. I just want to take things as they come."

The final theme that emerged centered around quitting work to be home with children. Examples of these responses include, "I plan on being a stay at home mom.", and "I would like to work and then once I have children maybe become a stay at home mom and help in the classroom." These responses predominately stated that the mother would stay home although a few indicated a deviation from traditional gender roles by

indicating that "Whoever makes the least amount of money will have to postpone his/her job to say home and take care of the kids until they are five.", and "I plan to have one parent at home most of the time during the first few years and after our child is born while the other works."

While drawing definitive conclusions based on the open-ended questions is difficult, overall more women who had chosen moderately ranked careers indicated role-sharing responses in comparison with those women that chose traditional careers. Similarly, many women who indicated a desire for a traditional career, such as teaching or nursing, also noted that this would allow them to spend more time with their children.

Summary of the Results

The results of this study were presented by providing a description of the sample and the descriptive statistics computed for each instrument used in the study. In addition, reliability for each instrument used in the study was analyzed and items were eliminated from analyses for the ATMRP to increase the reliability of the scales.

The two research hypotheses were tested using statistical analyses that included multiple regression, Pearson Product Moment Correlations, and MANOVAs. The results from this study partially supported the first hypothesis. The regression equations predicting career aspiration (operationalized as CAS) were significant for participants overall and the participants who do not have children. The equations were not significant when culture was used as a grouping variable. Career choice and major choice were also not significant predictor variables in the regressions. The second part of hypothesis one was supported because more variance was accounted for by wellness and attitudes about

multiple role planning in the Caucasian female sample versus the African-American female sample. The third part of hypothesis one was also partially supported with certain subscales of both the 5-F Wel and the ATMRP being positively correlated for both the Caucasian and African-American samples. The fourth part of hypothesis one was not substantiated because wellness was not found to be positively correlated with career aspirations for either Caucasian or African-American women. The final part of hypothesis one was also not substantiated because multiple role planning attitudes were not found to be negatively correlated with career aspirations.

Hypothesis two was also partially supported. The MANOVA examining differences in wellness between African-American and Caucasian women was significant indicating that African-American women had lower wellness than Caucasian women. However, only the Physical Self scale was lower for African-American women. The other significant scale difference was on the Essential Self scale and African-American women actually had higher scores than their Caucasian counterparts. The second part of hypothesis two comparing attitudes about multiple role planning was also partially supported. Not only was the MANOVA significant, but again African-American women were higher on both the Knowledge/Certainty and the Commitment to MRP scales, consistent with the hypothesized relationship. The final part of hypothesis two was again partially supported because MANOVA results revealed that African-American women did have higher career aspirations than Caucasian women, specifically higher career motivation. There were no significant differences found in career or major choice.

Additional results were also presented which presented similarities and differences between the two samples of women and general summaries of the open-ended responses were discussed. In Chapter V, a discussion of the results, implications for counseling, and recommendations for future research are presented.

CHAPTER 5

DISCUSSION

In Chapter Four, the results of the analyses examining the relationships among career aspirations, multiple role planning attitudes, and wellness were presented. In this final chapter, the study is summarized along with potential limitations and the results presented in the previous chapter are discussed. Finally, implications for counseling practice, counselor education, and future research are discussed.

Overview

This study sought to provide further insight into why women continue to choose traditional careers despite unprecedented access to career and educational opportunities. It was hypothesized that women's attitudes about their future multiple roles and their current level of wellness were two factors that influence career planning. However, since few, if any, studies had examined the relationships among these variables, the first main goal of this study was to provide an important first step towards increasing understanding by determining the relationship among career aspirations, multiple role planning attitudes, and wellness. A second main goal of this study was to determine if multiple role planning attitudes and wellness contributed to career aspirations. The population of interest for this study was traditional-aged Caucasian and African-American undergraduate females. The final main goal was to uncover similarities and differences

between the three variables of interest and to determine if these differences were accounted for by group representation.

Pearson Product Moment correlations, Step-Wise Regression, and Multivariate Analysis of Variance (MANOVA) were used to test the research hypotheses and the results indicated that wellness and multiple role planning attitudes did predict career motivation for women without children and for the total sample of women in this study. Approximately 7% of the variance in career motivation was accounted for by wellness and multiple role planning attitudes for women without children and 12% of the variance was accounted for in the total sample. Of these variables, wellness contributed less than 1% of the variance with the remainder being accounted for by multiple role planning attitudes. When career choice and career major were added to the predictive equations, these variables also contributed less than 1% variance and were therefore not significant predictors.

In addition, separate regression equations analyzing the predictive nature of African-American and Caucasian women's career motivation from multiple role planning attitudes and wellness based on cultural affiliation were not significant. An analysis of the variance for wellness and multiple role planning attitudes revealed that more variance was accounted for in career motivation for the Caucasian sample (12.6%) than the African-American sample (5.9%) as hypothesized in this study.

Several significant positive correlations were also observed between multiple role planning attitudes and wellness. Specifically, Knowledge/Certainty about multiple role

planning was positively correlated with total wellness for both the Caucasian and African-American participants. Total wellness and the Essential Self were also positively correlated to Commitment to Multiple Role Planning for the African-American participants. Other correlations observed among the Caucasian participants include Knowledge/Certainty to Essential Self, Creative Self, and Social Self, Commitment to Multiple Role Planning to Coping Self, and Involvement to Essential Self. Correlations between multiple role planning attitudes and career aspiration (career motivation) were not significant for either African-American or Caucasian participants.

