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`We Are All Stories in the End, I Want Mine to be a Good One': College Students' Work-Family Expectations and the Role of Educational Experiences

Chandra D. Mason
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‘WE ARE ALL STORIES IN THE END, I WANT MINE TO BE A GOOD ONE’: COLLEGE STUDENTS’ WORK-FAMILY EXPECTATIONS AND THE ROLE OF EDUCATIONAL EXPERIENCES

by

Chandra D. Mason

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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The manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the Dissertation requirements for the degree of Doctor of Philosophy

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iii
Abstract

‘WE ARE ALL STORIES IN THE END, I WANT MINE TO BE A GOOD ONE’: COLLEGE STUDENTS’ WORK-FAMILY EXPECTATIONS AND THE ROLE OF EDUCATIONAL EXPERIENCES

By

Chandra D. Mason

Adviser: Professor Emeritus William E. Cross, Jr.

While researchers have long been interested in the experiences of people who combine paid work with non-work roles (e.g., spouse, parent, eldercare provider), relatively little attention has been given to the expectations that people hold prior to occupying these roles, such as the amount of role conflict or fulfillment anticipated as a result of participating in both work and non-work roles. Even less is known about the factors that shape these expectations. For college students, these factors may include experiences of a college education (e.g., coursework that addresses gender roles, interacting with successful role models), yet, ironically, few studies have explored the role of educational experiences in work-family expectations. The current study attempted to fill this void by first developing a new instrument designed to survey college student’s family-work expectations and secondly by conducting an online survey of 134 college students using the new instrument along with measures of work-family conflict management self-efficacy, anticipated work-family conflict, anticipated work-family enrichment, and personal importance of work and family roles. Finally, Lent’s Social Cognitive Career Choice Theory that is frequently used to map college students’ career choice was used to scaffold college students’ work-family expectations, and data from the current study were employed to test the
model. The first examination of the data did not confirm the model; however, with a minor adjustment, good-fit was accomplished. This study adds to the literature in several unique ways: by providing a psychometrically-sound measure of a new construct (i.e., influence of educational experiences) that previously had been overlooked, by generating much-needed information about an understudied topic, and by contributing an original theoretical framework to the area of work-family expectations.
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# Table of Contents

List of Tables ........................................................................................................... viii

List of Figures ......................................................................................................... ix

Chapter 1: Work and Family on the Horizon .......................................................... 1

Chapter 2: Review of the Recent Literature on Work-Family Expectations ........... 5


Chapter 4: Method .................................................................................................. 34

Chapter 5: Data Preparation ................................................................................... 44

Chapter 6: Results ................................................................................................... 50

Chapter 7: Discussion, Limitations, and Directions for Future Research .......... 65

Appendices

Appendix A: Initial Recruitment Email Message with Hyperlink ....................... 71
Appendix B: Reminder #1 Recruitment Email Message ........................................ 72
Appendix C: Reminder #2 Recruitment Email Message ....................................... 73
Appendix D: Informed Consent Form .................................................................... 74
Appendix E: Demographic Items .......................................................................... 77
Appendix F: Marriage/Partnering, Parenting and Work Expectations Items ....... 78
Appendix G: Educational Experiences Prompts ................................................... 79
Appendix H: Educational Experiences Scale ....................................................... 80
Appendix I: Self-Efficacy for Work-Family Conflict Management Scale .......... 82
Appendix J: Anticipated Work-Family Conflict Scale .......................................... 83
Appendix K: Anticipated Work-Family Enrichment Scale ................................... 84
Appendix L: Role Importance Scales .................................................................... 86
Appendix M: Thank you Reward Preference and Debriefing .............................. 87
Appendix N: Pattern Matrix for Education Experiences ....................................... 88
Appendix O: Factor Matrix Self-Efficacy for Work-Family Conflict Management Scale ................................................................. 89
Appendix P: Pattern Matrix for Anticipated Work-Family Conflict ................... 90
Appendix Q: Pattern Matrix for Anticipated Work-Family Enrichment ............ 91
Appendix R: Factor Matrices for Work Role Importance and Family Role Importance .............................................................................................................. 92

References .............................................................................................................. 93


List of Tables

Table 1. Demographic Information............................................................... 37
Table 2. Future Work and Family Role Intentions as a Percentage of the Sample ...... 38
Table 3. Means, Standard Deviations and Reliabilities for Model Variables and Factor Scores ........................................................................... 48
Table 4. Input Data (Covariances) for Path Analysis ........................................ 49
Table 5. Value of Fit Statistics for the Hypothesized Model................................ 52
Table 6. Fitted Residuals and Standardized Residuals for the Hypothesized Model .... 53
Table 7. Value of Fit Statistics for the Hypothesized, Correlated Error, and Partially Mediated Models ................................................................. 54
Table 8. Value of Fit Statistics for AWFC and ASWFC Models............................ 60
Table 9. Pattern of Path Coefficients to and from AWFC, ASWFC and ATFIWC ..... 61
List of Figures

Figure 1: Conceptual model of Social Cognitive Career Theory ........................................ 24
Figure 2: Work–family Expectations theoretical model to be tested................................. 33
Figure 3: Correlated Error Model ..................................................................................... 55
Figure 4: Partially Mediated Model .................................................................................. 58
Figure 5: Partially Mediated Model with

Anticipated Strain-Based Work-Family Conflict ......................................................... 63
Chapter 1

Work and Family on the Horizon

During an introductory psychology lecture on the subdisciplines of psychology a few years ago, I introduced social psychology. After describing my own research on work and family, I invited my students to share their plans, hopes, dreams and fears about their future work and family relationships. Expecting a lively discussion due to the highly relevant and personal nature of the topic, I was completely unprepared for the silence that followed, and the reticence of my students to talk about their work and family expectations. Were they disinterested, uncertain, anxious, embarrassed? Given the inherent privilege in “work and family issues” and the diversity of class, race and ethnicity of my students, was the question of balance out of touch with their personal experiences? And what part, if any, did I (as a teacher, adviser, and mentor) have in the development of their ideas about work and family? These questions were the impetus for this dissertation.

National labor statistics tracking the employment and family patterns in the United States suggest that most people today combine paid work with non-work roles (e.g., parent, spouse, leisure) in some way. For example, the Bureau of Labor Statistics (2014) reported that in 2012, 65% of women and 88% of men with a child under the age of 18 were employed; likewise, the majority (59%) of married-couple families with children under the age of 18 years reported that both parents participated in the labor force in 2012 (Bureau of Labor Statistics, 2013). Among opposite sex unmarried couples in which both partners are in the labor force, 44% have at least one biological child under the age of 18 years (US Census Bureau, 2011a). Furthermore, a multiple role lifestyle may be practiced even when children are not present, as is the case for 40% of all married couple families in which both wives and husbands were in the labor force and
were without children under the age of 18 years (U.S. Census Bureau, 2011b). [It should be noted that, to the extent that the number of couples who choose not to marry or who cannot marry is increasing, these figures may underestimate how many people are affected.]

Although combining paid work and non-work roles appears to be the norm, coordinating multiple roles is not always easy. Pleck (1977) proposed that permeable boundaries may exist between one’s work and family roles, such that stress from one role spills over into another role. Role conflict theory suggests that interrole conflict occurs when paid work and family roles (e.g., spouse, parent) make simultaneous demands on one’s resources (e.g., time, energy) which are limited in supply, resulting in a specific type of interrole conflict known as work-family conflict (e.g., Greenhaus & Beutell, 1985). Work-family conflict has been found to be negatively related to job satisfaction, commitment, retention, and involvement and life satisfaction, and positively related to depression, somatic complaints, cholesterol levels, burnout and absenteeism (Eby, Casper, Lockwood, Bordeaux & Brinley, 2005; Kossek & Ozeki, 1998; Thomas & Ganster, 1995). Thus, given the potential number of people at risk, it is not surprising that the relationship between work and family roles –and strategies for effectively managing it –has captured the attention of researchers for many years (e.g., Eby et al., 2005; Pleck, 1977; Westring & Ryan, 2011).

While research suggests that the costs of combining work and family are high, potential benefits of the work-family relationship have been largely ignored (Barnett & Hyde, 2001). However, a number of constructs that capture positive outcomes of the work-family relationship such as positive spillover, work-family facilitation, and work-family enhancement, have received some attention. One particularly promising construct is work-family enrichment, which is defined as “the extent to which experiences in one role improve the quality of life in the other
role” (Greenhaus & Powell, 2006, p. 73). Work-family enrichment occurs when resources (e.g., interpersonal skills) from one role are directly transferred to another role (i.e., instrumental path), or when positive mood and emotion generated in one role affect performance in another role (i.e., affective path). Research has found evidence for positive relationships between work-family enrichment and life satisfaction, job satisfaction, family satisfaction, and physical and mental well-being (e.g., Carlson, Kacmar, Wayne & Grzywacz, 2006; Masuda, McNall, Allen, & Nicklin, 2012; McNall, Nicklin & Masuda, 2010).

One dominant trend in this research is a focus on participants already occupying work and family roles, as opposed to participants who may (or may not) be anticipating a work-family relationship for themselves (Weer, Greenhaus, Colakoglu, & Foley, 2006). Most young people expect to hold both work and family roles in the future (e.g., Barnett, Gareis, James & Steel, 2003; Kerpelman & Schvaneveldt, 1999; Marks & Houston, 2002), yet compared to the amount of research on people already engaged in a multiple role lifestyle, little research on what and how people think about their future work-family relationship exists (McCracken & Weitzman, 1997; Weer, et al., 2006; Weizman & Fitzgerald, 1996). Furthermore, when asked about their work-family expectations, young adults often express very ambitious (sometimes characterized as unrealistic) ideas, plans and goals, such as very low estimates of anticipated work-family conflict while simultaneously placing a great deal of personal importance on family and work (e.g., McCracken & Weitzman, 1997). Given that anticipated multiple role conflict has been found to impact young women’s career choices, aspirations, and development (e.g., McWhirter, Torres, & Rasheed, 1998; Quimby & DeSantis, 2006; Rayman & Brett, 1995) as well as young people’s family role plans, such as delaying marriage and parenthood (e.g., Weer, et al., 2006), it is
imperative that researchers investigate the work-family attitudes of those who have not yet assumed these roles, and the factors that shape these attitudes.

For college students, these factors may include experiences of a college education (e.g., coursework that addresses gender roles, interacting with successful role models), yet, ironically, few studies have explored the role of educational experiences in work-family expectations. The current study attempted to fill this void by first developing a new instrument designed to survey college student’s family-work expectations and secondly by conducting an online survey of 134 college students using the new instrument along with measures of work-family conflict management self-efficacy, anticipated work-family conflict, anticipated work-family enrichment, and personal importance of work and family roles. Finally, Lent’s Social Cognitive Career Choice Theory that is frequently used to map college students’ career choice was used to scaffold college students’ work-family expectations, and data from the current study were employed to test the model. The first examination of the data did not confirm the model; however, with a minor adjustment, good-fit was accomplished. This study adds to the literature in several unique ways: by providing a psychometrically-sound measure of a new construct (i.e., influence of educational experiences) that previously had been overlooked, by generating much-needed information about an understudied topic, and by contributing an original theoretical framework to the area of work-family expectations.
Chapter 2

Review of the Recent Literature on Work-Family Expectations

To better understand the influences on work-family expectations, I conducted a review of the literature on work-family expectations of college students. Borrowing from the method of systematic review (e.g., Conn, Isaramalai, Rath, Jantarakupt, Wadhawan, & Dash, 2003; Pai, McCulloch, Gorman, Pai, Enanoria, Kennedy, Tharyan, & Colford, 2004), I used clear conceptual criteria for including or excluding articles in my literature review and then reviewed each article before synthesizing a set of articles.

Search Strategies

Because of the multidisciplinary nature of the work-family relationship, five computerized databases (Academic Search Complete, Education Source, PsycArticles, PsycInfo and SocINDEX) were searched using seven common work-family terms: “work family expectations”; “work family conflict”; “work family balance”; “work family enrichment”; “multiple role planning”; “work family” and “self efficacy”; and “dual career.” Each of these seven terms was searched in combination with “college” or “undergraduate.”

Initial Review of Articles: Inclusion and Exclusion Criteria

Results were examined to identify whether they met a predetermined set of inclusion and exclusion criteria. A study had to meet all of the following criteria to be retained for the final literature review:

a) Published in English;

b) Reporting of original empirical research;
c) Reporting results obtained from at least one sample of participants who were “traditional” college or university undergraduate students (i.e., not adult, reentry, returning or graduate students) from the United States at the time of the data collection.

Exclusion criteria were:

a) A theoretical or review article;

b) A focus on current work and family relationship, as opposed to future work, family or school roles;

c) Incidental mention of work and family relationship (i.e., when it was not the focus);

d) Assessment of sex or gender role attitudes and judgments of others’ work and family relationship, as opposed to one’s own work and family relationship;

e) Published prior to 1994.

Using these criteria, 21 articles published between 1994 and 2014 were retained for the review for possible influences on and antecedents of work-family expectations.

**Work-Family Expectation #1 – Salience of Future Work and Family Roles**

How important are future work and family roles to college students? A topic that has a long held the interest of researchers is the importance of and commitment to future roles, sometimes referred to as role salience. Amatea, Cross, Clark and Bobby (1986) define role salience as “the level of importance or value attached to performing in a diverse role area or the level of commitment of personal time and energy resources to performance of a given role” (p. 832).

**General Pattern of Findings.** An early measure of role salience, the Life Role Salience Scales (LRSS), was developed to measure the importance of and one’s commitment to work,
marriage, and parent roles (Amatea et al., 1986). In the original validation study, Amatea et al. measured both college women and men on six subscales (occupation role value, occupation role commitment, marital role importance, marital role commitment and parental role importance and parental role commitment), with 10 items in each subscale. Reported means indicated that students scored in the midrange (designated by the authors as 18-23 with possible score range of 6-30) on five of the six subscales, suggesting moderate amounts of role salience for all roles and dimensions, except for parental role value subscale, which was scored slightly higher with a mean of 24.6.

Three studies used modified versions of the LRSS: Livingston, Burley and Springer (1996) found slightly higher average ratings of occupational and marital role commitment in 256 college women and men than did Amatea et al. (1986), whereas in their sample of 95 college juniors and seniors, Friedman and Weissbrod (2005) found very similar occupational commitment ratings as Amatea et al. but a lower average rating of commitment to family roles. In a large (N=969) sample of college women and men, Kerpelman and Schvaneveldt (1999) found higher levels of career, marital, and parental roles importance than Amatea et al.

Two studies measured role salience using scales other than the LRSS. Hartung, Lewis, May and Niles (2002) assessed role salience with the Working and Home and Family subscales of Super’s 170 item Salience inventory (Super, 1985). Examination of overall sample means reveal moderate levels of commitment to work and to home, and high levels of value expectations (i.e., the extent to which participation in a given role will fulfill one’s values). Using the Importance of Work and Family subscale of the Family Responsibility Scale by Looker and Magee (2000), Fulcher and Coyle (2011) found that role salience was moderately high across three cohorts (middle childhood, high school and university students, with means
ranging from 3.39 to 3.75 on a scale from 1 to 5, with higher scores indicating higher role importance.

**Possible Influences on Role Salience.** The articles that focused on role salience identified three possible sources of influence on role salience: gender and gender ideology, parents, and developmental stage.

**Gender and Gender Ideology.** All five of the articles in this set used samples that included both women and men and thus permitted gender comparisons to be made. These comparisons revealed more similarities than differences between women and men in the importance placed on future work and family roles.

As measured by the LRSS, women and men expressed comparable levels of future role salience. Freidman and Weissbrod (2005) reported that neither work nor family commitment differed significantly by gender.\(^1\) Livingston et al. (1996) also failed to find evidence of significant relationships between gender and commitment to work and family roles; however, feminine and masculine orientations (i.e., sex role ideology) were positively related to marital role commitment and occupational role commitment respectively. One significant gender difference was reported by Kerpelman and Schvaneveldt (1999): while college women and men did not differ in their career and marital identity salience, college women scored significantly higher than men in parental role commitment.