Differences in several variables were also observed when the sample was separated into African-American and Caucasian subgroups. No difference in overall wellness was observed between the two groups, but African-American women had significantly higher scores on the Essential Self and significantly lower scores on the Physical Self. African-American women also had higher scores on Knowledge/Certainty about multiple role plans and Commitment to multiple role plans than the Caucasian women. Finally, African-American women also had higher career motivation than the Caucasian women in this sample but no difference was observed in career or major choice.

<div align="center">Discussion of Hypotheses</div>

In this section, a discussion of the sample characteristics is provided. Also, a discussion of the results of each hypothesis is presented. Possible reasons for each of the research finding are discussed concluding with an overall discussion of the results of the study.

<div align="center">234</div>

Sample Characteristics

Frequency analysis revealed that a majority of the sample was single and either working part-time or not working. In addition, over nine-tenths of the sample was heterosexual. Over half of the participants reported attending a Historically Black College and University and almost two-thirds of the sample was comprised of African-American women. Two-thirds of the sample reported wanting to continue their education to the master's degree level or beyond. This finding is interesting given that (almost) all participants also reported either a traditional or moderate career choice. This finding is consistent with the findings of O'Brien et al. (2000) and Rainey and Borders (1997) who stated that women can and do choose traditional fields but can still be highly motivated to succeed within these fields. The majority of women choosing more traditional fields may also be consistent with the findings of Hackett and Betz (1981) who reported that women continue to predominately choose more traditional fields because of their belief that they can find more success in these fields.

The fact that most women in this study did not currently have a child but planned to have at least one is consistent with O'Brien et al. (2000) who found that family and multiple role pursuits are very important to young women today. Bronzaft (1991) also reported that a majority of women plan on having both a family and career. While most participants were planning on marriage, only a third reported currently being in a monogamous relationship for greater than six months. This may indicate a degree of planfulness and at least the intention of participating in multiple roles despite the absence of a significant long-term relationship. In other words, these women may not imminently

know the specifics of their future roles, but they are clearly intending to be in these family and work roles.

Related to family of origin, most respondents grew up in two parent homes and half of those had two parents who worked full time. Interestingly, almost one-third of the African-American participants reported growing up in a single mother home. Consistent with Fields' (2003) findings, those who indicated that their mothers did not work tended to be Caucasian. These women reported five times more frequently that their mothers did not work compared to the African-American women. Of the mothers who did work, most worked in traditionally female-dominated careers and had fathers who worked in traditionally male-dominated careers. High school graduate was the highest level of education achieved for most of the participant's parents.

Given the characteristics of the sample, it seems that many of the participants were first generation college students. They also had plans to further their education beyond a bachelor's level although not necessarily in a field high in compensation, power, or prestige. In fact, it seems that many may be planning on multiple role lifestyles reminiscent of their family of origins.

Hypothesis One

Hypothesis one, which was partially supported, proposed that wellness and multiple role planning attitudes would predict career aspiration. There was one hypothesized measure of career aspiration, career motivation, used as the outcome variable. The results indicated that wellness and multiple role planning did predict career motivation, with significant variance being contributed by multiple role planning

attitudes. Specifically, career motivation was related to both knowledge and certainty about having a multiple role lifestyle and commitment to planning for them. The more women are committed, knowledgeable, and certain about having a multiple role lifestyle, the higher their career motivation. This finding is consistent with Lent et al. (2000) who believe that ideas about multiple roles can serve either a supportive or barrier function to women's career development depending on how these ideas are conceptualized. In this case, it seems that women more committed and knowledgeable about multiple roles are perhaps receiving a career boost from these ideas.

The relationship predicting career motivation was only found when examining the entire sample or those participants that currently did not have a child or children. Hypothesized cultural differences were not found and career motivation was not predicted from multiple role planning attitudes and wellness when the sample was divided by ethnicity. However, it is important to note that wellness and multiple role planning attitudes were responsible for more variance in career motivation for the Caucasian (12.6%) versus the African-American (5.2%) participants with wellness contributing only a nominal amount of variance. This is consistent with the hypothesized relationship anticipating more variance explained for Caucasian women versus African-American women based on the belief (Boronzaft, 1991) that Caucasian women's career plans are more influenced by multiple role planning attitudes. This may also be consistent with Baruch and Barnett (1996) who stated that African-American women place differing emphases on the worker, marital, and motherhood roles than Caucasian women. Another possibility for these findings is the ATMRP was a more reliable measure for the

Caucasian participants and thereby yielded more accurate responses. Additional research utilizing different measures of multiple role planning are needed to clarify this finding.

In contrast, wellness accounted for similar amounts of variance in career motivation for both cultural groups although this amount was nominal. This finding seems to indicate that wellness and components to wellness were not significant predictors of career motivation for either group of women in this sample. This finding, although no significant, is important because it represents the first time the predictive relationship between wellness and career aspiration has been explored. In order to further understand this relationship, additional research examining these two variables is needed.

Analysis of the open-ended responses to the question of how the participant saw their future in terms of work and family yielded some additional information about the relationship among multiple role planning attitudes, wellness, and career aspiration. The most common response was equality at both home and work with both spouses working and sharing family roles equally. Some had specific details about how this would be accomplished while other responses were more vague. The next most common response was a general lack of concern about multiple role and career plans which is consistent with McCracken and Weitzman's (1997) findings which suggest a developmental component to multiple role and career planning. Those women indicating a traditional career path, such as teaching, were more likely to mention how compatible their career would be with parenting, however many still indicated a desire for a role-sharing marriage. Even though career choice did not significantly predict career motivation, a

closer look at the respondents own words indicate that perhaps more information is needed in this area before firm conclusions can be drawn.

Another hypothesized relationship between wellness and multiple role planning attitudes was also partially supported. First, a significant positive correlation was found between total wellness and knowledge and certainty about multiple role planning and commitment to multiple role planning for both African-American and Caucasian women. Though a causal relationship cannot be determined, the findings indicate that those individuals who are more well overall are also more knowledgeable, certain, and committed to having a multiple role lifestyle. Perhaps success in personal wellness leads to confidence and commitment to one day having a successful multiple role lifestyle. Additional research is needed to clarify the nature of this relationship.

One other significant correlation was found for African-American women and this was between the Essential Self (Spirituality, Self-Care, Gender Identity, Cultural Identity) and Commitment to MRP scales. This finding suggests that for African-American women being committed to multiple roles and planning for them may be deeply related to their sense of self as expressed through their spirituality or gender or cultural identities. This is perhaps reflective of their unique cultural histories and identities whereby African-American women have always worked and in turn are raised with the expectation to work (Bayer, 2001; Vaz, 1995). As such, working and having a family may have been integrated on a deeply spiritual and personal identity level. This is probably not the same for Caucasian women whose spiritual and cultural experiences have been historically very different.

For Caucasian women in this study, significant positive correlations existed between knowledge and certainty about multiple role plans and the Essential Self (Spirituality, Self-Care, Gender Identity, Cultural Identity), Creative Self (Thinking, Emotions, Control, Positive Humor, Work), Social Self (Friendship, Love) and Total Wellness. In other words, Caucasian women with higher scores on these wellness components were more likely to have knowledge or certainty about multiple role planning. Again, while causality cannot be implied, the current findings suggest a positive relationship between these variables in that women with more certainty or confidence about planning and living a multiple role lifestyle may have greater spirituality, better self-care, stronger gender and cultural identities, stronger relationships, better humor, clearer thinking, more meaningful work, more self-control, more positive emotional experiences, and higher overall wellness. Additional research is needed to clarify this relationship perhaps utilizing multiple measures of multiple role planning attitudes.

In addition, commitment to a multiple role lifestyle was positively correlated to Coping Self (Realistic Beliefs, Stress Management, Self-Worth, Leisure) for this population. For the Caucasian women in this study, higher commitment to living a multiple role lifestyle was associated with having more realistic beliefs, better stress management skills, higher self-worth, and more meaningful leisure that enhances coping. This intuitively makes sense because those individuals with good coping skills would most likely be very committed to their ability to plan and manage a multiple role lifestyle in the future.

While multiple role planning and wellness were correlated for both African-American and Caucasian women, wellness and career motivation were not. Similarly, multiple role planning and career motivation were also not correlated. This suggests that women who are highly motivated to achieve in their careers are no more or less well or active in multiple role planning than those less motivated in their career pursuits. This was true for both African-American and Caucasian women. On the other hand, limitations of the sample and instruments, discussed later in this chapter, prohibit firm conclusions about these hypotheses. Additional studies with more sensitive measures and different populations may reveal nuances of relationships that were not discovered with the current research methodology.

Hypothesis Two

The second hypotheses examine group differences among the variables. Specifically, were there differences between African-American women and Caucasian women among career aspirations, multiple role planning attitudes, and wellness? There were significant differences found between the two groups on specific factors of wellness, but not on total wellness. Specifically, this difference was observed on the Essential Self (Spirituality, Self-Care, Gender Identity, Cultural Identity) and the Physical Self (Exercise, Nutrition) subscales. African-American women were found to be higher on the Essential Self and lower on Physical Self than their Caucasian counterparts. This finding is consistent with other research reporting lowered physical wellness of African-American women (Lee, 2005; Office on Women's Health, 2003). Higher scores on the Essential Self may be accounted for by increased spirituality and cultural identity often

found within the African-American population (Department of Health and Human Services, 2002). These findings, although preliminary, speak to the need for future research in this area examining cultural differences on holistic wellbeing.

The second variable of multiple role planning was also found to differ based on cultural group. Specifically, the hypothesized relationship that African-American women would be more likely to engage in multiple role planning was supported. African-American women were more committed to planning for multiple roles and more knowledgeable about them as well. Perhaps this reflects more exposure to these roles and therefore more commitment to having them. As discussed earlier, this is perhaps because of unique cultural histories and identities whereby African-American women are raised with the expectation to work (Bayer, 2001; Vaz, 1995) and are also deeply committed to family. They may also have more exposure to multiple role planning and therefore be more familiar and knowledgeable about these roles.