Other role salience measures yielded similar patterns: Hartung et al. (2002) found neither gender differences in commitment to work and to home, nor in value expectations for work and  

\(^1\) Interestingly, the correlation between work role commitment and family role commitment for college women, but not for college men was negative, suggesting that women might have envisioned their role participation as a trade-off, whereas men might have expected participation in both roles to be compatible.
for home, and Fulcher and Coyle (2011) detected no gender differences in importance of family role or of work role.

**Parental Influence.** Two studies in this group investigated the role that parents may have in shaping students’ future role salience. In a study of 147 college students, Kerpelman and Schvaneveldt (1999) measured both college students’ future role importance as well as their perceptions of the importance their mothers’ and fathers’ placed on work and family roles. Overall, college students’ role importance ratings were more congruent with their fathers’ than mothers’ role importance ratings, with the exception of family-oriented students (i.e., those students who placed high importance on marital and parental roles and low importance on career roles). Compared to their fathers, family-oriented students indicated that they placed more importance on their future marital roles and less importance on their future career roles. All students, regardless of their future role importance scores, placed less importance on their parental role than their mothers did, whereas career/marriage-oriented students placed significantly more importance on their future career role than their mothers.

In contrast, Fulcher and Coyle (2011) did not find evidence of a significant relationship between mothers’ work nontraditionality or fathers’ work traditionality scores (based on occupational prestige, percentage of men employed in the occupation, and work hours). Shifting the focus from parents to family dynamics, Hartung et al. (2002) found that cohesion and adaptability in family of origin was related to family role salience, but not to work role salience.

**Developmental Stage.** Fulcher and Coyle (2011) found that university students reported significantly higher family role salience than a sample of 6 to 13 year olds; work role salience did not vary by age group. In a similar vein, Friedman and Weissbrod’s (2005) study revealed
that role salience varied by decision-making status regarding work (e.g., career path) and family plans (e.g., to become a parent) in the following ways: those who had at least thought extensively about work plans (even if they had yet to make a decision) were significantly more committed to future work roles than those who had not given future work roles much consideration. The opposite was true for future family role salience and decision-making status: the distinguishing feature of those who expressed high family role salience was that they had made decisions about family plans.

**Work-Family Expectation #2 – Anticipated Role Conflict**

Given the high importance that college students place on their future work and family roles, it is not surprising that role conflict is one of the more frequently researched expectations in this literature. Do college students anticipate work-family conflict?

**General Patterns of Findings.** Seven studies measured anticipated role conflict; six of these studies reported scores of anticipated role conflict between work and family (Barnett et al., 2003; Burley, 1994; Livingston et al., 1996; Gaffey & Rottinghaus, 2009; Hallett & Gilbert, 1997; Weer et al., 2006). [It should be noted that two of these articles (Burley, 1994; Livingston, et al., 1996) appear to be based on the same data set.] All reported low to moderate anticipated role conflict among college students\(^2\), with one exception: Hallett and Gilbert (1997) reported that conflict associated with child care was moderately high (while all other measures of

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\(^2\) Because almost every one of these studies used a different scale to measure anticipated work-family conflict, the following guidelines were used: “low” is used to describe mean scores that were more than one rating below the mid-point of the rating scale; “high” is used to describe mean scores that were more than one rating above the mid-point; and “moderate” is used to describe mean scores that were less than one rating above or below the mid-point of the rating scale.
anticipated role conflict were moderate). Thus, the evidence suggests that college students anticipated mostly low to moderate levels of role conflict.

**Possible influences on anticipated role conflict.** By far, the most common source of influence addressed in this subset of articles was gender (and in one case, gender role ideology). Other influences included parental influence, role commitment, importance, and salience, and anticipated use of strategies to avoid role conflict.

**Gender and Gender Ideology.** Five of the seven studies included both college women and men and could explore gender differences. Women anticipated more role conflict than men in one study (Weer et al., 2006), less than men in two studies (Burley, 1994; Livingston et al., 1996) and equal amounts in one study (Barnett et al., 2003). Gender role ideology (in addition to gender) was measured as a possible predictor of anticipated work-family conflict in one study (Livingston et al., 1996); both women and men who scored high in femininity reported low levels of anticipated work-family conflict.

One possible explanation for these somewhat inconsistent findings lies in Pleck’s (1977) theoretical work in which the permeability of work and family roles is considered to differ by gender. Specifically, Pleck proposed that men are more likely to experience family interfering with work conflict than women, and women are supposed to experience more work interfering with family conflict. Livingston and Burley (1991) suggested that family interfering with work conflict may be more stressful than work interfering with family conflict. This difference in type of conflict might lead college men to score higher on anticipated work-family conflict than college women. Indeed, using a more advanced, multi-dimensional and bi-directional conceptualization of work-family conflict, Gaffey and Rottinghaus (2009) found that women
expected more conflict than men, except work interfering with family conflict, which men expected to experience more than women.

**Parental Influence.** Two studies measured the relationship between anticipated role conflict and maternal employment, with mixed results. Barnett et al. (2003) found that college seniors (women and men) reported a negative relationship between maternal employment and anticipated career-marriage conflict; full-time maternal employment during early childhood was related to lower levels of anticipated career-marriage conflict than other maternal employment histories. Another study suggested that the relationship between maternal employment and measures of anticipated work-family conflict is moderated by gender: Weer et al. (2006) reported a positive relationship between maternal employment and anticipated work-family conflict for college men only.

**Role Commitment/Importance/Salience.** Two studies considered role commitment, importance or salience as possible predictors of anticipated work-family conflict. Livingston et al. (1996) found that for college women, as commitment to marriage increased, levels of anticipated work-family conflict decreased; however, women who are low in both occupational commitment and low in femininity had the highest levels of anticipated work-family conflict. Markle, Yeatts, Seward and Spencer (2007) asked about the importance of the work-family role, and found evidence of a positive relationship between it and anticipated work-family conflict.

**Strategies to avoid anticipated role conflict.** Several studies explored the expectations that college students had about how to manage a multiple role lifestyle. In terms of family-based strategies, two studies (Barnett et al., 2003; Weer et al., 2006) found that anticipated role conflict was related to intentions to delay marriage, but in opposite directions. A third study by
Livingston et al. (1996) found that marital role commitment was negatively related to anticipated role conflict. Weer et al. (2006) and Barnett et al. (2003) reported that anticipated role conflict was negatively related to the number of children desired and the intention to delay parenthood.

In terms of work-based strategies, Riggio and Desrochers (2006) found that students desired jobs that would allow them the flexibility to meet the needs in their nonwork lives, and Burley (1994) found that intentions to reduce tension and employ strategies for increasing efficiency were negatively related to anticipated work-family conflict. However, two studies (Hallett & Gilbert, 1997; Weer et al., 2006) tested but found no support for relationships between anticipated role conflict and lifestyle orientation or career altering intentions.

**Work-Family Expectation #3: Multiple Role Planning**

Given that college students generally anticipate low to moderate amounts of work-family conflict, what are their views toward planning for multiple role lifestyles? The Attitudes Toward Multiple Role Planning scale (ATMRP) was developed by Weitzman and Fitzgerald (1996) to capture one’s overall mind-set regarding the actual planning for future multiple roles (Knowledge/Certainty, Commitment to Multiple Roles, Independence, and Involvement), with low scores often interpreted as indication of unrealistic attitudes towards multiple role planning (McCracken & Weitzman, 1997). Six of the studies reviewed utilized the ATMRP.

**General Findings.** Five studies reported subscale score averages, which reflected mostly moderately realistic attitudes, with the exceptions of Commitment (with relatively high means in all five studies), and Knowledge/Certain (with relatively low means in three of the five studies) (Basuil & Casper, 2012; Lopez, McDermott & Fons-Scheyd, 2014; McCracken & Weitzman, 1997; Peake & Harris, 2002; Weitzman & Fitzgerald, 1996). Without reporting means, Markle et
al. (2007) concluded that about 10% of their participants for whom both roles were important had a realistic approach toward planning for combining work and family roles.

**Possible Influences on Multiple Role Planning.** This subset of articles explored a wide range of potential influences on planning for a multiple role lifestyle, to include gender and gender ideology, parental influences, developmental stage, career traditionality (in terms of gender), and work-family self-efficacy.

**Gender and Gender Ideology.** Only two studies included both college women and men; neither found evidence of a main effect of gender on attitudes toward multiple role planning (Basuil & Casper, 2012; Peake & Harris, 2002).

**Parental Influence.** Using a social learning framework, Basuil and Casper (2012) explored the relationship between perceptions of parental work-family conflict and one’s own planning behavior, finding that as students’ reports of the amount of work-family conflict experienced by the same-sex parent increased, Knowledge of, Commitment to and Involvement in multiple role planning increased. In other words, women whose mother’s experienced high work-family conflict reported being more knowledgeable about, committed to and involved in planning for a multiple role lifestyle than women whose mothers reported lower levels of work-family conflict. The same pattern was observed in men’s ratings of their fathers’ work-family conflict and their own ratings of Knowledge, Commitment and Involvement.

**Developmental Stage.** Three of the studies tested the idea that multiple role planning becomes more realistic as the reality looms closer (operationalized as education level). Weitzman and Fitzgerald (1996) compared ATMRP scores across three different age cohorts (high school, college and graduate students) and found that Knowledge/Certainty remained low
and *Commitment* remained high across all three levels, but that *Independence* and *Involvement* in multiple role planning increased with education level. McCracken and Weitzman (1997) found that *Involvement* and *Knowledge/Certainty* increased with education level. Lopez et al. (2014) found no main effect for undergraduate class level (i.e., freshman, sophomore, junior, senior), but data indicated an interaction of class level and relationship status; advanced students in committed relationships reported more planful attitudes.

**Career Traditionality.** Two studies considered the relationship between career traditionality and ATMRP. Peake and Harris (2002) recruited heterosexual, dating couples and using U.S. Census data, classified the female partner’s intended occupation as either traditional or nontraditional based on the national percentage of women who were employed in this occupation. Although no main effects of gender on ATMRP were detected, gender was associated with career traditionality and marriage plans for two ATMRP subscales, *Commitment* and *Involvement*. For women, *Commitment* and *Involvement* scores were higher if the woman planned to pursue a nontraditional career and the multiple role lifestyle was imminent (i.e., marriage plans had been made). However, for men, *Commitment* was higher when the multiple role lifestyle was further away (i.e., they had not made marriage plans) and their (female) partners anticipated a non-traditional career. Surprisingly, men’s *Commitment* and *Involvement* scores were higher than those of women who had not made marriage plans and who expected nontraditional careers. Thus, for women only, planning increased as multiple role lifestyle proximity increased; for men, career traditionality of their future spouses influenced planning, even in absence of specific plans to assume a multiple role lifestyle.

McCracken and Weitzman (1997) also investigated career traditionality within the context of ATMRP and found that it interacted with agency to affect *Commitment* and
Independence; college women pursuing traditional careers and high in agency reported more Commitment, whereas college women pursing traditional careers and low in agency reported lower Independence.

Work-family self-efficacy. Basuil and Casper (2012) explored the relationship between work-family balance self-efficacy and ATMRP. Support was found for positive relationships between work-family self-efficacy and two ATMRP subscales; as Commitment to and Involvement in planning for multiple roles increased, so did work-family balance self-efficacy.

Work-Family Expectation #4: Partnership Preferences

These articles explore whether college students expect egalitarian and role-sharing relationships in which both partners are equally committed to work and family roles, and contribute equally in terms of finances, time, and energy to the partnership, or a more traditional or gendered partnerships (e.g., husband as “breadwinner”, wife as primary caregiver and domestic laborer).

General Pattern of Findings. Findings from six of the reviewed articles seem to suggest that college students expected egalitarian or role-sharing partnerships. For example, Savage and Fouad (1994) reported that regardless of their careers choice (i.e., gender traditional, gender-neutral, or gender nontraditional), women had given more thought and were more committed to role-sharing partnerships than traditional ones, as evidenced by higher mean scores on the role-sharing scales than on the traditional scales.³ Data from Kaufman’s (2005) study also suggest that the majority of college women and men prefer egalitarian partnerships: few (29%) expressed a desire to stay at home if given a choice, and most (72%) indicated that they would

³ The authors did not report if the endorsements of the role-sharing partnership orientation were significantly stronger than the endorsements of the traditional partnership.
“definitely not” or “probably not” like their spouse to stay at home. Fulcher and Coyle (2011) reported low endorsement of the traditional (male) breadwinner-(female) caregiver model across three education levels (middle school, high school and university students). Data from the only study in this review with an entirely male sample (Thorn & Gilbert, 1998) suggested that men, on average, were moderately high in commitment to a future role-sharing partnership. Deutsch, Kokot, and Binder (2007) compared college women’s preferences for nine different styles of partnerships (three egalitarian, and six unequal distributions of work and family) and found evidence of three distinct versions of egalitarian marriage: one in which both partners scale back; one where both arrange schedules; and one where labor is outsourced (e.g., paid childcare). Participants rated two of the egalitarian scenarios as significantly more likely than any of the other seven scenarios.

One study stands alone in that the preferences of the college women in their sample were mixed: Hallett and Gilbert (1997) reported that nearly one-third of their sample preferred an egalitarian arrangement, one-third preferred a traditional partnership, and one-third third expressed a mix of traditional and egalitarian expectations. However, as noted by the authors, the women in this study were students at a “university located in a historically conservative state” and thus, may not be representative of college women in general (p. 320).

Possible Influences on Partnership Preferences. In the work on partnership expectations, gender ideology is lifted up as a potentially powerfully source of influence. A related concept, career traditionality, is also implicated. The role that parents play and developmental stage also may hold some explanatory power.

Gender and Gender Ideology. Of the six articles in this subset, only two reported samples that included both college women and men. Kaufman (2005) found that the majority
(65%) of college women expected to work even if they had the choice not to, and the majority of men (51%) expressed that they would prefer that their wives engaged in paid work, which was interpreted as a trend in endorsement of egalitarian partnerships. However, the percentages of women and men endorsing egalitarian partnership values differed, with more women than men expressing an expectation of equality, but it was not reported if these differences were statistically significant. In terms of gender ideology, Kaufman’s sample of traditional women (compared to egalitarian women) and egalitarian men (compared to traditional men) expressed significantly more desire to stay at home. Compared to egalitarian men, traditional men were significantly more likely to desire a stay-at-home spouse, whereas gender role attitudes were unrelated to women’s preferences for a stay-at-home spouse.

Fulcher and Coyle (2011) reported significantly stronger endorsement of the traditional breadwinner-caregiver model by university men compared to university women (though it is important to note that average endorsement ratings of men and women fell at the midpoint of the scale or weaker, respectively). Deutsch et al. (2007) found that gender ideology predicted a preference for a home-centered egalitarian partnership; endorsement of liberal gender ideology was positively related to desire for a partnership in which both partners reduce work roles involvement after becoming parents, and share equally household and childcare labor. Liberal gender role ideology did not predict endorsement of either a balanced egalitarian partnership (neither partner reduce work role involvement, and both contribute evenly to home work) or a career/job-centered egalitarian arrangement in which work roles remain unchanged after becoming parents and most of the household labor is outsourced. Finally, Hallett and Gilbert (1997) and Thorn and Gilbert (1998) measured either instrumentality alone or both instrumentality and expressiveness, two traits that are often used to represent masculinity and
femininity. Hallett and Gilbert found that college women who desired a role-sharing partnership were significantly higher on instrumentality than college women who envisioned themselves in a more traditional (i.e., breadwinner-caregiver model) partnership. Thorn and Gilbert (1998) found that high expressiveness, but not instrumentality, predicted stronger preferences for a future role-sharing partnership among college men.

**Parental Influence.** Fulcher and Coyle (2011) found that maternal work traditionality was related to college women’s own work traditionality; college women with stronger endorsements of the breadwinner-caregiver model and traditional work plans (e.g., to not work when children are young) were more likely to have mothers with traditional work roles than nontraditional work roles. Likewise, college women with weaker endorsements of the breadwinner-caregiver model and nontraditional work plans (e.g., to work when children are young) were more likely to report nontraditional work roles for their own mothers. Among college men, Thorn and Gilbert (1998) found that greater father involvement in daily household work was associated with higher expectations for future role sharing.