Lastly, the variable of career aspiration was found to vary significantly by cultural group. Specifically, African-American women had higher career motivation than the Caucasian women which perhaps reflects a greater awareness regarding the necessity of gainful employment and the demographic characteristics of this sample. Again, perhaps this is reflective of a cultural difference in the history, experience, and meaning of work (Bayer, 2001; Vaz, 1995). Another possible explanation, is the fact that many African-American females are single working mothers (Fields, 2003) and exposure to this culturally may lead to a greater motivation to succeed occupationally. There was no difference in career choice or major choice contradicting the "double jeopardy" of race

242

and gender proposed by Betz and Fitzgerald (1987), Evans and Herr (1991), and Richie et al. (1997) as responsible for leading many minority women away from non-traditional fields.

Summary of Overall Results

This was the first study to explore the relationship among career aspirations, multiple role planning attitudes, and wellness for Caucasian and African-American traditional-aged undergraduate females. While career choice was not predicted from these factors and was not found to be correlated either, valuable information was learned. Career motivation was found to be related to several distinct wellness and multiple role planning variables for both Caucasian and African-American women.

In addition, each of these variables was found to differ significantly based on cultural affiliation. Perhaps most importantly, research has been generated that includes cultural affiliation as a significant factor. This study has increased the knowledge on how African-American and Caucasian women experience career motivation, multiple role planning, and wellness. This study has shown that these two groups of young women do experience career motivation, multiple role planning attitudes, and wellness differently. This has important implications for anyone working with these populations of women. These implications will be discussed in a later section, following a discussion of potential limitations.

Potential Limitations

There were several potential limitations of this study that may limit the generalizability of the results. These limitations relate primarily to sampling and instrumentation. A discussion of these limitations follows.

Sampling

There is one potential limitation related to sampling. Since the sample was drawn from only three universities in the Southeast, it is possible that the group might not be representative of the larger population of Caucasian and African-American women in the United States. To counter this, convenience samples were drawn from across the university communities to include as much diversity as possible. Samples were gathered from the Departments of History, English, and Education using primarily required general education classes. However, a closer look at the data indicates only three individuals selected a non-traditional career choice, compared with 66 who selected traditional choices, and 126 who made moderate selections. This may be indicative of the general population of female undergraduates or it may be related to where the sampling for participants occurred.

Another limitation relates to the fact that subjects were drawn from two Predominately White Colleges and Universities (PWCU) and one Historically Black University (HBCU). These two types of institutions have different student compositions, histories, and educational strengths. It should be noted that the majority of the African-American population was derived from the HBCU. This may impact generalizability, particularly for the African-American sample.

Instrumentation

One instrument used displayed evidence of low reliability. The ATMRP had quite low reliability. Subsequent analyses revealed several items that were disproportionately contributing to this low score and these items were removed. However, the Independence scale was still found to have sub-par reliability even after removal of several items. In addition, the reliability for African-American women was lower than for Caucasian women. This is perhaps reflective of the norm group used to test this instrument being predominately white. This lowered reliability for African-American women brings into question the validity and generalizability of these results for African-Americans.

Measuring the variable of career aspiration as a self-report career choice also yielded some potential complications. Specifically, the Department of Labor classifications for career aspiration responses may have been too complicated for undergraduates to decipher. To help counter this, students were allowed to ask questions regarding the categories. However, there were a significant number of blank and illegible responses to this item perhaps indicating confusion or another possibility, unknown career choice. A similar pattern was observed on the page asking for parents' occupation. Many left this page blank or misinterpreted the instructions to yield unusable data.

The three instruments used in this study had two different scales. The ATMRP and CAS measured responses on a Likert scale from 1 to 5 while the 5-F Wel measured responses on a Likert scale from 1 to 4. Analyses of the raw data revealed that several respondents failed to notice the different scales and answered all questions using the

same scale. This undoubtedly caused increased error in the data and contributed to exaggerated or understated responses.

A final limitation related to instrumentation concerns the length of the instrumentation and data collection. Participants may have experienced test fatigue because of the sum total of items used, which could have led to inaccurate responses. Several times during data collection, class time was over before all respondents had finished. This may have lead to rushed finishing of the questionnaires and inaccurate responses.

Implications of the Study

The results of this study have been interpreted within the context of possible limitations. These results provide a foundation for understanding the development of traditional-aged African-American and Caucasian female college students. Implications for counseling practice, counselor education, and future research are discussed in this section.

Counseling Practice

There are several important implications for counseling practice. It is important that counselors understand what factors influence women's career decision making and also what obstacles are stifling their options. It is necessary to obtain this information to aid the development of interventions or educational programs to assist women in choosing careers that will better their economic and social circumstances.

This study highlighted several important differences between African-American and Caucasian women. This is important information that has implications for counseling

practice in the school, community, and career counseling arenas. Counselors need to have an awareness regarding these differences so they can choose appropriate interventions. It has been discussed that certain areas of wellness are more an issue for one population than another. Counselors could use this information to target their interventions to increase the overall physical, mental, and spiritual health of their clients. For instance, counselors may want to target African-American females for increased physical health initiatives.