**Developmental Stage.** Fulcher and Coyle (2011) is the only study in this subset to investigate potential developmental differences in partnership expectations (specifically, the endorsement of the breadwinner-caregiver model). Although endorsement of this partnership ideal did not vary by age group (i.e., middle childhood, high school, university), the authors report a significant interaction of age and gender: adolescent and college men were more likely than adolescent and college women to endorse the traditional partnership model. No gender difference in model endorsement was detected in the middle childhood group.
**Career Traditionality.** One article in this set addressed education-related experiences as possible influences on work-family expectations. Savage and Fouad (1994) found that college women in traditional majors (e.g., education) were more likely to expect a traditional arrangement (e.g., spouse will be the primary “breadwinner”, self will engage in part-time paid work) than women in non-traditional majors.

**Work-Family Expectation #5: Self-Efficacy in Work and Family Roles**

As a relatively new construct to the field of work and family (but not a new construct), self-efficacy (i.e., the degree of confidence one has in herself to perform a domain-specific behavior, such as solving a math problem, successfully; e.g., Bandura, 1977) as it pertains to work and family was studied in only two articles included in this review.

**General Pattern of Findings.** Riggio and Desrochers (2006) did not report overall sample means of self-efficacy, but an examination of the group (i.e., gender, maternal employment categories) self-efficacy means revealed that in this sample of college students, parenting self-efficacy and work self-efficacy were moderately high. Basuil and Cooper (2012) reported that for college women and men, work-family balance self-efficacy (i.e., belief in one’s ability to balance work and family) was high.

**Possible Influences on Self-Efficacy in Work and Family Roles.** To date, only two concepts have been studied as factors that may shape work and family self-efficacy: gender and parental influence.

**Gender.** Both studies found that gender was a predictor of self-efficacy. Specifically, Riggio and Desrochers (2006) reported that college women had significantly higher parenting self-efficacy and work self-efficacy than college men. Basuil and Cooper (2012) found the same
pattern (i.e., college women scoring significantly higher on work-family balance self-efficacy than college men).

**Parental Influence.** Both studies explored the role that parental employment plays in college students’ self-efficacy. In Riggio and Desrochers’ (2006) study, having a consistently nonemployed mother was associated with lower parenting self-efficacy than having an inconsistently or consistently employed mother for college men only [college women scored very high in both measures of self-efficacy, and across all maternal employment groups]. Basuil and Cooper (2012) found that work-family balance self-efficacy was unrelated to perceived work-family conflict status of mothers and of fathers. As reported earlier in this review, Basuil and Cooper noted a significant relationship between work-family balance self-efficacy and the *Knowledge* subscale of the Attitudes Toward Multiple Role Planning, and although the authors conceptualized the direction of influence from self-efficacy to *Knowledge*, the study was strictly correlational. One can easily imagine a relationship in which Knowledge about Multiple Role Planning influences work-family balance self-efficacy.

**Summary of Systematic Literature Review**

The purpose of this literature review was twofold: to describe college students’ work-family expectations that have been explored in the empirical literature within the last 20 years, and to identify potential sources of influence on these expectations. Based on the review of the literature, I offer up several summary observations:

1. The weight of the evidence, across multiple samples of college students and using different operationalizations, is overwhelmingly in support of a moderate to high importance being placed on future work and family roles by college students;
2. In general, college students anticipated only low to moderate amounts of work-family conflict;

3. Thus, it was not surprising that students were somewhat reserved - if not unrealistic- in their attitudes toward multiple role planning;

4. For the most part, college students envisioned for themselves egalitarian partnerships in which both members are invested equally in work and family;

5. College students, despite having limited first-hand experience in work and family roles, appear very confident in their ability to perform in them and to balance them; student self-confidence in their ability” defines the term “self-efficacy” -- a construct of critical importance to the hypotheses to be introduced shortly.

6. Although numerous theoretical influences (e.g., gender, gender ideology, parental influences, and developmental stages) have been studied, the role that higher educational experiences may play has mostly been ignored.

Given that college is a time when students may be weighing the costs and benefits of different career paths and may be seeking information that will help them decide how to best coordinate their lives post-graduation, the lack of attention to the role that educational experiences may play in the shaping of college students’ plans for work and family is remarkable. Ignoring the impact that educational experiences may have on these expectations will result, at best, in an incomplete (if not inaccurate) picture of how students’ expectations are formed and shaped. Thus, the primary aim of this dissertation is to contribute to the existing literature by focusing on educational experiences as possible influences on college students’ work-family expectations.
Chapter 3

A New Direction for Work-Family Expectations Research:

Social Cognitive Career Theory

A promising direction for understanding the role that educational experiences may play in shaping work-family expectations is Social Cognitive Career Theory (SCCT; Lent, Brown & Hackett, 1994). In general terms, SCCT attempts to describe how people make educational and career decisions and relates those factors to the outcomes of these decisions.

**SCCT: An Overview of the Theory.** Based on Bandura’s (1986) Social Cognitive Theory, SCCT is a three-model system that explains how career interests develop, how career choices are made, and how career-related performances (e.g., persistence, grades) are achieved or attained (Lent et al., 1994). All three models share a focus on the relationships among self-efficacy (i.e., one’s confidence in one’s ability to be successful in a particular domain), outcome expectations (i.e., one’s expectation of what will happen as a consequence of one’s behavior in a particular domain) and related interests, goals and attainment. Of the three, the model that holds the most promise for understanding the role that educational experiences may play in shaping work-family expectations is the model of career choice (Figure 1), as it is the only one to include learning experiences. Furthermore, it has been theorized that work-family conflict acts as an outcome expectation (described in detail below) within the career choice model of SCCT (e.g., Lent, Brown, & Hackett, 2000). Thus, SCCT seems ideally suited to address the overarching research question of this dissertation: do educational experiences influence college students’ expectations about the work-family relationship?
Figure 1. Conceptual model of Social Cognitive Career Theory (Lent et al., 1994). Note: Adapted from Bakken, Byars-Winston, & Wang (2006). Dashed lines indicate the part of the model to be tested in the proposed study.
In the career choice model of SCCT, self-efficacy (“can I do this?”) is thought to influence outcome expectations (“what will happen if I do this?”). Both self-efficacy and outcome expectations influence career interest. Interest will, in turn, influence goals related to a career choice and actions to pursue a career choice, and actions influence performance and success in a chosen domain. Performance in a domain will, in a feedback loop fashion, influence one’s self-efficacy in that domain through learning experiences.

Self-efficacy is influenced by four sources of information or learning experiences: personal experiences (i.e., mastery experiences), exposure to role models (i.e., vicarious experiences), messages of social/verbal persuasion, and physiological states and reactions while performing domain-related tasks. As experiences of personal success, the availability of successful role models, and messages of encouragement increase, and as negative affect and physiological states (e.g., stress) during task performance decrease, self-efficacy increases. However, not all learning experiences exert the same degree of influence, according to Lent et al. (1994): specifically, personal experiences of success will have more of an impact on self-efficacy than the other three informational sources.

Finally, Lent et al. (1994) identified two categories of influence on learning experiences: person inputs (such as gender and race/ethnicity) and contextual affordances. Person inputs are intrapersonal variables that shape which learning experiences are available and how they are experienced. For example, women and men may receive different messages of social/verbal persuasion with regard to pursuing certain careers (e.g., in male-dominated fields such as engineering), and thus may have different levels of career self-efficacy. Person inputs may also regulate background contextual affordances or environmental contributions, which will, in turn, influence learning experiences. For example, a person of a low socio-economic status (i.e.,
person input) may not have been able to afford certain experiences (i.e., background contextual influences) that would have exposed them to role models who have pursued higher education (i.e., learning experiences). Contextual variables can also be thought of in terms of more current environmental supports (e.g., access to professional networks) or barriers (e.g., poor job market) that influence career choice and goals, and moderate the relationship between interest and choice and choice and action.

**Empirical Evidence for the SCCT Choice Model.** Empirical research on SCCT is voluminous: a search of the PsycInfo database for peer-reviewed, empirical studies containing the term “social cognitive career theory” returned 148 results⁴. However, most relevant to the scope of this dissertation are the results of a meta-analytic path analysis of the empirical literature specifically on the career choice model of SCCT conducted by Sheu, Lent, Brown, Miller, Henessy, and Duffy (2010). Meta-analytic path analysis is a two-step process in which study results are first meta-analyzed by calculating corrected, weighted and synthesized bivariate correlations, and then submitting the matrices to structural equation modeling (Viswesvaran & Ones, 1995). Forty studies (with 45 independent samples) that were published between 1981 and 2008 met the authors’ criteria for inclusion. To be included in the study, among other criteria, a study had to measure career choice goals and at least one of the following: self-efficacy, outcome expectations, interests, supports and barriers. [Due to a lack of empirical work that included the other variables in the model, the full career choice model could not be tested.]

In keeping with a recent trend in this literature (e.g., Lent, Sheu & Brown, 2010) to measure choice goals in terms of Holland’s (1997) educational/occupational types (Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (C)), studies were

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⁴ Database search conducted in November 2014.
classified in terms of Holland’s (1997) six themes. Because too few studies classified as A, S and C included data on supports and barriers, these studies were analyzed separately from studies in the other three occupational themes. However, both sets of analyses revealed very similar patterns among the remaining variables. As predicted by the career choice model, self-efficacy and outcome expectations were positively and directly related to career interest, which was positively related to choice goals. Outcome expectations were also directly related (positive) to choice goals. Self-efficacy was directly related to choice goals as well, but the relationship was not strong relative to the other path coefficients and in one theme (E), the coefficient was negatively related to choice goals.

In the test of the model that included supports and barriers (with themes R, I, & E), support was weak for direct relationships of supports and barriers with choice goals. However, a mediating effect of supports on choice goals through self-efficacy and outcome expectations was supported. The indirect effects of barriers on goal choice through self-efficacy and outcome expectations, although statistically significant, were not large. Although not a test of the full model, the results of this meta-analysis lend support to the central tenets of the choice model. In addition, these findings are in line with the conclusions of an earlier meta-analytic study of the relationship between self-efficacy and career interests in 60 independent samples (Rottinghaus, Larson & Borgen, 2003). Once again, the evidence supported the theory: self-efficacy had a moderate, positive influence on career interest.

Sheu et al. (2010) did not specifically analyze person input data but, as noted, the articles that were analyzed included samples that were gender and racially or ethnically diverse (i.e., Gainor & Lent, 1998; Lent, Brown, Sheu, Schmidt, Brenner, Gloster, Wilkins, Schmidt, Lyons, & Treistman, 2005, Lent, Lopez, Lopez, & Sheu, 2008) which, when reviewed individually,
reveal support for the role of person inputs in the SCCT career choice model. However, Rottinghaus et al. (2003) examined the meta-analytic data for gender differences; although in the same direction as women, men showing interest in Realistic, Social, and Conventional occupational themes showed a significantly stronger relationship between self-efficacy and interest than women in those same occupational themes.

According to Tokar, Buchanan, Subich, Hall & Williams (2012), learning experiences, as antecedents of self-efficacy and outcome expectations, have received relatively little attention in research on SCCT. Prior to proposing SCCT, Lent, Lopez, and Bieschke (1991) created a learning experiences assessment comprised of 40 items across four scales that corresponded to Bandura’s (1986) four sources of information (i.e., learning experiences) and found that, as predicted by social cognitive theory, all four sources of information were significantly related to math self-efficacy, with personal performances having the strongest influence. Using Lent et al.’s (1991) 40-item assessment, Gainor and Lent (1998) also found full support for the relationship between learning experiences and both math self-efficacy and outcome expectations in their test of the model with Black college students. The next major advancement in the study of learning experiences in SCCT was the development of the Learning Experiences Questionnaire (Schaub & Tokar, 2005) which, with 24 scales, taps the four sources of information that correspond to each of Holland’s (1997) six educational/occupational themes. With the advent of this new measurement tool, work on learning experiences has increased in recent years (e.g., Tokar, Thompson, Plaufcan, & Williams, 2007; Williams & Subich, 2006), as has support for the relationship between learning experiences, self-efficacy and outcome expectations.
In sum, since its debut in 1994, SCCT has been repeatedly tested and, with a few notable exceptions, has been largely supported. Specifically, research has examined and failed to find consistent support for direct effects of supports and barriers on choice goals and actions, or moderating effects on the relationships between interests and goals. Also, although relationships from interest to career goals, career action and performance attainment, when included in tests of the model, appear to be in the predicted direction (e.g., Lent, Brown, Schmidt, Brenner, Lyons, & Treistman, 2003), the distal consequences of self-efficacy and outcome expectations may require closer attention.

**Hypotheses**

**Person Inputs and Learning Experiences**

According to SCCT, person inputs (i.e., intrapersonal variables) may influence which learning experiences are available and how they are experienced. For example, learning experiences may differ by gender because women and men often receive different messages of social/verbal persuasion (e.g., which career choices are appropriate and available to them). Also, advanced students may have accumulated more (and more diverse) learning experiences than less advanced students. Finally, students pursuing degrees in the humanities or the social sciences may be more likely to complete courses that address gender roles in society than students studying natural science or technology.

**Hypothesis 1a:** Influence of educational experiences (as measured by the 30 item Educational Experiences Scale) will vary by gender (as measured by the item “In terms of gender, how do you identify?”).

**Hypothesis 1b:** Influence of educational experiences (as measured by the 30 item Educational Experiences Scale) will vary by class level (as measured by a respondent’s answer to the question “What is your class level?” with possible responses being “freshman”, “sophomore”, “junior”, “senior”).
**Hypothesis 1c:** Influence of educational experiences (as measured by the 30 item Educational Experiences Scale) will vary by status of major as a STEM or non-STEM major, which I will determine by comparing respondents’ answers to the question “What is your major?” to a list maintained by the Department of Homeland Security of STEM-designated degree programs.

### Learning Experiences, Self-Efficacy and Outcome Expectations

At the heart of SCCT are the relationships among learning experiences, self-efficacy and outcome expectations, which have been empirically supported. For example, Lent et al., (1991) found that all four sources of information were significantly (and positively) related to math self-efficacy, with mastery experiences (i.e., personal performances) having the strongest influence (Lent et al., 1991). Gainor and Lent (1998) also found full support for the relationship between learning experiences and both math self-efficacy and outcome expectations in their test of the model with Black college students. Although research has pointed to a positive relationship between learning experiences and self-efficacy in domains such as math, it is plausible that more awareness of the work-family relationship might lead to either an increase or a decrease in work-family self-efficacy, anticipated work-family conflict, and anticipated work-family enrichment. Thus, the following hypotheses are non-directional.

**Hypothesis 2a:** As influence of educational experiences on work-family expectations (as measured by the 30 item Educational Experiences Scale) varies, work-family self-efficacy (as measured by the Self-Efficacy for Work-Family Conflict Management scale) will vary.

**Hypothesis 2b:** As influence of educational experiences on work-family expectations (as measured by the 30 item Educational Experiences Scale) varies, anticipated work-family conflict (as measured by the Anticipated Work-Family conflict scale) will vary.

**Hypothesis 2c:** As influence of educational experiences on work-family expectations (as measured by the 30 item Educational Experiences Scale) varies, anticipated work-family enrichment (as measured by the Anticipated Work-Family Enrichment scale) will vary.
Self-Efficacy and Outcome Expectations

Because anticipated work-family conflict is a negative outcome expectation (Lent et al., 2000), SCCT would predict that its relationship with work-family self-efficacy is negative (i.e., SCCT would predict that low work-family self-efficacy would result in high anticipated work-family conflict). Research on this relationship is limited, but findings from two studies point in this direction. Westring and Ryan (2011) found that medical students reported a negative relationship between anticipated work-family conflict measures and work-family decision-making self-efficacy. Cinamon (2006) found the same pattern between anticipated work-family conflict and work-family self-efficacy in Israeli college student samples. However, to allow for the possibility that someone could have low confidence in their ability to manage work-family conflict and have adjusted their work and family plans to avoid this conflict, or to enhance their anticipated work-family enrichment, I propose non-directional hypotheses between work-family self-efficacy and the two outcome expectations.

**Hypothesis 3a:** As work-family self-efficacy (as measured by the Self-Efficacy for Work-Family Conflict Management scale) varies, anticipated work-family conflict (as measured by the Anticipated Work-Family Conflict scale) will vary.

**Hypothesis 3b:** As work-family self-efficacy (as measured by the Self-Efficacy for Work-Family Conflict Management scale) varies, anticipated work-family enrichment (as measured by the Anticipated Work-Family Enrichment scale) will vary.

Self-Efficacy, Outcome Expectations and Interests

The final paths in the SCCT model to be tested are the ones among self-efficacy, outcome expectations and interests. According to SCCT, both self-efficacy and outcome expectations influence interests. However, the relationships among self-efficacy for work-family conflict management, and interests in work and family roles may not be linear. To illustrate, as work-family self-efficacy decreases, two possible patterns in terms of role importance could emerge:
low importance placed on both work and family roles (i.e., overall distancing), or a trade-off approach in which importance is placed on only one role (e.g., high work role importance paired with low family role importance, or low work role paired with high family role importance).

Similarly, regarding the direct relationships between the two outcome expectations (i.e., anticipated work-family conflict and anticipated work-family enrichment) and importance ratings of work and family roles, the relationships could be either inverse or direct: for example, high levels of anticipated work-family conflict could be paired with low work and family role importance or a trade-off approach (i.e., high work role importance and low family role importance, or low work role importance and high family role importance).

**Hypothesis 4a**: Work role importance and family role importance (as measured by subscale scores on the Role Importance Scale) will vary as work-family self-efficacy (as measured by the Self-Efficacy for Work-Family Conflict Management scale) varies.

**Hypothesis 4b**: Work role importance and family role importance (as measured by subscale scores on the Role Importance Scale) will vary as anticipated work-family conflict (as measured by the Anticipated Work-Family Conflict scale);

**Hypothesis 4c**: Work role importance and family role importance (as measured by subscale scores on the Role Importance Scale) will vary as anticipated work-family enrichment (as measured by the Anticipated Work-Family Enrichment scale).

Taken together, these hypotheses suggest the theoretical model depicted in Figure 2.
Figure 2. Work–family Expectations theoretical model to be tested.
Chapter 4

Method

Participants

Two groups of participants were involved in this study: the scale development group of participants and online survey respondents.

**Scale Development Group of Participants.** According to Tokar et al. (2012), learning experiences, as antecedents of self-efficacy and outcome expectations, have received relatively little attention in research on SCCT. Prior to proposing SCCT, Lent et al. (1991) created a learning experiences assessment comprised of 40 items across four scales that corresponded to Bandura’s (1986) four sources of information (i.e., learning experiences). While Lent et al.’s original measure of sources of mathematics self-efficacy information has been widely used and adapted for other, mostly academic domains (Usher & Pajores, 2009), no one to date has adapted it to assess sources of information about self-efficacy in the work-family relationship domain.

To fill this assessment gap and using a multi-stage development approach to scale construction, conversational interviews and focus groups were conducted with a convenience sample of nine college students currently enrolled in residential undergraduate programs at two small institutions in the Commonwealth of Virginia. These institutions differ in important ways: one is a public, military, coeducational but predominately male, and undergraduate institution in a rural environment; the other is a private women’s college with several coeducational graduate programs in a comparatively less rural setting.

Three focus group members and one interviewee were undergraduate women enrolled at the small, private women’s college; all were Psychology majors, not married and not parents. Five focus group members were college men enrolled in an honors colloquium at the military
institution and studying a range of subjects; none were married or parents. All nine informants were known either to me or one other researcher, and were personally recruited by one of us to describe their plans and expectations for their future work and family relationship and to discuss the role that education had played in shaping their plans. Interviews and focus groups began by asking informants to talk about their specific work and family plans (e.g., get a job, go to graduate school, marry, have children) after graduation, both short- and long-term. The interviewer asked follow-up questions if answers were unclear or vague, to make sure that the interviewer understood the informant’s plans, including order and timing. Then participants were asked who or what had influenced these plans, particularly since starting college. Finally, informants were asked about any specific education-related sources of influence (e.g., faculty, administrators, courses, institution mission, extracurricular activities, peers) that they had not mentioned.

Material from the focus groups and interviews was transcribed and transformed into a new Educational Experiences scale that consists of 30 educational experiences (Appendix H). Each educational experience is rated in terms of strength of influence on one’s work-family plans from 1 (“no influence at all”) to 7 (“very strong influence”).

**Online Survey Participants.** Survey respondents were recruited from a participant pool of all currently enrolled students (as of June 2014) at the same two institutions from which the scale development group of participants were recruited.

Three recruitment email messages (Appendices A-C) were sent over summer break and at the beginning of the Fall semester to 1,199 students at the military school and 553 students in the undergraduate residential college for women. In all, 225 (12.8% total response rate, 22% response rate at the women’s college, 8% response rate at the military institute) students
responded to the call for participants by clicking on the web link. However, 79 responses were excluded from further analysis because they did not meet the following criteria for inclusion:

1. Surveys were unfinished (as determined by Qualtrics; 62 participants excluded)
2. Failed to meet eligibility requirements of participation (eight participants excluded)
3. If a respondent indicated that she was currently married or cohabitating with a significant other and/or was currently a parent (1 participant excluded)
4. Completed the survey in less than five minutes (2 participants excluded)
5. Average on the family role importance subscale before reverse-coding was 1.00 or 5.00 (indicating ratings of all 1’s or of all 5’s on the subscale) (14 participants excluded)
6. Indicated gender as “Other” (4 participants excluded).

The final sample for all further analyses (unless otherwise noted) consisted of 134 respondents.

Measures

**Demographic items.** Respondents were asked to identify their gender identity (woman, man, other), class level (freshman, sophomore, junior, senior), race/ethnicity, and major area of study (open-ended). I coded responses to the question “What is your major?” to determine STEM status by comparing the name of the major provided by the participant to the Department of Homeland Security’s list of STEM-Designated Degree Programs (http://www.ice.gov/sites/default/files/documents/Document/2014/stem-list.pdf). Majors listed on the DHS list were coded as a STEM major; majors not listed received a non-STEM designation. Frequencies and percentages of these responses to these demographic variables are included in Table 1.
Table 1.

Demographic Information

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<th>Military Coeducational (N=64)</th>
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<td>22</td>
</tr>
<tr>
<td>Sophomore</td>
<td>28</td>
<td>20.9</td>
<td>14</td>
</tr>
<tr>
<td>Freshman</td>
<td>1</td>
<td>.7</td>
<td>0</td>
</tr>
<tr>
<td>School Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women’s College</td>
<td>70</td>
<td>52.2</td>
<td></td>
</tr>
<tr>
<td>Military Coeducational</td>
<td>64</td>
<td>47.8</td>
<td></td>
</tr>
</tbody>
</table>

Of the 134 retained responses, 82 (61%) were women, and 52 (39%) were men. The majority (64%) of respondents were White, 18% were Black or African American, and the remaining respondents (18%) identified as some other race/ethnicity, with almost 6% selecting
more than one category to describe themselves. Most respondents (78%) were either juniors or seniors, with freshman and sophomores making up 22% of the overall sample.

Finally, to provide context to responses, three items asked respondents to indicate their intentions to become a spouse/partner and a parent at some point in the future, and for those with intentions to partner and parent, to select a statement that best described their work and family plans from a range of general work-family relationship descriptions. [This item was only displayed to respondents who expected to partner and parent in the future; see Appendix F]). Frequencies and percentages of responses to these items are included in Table 2.

Table 2.

*Future Work and Family Role Intentions as a Percentage of the Sample*

<table>
<thead>
<tr>
<th>Intention</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect to marry/partner&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>106</td>
<td>79.1</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>4.5</td>
</tr>
<tr>
<td>Undecided/don’t know</td>
<td>22</td>
<td>16.4</td>
</tr>
<tr>
<td>Expect to parent&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>74.6</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>6.0</td>
</tr>
<tr>
<td>Undecided/don’t know</td>
<td>26</td>
<td>19.4</td>
</tr>
<tr>
<td>Timing of Parental Employment&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal interruptions</td>
<td>63</td>
<td>65.6</td>
</tr>
<tr>
<td>Beginning of school</td>
<td>27</td>
<td>28.1</td>
</tr>
<tr>
<td>Beginning of middle/high school</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>After high school graduation</td>
<td>2</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Notes:  
<sup>a</sup>N=134; <sup>b</sup>N=96.

*Educational Experiences.* The influence of educational experiences on work and family plans was measured in two steps. First, to help bring to mind their plans, goals, and/or expectations for the their future work and family roles, respondents were asked to describe in as much detail as possible their expectations for the relationship between their work and family
roles. This prompt is found in Appendix G. Next, participants were asked to rate 30 educational experiences in terms of the strength of influence on their work-family plans for the future from 1 (“no influence at all”) to 7 (“very strong influence”). Responses were averaged to form an overall educational experiences score, with high scores indicating strong influence on work and family plans.

**Self-Efficacy for Work-family Conflict Management.** Work-family self-efficacy was measured by the Self-Efficacy for Work-Family Conflict Management Scale (SEWFCM); Appendix I scale. The original 10-item scale was developed in Hebrew by Cinamon (2003, as cited in Hennessey & Lent, 2008) to measure one’s confidence in their ability to resolve work-family conflict. Each item on the SEWFCM scale describes a generic scenario in which work and family are in conflict. Respondents are asked to rate their confidence in their ability to handle the conflict on a 10-point scale (0 is “complete lack of confidence”, 9 is “total confidence”). Hennessey and Lent (2008) reported that Cinamon’s 2003 data revealed a two-factor structure, work interfering with family self-efficacy, and family interfering with work self-efficacy, with Cronbach’s alphas of 0.83 to 0.84. Hennessey and Lent (2008) validated the original 10-item scale with a group of employed North-American women, and like Cinamon, found evidence for a two-factor structure, and strong internal consistency within each factor ($\alpha=0.90$ for work interfering with family, and 0.89 for family interfering with work). In the time between these two studies, Cinamon (2006) revised the original 10-item scale to include two new items and six of the original items and measured. Once again, a two-factor structure emerged: work to family conflict self-efficacy ($\alpha=0.86$) and family to work conflict self-efficacy ($\alpha=0.86$). Cinamon’s (2006) revised 8-item measure was used in this study. Responses were averaged to
form an overall self-efficacy for work-family conflict management score, with high scores indicating high self-efficacy.

To encourage college students to think about their future work and non-work roles, the following instructions were used: “Thinking about your life after graduation and using a 10-point scale (0 is “complete lack of confidence”; 9 is “total confidence”), please answer the following questions.”

**Anticipated Work-Family Conflict.** Following the same procedure as Gaffey and Rottinghaus (2009), and Westring and Ryan (2011), Anticipated Work-Family Conflict (AWFC; Appendix J) was measured with a future-tense version of Carlson, Kacmar and Williams’ (2000) 18-item Work-Family Conflict scale. Each item is worded so that agreement, on a scale from 1 (“strongly disagree”) to 5 (“strongly agree”), indicates high AWFC. An example of an item from this scale is “I will often be so emotionally drained when I get home from work that it will prevent me from contributing to my family.” Whereas WFC has a six factor structure, with each factor consisting of a source (i.e., time, strain or behavior) and direction (i.e., work interfering with family, or family interfering with work) of conflict, evidence that AWFC maintains the same six-factor structure is mixed: Westring and Ryan (2011) found support for a six-factor structure among medical students, with subscale reliabilities between 0.75 and 0.88, whereas Gaffey and Rottinghaus (2009) reported evidence for a four-factor model with college students (with subscale reliabilities between 0.63-0.92). Responses were averaged to form an overall anticipated work-family conflict score, with high scores indicating high levels of anticipated work-family conflict.

To encourage college students to think about possible conflict in their future work and non-work roles, the following instructions were used: “Thinking about your future job/career
and the family that you plan to have in the future, please indicate whether you agree or disagree with the following statements.”

**Anticipated Work-Family Enrichment.** Anticipated Work-Family Enrichment (AWFE; Appendix K) was measured with a future-tense version of Carlson et al.’s (2006) 18-item Work-Family Enrichment (WFE) scale. Each item is worded so that agreement, on a scale from 1 ("strongly disagree") to 5 ("strongly agree"), indicates high AWFE. An example of an item from this scale is “My involvement in my work will help me to understand different viewpoints and this will help me be a better family member.” Like the WFC scale, the WFE scale has an underlying structure of six factors, each consisting of a direction (i.e., work to family or family to work) of enrichment, and a dimension of enrichment: development, affect, capital (work to family only), and efficiency (family to work only), with reliabilities ranging from 0.73-0.91 (Carlson et al., 2006). Responses were averaged to form an overall anticipated work-family enrichment, with high scores indicating high levels of anticipated work-family enrichment. To encourage respondents to think about their future work and family roles, items were worded in the future tense.

**Role Importance.** According the career choice model of SCCT, one’s self-efficacy and outcome expectations will directly influence one’s interests in a particular domain. In the case of work-family self-efficacy, one’s interest in or importance placed on work and family roles may be at stake. The Role Importance Scale (Westring & Ryan, 2011; Appendix L) is a 10-item, two-factor scale that measures work role importance (five items; e.g., “My life would seem empty if I didn’t have a job/career.”) and family role importance (five items; e.g., “If I chose not to have a family, I would regret it.”). Respondents are asked to indicate the extent to which they agree or disagree, on a scale from 1 (“strongly disagree”) to 5 (“strongly agree”), with one item (“The
whole idea of having a family and caring for them is not attractive to me.”) reverse-coded before subscale average scores were calculated. High subscale scores indicated great importance. Westring and Ryan (2011) reported adequate internal reliability on both the work role importance scale (α=0.73) and family role importance scale (α=0.80).

**Procedure**

Participants were contacted through their school email addresses and invited to participate in a short, anonymous survey about their plans for “life after graduation.” This invitational email message (Appendix A) included a unique web link to the survey, which was administered by Qualtrics, an online survey service. A unique web link with responses anonymized (i.e., identifying information “scrubbed” from the data before saving) ensured that the survey was accessed only once. Clicking on the web link directed respondents to the informed consent form (Appendix D) which described the purpose of the study, indicated that it is a low-risk study, listed the rights of the participants, and provided the researcher’s contact information. Once respondents provided informed consent, they were directed to the survey, which was the same survey displayed to all respondents. At the end of the survey, respondents were given an opportunity to either request a $5 e-gift certificate from PayPal or Amazon. If respondents requested the e-gift certificate, they were redirected to an external survey where they entered a valid school email address, which was followed by the debriefing (Appendix M). At the end of the survey, participants were thanked. Participants who chose to end their participation without requesting a $5 e-gift certificate were directed to the debriefing page, and then to the end of the survey, at which point they were thanked for their time and response. The average time to completion of the survey was 51 minutes; however, 75% of the respondents finished it in 30 minutes or less. [The average is high because respondents were permitted to start the survey and
complete it at a later date. A follow-up email reminder (Appendix B) was sent approximately two weeks after the first invitation to students who had not completed the survey. A final follow-up email reminder (Appendix C) was emailed approximately two months after the first reminder email message to those who had not completed the survey.
Assessing Normality

Data from the 134 respondents were examined for univariate outliers by converting raw scores on each of the five major study variables (EE, WFCMSE, AWFC, AWFE, RI) to z-scores, and then visually examining the data for any case in which a z-score was +/- 3.00. Using this criterion, three potential univariate outliers were detected due to extreme responses on the self-efficacy for work-family conflict management scale. Data of these three cases were visually examined for errors in entry, recording or recoding; none were found. Thus, these cases were retained. Multivariate outlier detection consisted of calculating Mahalanobis Distance (D2) scores and their probabilities using SPSS. [D2 is an index of the distance between a set of scores for an individual case and the sample means for all variables, and has been adjusted for intercorrelations.] Using .001 as the criterion level of statistical significance, one distance scores was significant, indicating that it was a multivariate outlier and was flagged to be tested as model fit outlier during the modeling fit assessment stage\(^5\) (Aquinis, Gottfredson, & Joo, 2013).