In addition, significant differences have emerged in career motivation and multiple role planning for the two groups. Counselors working with students at any level should be aware of this to help accurately facilitate the personal development of their specific student population. Caucasian women may need additional information such as hearing a woman currently in multiple roles speak to increase her knowledge of this area. Caucasian women may not possess the same expectations about work and family, therefore working to increase awareness on these issues would serve to enhance decision-making and increase future career and life options. It is important to note that counselors also need to remain open to other factors that could be voiced by women as influencing career motivation and multiple role planning.

Counselor Education

Counselor educators have an important role to fill within the educational and counseling communities. As trainers of future counselors, they have the opportunity to impart knowledge on a wide scale. This is particularly important since they educate not only counselors working in community settings (i.e., career counselors), but also

counselors working in educational settings (i.e., school counselors). These practitioners need to understand the significant variables that impact the career and life choices of their clients. It is of particular importance to move towards a holistic view of the individual in all matters of health and education. Counselor educators can teach and model the importance of wellness for their students, and show how it relates to all areas of life, including career and life choices.

In addition, counselor educators need to continue their multi-cultural focus and educate students that different cultures and genders experience events differently. This is particularly relevant for career and life choices. Women remain in a disadvantaged career position overall in this country and training counselors to be aware of the sociocultural differences in people is very important. Also, the experience of women overall in terms of their unique career development needs to be addressed. Career and life choices are extremely complex for everyone, but counselor educators need to teach their students that for certain populations, these decisions can be even more difficult. Particularly for women who culturally still bear the primary responsibility for home and family duties.

Future Research

In the future, more research is needed to further define the relationship between career aspirations, multiple role planning attitudes, and wellness. This study has provided an important step in understanding the complex relationship between these variables, particularly as it relates to the two populations of interest, traditional-aged, undergraduate African-American and Caucasian women. Although firm conclusions on this population are not possible at this time, additional research utilizing these populations would help

clarify the true nature of the relationship among these variables. In addition, research examining these variables using a more diverse sample including respondents of different ethnicities, ages, and educational status is needed. More information is needed on the predictive value of multiple role planning attitudes and wellness on the variable of career aspiration, perhaps utilizing different measures of career aspiration and career motivation.

More research examining the correlates of wellness and multiple role planning is also needed. It is important to understand how these variables are interacting and influencing individual's lives. It is important to try and explain these relationships to help advance individual self-awareness and scientific understanding. Again, research utilizing a different measure of multiple role planning would be warranted to clarify and increase understanding of the relationship between multiple role planning attitudes and wellness.

While career choice and major choice were not found to be significant, this does not mean that research seeking to uncover forces behind these choices should cease. The overarching question of why women continue to choose traditional careers remains ultimately unanswered. Additional research needs to be conducted looking at different variables and their impact on career and major choice. Specifically, research using more precise instrumentation measuring career choice is greatly needed. In fact, a solid career choice instrument needs to be developed to help advance the field and increase understanding of factors that contribute to a woman's career selection. As long as women continue to trail in the labor force, research needs to be undertaken to help explain why.

Conclusion

In conclusion, the predictive relationship of multiple role planning attitudes and wellness on career aspiration was examined. Additionally, a proportion of the variance and correlations between these variables were explained. Finally, group differences in these variables were examined. Findings indicated that career motivation could be predicted by multiple role planning attitudes and wellness but culture was not significant in this equation. Also, greater variance in career motivation was explained by multiple role planning attitudes and wellness in the Caucasian sample. African-American women had higher Essential Self wellness and lower Physical Self wellness. African-American women were also more knowledgeable, certain, and committed to a multiple role planning lifestyle and had greater career motivation than their Caucasian counterparts. This study validates previous history and research which suggests that African-American women are raised with the expectation to work. This study has provided some much needed research on African-American women and career development. It also highlights some important differences in holistic wellness among women. Knowledge of these areas is particularly important for counselors, counselor educators, and researchers. While not every hypothesized relationship was supported, valuable information about how these two distinct populations of women and subgroups of women experience these variables was gained.

In today's world, Caucasian and African-American undergraduate women face an abundance of choices. Developmentally, undergraduate students in the process of defining their futures and defining themselves as well (Erikson, 1968). Career choice and

multiple role plans at this stage of life not only significantly contribute to the ego identity

formation described by Erikson (Cohen, Chartrand, & Jowdy, 1995), but these choices

also have the potential to guide the remainder of a woman's career development.

Therefore, there is a continued need to understand and identify the career development

needs of women, specifically factors that contribute to women lowered career interests,

choices, and outcomes.

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271

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Select the response that is most descriptive of you. Fill in your answers on the bubble sheet unless otherwise directed.

142. What is your current marital status?
A. married/partnered
B. single
C. separated
D. divorced
E. widowed

143. What is your current employment status?
A. employed full time
B. employed part time
C. retired, not working
D. retired, working part time
E. not working

144. Are you currently a student?
A. yes, in high school
B. yes, working on undergraduate degree
C. yes, working on graduate degree
D. yes, taking courses for fun
E. no, not currently a student

145. What is the highest level of education you have completed?
A. less than high school
B. high school graduate
C. trade/technical school/A.A. Degree
D. Bachelor's Degree
D. Advanced Degree

146. If you have an advanced degree, please specify your highest degree.
A. Master's degree
B. Specialist degree
C. Professional degree (DDS, JD, MD)
D. Doctorate degree (Ph.D., Ed.D.)