Skewness and kurtosis statistics for all scales and subscales fell within Kline’s (2011) guidelines for skewness and kurtosis (between 3 and 10), respectively, indicating that the data did not violate assumptions of normality. Thus, no data transformations were performed.

Factor Structures

Factor analyses were performed on all six main study constructs, and the results are described in detail below. Because my goal was to be able to generalize structures to the population of college students and I assumed that underlying factors of each construct are

\(^5\) It should be noted that this case was also detected as a univariate outlier.
related, all factors were extracted with the method of Maximum Likelihood based on eigenvalues greater than one, and the Oblimin with Kaiser Normalization rotation method. Before examining the rotated pattern loadings, three criteria for factor analysis were assessed. First, all Kaiser-Meyer-Olkin Measures of Sampling Adequacy were in Hutcheson and Sofroniou’s (1999) “meritorious” or “marvelous” ranges of values (i.e., .80 or above), with the exception of the work role importance scale and family role importance scale, which, at .73 and .77, respectively, fell in the “middling,” but still acceptable range.\footnote{Kaiser-Meyer-Okin Measure of Sampling Adequacy indicates whether the sample size was adequate to detect “distinct and reliable factors” (Field, 2013, p. 684).} An examination of the diagonal KMO anti-image correlations revealing that all values exceeded the recommended minimum of .5 supported this conclusion (Field, 2013). Finally, in all final factor analyzed solutions, Bartlett’s Tests of Sphericity were significant at the .001 level, an indication that for each construct, the correlations among all of the items were significantly different from zero (Field, 2013).

**Educational Experiences.** An exploratory factor analysis was conducted with the 30 items of the Educational Experiences Scale; six factors were extracted. Items loadings were then examined, resulting in the removal of seven items with loadings less than .40. The construct was respecified with 23 items, and two items were removed due to low (i.e., less than .40) loadings. The construct was respecified a third time with 21 items, and one item was removed due to a low loading. The construct was respecified a fourth and final time with 20 items and all had loadings and communality estimates greater than .40. A four-factor structure (i.e., Peers and Relevant courses, Faculty, Institution, and Staff; see Appendix N) for the pattern matrix) of educational experiences emerged, and together, after rotation, these four factors accounted for almost 66% of the variance in the construct.
Work-family Conflict Management Self-efficacy. An exploratory factor analysis was conducted with the eight items of the WFCMSE scale; one factor was extracted. [Hennessey and Lent (2008) reported a two-factor structure.] An examination of item loadings revealed that the largest factor loading of every item was .77 or larger (see Appendix O factor matrix), and all had communality estimates over .50, thus all eight items were retained. The single factor accounted for 77% of the variance in the construct.

Anticipated Work-Family Conflict. An exploratory factor analysis was conducted with 18 items of the AWFC scale; four factors were extracted: anticipated strain-based work-family conflict (ASWFC), anticipated behavior-based work-family conflict (ABWFC), anticipated time-based family interfering with work conflict (ATFIWC), and anticipated time-based work interfering with family conflict (ATWIFC). [Gaffey and Rottinghaus (2009) reported the same factor structure.] An examination of the pattern matrix (see Appendix P for the pattern matrix) revealed that the largest factor loading of every item was at least .60, and communality estimates for each item were all over .40. Thus, all 18 items were retained. Together, these four factors explained 67% of the variance in anticipated work-family conflict.

Anticipated Work-family Enrichment. An exploratory factor analysis was conducted with 18 items of the WFE scale; four factors were extracted: family to work efficiency, family to work affect, work-family development, and work to family affect and capital. [Carlson et al. (2006) reported a six factor structure, in which participants distinguished between work to family development and family to work development, and between work to family affect and work to family capital, in addition to work to family efficiency and work to family affect.] An examination of item loadings (see Appendix Q for the pattern matrix) revealed that the largest factor loading of every item was at least .40, and all items had communalities above .40,
therefore, all 18 items were retained. The four-factor structure explained 67% of the variance observed in anticipated work-family enrichment.

**Work Role Importance.** An exploratory factor analysis was conducted with the five items of the work role importance scale; one factor was extracted. An examination of the communality estimates and factor matrix (see Appendix R, Table R1) revealed that two items had low communality estimates (less than .40); however, all items had factor loadings of at least .55, so all five items were retained. The single factor structure explained 46% of the variance observed in the scale.

**Family Role Importance.** After reverse-coding responses to the item “The whole idea of having a family and caring from them is not attractive to me”, an exploratory factor analysis was conducted with the five items of the family role importance scale; one factor was extracted. An examination of the communality estimates and factor matrix (see Appendix R, Table R2) revealed that three items had low communality estimates (less than .40); however, all items had factor loadings of at least .50, so all five items were retained. The single factor structure explained 52% of the variance observed in the scale.

**Scale and Subscale Score Calculations**

To prepare the data for path analysis, I calculated Cronbach’s alphas for all scales, subscales and factors with all items that were retained based on the results of the factor analyses. Because all scale items showed strong (at least .80) internal reliabilities, item responses were averaged to form overall scores of influence of educational experiences scale (EE), self-efficacy for work-family conflict management (SEWFCM), anticipated work-family conflict (AWFC), anticipated work-family enrichment (AWFE), work role importance (WRI), and family role
importance (FRI). For descriptive purposes, means, standard deviations and reliabilities for all scale, subscale and factor average scores are provided in Table 3.

Table 3.

Means, Standard Deviations and Reliabilities for Model Variables and Factor Scores

<table>
<thead>
<tr>
<th>Variables and Factors</th>
<th># Items</th>
<th>α</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Experiences†</td>
<td>20</td>
<td>.94</td>
<td>4.10</td>
<td>1.38</td>
</tr>
<tr>
<td>Peers &amp; Relevant Courses</td>
<td>8</td>
<td>.88</td>
<td>4.10</td>
<td>1.48</td>
</tr>
<tr>
<td>Faculty</td>
<td>5</td>
<td>.93</td>
<td>4.84</td>
<td>1.74</td>
</tr>
<tr>
<td>Institution</td>
<td>4</td>
<td>.90</td>
<td>3.62</td>
<td>1.76</td>
</tr>
<tr>
<td>Staff</td>
<td>3</td>
<td>.92</td>
<td>3.52</td>
<td>1.82</td>
</tr>
<tr>
<td>Work-family Self-efficacy†</td>
<td>8</td>
<td>.97</td>
<td>6.70</td>
<td>1.89</td>
</tr>
<tr>
<td>Anticipated Work-family Conflict‡</td>
<td>18</td>
<td>.91</td>
<td>2.47</td>
<td>.66</td>
</tr>
<tr>
<td>Time-based WIF</td>
<td>3</td>
<td>.89</td>
<td>2.83</td>
<td>1.01</td>
</tr>
<tr>
<td>Time-Based FIW</td>
<td>3</td>
<td>.88</td>
<td>2.59</td>
<td>.93</td>
</tr>
<tr>
<td>Strain-based WFC</td>
<td>6</td>
<td>.91</td>
<td>2.17</td>
<td>.82</td>
</tr>
<tr>
<td>Behavior-based WFC</td>
<td>6</td>
<td>.91</td>
<td>2.54</td>
<td>.87</td>
</tr>
<tr>
<td>Anticipated Work-Family Enrichment‡</td>
<td>18</td>
<td>.94</td>
<td>3.88</td>
<td>.65</td>
</tr>
<tr>
<td>Work-family development</td>
<td>6</td>
<td>.90</td>
<td>3.89</td>
<td>.75</td>
</tr>
<tr>
<td>Work to family affect &amp; capital</td>
<td>6</td>
<td>.89</td>
<td>3.80</td>
<td>.70</td>
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<tr>
<td>Family to work affect</td>
<td>3</td>
<td>.91</td>
<td>4.10</td>
<td>.76</td>
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<tr>
<td>Family to work efficiency</td>
<td>3</td>
<td>.90</td>
<td>3.79</td>
<td>.92</td>
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<tr>
<td>Work Role Importance†</td>
<td>5</td>
<td>.80</td>
<td>3.70</td>
<td>.83</td>
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<tr>
<td>Family Role Importance†</td>
<td>5</td>
<td>.82</td>
<td>4.11</td>
<td>.82</td>
</tr>
</tbody>
</table>

Notes: WIF = Work Interfering with Family; FIW = Family Interfering with Work; WFC = Work-Family Conflict. All scales and factor scores are on a scale from 1-5, except for Educational Experiences (1-7) and Work-family Self-efficacy (1-9). For all scales, higher values indicate stronger endorsements. †Average scores used for path analysis.

One assumption of path analysis is that all variables tested in the model are continuous. Therefore, to test the possible effects of gender, educational class level and STEM status of major, these variables were recoded (“dummy coded”) using the following code: women = 0, men = 1; freshmen and sophomores = 0, juniors and seniors = 1; non-STEM major = 0, STEM major = 1. [Class levels were collapsed into two categories because there were so few “freshman” and “sophomore” responses.] Finally, I generated a covariance matrix (Table 4).
using the three person input variables, and the six average scale and subscale scores. This covariance matrix served as the input data for the main path analyses.

Table 4.  

*Input Data (Covariances) for Path Analysis*  

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEM Status</td>
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<td>.017</td>
<td>.248</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>-.194</td>
<td>.028</td>
<td>-.013</td>
<td>1.904</td>
<td></td>
<td></td>
<td></td>
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<td>SEWFCM</td>
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<td>.109</td>
<td>.494</td>
<td>3.560</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>AWFC</td>
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<td>.006</td>
<td>-.027</td>
<td>.034</td>
<td>-.328</td>
<td>.439</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AWFE</td>
<td>-.029</td>
<td>-.002</td>
<td>.011</td>
<td>.224</td>
<td>.402</td>
<td>-.131</td>
<td>.419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WRI</td>
<td>-.064</td>
<td>-.014</td>
<td>-.035</td>
<td>.148</td>
<td>.111</td>
<td>.044</td>
<td>.084</td>
<td>.690</td>
<td></td>
</tr>
<tr>
<td>FRI</td>
<td>-.005</td>
<td>-.019</td>
<td>.076</td>
<td>.048</td>
<td>.230</td>
<td>-.110</td>
<td>.195</td>
<td>-.121</td>
<td>.679</td>
</tr>
</tbody>
</table>

Notes: Gender, Class and STEM Status variables are dummy-coded (i.e., as values of 0 and 1). EE=Educational Experiences; SEWFCM=Self-Efficacy for Work-family Conflict Management; AWFC=Anticipated Work-Family Conflict; AWFE=Anticipated Work-Family Enrichment; WRI=Work Role Importance; FRI=Family Role Importance. N=134

*Power analysis.* Bentler and Choe (1987) suggested a minimum ratio of five observations per free parameter for adequate statistical power in structural equation modeling. For this study’s theoretical model, there are 26 free parameters (14 paths, nine error terms and three bivariate correlations among the exogenous variables), which would call for a minimum of 130 observations according to Bentler and Choe. Another common recommendation for structural equation modeling is a maximum sample size of 200, due to chi square’s - an important goodness of fit index - sensitivity to large sample sizes (Kenny, 2014). Thus, the size (N=134) of the final sample falls within the range of these two recommendations.
Chapter 6

Results

Assessing Model Fit

As indicated in Figure 2, the proposed hypotheses imply a causal model: learning experiences, which influence self-efficacy for work-family conflict management, anticipated work-family conflict, and anticipated work-family enrichment, vary as a function of person inputs (i.e., gender, education class level, and STEM status). In turn, self-efficacy for work-family conflict management influences anticipated work-family conflict and anticipated work-family enhancement, and these three outcomes together shape work role and family role importance. As this study design is cross-sectional and correlational in nature, causation cannot be tested, but path analysis can reveal if data fit a theoretical causal model.

Path analysis involves assessing the fit of the observed data (in this case, the covariances among the model variables) to expected data using multiple indices. First, a significant Maximum Likelihood $\chi^2$ (an exact fit test) indicates that a significant difference between model-predicted and population (estimated by LISREL) covariances exists, which suggests a poor fit of the data to the model. If data fail the exact-fit test, it is necessary to “diagnose the source(s)” of this failure by considering approximate fit indices (Kline, 2011, p. 211). Approximate-fit indices, such as the Goodness of Fit Index (GFI) and the Comparative Fit Index (CFI), quantify how much better a model fits the covariances over no model (in the case of GFI) or some baseline model (sometimes referred to as the worst possible model, e.g., Kenny, 2014). Specifically, GFI and CFI values indicate how much more variance the tested model accounts for than the comparison; values closer to 1.0 indicate better fit. Two commonly reported indices, the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square
Residual describe the residuals (or differences) between the observed covariances and population covariances if the model were true. Thus, values close to zero are desirable in these indices. For the RMSEA, values under .05 indicate “good fit.” RMSEA also lends itself to probability testing, so additional RMSEA-related assessments of fit take the form of significance of a close fit (i.e., Test of Close Fit) and confidence intervals of RMSEA, with higher, non-significant p-values (> .50) indicating better fit, and narrower confidence intervals indicating more precision (Byrne, 2013; MacCallum, Browne, & Sugawara, 1996). Finally, in the case of poor fit, useful sources of information are the fitted and standardized residual matrices. Absolute values of fitted residuals greater than .10 indicate that the model does not predict well the observed variance between two variables (i.e., the model does not explain some amount of shared variance), and together with a significant standardized residual, suggest a possible source of fit failure.

Path Analysis Results of Hypothesized Model

To test the fit of the data (i.e., covariances) to the hypothesized model, I used LISREL 9.1 (Joreskog & Sorbom, 2012). The data failed to pass the exact-fit test (as evidenced by a significant p-value for $\chi^2_M$; Table 5), indicating that the data did not fit the model as hypothesized in this study. As prescribed by path analysis, I examined the approximate-fit indices to try to identify the source(s) of this failed test; I report the findings in Table 5 and discuss them below.

Although the GFI indicated good fit in the test of the hypothesized model, the CFI did not. The Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual are both within the upper limits of acceptable fit ranges, and although the non-significance of RMSEA ($p_{close.fit}$) suggests that residuals were small, it did not meet the critical
threshold of .50 as recommended by MacCallum et al. (1996). A visual examination of the fitted residuals and standardized residuals matrices (Table 6) revealed only one fitted correlation residual (absolute) value exceeding .10 with a significant standardized residual: the residual associated with the relationship between work role importance and family role importance. The large, negative residual (-.16) indicates that the model underpredicted the relationship between work role importance and family role importance, pointing to some unspecified source of the observed variance between those two variables.

Table 5.

Value of Fit Statistics for the Hypothesized Model

<table>
<thead>
<tr>
<th>Index</th>
<th>Hypothesized Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2_M$</td>
<td>35.42</td>
</tr>
<tr>
<td>$df_M$</td>
<td>19</td>
</tr>
<tr>
<td>$p$</td>
<td>.01</td>
</tr>
<tr>
<td>RMSEA (90%CI)</td>
<td>.08 (0.0367 - 0.121)</td>
</tr>
<tr>
<td>$p_{close fit}$</td>
<td>.11</td>
</tr>
<tr>
<td>GFI</td>
<td>.95</td>
</tr>
<tr>
<td>CFI</td>
<td>.80</td>
</tr>
<tr>
<td>SRMR</td>
<td>.07</td>
</tr>
</tbody>
</table>
Table 6.

### Fitted Residuals and Standardized Residuals for the Hypothesized Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
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<tbody>
<tr>
<td><strong>Fitted Residuals</strong></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. EE</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. WFCMSE</td>
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<td></td>
</tr>
<tr>
<td>3. AWFC</td>
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<td>0</td>
<td>0</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>4. AWFE</td>
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<td>0</td>
<td>-.10</td>
<td>0</td>
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<td>5. WRI</td>
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<td>-.02</td>
<td>-.01</td>
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<tr>
<td>6. FRI</td>
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<td>-.04</td>
<td>.01</td>
<td>-.16</td>
<td>.01</td>
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</tr>
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<td>7. Gender</td>
<td>-</td>
<td>.11</td>
<td>.04</td>
<td>-.01</td>
<td>-.06</td>
<td>.01</td>
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<tr>
<td>8. Class</td>
<td>-</td>
<td>.02</td>
<td>.01</td>
<td>-.01</td>
<td>-.02</td>
<td>-.02</td>
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<td>9. STEM</td>
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<td>.11</td>
<td>-.03</td>
<td>.01</td>
<td>-.04</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. AWFC</td>
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<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. AWFE</td>
<td>0</td>
<td>0</td>
<td>-3.07*</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. WRI</td>
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<td>0</td>
<td>-2.73*</td>
<td>-2.57</td>
<td>-1.14</td>
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</tr>
<tr>
<td>6. FRI</td>
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<td>0</td>
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<td>2.12</td>
<td>-1.32</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7. Gender</td>
<td>-</td>
<td>1.45</td>
<td>1.32</td>
<td>-.24</td>
<td>-1.62</td>
<td>.13</td>
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<td></td>
</tr>
<tr>
<td>8. Class</td>
<td>-</td>
<td>.31</td>
<td>.23</td>
<td>-.24</td>
<td>-.50</td>
<td>-.70</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9. STEM</td>
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<td>1.41</td>
<td>-.94</td>
<td>.47</td>
<td>-.96</td>
<td>2.17</td>
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<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Notes: EE=Educational Experiences; WFCMSE=Work-Family Conflict Management Self-Efficacy; AWFC=Anticipated Work-Family Conflict; AWFE=Anticipated Work-Family Enrichment; WRI=Work Role Importance; FRI=Family Role Importance. *p <.01

**Model Respecification: The Correlated Error Model**

Based on the results of path analysis, the model was respecified. Because they are factors of the same construct (which could be a source of error variance), it seemed justified to let the errors of work role importance and family role importance correlate, as suggested by the residual patterns. No other changes to the hypothesized model were made at this point. With this change, the data fit the model reasonably well. Most notably, it passed the exact-fit test (i.e., a non-significant $\chi^2_M$), and approximate fit indices were also in ranges that suggest adequate fit.
with the exception of \( p_{\text{close fit}} \), which, while non-significant, was less than .50 (Table 7). Fitted and standardized residuals confirmed this assessment, with no significant standardized residual with a fitted residual over an absolute value of .10. Finally, the chi-square difference test indicated that the data fit the Correlated Error model significantly better than the Hypothesized model, \( \chi^2_D (1) = 8.30, p = .004 \). However, because the paths among the variables as hypothesized were supported, I conclude that the study’s hypotheses were supported. The Correlated Error model, along with unstandardized path coefficients, are depicted in Figure 3.

Table 7.

*Value of Fit Statistics for the Hypothesized, the Correlated Error, and Partially Mediated Models*

<table>
<thead>
<tr>
<th>Index</th>
<th>( \chi^2_M )</th>
<th>( df_M )</th>
<th>( p )</th>
<th>RMSEA (90%CI)</th>
<th>( p_{\text{close fit}} )</th>
<th>GFI</th>
<th>CFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2_M )</td>
<td>35.42</td>
<td>27.12</td>
<td>27.49</td>
<td>.08</td>
<td>(.037 - 0.121)</td>
<td>.95</td>
<td>.80</td>
<td>.07</td>
</tr>
<tr>
<td>( df_M )</td>
<td>19</td>
<td>18</td>
<td>20</td>
<td>.06 (0.0 - .106)</td>
<td>.06 (0.0 - .106)</td>
<td>.96</td>
<td>.96</td>
<td>.06</td>
</tr>
<tr>
<td>( p )</td>
<td>.01</td>
<td>.08</td>
<td>.12</td>
<td>.05 (0.0 - .097)</td>
<td>.05 (0.0 - .097)</td>
<td>.91</td>
<td>.91</td>
<td>.07</td>
</tr>
<tr>
<td>RMSEA (90%CI)</td>
<td>.08</td>
<td>.06</td>
<td>.05</td>
<td>.05</td>
<td>.05</td>
<td>.95</td>
<td>.95</td>
<td>.07</td>
</tr>
<tr>
<td>( p_{\text{close fit}} )</td>
<td>.11</td>
<td>.31</td>
<td>.42</td>
<td>.42</td>
<td>.42</td>
<td>.96</td>
<td>.96</td>
<td>.07</td>
</tr>
</tbody>
</table>

Notes: H= Hypothesized Model, CE = Correlated Error Model, PM=Partially Mediated Model
Figure 3. The Correlated Error Model (Hypothesized Model respecified with WRI and FRI errors correlated)
Notes: Path coefficients are unstandardized. *** $p \leq .001$; * $p < .05$
Assessing Equivalent Models

Even though the data support the hypotheses, path analysis gives the researcher the ability to assess model equivalence: that is, are there other models that fit the data equally as well as the supported model? One starting point in the process for identifying equivalent models is the significance levels of the calculated path coefficients. I examined the nonsignificant paths for possible elimination (i.e., model trimming) to improve fit. Decisions to eliminate specific non-significant paths were driven by both theoretical and empirical considerations; no non-significant path was deleted on the basis of statistical significance alone. Because deletion of paths can affect the overall model by making fit worse or better, path elimination was conservative and limited.

Because of the non-significance of the direct paths from the self-efficacy measure to work role importance and family role importance, and because it seems theoretically plausible that the relationship between self-efficacy and these role values could be mediated by the measured outcome expectancies (i.e., anticipated work-family conflict and anticipated work-family enrichment), I respecified the Correlated Error Model without these paths. No other change to the Correlated Error model was made. With this change, the data fit this new Partially Mediated model reasonably well. Most notably, it passed the exact-fit test (i.e., a non-significant $\chi^2_M$), and approximate fit indices were also in ranges that suggest adequate fit, with the exception of $p_{close.fit}$, which, while non-significant, was less than .50 (Table 7). Finally, the chi-square difference test indicated that the data fit the Partially Mediated model significantly better than the Hypothesized model, $\chi^2_D (1) = 7.93, p=.004$, but not significantly better than the Correlated Error model, $\chi^2_D (2) = .37, ns$. 
In conclusion, the data fit both the Correlated Error and the Partially Mediated models better than the original hypothesized model, but the two hierarchical models are equivalent in terms of fit. When model equivalence is achieved, it is generally recommended that the simpler model be retained. In this case, the Partially Mediated model, in which the effects of self-efficacy for work-family conflict management on role importance are mediated by the two outcome expectancies, was supported. The Partially Mediated model is depicted, along with unstandardized path coefficients, in Figure 4.7

---

7 All three models were tested without the one multivariate outlier (N=133), and none of them passed the exact-fit test, indicating that the outlier is an “interesting” and “influential” outlier. However, as recommended by Aquinis et al., (2013), I studied this outlier case closely, and could find no compelling reason to exclude it. The closed-ended and open-ended responses, while perhaps uncommon to this sample, seemed plausible and reasonable. Specifically, the respondent (self-identified as a man at the military institution) indicated low influence of educational experiences, extremely low self-efficacy, low anticipated work-family conflict and enrichment, moderately high work role importance and moderately low family role importance.
Figure 4. Partially Mediated Model (PMM; Hypothesized Model respecified with WRI and FRI errors correlated and with direct paths between Self-efficacy for Work–Family Conflict and Work Role Importance and Family Role Importance removed)

Notes: Path coefficients are unstandardized. ** $p < 0.01$; * $p < 0.05$
Post-Hoc Analyses

Although the models were supported, several hypothesized individual paths failed to reach statistical significance. While the lack of significance of specific paths does not change the conclusion of overall fit of the model to the data, these unanticipated patterns warrant exploratory analysis.

Anticipated Work-Family Conflict. Anticipated work-family conflict was hypothesized to be influenced by educational experiences and self-efficacy for work-family conflict, and to influence work role importance and family role importance. As noted above, the path coefficients in the retained model failed to reach significance. In addition to the explanation that no significant relationship actually exists in the population, several other explanations are offered. First, the average anticipated work-family conflict ratings were reliably low (M=2.47, SD=.66), so it is possible that this sample lacked sufficient variability to detect a relationship. Another viable explanation is that college students in my sample were able to distinguish the types (i.e., strain, behavior, and time) of anticipated work-family conflict, but were only able to distinguish the direction (work to family, family to work) of time-based work-family conflict, a finding that is consistent with previous research. To explore whether these differences might have played a role in the lack of significant paths around anticipated work-family conflict, I respecified the retained model (PMM) with each of the factors (i.e., ASWFC, ABWFC, ATWIFC, ATFIWC) of anticipated work-family conflict that emerged from the factor analysis of all scale items. Of the four respecified models, only the ATWIFC did not pass the exact fit (i.e., non-significant $\chi^2_M$).

In addition to passing the exact-fit test, approximate fit indices were in ranges that suggest adequate fit for both models, including the values of $p_{\text{close.fit}}$, which were greater than .50 (Table
Because I substituted a different variable for the anticipated work-family conflict overall score, the models are now considered non-hierarchical models estimated with the same data, making the chi-square difference test an inappropriate statistic for fit comparison purposes. Instead, the model with the smallest Akaike Information Criterion (AIC), an index that takes into account fit and parsimony (i.e., number of parameters), is selected as the relatively better fitting model.

Table 8.

<table>
<thead>
<tr>
<th>Model</th>
<th>PMM</th>
<th>ASWFC</th>
<th>ATFIWC</th>
<th>ABWFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2_M$</td>
<td>27.49</td>
<td>22.60</td>
<td>20.89</td>
<td>30.55</td>
</tr>
<tr>
<td>$df_M$</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>$p$</td>
<td>.12</td>
<td>.31</td>
<td>.40</td>
<td>.06</td>
</tr>
<tr>
<td>RMSEA (90%CI)</td>
<td>.05 (0.0-.097)</td>
<td>.03 (0.0-.083)</td>
<td>.02 (.000-.077)</td>
<td>.06(0.0-.105)</td>
</tr>
<tr>
<td>$p_{close \ fit}$</td>
<td>.42</td>
<td>.67</td>
<td>.75</td>
<td>.29</td>
</tr>
<tr>
<td>GFI</td>
<td>.96</td>
<td>.97</td>
<td>.97</td>
<td>.95</td>
</tr>
<tr>
<td>CFI</td>
<td>.91</td>
<td>.97</td>
<td>.99</td>
<td>.87</td>
</tr>
<tr>
<td>SRMR</td>
<td>.07</td>
<td>.04</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>AIC</td>
<td>481.33</td>
<td>525.28</td>
<td>583.90</td>
<td>561.29</td>
</tr>
</tbody>
</table>

Notes: PMM=Partially Mediated Model; ASWFC=Anticipated Strain-Based Work-Family Conflict; ATFIWC=Anticipated Time-Based Family Interfering with Work Conflict; ABWFC=Anticipated Behavior Based Work-Family Conflict.

The exact and approximation fit indices in Table 8 indicate that the data fit the ATFIWC model better than the other three models. However, what I find more interesting are the significant paths to and from the conflict variable that are unique to the ASWFC model. Table 9 summarizes the patterns of paths leading to and away from the four anticipated work-family conflict measure; the ASWFC model is depicted in Figures 5.
Table 9.

*Pattern of Path Coefficients to and from AWFC, ASWFC and ATFIWC*

<table>
<thead>
<tr>
<th>AWFC Factor</th>
<th>Paths From</th>
<th>Paths To</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EE</td>
<td>WFCMSE</td>
</tr>
<tr>
<td>AWFC</td>
<td>+</td>
<td>-*</td>
</tr>
<tr>
<td>ASWFC</td>
<td>+*</td>
<td>-*</td>
</tr>
<tr>
<td>ATFIWC</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>ABWFC</td>
<td>+</td>
<td>-*</td>
</tr>
</tbody>
</table>

Notes: ASWFC=Anticipated Strain-Based Work-Family Conflict ATFIWC=Anticipated Time-Based Family Interfering with Work Conflict. + Positive path coefficient; – Negative path coefficient. *Significant path coefficient.  a p<.06.

Taken together, these post-hoc analyses suggest that the antecedents and consequences of anticipated work-family conflict may vary by type of anticipated work-family conflict, with anticipated strain-based work-family conflict showing the strongest connection to variables in the model (as evidenced by the number of significant path coefficients). While four of the five types of anticipated work-family conflict seem to increase as educational experiences increase and decrease as self-efficacy for work-family conflict management decreases, only the strain-based measure is significantly related to both of these hypothesized antecedents. Likewise, only the strain-based measure is significantly or marginally significantly related to both of the hypothesized role importance outcomes (i.e., negatively related to family role importance and positively related to work role importance. One possible interpretation of these findings is that educational experiences may better prepare students for the affective toll that work and family may exact while at the same time increasing their self-efficacy, and these students have chosen to manage this anticipated strain by placing more importance on their future work role and less
importance on their future family role. Of course, these data do not indicate that this interpretation is accurate, but only that they are consistent with it. More research is needed to understand the underlying process of conflict expectations.
Figure 5. Partially Mediated Model with Anticipated Strain-Based Work-Family Conflict.
Notes: Path coefficients are unstandardized. *** $p \leq .001$ ** $p \leq .01$ * $p < .05$ $a$ $p < .06$
**Class Level and STEM status.** The data also failed to support significant paths between STEM status and educational class level and educational experiences. Post-hoc t-tests confirm that there were no significant differences in educational experience ratings between upper and lower level students and between STEM and non-STEM students. One possible explanation for this consistency across groups is the timing of the study. Participant recruitment occurred over email several weeks to a month (depending on the school) into summer break, so it is possible that students who responded to my survey may be similar to one another in important ways (e.g., level of academic engagement) regardless of education level and STEM status.

**Gender and School Type.** Given the stark differences between the two schools from which I recruited my respondents, it seems plausible that gender may serve as a proxy for school type, and offers no unique explanatory power in predicting educational experiences. To test this hypothesis *post-hoc*, I conducted a linear regression test for mediating effects. Specifically, I regressed educational experiences on gender (“dummy coded”) and determined that there was a significant relationship. Next, I added school type (also “dummy coded”) to gender to see if the significant relationship between it and educational experiences became non-significant; it did not. It seems, therefore, that school type did not mediate the effect of gender on educational experiences. However, due to the unequal distribution of gender across school type, these findings should be cautiously considered.
Chapter 7
Discussion

My primary aim in this dissertation was to contribute to the burgeoning line of inquiry of work-family expectations by testing a theoretical causal model with a sample of participants who anticipate combining work and family – broadly defined – in the future. While not the first attempt to identify influences on and outcomes of work-family expectations, this study represents the first of its kind to situate these expectations within a theoretical framework that describes specific social cognitive processes that may shape them. Furthermore, it introduces the role of college educational experiences as potential influences and relevant sources of information.

I drew inspiration from the career choice model within the general paradigm of Social Cognitive Career Theory, which centers on the concept of self-efficacy. Influenced by a range of variables, including learning experiences, person inputs and contextual variables, self-efficacy is a robust predictor of outcome expectancies and ultimately values, intentions and actions with regard to career choice. Social cognitive career theorists have speculated that work-family expectations have a place within this framework but, to date, no empirical attempt has been made to fully integrate work-family-related constructs. A possible first step towards integration is to determine if the model holds true for work-family expectations.

To this end, I re-imagined the career choice model in terms of work-family behavior: domain-specific self-efficacy became self-efficacy for work-family conflict management, outcome expectancies became anticipated work-family conflict and anticipated work-family enrichment, and interests became work role importance and family role importance. Learning experiences became a newly-created construct of educational experiences clustered roughly
around the four kinds of experiences (i.e., mastery experiences, vicarious experiences, social persuasion and physiological and emotional states) that Bandura proposed, and person inputs became gender, education level, and type of study (i.e., STEM or non-STEM). Then, I hypothesized a model in which work and family role importance values were influenced, directly and/or indirectly, by these work-family variables. Path analyses revealed a fair fit of the data to the hypothesized model with one error term modification, and an equivalent fit to a model in which the effects of self-efficacy are fully (as opposed to partially) mediated through outcome expectancies.