147. What is your biological sex?
A. Male
B. Female

148. Are you biracial?
A. Yes
B. No

149. What is the primary cultural background with which you most closely identify?
A. Native American
B. Asian or Pacific Islander
C. African American

D. Caucasian
E. Hispanic/Latino/Latina

150. What is your sexual/affectional orientation?
A. gay
B. lesbian
C. bisexual
D. heterosexual

151. Please indicate your year in school:
A. Freshman
B. Sophomore
C. Junior
D. Senior
E. Graduate student

152. Which most accurately represents your university or college affiliation?
A. HBCU (Historically Black College and University)
B. Predominately White University or College

153. Select the statement that best describes the adults who were present in your household while growing up.

1) Both parents
2) Remarried parent (mother and stepfather or father and stepmothers
3) Father only*
4) Mother only*
5) Other*   *Indicate:* _____

*If you grew up predominately in a two-parent home, and answered A or B above, please answer #154. If not, skip to number 155/156.

154. Select the statement that best describes the typical or predominate situation in your family concerning **paid employment** when you were growing up. *Full time paid employment is at least 35 hours/week; part-time paid employment is less than 35 hours/week*

A. both parents (or parent and step-parent) worked in full time (at least 35 hours/week)
B. mother (or step-mother) worked full-time, father (or step-father) worked part-time
C. mother (or step-mother) worked full-time, father (or step-father) did not work
D. father (or step-father) worked full-time, mother (or step-mother) worked part-time
E. father (or step-father) worked full-time, mother (or step-mother) did not work

155/156. Please indicate the **highest** educational degree your mother attained (choose only one option for either question 9 or question 10.

155.
A. Less than high school
B. High school graduate
C. Associate degree
D. Vocational degree

E. Bachelor's degree

156.
A. Master's degree
B. Specialist degree (e.g. Ed.S., CAS)
C. Professional degree (D.D.S., J.D., M.D., etc.)
D. Doctorate degree (e.g. Ph.D., Ed.D., etc.)
E. Educational status is unknown

157/158. Please indicate the **highest** educational degree your father attained (choose only one option for either question 11 or question 12.

157.
A. Less than high schoo
B. High school graduate
C. Associate degree
D. Vocational degree
E. Bachelor's degree

158.
A. Master's degree
B. Specialist degree (e.g. Ed.S., CAS)
C. Professional degree (D.D.S., J.D., M.D., etc.)
D. Doctorate degree (e.g. Ph.D., Ed.D., etc.)
E. Educational status is unknown

159. Please indicate your age:
A. 18 and under
B. 19 to 20
C. 21 to 22
D. 23 to 24
E. 25 and over

160. Do you currently have a child or children?

A. yes, one child
B. yes, two children
C. yes, three or more children
D. no children

161. Describe your current relationship status:

A. not involved in a monogamous relationship **
B. divorced (and not currently in a relationship) **
C. married
D. involved in monogamous relationship for less than 6 months
E. involved in monogamous relationship for more than 6 months

162. How much have you and your partner discussed future plans about how you will *each* manage your time in career and home-related activities.
A. not at all
B. a little
C. a moderate amount
D. a lot
E. not applicable (e.g. I am single, etc.)

163. At what age would you like to settle down with a partner either in marriage or domestic partnership?

A. already married/partnered
B. don't plan on getting (re)married or partnered
C. between the ages of 18 and 24
D. between the ages of 25 and 30
E. over the age of 30

164. Which statement best describes your future plans concerning children.

A. I do not desire children
B. I desire 1 child
C. I desire 2 children
D. I desire 3 or more children
E. I have not thought about it

165. I plan on ultimately achieving which of the following educational degrees?

a.   Bachelor's degree
b.   Master's degree
c.   Specialist degree (e.g. Ed.S., CAS)
d.   Professional degree (D.D.S., J.D., M.D., etc.)
e.   Doctorate degree (e.g. Ph.D., Ed.D., etc.)

Please answer the following questions in the blank space provided.

166. What or who has influenced your career choice?

_____

_____

_____

_____

167. If you are planning on having a career and family roles, describe how you envision your

future in terms of balancing these responsibilities. Be sure to include how your spouse/partner

will participate.

_____

_____

_____

_____

168. Place a check next to the field that most accurately describes your major.			
Agricultural business and production			
Agricultural sciences			
Architecture and related programs			
Area, ethnic and cultural studies			
Biological sciences/life sciences			
Business management and administrative services			
Communications			
Communications			
Computer and information sciences			
Conservation and renewable natural resources			
Construction trades			
Education			
Engineering			
Engineering-related technologies			
English language and literature/letters			
Foreign languages and literatures			
Health professions and related sciences			
Home economics			
Law and legal studies			
Liberal/general studies and humanities			
Library science			
Marketing operations/marketing and distribution			
Mathematics			
Multi/interdisciplinary studies			
Parks, recreation, leisure, and fitness			
Personal and miscellaneous services			
Philosophy and religion			
Physical sciences			
Precision production trades			
Protective services			
Psychology			
Public administration and services			
Science technologies			
Social sciences and history			
Theological studies and religious vocations			
Transportation and materials moving workers			
Visual and performing arts			
Vocational home economics			
Undecided/Undeclared			
Other			
292			

169. Place a check next to the one occupation that you aspire/hope to achieve.			
Executive, Administrative, and Managerial Professions			
Public administration administrator/official			
Administrator, protective services			
Financial manager			
Personnel and labor relations manager			
Purchasing manager			
Marketing, advertising, public relations manager			
Education or related field manager			
Medicine or health manager			
Postmaster or mail superintendent			
Food or lodging manager			
Property or real estate manager			
Funeral director			
Management-related occupation *(accountant, underwriter, other financial officer, analyst, inspector,personnel, buyers, inspectors)*			
Professional Specialty			
Architects			
Engineers (aerospace, chemical, civil, electrical, industrial, mechanical)			
Mathematical and computer scientists (computer/operations analyst)			
Natural scientists (chemist, agricultural/food, biological, medical)			
Heath (physician or dentist)			
Health assessment and treating (RN, pharmacist, dietician, therapists, physician's assistant)			
Teacher – college and university			
Teacher – except college and university			
Counselor (vocational)			
Librarian, archivist, curator			
Social scientist and urban planner (economist, psychologist)			
Social worker, recreation worker, clergy			
Lawyers and judges			
Writers, artists, entertainers, and athletes			
Technicians and Related Support Positions			
Health technicians (lab or radiologic technicians, dental hygenists, LPN)			
Engineering technician (electrical tech, drafting, surveying, mapping)			
Science technician (biologic or chemical tech)			
Other technician (airplane pilots and navigators, computer programmers, legal assistants)			
Sales Occupations			
Sales supervisor			
Financial or business sales (insurance, real estate, securities, financial services, advertising)			
Manufacturing, mining, and wholesale sales			
Retail and personal services sales (car, furniture, appliances, hardware, apparel, cashiers)			
Administrative Support			
Administrative supervisor (general office, financial records, scheduling)			
Computer equipment operator			
Secretary, stenographer, typist, telephone operator,			
Information, records processing, scheduling, or mail clerk			
Adjusters and investigators (insurance, bill collectors, and social welfare eligibility clerks)			
Other administrative (office clerk, bank teller, data entry, statistical clerk, teacher's aid)			
Service Occupations			
Protective service supervisor (police, detective, guard)			
Firefighting and fire prevention			
Police and detective			
All Construction trades (painter, plumber, roofer, brickmason, electrician)			
Operator, Fabricator, and Laborer			
Transportation and Material Moving Occupations			
Handlers, Equipment Cleaners, Helpers, and Laborers			
Farming, Forestry, and Fishing			
Other: Please write in here _____			

Pilot Study Feedback Form

Please complete this evaluation immediately after completing all of the questionnaires in the packet, noting any changes that could possibly improve the study and/or instruments. Your comments and suggestions are greatly appreciated.

1. Were the instructions for the study questionnaires clear?   Yes   No

If no, please comment

_____

_____

_____

2. Were there any questions that were difficult to understand?   Yes

                                                                          No

If yes, please comment, noting whether the problems were with the 5-F Wel, the Attitudes Towards Multiple Role Planning Scale, the Career Aspiration Scale, or the demographic questionnaire.

_____

_____

3. Were there any words or phrases that you would have liked clarified or changed?

                          Yes   No

If yes, please comment:

_____

_____

4. Do you have any further suggestions for improving the study/questionnaires?

_____

_____

APPENDIX B
Consent Form

Project Title: The relationship among career aspirations, multiple role planning attitudes, and wellness among Caucasian and African-American undergraduate females.

Project Director: Caroline S. Booth, MS, EdS, LPC, NCC; Doctoral Student
Department of Counseling and Educational Development
The University of North Carolina at Greensboro

Participant's Name: _____

Date of Consent: _____

Caroline S. Booth has explained in the preceding oral presentation the procedures involved in this research project including the purpose and what will be required of you. Any benefits and risks were also described. Caroline S. Booth has answered all of your current questions regarding your participation in this project. You are free to refuse to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice. Your participation is entirely voluntary. Your privacy will be protected because you will not be identified by name as a participant. All data will be kept for five years at which time all paperwork will be shredded and computer files will be erased.

The research and this consent form have been approved by the University of North Carolina at Greensboro Institutional Review Board, which insures that research involving people follows federal regulations. Questions regarding your rights as a participant in this project can be answered by calling Mr. Eric Allen at (336) 256-1482. Questions regarding the research itself will be answered by calling Caroline S. Booth at (336) 830-1180. Any new information that develops during the project will be provided to you if the information might affect your willingness to continue participation in the project. Should you wish to engage in a personal dialogue regarding the topics present in this research project, you are encouraged to contact the University Counseling Center at 336-334-5340.

By signing this form, you are agreeing to participate in the project described to you by Caroline S. Booth. You will keep one copy of this consent form for your records.