Specifically, and as indicated by the direction (positive or negative) of the computed path coefficients, the data fit a model in which:

1. Influence of educational experiences varies as a function of gender, education level and type of major: women, those for whom work and family roles are relatively proximal (i.e., more advanced students), and STEM majors perceive stronger influence of educational experiences on their work-family plans;
2. Strong influential educational experiences increase self-efficacy for work-family conflict management, anticipated work-family enrichment as well as anticipated work-family conflict;
3. Self-efficacy for work-family conflict management affects work role and family role importance by increasing anticipated work-family enrichment and decreasing anticipated work-family conflict;
4. Higher levels of anticipated work-family conflict result in a “trade-off” approach; high importance of both family and work roles appear to be incompatible for college students who anticipate high levels of role conflict. However, anticipated work-family
enrichment fosters a “balance” approach in which importance is placed on both the work and the family roles.

Put plainly, the effects of educational experiences on student development appear to extend beyond the classroom and do more for students than simply prepare them for their future work roles. Furthermore, the results of this study suggest that self-efficacy may be at least one of the mechanisms by which this effect occurs. The findings also suggest that educational experiences may increase self-efficacy while at the same time sensitizing students to both the positive and the negative aspects of a multiple role lifestyle, which may result in more realistic expectations about one’s future work-family relationship (i.e., that there will be a trade-off, and to thus adjust values accordingly). Therefore, to the extent that one is invested in the development and preparation of students as whole people, who will enjoy long, productive professional lives as well as fulfilling personal lives, increasing self-efficacy regarding work and family conflict through meaningful and interactive educational experiences should be a priority.

**Limitations and Directions for Future Research**

There are several notable limitations of this study. First, given the unique pool of college students from which my participants were recruited, I do not know how well these findings generalize to college students attending other types of schools. Furthermore, the low response rate is another indicator of bias in the form of self-selection. Researchers of ongoing work-family relationships understand this problem all too well; often the very people from whom we want to hear are the ones who are grappling with work-family issues and do not have the time, energy and/or inclination to share these limited resources for research purposes. With this in mind, the generalizability of the findings to other college students even at the same institution may be limited.
Another possible explanation for not responding could be a reticence on the part of college students to answer questions that may cause them anxiety and/or that they do not (yet) feel capable of or interested in addressing at this point in their lives. Participants were asked to respond to the prompt “Describe in as much detail as possible your plans, goals, and/or expectations for how you will balance your paid work with everything else that will be important to you.” “Kai,” a History major whose sources for information about work and family include “observation of a friend my age begging [beginning] the process has solidified that I am not ready for it,” writes:

I am 20 and think that I am too young to think like this because long term plans like this are unrealistic. Other things develop as my life goes on. I want to be an Army Officer upon graduation. That is the most concrete plan I have and plan on having. Planning your life to the last detail at this point is strange in my opinion.

While a number of respondents expressed some ambivalence and uncertainty, Kai’s response was atypical in this sample; most respondents provided rich details regarding their work-family plans. However, the scarcity of responses like Kai’s, in combination with the low response rate, raises the possibility that students who completed my survey tended to have somewhat definite ideas and plans about their future work and family relationship.

Other methodological limitations include the absence of potentially important variables in the work-family relationship planning process, such as socio-economic status. For example, the general line of questioning “How do you plan to balance work and family?” implies flexibility and choice, and thus is inherently biased against those who are limited in their options for combining work and family. Future research could attempt to deconstruct the standard work-family measures and reconstruct them to be less biased; at the very least, asking for family-of-

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8 This is a pseudonym; no identifying information was collected as part of this study.
origin household income, while rife with problems, would be preferable to ignoring SES altogether.

Despite filling a measurement void, another limitation is the Educational Experiences Scale that was constructed for this study. As a first attempt to capture Bandura’s learning experiences that influence work-family conflict self-efficacy, it ably served the purpose. However, future research should focus on thorough scale construction and validation to further develop the measure. I imagine that a robust, validated scale would benefit not only work-family expectation researchers, but career counselors, college educators and administrators who are committed to student development. Furthermore, a psychometrically strong assessment could be a useful tool for program performance and evaluation.

One limitation of the Educational Experiences Scale is that it focuses solely on students’ perceptions of influence on their work-family expectations. Although the results of this study indicate that perceptions are meaningful, future research could benefit from incorporating objective measures of educational experiences that may be important, such as gender ratio and average age of faculty, as the Faculty factor of the Educational Experiences Scale was rated so highly in terms of influence in this sample.

Finally, I endeavored to capture the developmental nature of work-family expectations by measuring educational class level, but it is possible that my operationalization of development and resulting data lacked the granularity necessary to describe these processes. Future attempts to test the work-family expectations theory, particularly those grounded in Social Cognitive Career Theory, should employ a longitudinal design, which would allow us to test the causal relationships among a broad range of educational experiences, work-family intentions and achievements over time.
Summary

…I would be perfectly fine with becoming the crazy bird-lady (as opposed to cat lady) if that is the plan that God has for me. My main goal is to have a job with which I can pay off my student loans and live. I want to live in a tiny house (if I'm on my own) to keep down the costs of living. I plan on still being an active runner and staying in relatively good shape. Also, I want to be in touch with those who are or will be important to me. When I am old (as I hope to become) I want to be able to look back on my life and be content and happy with it. After all, we are all stories in the end, I want mine to be a good one.

-Cora, a junior Biology major

College is a time for career preparation, for acquiring and perfecting the skills and abilities that will be needed for a professional life after graduation. College is also a time for personal growth and development, exploring possibilities and imagining the future. Although college students in this study had yet to assume a work-family lifestyle, they wrote at length and in rich detail about their hopes, dreams and fears for their life after graduation, indicating that they are thinking seriously about their long-term goals. The results of this study suggest that educators can support students’ planning to integrate their professional and personal lives, and help them prepare for the work-family relationship by providing relevant educational experiences, such as courses on gender roles and developmental psychology, serving as faculty role models, and creating opportunities to form substantive relationships with academic peers.
Appendix A

Initial Recruitment Email Message with Hyperlink

Subject line: $5 e-gift card for completion of online survey about life after graduation

Thinking about life after graduation? Want to earn a $5 Amazon or PayPal e-gift card?

If so, you are invited to participate in an important research study that looks at how college students think about and plan for their futures after graduation. Participation involves completing a short survey that will take approximately 20 to 30 minutes. All survey responses will remain confidential, and participation is completely voluntary. Clicking the link below will take you to the informed consent form, where you can read more about the study to help you decide if you would like to participate.

Who is eligible to participate? You are eligible if all of the following applies:

- You are a currently enrolled undergraduate student between 18 and 24 years of age;
- Your current marital status is never married or cohabited with a romantic partner;
- You are currently not pregnant;
- You do not have children.

The first 300 participants to complete the survey will receive a $5 e-gift card (your choice of Paypal or Amazon.com) sent to your school email address.

This study has been approved by the Institutional Review Boards of the City University of New York (Protocol #: 544763-2), Mary Baldwin College and Virginia Military Institute (Protocol #:136).

In advance, thank you!

Chandra Mason
Assistant Professor of Psychology/Ph.D. Candidate
Mary Baldwin College/City University of New York
cmason@mbc.edu
(540) 887-7096

Click here to begin the study:
[Hyperlink]
Appendix B
Reminder Recruitment Email Message with Hyperlink

Subject line: REMINDER: $5 e-gift card for completion of online survey about life after graduation

REMINDER:
Thinking about life after graduation? Want to earn a $5 Amazon or PayPal e-gift card?

Two weeks ago you received an invitation to participate in an important research study that looks at how college students think about and plan for their futures after graduation. Participation involves completing a short survey that will take approximately 20 to 30 minutes. All survey responses will remain confidential and participation is completely voluntary. Clicking the link below will take you to the informed consent form, where you can read more about the study to help you decide if you would like to participate.

Who is eligible to participate? You are eligible if all of the following applies:

- You are a currently enrolled undergraduate student between 18 and 24 years of age;
- Your current marital status is never married or cohabited with a romantic partner;
- You are currently not pregnant;
- You do not have children.

The first 300 participants to complete the survey will receive a $5 e-gift card (your choice of Paypal or Amazon.com) sent to your school email address.

This study has been approved by the Institutional Review Boards of the City University of New York (Protocol #: 544763-2), Mary Baldwin College and Virginia Military Institute (Protocol #136).

In advance, thank you!

Chandra Mason
Assistant Professor of Psychology/Ph.D. Candidate
Mary Baldwin College/City University of New York
cmason@mbc.edu
(540) 887-7096

Click here to begin the study:
[Hyperlink]
Appendix C
Second Reminder Recruitment Email Message with Hyperlink

Subject line: REMINDER: $5 e-gift card for completion of online survey about life after graduation

REMINDER:

Thinking about life after graduation? Want to earn a $5 Amazon or PayPal e-gift card?

Early this summer you received an invitation to participate in an important research study that looks at how college students think about and plan for their futures after graduation. Participation involves completing a short survey that will take approximately 20 to 30 minutes. All survey responses will remain confidential and participation is completely voluntary. Clicking the link below will take you to the informed consent form, where you can read more about the study to help you decide if you would like to participate.

Who is eligible to participate? You are eligible if all of the following applies:

- You are a currently enrolled undergraduate student between 18 and 24 years of age;
- Your current marital status is never married or cohabited with a romantic partner;
- You are currently not pregnant;
- You do not have children.

The first 300 participants to complete the survey will receive a $5 e-gift card (your choice of Paypal or Amazon.com) sent to your school email address.

This study has been approved by the Institutional Review Boards of the City University of New York (Protocol #: 544763-2), Mary Baldwin College and Virginia Military Institute (Protocol #136).

In advance, thank you!

Chandra Mason
Assistant Professor of Psychology/Ph.D. Candidate
Mary Baldwin College/City University of New York
cmason@mbc.edu
(540) 887-7096

Click here to begin the study:
[Hyperlink]
Appendix D
Informed Consent Form

CITY UNIVERSITY OF NEW YORK
The Graduate School and University Center
Department of Psychology (Critical Social/Personality Psychology)

CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

Project Title:
The Role of Learning Experiences in College Students’ Work-Family Expectations

Principal Investigator:
Chandra Mason (540)887-7096

Graduate Student
The Graduate School and University Center
365 Fifth Avenue, 6th Floor
New York, NY 10010

Assistant Professor
Department of Psychology
Mary Baldwin College
Staunton, VA 24401

Faculty Advisor:
Tamara R. Buckley, Ph.D.
Associate Professor
Hunter College
695 Park Ave
New York, NY 10065
(212) 772-4758

Sites where study is to be conducted:
Mary Baldwin College, Staunton, VA 24401
Virginia Military Institute, Lexington, VA 24450

Introduction/Purpose: You are invited to participate in a research study. The study is conducted
under the direction of Chandra Mason, a doctoral student at the Graduate School and University
Center at the City University of New York and an assistant professor at Mary Baldwin College.
The purpose of this research study is to better understand educational experiences that are
meaningful to college students in planning for life after college. The results of this study may be
used to support college students as they plan for their futures after graduation.

Procedures: Approximately 200-300 individuals are expected to participate in this study. You
will be asked to complete a series of questionnaires about your attitudes towards work and
family after graduation (e.g., “How confident are you that you will have a job that meets the

CUNY UI - Institutional Review Board
Approval Date: May 23, 2014
needs of your family?”). The time commitment of each participant is expected to be between 20 to 30 minutes. Questionnaires can be completed from any computer with internet access.

Possible Discomforts and Risks: While this study poses minimal risk to you, it is possible that you may experience some anxiety as you think about your future. If you become worried or concerned as a result of your participation in this study, you may find it helpful to call or visit the career services center at your institution; the phone number to the career services center at your school will be provided to you at the survey. You may also consider speaking to your academic advisor, mentor, or someone with whom you feel comfortable discussing your concerns.

Benefits: One possible direct benefit of your participation is an opportunity to think about your plans after graduation. There are no other direct benefits. However, participating in the study may increase general knowledge about educational experiences and college students’ development, which may indirectly benefit you.

Voluntary Participation: Your participation in this study is voluntary, and you may decide not to participate without prejudice, penalty, or loss of benefits to which you are otherwise entitled. Your grades or standing with your institution will not be affected by your willingness to participate or discontinue participation in this study.

Financial Considerations: The first 300 participants to complete the survey will be entitled to a $5 e-gift card from PayPal or Amazon.com (your choice). Upon completion, you will have an opportunity to indicate your preference. Within one week of participating in this study, e-gift cards will be sent to the school email address that you provide. You may also choose to not receive a $5 e-gift card.

Confidentiality: Unless you request an e-gift card, you will not be asked to provide any personally identifying information as part of this study. Furthermore, the email address that was used to contact you will be stripped from your responses before they are recorded and made available to the Principal Investigator. All responses to the questionnaire that you provide will be encrypted and stored online in a password-protected account accessible only by the Principal Investigator.

If you request an e–gift card, the school email address that you provide will never be connected with the responses that you give on the questionnaire; it will be recorded and stored separately from your other responses, and maintained by key personnel who does not have access to your responses to the questionnaire.

For analysis, the data will be downloaded into a password-protected digital file to a password-protected computer in my locked faculty office at Mary Baldwin College. Only I will have access to this file. As required, my faculty advisor will also have access to these data and will maintain a copy of the digital data file; this copy will be password-protected and stored on my faculty advisor’s password-protected computer in her locked faculty office. Neither of these data files will contain any personally identifying information that you may have provided for compensation purposes. Institutional Review Board members and staff may also request access to this data file. Data will be stored for a minimum of three years.
**Contact Questions/Persons:** If you have any questions about the research now or in the future, you should contact the Principal Investigator, Chandra Mason, (540) 887-7096, cmason@gc.cuny.edu. If you have any questions concerning your rights as a participant in this study, you may contact the Hunter College Human Research Protection Program at (212) 650-3053, or hrpp@hunter.cuny.edu.

**Statement of Consent:**

“I have read the above description of this research and I understand it. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions that I may have will also be answered by the principal investigator of the research study. By confirming that I meet all of the eligibility requirements below, I voluntarily agree to participate in this study.

By confirming my eligibility to participate, I have not waived any of my legal rights to which I would otherwise be entitled.”

You may print off a copy of this consent form to keep.

Check all of the boxes that apply to confirm your eligibility for this research study:

- [ ] I am currently enrolled as an undergraduate student;
- [ ] I am between 18 and 24 years of age;
- [ ] My current marital status is never married or cohabited with a romantic partner;
- [ ] I am not pregnant;
- [ ] I do not have children;
- [ ] I understand my rights as a participant;
- [ ] I understand the description of this study;
- [ ] I agree to participate in this study.
Appendix E

Demographic Items

1. Please indicate your gender.
   
   Woman ___  
   Man ____  
   Other ___

2. What is your class level?
   
   Freshman ___  
   Sophomore ___  
   Junior ___  
   Senior ___

3. Which of the following best describes your race? (You may select more than one.)
   
   White  Japanese  Samoan  
   Black, African American, or Negro  Korean  Other Pacific Islander  
   American Indian or Alaska Native  Vietnamese  Some other race: ____  
   Asian Indian  Native Hawaiian  
   Chinese  Guamanian or Chamorro  
   Filipino

4. What is your major? (open-ended)

5. Which of the following best describes the school that you currently attend:
   
   _____ Single sex  
   _____ Coeducational
Appendix F

Marriage/Partnering, Parenting and Work Expectations

1. Do you expect to marry or form a long-term cohabitating partnership with another person at some point in the future?
   ___ yes  ___ no  ___ I don’t know
   ____ am currently married/ cohabitating with my significant other (DIRECTED TO END OF SURVEY)

2. Do you expect to become a parent at some point in the future?
   ___ yes  ___ no  ___ I don’t know
   ____ already am a parent (DIRECTED TO END OF SURVEY)

3. (If responded “yes” to question 7) Select the situation that best describes your plans for lifetime work or career involvement:

   No further work or career after marriage/cohabitation.
   Work or career involvement after marriage/cohabitation until becoming a parent; no further work/career involvement unless absolutely necessary.
   Work or career involvement after marriage until becoming a parent, devote full-time efforts to family during my children’s early years, and return to work/career when children begin school.
   Work or career involvement after marriage until becoming a parent, devote full-time efforts to family during my children’s early years, and return to work/career when children begin middle school or high school.
   Work or career involvement after marriage until becoming a parent, devote full-time efforts to family during my children’s early years, and return to work/career after children graduate from high school.
   Pursue work and family activities simultaneously with minimal interruptions from work for parenting.
Appendix G

Educational Experiences Prompts

This questionnaire addresses how you see yourself in the future. We all think about the future to some extent. When doing so, we usually think about the kind of experiences that are in store for us.