_____
Subject's Signature

_____
Witness

Oral Consent Presentation

Hello, my name is Caroline Booth and I am a doctoral student in the Department of Counseling and Educational Development at the University of North Carolina at Greensboro. Currently, I am conducing my dissertation research on "The relationship among career aspirations, multiple role planning attitudes, and wellness in African-American and Caucasian undergraduate women".

As part of this research, I am interested in measuring how attitudes about career and family roles are related to holistic well-being and career aspirations. In order to study this, I ask that you complete a series of questionnaires designed to measure your career aspirations, multiple role planning attitudes, and holistic wellness. Participation is entirely voluntary and everyone in the classroom is invited to take part. This process will take approximately 30 to 40 minutes and your responses will be kept entirely confidential. Your name will not appear on any of the research data collected. Your responses will be combined with others and the results statistically analyzed to uncover the relationships between the variables. Ultimately, this information will be published in my dissertation.

Should you decide to participate, you will have the opportunity to ask questions at any time during this process. Simply raise your hand and I will come over and address your question. You also have the right to change your mind about participating at any point during this process. Since this study utilizes questionnaires measuring career aspirations, multiple role planning attitudes, and wellness, there is a possibility that answering these questions may provide you with added insight about yourself. This insight may be of a positive or negative nature. Should you wish to further discuss these topics or related issues of a personal nature, you are encouraged to contact the University Counseling Center at 336-334-5340.

Finally, as an added incentive, I am offering a $10 cash prize to one student participant in the class. When everyone has completed their questionnaires, your instructor will randomly and blindly select a testing packet from the group. This person will immediately win $10.

Are their any questions?

If you are planning on having a career and family roles, describe how you envision your future in terms of balancing these responsibilities. Be sure to include how your spouse/partner will participate.

Caucasian undergraduate student responses

I would like to work and then once I have children maybe become a stay at home mom and help in the classroom.

My husband and I will both work so that we will have the income to support two children. Also, flexible hours at work for emergencies with my children.

Full-time mom, perhaps working part-time when the kids become old enough for school. Of course my husband will take an active part in their development, but if I get away with marrying someone rich enough I have no problem not working and spending my days doing leisure activities. No problem at all.

Since I want to be a teacher, the hours that I work will suit my children

I plan on going to work as well as my husband and taking care of the children after work. I plan on teaching so I have a small advantage over some mothers. I plan to be a stay at home mom during the summer

I would like to stay at home until all of my children are in school and then go back to teaching.

I will be an elementary teacher. My husband will have a job and we will have children when financially stable.

I assume I will have a part-time job from home so I can take care of my children while my husband makes the bulk of the money.

Not planning on marriage.

I want to have a family, but I want it to be "traditional" in the sense that I stay and home and my spouse works

I would actually like me or my husband to be home with the kids the first 6 months, while the other manages the outside job. When the spouse comes home, they too will take part in the children.

I hope to know how to manage my career and family roles and I hope that my partner supports all that I do.

I will work right out of college, then take a few years off to have babies while my future husband works and also helps me.

I plan to have a full-time job (9-5), put my children in daycare and be home in the evening to spend time with my husband and children. I also hope that my husband will have a full-time job where he is home in the evenings.

2 kids, my husband and me work full time, have nanny or sitter with the kids when needed

My spouse and I will work full-time but I will have summers off to spend with our kids

We will both have a career and have a 50/50 relationship with bills, children, and the household

I have not given it too much thought because having a family of my own seems so far away but I would like to work and raise a family

Both have to cooperate, daycare, changing of shifts, etc.

African-American undergraduate student responses

I hopefully will become successful in my future as well as the man I marry will also be. Balancing it out will not be hard and when the time comes things will be figured out.

Spouse will work full time; me = work fulltime, have kids = no work, then work when they are school age

I will have to manage my time in order to have time for family and work. My husband will do the same so we will be able to be a family and take care of our family by having stable careers.

I'm not really sure. I don't feel I have to have a husband or family to have a good life. I can imagine myself living on my own very easily.

Who or what influenced your career choice?

Caucasian undergraduate female responses

My tenth grade earth science teacher

Nothing, don't have one yet

Working with children

My personal interests have influenced my wanting to be in the business field

I'm hoping career and life planning class will influence my career choice

My parents

Self-interest in career

My mother. She is a kindergarten teacher and that's what I want to do also

My past teachers and just going to school

Myself

No one, it just seemed interesting

My experiences in life so far

I plan to go into social work or open group homes for young teen mothers and teens. I have a strong desire to help.

It is important for me to have a successful career. No one has influenced me but myself because my parents didn't have careers.

My aunt was a kindergarten teacher for 30 years. She loved her job and thought so highly of it that I would like to be one too.

My current job in daycare has influenced my decision to become a counselor or social worker.

My parents mostly, but also my own interest in the field.

My relationships with younger children.

I am unsure of my career choice.

I have not decided on a specific career, but it will be influenced by my interests.

Occupational health teacher, my mother's hysterectomy, pastor, grandparents

African-American undergraduate female responses

My family and friends, personal interest

My next door neighbor

My children

I chose my career on my own because I enjoy helping teenagers and children

I've always wanted to become a veterinarian as well as own my own business. My dad influenced my choice of wanting my own business because he does and I think it is very honorable.

My mother

One of my high school teachers