In the space provided, please describe in as much detail as you can, your plans, goals and/or expectations for how you will balance your paid work with everything else that will be important to you (e.g., spouse, children, family, friends, non-work interests) in the future.

Do you think that your plans, goals and/or expectations for how you will balance paid work with everything else that will be important to you (e.g., spouse, children, family, friends, non-work interests) have changed since you started college?

___ Yes
___ No
Appendix H

Educational Experiences Scale

To what extent have each of the following influenced your plans, goals and/or expectations to balance paid work with everything else that will be important to you (e.g., spouse, children, family, friends, caregiver, non-work interests)?

(1 “No influence at all” to 7 “Very strong influence”)

1. Courses that included information about careers in my major
2. Courses that included information about gender roles in society
3. Courses that included information about sexuality, sexual orientation and/or identity
4. Courses that included information about parenting, children, and/or development (e.g., child psychology, developmental psychology)
5. Other coursework (Please indicate course)
6. My academic performance overall
7. My academic performance in my major(s)
8. Balancing my coursework with other activities and/or obligations (e.g., paid work, family, sports)
9. Academic performance of other students at my school
10. Academic performance of other students in my major at my school
11. Seeing other students at my school balancing coursework with other activities and/or obligations (e.g., school-based organizations/clubs, paid work, family, sports).
12. Conversations with peers/friends at my school about coursework
13. Conversations with peers/friends at my school about social issues
14. Conversations with peers/friends at my school about plans, goals and/or expectations to balance paid work with everything else that will be important
15. Receiving positive feedback and/or encouragement from my peers/friends at my school
16. Participation in school organizations or programs (e.g., Honor Court/Council, Student government, sports teams/clubs, VWIL, ROTC)
17. Participation in religious/spiritual groups and activities at my school
18. Serving as a peer advisor or peer mentor role (e.g., tutor, teaching assistant, resident advisor)
19. Faculty at my school as teachers
20. Faculty at my school as professionals in their fields
21. Seeing faculty at my school balance paid work with everything else that is important to them
22. Conversations with faculty about plans, goals and/or expectations to balance paid work with everything else that will be important
23. Receiving positive feedback and/or encouragement from faculty at my school
24. Non-faculty staff members at my school in their work roles
25. Seeing non-faculty staff at my school balance paid work with everything else that is important to them
26. Receiving positive feedback and/or encouragement from non-faculty staff at my school
27. Administrators at my school in their work roles
28. Seeing administrators at my school balance paid work with everything else that is important to them
29. Receiving positive feedback and/or encouragement from administrators at my school
30. Feeling that I am part of a community at my school
Appendix I

Self-Efficacy for Work-Family Conflict Management Scale

Instructions: Thinking about your life after graduation and using a 10-point scale, please answer the following questions. (0 “complete lack of confidence”; 9 “total confidence”)

1. How confident are you that you could attend to your family obligations without it affecting your ability to complete pressing tasks at work?

2. How confident are you that you could fulfill your work responsibilities despite going through having a trying and demanding period in your family life?

3. How confident are you that you could fulfill your family role effectively after a long and demanding day at work?

4. How confident are you that you could invest in your job even when under heavy pressure due to family responsibilities?

5. How confident are you that you could succeed in your family role although there are many difficulties in your work?

6. How confident are you that you could succeed in your role at work although there are many difficulties in your family?

7. How confident are you that you could invest in your family role even when under heavy pressure due to work responsibilities?

8. How confident are you that you could focus and invest in work tasks even though family issues are disruptive?
Appendix J

Anticipated Work-family Conflict Scale

Instructions: Thinking about your future job/career and the family that you plan to have in the future, please indicate whether you agree or disagree with the following statements. Your ratings should range from 1 (showing that you strongly disagree with the statement) to 5 (showing that you strongly agree with the statement).

1 = Strong disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1. My work will keep me from my family activities more than I would like.
2. The time I will devote to my job will keep me from participating equally in household responsibilities and activities.
3. I will have to miss family activities due to the amount of time I will have to spend on work responsibilities.
4. The time I will spend on family responsibilities will often interfere with my work responsibilities.
5. The time I will spend with my family will often cause me not to spend time in activities at work that could be helpful to my career.
6. I will have to miss work activities due to the amount of time I will have to spend on family responsibilities.
7. I think that when I get home from work I will often be too frazzled to participate in family activities/responsibilities.
8. I will often be so emotionally drained when I get home from work that it will prevent me from contributing to my family.
9. Due to all the pressures I will have at work, sometimes when I get home I will be too stressed to do the things I enjoy.
10. Due to stress at home, I will often be too preoccupied with family matters at work.
11. Because I will often be stressed from my family responsibilities, I will have a hard time concentrating on my work.
12. Tension and anxiety from my family life will often weaken my ability to do my job.
13. The problem-solving behaviors I will use in my job will not be effective in resolving problems at home.
14. Behavior that is effective and necessary for me at work will be counterproductive at home.
15. The behaviors that I will perform that will make me effective at work will not help me to be a better parent and spouse/partner.
16. The behaviors that will work for me at home will not be effective at work.
17. Behavior that is effective and necessary for me at home will be counterproductive at work.
18. The problem-solving behavior that will work for me at home will not be as useful at work.
Appendix K

Anticipated Work-Family Enrichment Scale

Instructions: To respond to the items that follow, mentally insert each item into the sentence where indicated. Then indicate your agreement with the entire statement using the scale provided below.

Please note that in order for you to strongly agree (4 or 5) with an item you must agree with the full statement. Take for example the first statement:

My involvement in my work will help me to understand different viewpoints and this will help me be a better family member.

To strongly agree, you would need to agree that (1) your work involvement will help you to understand different viewpoints AND (2) that these different viewpoints will transfer to home making you a better family member.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

My involvement in my work ________.

(Work to family development)
1. Will helps me to understand different viewpoints and this will help me be a better family member
2. Will help me to gain knowledge and this will help me be a better family member
3. Will help me acquire skills and this will help me be a better family member

(Work to family affect)
4. Will puts me in a good mood and this will help me be a better family member
5. Will make me feel happy and this will help me be a better family member
6. Will make me cheerful and this will help me be a better family member

(Work to family capital)
7. Will help me feel personally fulfilled and this will help me be a better family member
8. Will provide me with a sense of accomplishment and this will help me be a better family member
9. Will provide me with a sense of success and this will help me be a better family member

My involvement in my family________.

(Family to work development)
10. Will help me to gain knowledge and this will help me be a better worker
11. Will help me acquire skills and this will help me be a better worker
12. Will help me expand my knowledge of new things and this will help me be a better worker
(Family to work affect)

13. Will put me in a good mood and this will help me be a better worker
14. Will make me feel happy and this will help me be a better worker
15. Will make me cheerful and this will help me be a better worker

(Family to work efficiency)

16. Will require me to avoid wasting time at work and this will help me be a better worker
17. Will encourage me to use my work time in a focused manner and this will help me be a better worker
18. Will cause me to be more focused at work and this will help me be a better worker
Appendix L
Role Importance Subscales

Please indicate the extent to which you agree or disagree with each item. [Response options are on a scale from 1 (strongly disagree) to 5 (strongly agree).]

(Work role importance subscale)

In the following questions, “work”, “career”, and “job” are used to describe any paid work.

1. Having work/a career that is interesting and exciting to me is my most important life goal.
2. I expect my job/career to give me more real satisfaction than anything else I do.
3. My life would seem empty if I didn’t have a job/career.
4. If I chose not to work, I would regret it.
5. Although having a job/career requires many sacrifices, the benefits of working are worth it all.

(Family role importance subscale)

In the following questions, “family” is used to describe any close relationships outside of the paid work domain.

1. Although having a family requires many sacrifices, the love and enjoyment of family of one’s own are worth it.
2. If I chose not to have a family, I would regret it.
3. It is important to me that I will be an effective family member.
4. The whole idea of having a family and caring for them is not attractive to me. (Reverse-coded)
5. My life would be empty if I never had a family.
Appendix M
Thank you Reward Preferences and Debriefing

1. Please indicate your preference:
   __ I would like to receive an e-gift card.
   __ I would like to end my participation.

2. (DISPLAYED IF OPTION 1 IN ITEM #1 ABOVE IS SELECTED)

   To receive your $5 e-gift card, please click the link below.

   (WEBLINK took participants to another Qualtrics survey that was administered and maintained by a faculty member at Virginia Military Institute.)

   I would like to receive a $5 e-gift card from
   __ PayPal
   __ Amazon.com

   Your school email address (must end in @mbc.edu/vmi.edu) ______
   You will receive your e-gift card at your school email address within one week.

Debriefing
(DISPLAYED TO ALL RESPONDENTS)

Your participation in this study involved providing information about your educational experiences during college and expectations for life after graduation. While this study posed minimal risk to you, it is possible that you may have experienced some anxiety as you thought about your future. If you have become worried or concerned as a result of your participation in this study, you may find helpful information and support by calling or visiting the career services center (540-887-7221/540-464-7560), or by speaking to your academic advisor, mentor, or someone with whom you feel comfortable discussing your concerns.

Your responses to the questionnaires were anonymous. If you indicated that you wanted to receive an e-gift card, you were asked to provide your email address. However, this information was recorded separately from your other responses about your college experiences and plans after graduation, and will never be connected to your other responses.

If you have any questions or concerns about this research and/or your participation in it, please contact the Principal Investigator, Chandra Mason, Assistant Professor of Psychology, Mary Baldwin College at cmason@gc.cuny.edu or (540) 887-7096.

Thank you very much for your time and responses!
# Appendix N

## Pattern Matrix for the Education Experiences Scale

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>F</th>
<th>I</th>
<th>PRC</th>
<th>S</th>
<th>CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses that included information about gender roles in society</td>
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<td>.49</td>
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</tr>
<tr>
<td>Courses that included information about sexuality, sexual orientation and/or identity</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses that included information about parenting, children, and/or development</td>
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<td>.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing other students at my school balancing coursework with other activities and/or obligations</td>
<td>.49</td>
<td>.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversations with peers/friends at my school about coursework</td>
<td>.66</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversations with peers/friends at my school about social issues</td>
<td>.73</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversations with peers/friends at my school about plans, goals and/or expectations to balance paid work with everything else that will be important</td>
<td>.68</td>
<td>.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive feedback and/or encouragement from my peers/friends at my school</td>
<td>.69</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty at my school as teachers</td>
<td>.83</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty at my school as professionals in their fields</td>
<td>.86</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing faculty at my school balance paid work with everything else that is important to them</td>
<td>.63</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversations with faculty about my plans, goals and/or expectations</td>
<td>.74</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving positive feedback and/or encouragement from faculty at my school</td>
<td>.74</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-faculty staff members at my school in their work roles</td>
<td>.66</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing non-faculty staff at my school balance paid work with everything else that is important to them</td>
<td>.64</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving positive feedback and/or encouragement from non-faculty staff at my school</td>
<td>.53</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrators at my school in their work roles</td>
<td>-.66</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing administrators at my school balance paid work with everything else that is important to them</td>
<td>-1.01</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving positive feedback and/or encouragement from administrators at my school</td>
<td>-.94</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling that I am part of a community at my school</td>
<td>-.54</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Factor loadings < .40 are suppressed. F=Faculty; I=Institution; PRC=Peers & Relevant Courses; S=Staff; CE Commonality Estimate.
### Appendix O

**Factor Matrix for the Self-Efficacy for Work-Family Conflict Management Scale**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend to your family obligations without it affecting your ability to complete pressing tasks at work</td>
<td>.77</td>
<td>.60</td>
</tr>
<tr>
<td>Could fulfill your work responsibilities despite going through having a trying and demanding period in your family life</td>
<td>.86</td>
<td>.75</td>
</tr>
<tr>
<td>Could fulfill your family role effectively after a long and demanding day at work</td>
<td>.85</td>
<td>.72</td>
</tr>
<tr>
<td>Could invest in your job even when under heavy pressure due to family responsibilities</td>
<td>.91</td>
<td>.84</td>
</tr>
<tr>
<td>Could succeed in your family role although there are many difficulties in your work</td>
<td>.90</td>
<td>.81</td>
</tr>
<tr>
<td>Could succeed in your role at work although there are many difficulties in your family</td>
<td>.94</td>
<td>.88</td>
</tr>
<tr>
<td>Could invest in your family role even when under heavy pressure due to work responsibilities</td>
<td>.89</td>
<td>.79</td>
</tr>
<tr>
<td>Could focus and invest in work tasks even though family issues are disruptive.</td>
<td>.90</td>
<td>.82</td>
</tr>
</tbody>
</table>

*Note.* C=Commonality Estimate.
Appendix P
Pattern Matrix for the Anticipated Work-Family Conflict Scale

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>My work will keep me from my family activities more than I would like.</td>
<td></td>
<td>.79</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The time I will devote to my job will keep me from participating equally in household responsibilities and activities.</td>
<td></td>
<td>.87</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have to miss family activities due to the amount of time I will have to spend on work responsibilities.</td>
<td></td>
<td></td>
<td>.74</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>The time I will spend on family responsibilities will often interfere with my work responsibilities.</td>
<td></td>
<td>-.68</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The time I will spend with my family will often cause me not to spend time in activities at work that could be helpful to my career.</td>
<td></td>
<td>-.94</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have to miss work activities due to the amount of time I will have to spend on family responsibilities.</td>
<td></td>
<td>-.82</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that when I get home from work I will often be too frazzled to participate in family activities/responsibilities.</td>
<td></td>
<td></td>
<td>.60</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>I will often be so emotionally drained when I get home from work that it will prevent me from contributing to my family.</td>
<td></td>
<td></td>
<td>.72</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td>Due to all the pressures I will have at work, sometimes when I get home I will be too stressed to do the things I enjoy.</td>
<td></td>
<td></td>
<td>.63</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Due to stress at home, I will often be too preoccupied with family matters at work.</td>
<td></td>
<td></td>
<td>.81</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Because I will often be stressed from my family responsibilities, I will have a hard time concentrating on my work.</td>
<td></td>
<td></td>
<td>.95</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Tension and anxiety from my family life will often weaken my ability to do my job.</td>
<td></td>
<td></td>
<td>.86</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>The problem-solving behaviors I will use in my job will not be effective in resolving problems at home</td>
<td></td>
<td></td>
<td>.68</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>Behavior that is effective/necessary for me at work will be counterproductive at home.</td>
<td></td>
<td></td>
<td>.64</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>The behaviors that I will perform that will make me effective at work will not help me to be a better parent and spouse/partner.</td>
<td></td>
<td></td>
<td>.75</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>The behaviors that will work for me at home will not be effective at work.</td>
<td></td>
<td></td>
<td>.80</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Behavior that is effective/necessary for me at home will be counterproductive at work.</td>
<td></td>
<td></td>
<td>.82</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>The problem-solving behavior that will work for me at home will not be as useful at work.</td>
<td></td>
<td></td>
<td>.90</td>
<td>.79</td>
<td></td>
</tr>
</tbody>
</table>

Note: Factor loadings < .40 are suppressed. 1=Anticipated Strain-based Work-family Conflict; 2=Anticipated Behavior-based Work family Conflict; 3 = Anticipated Time-based Family Interfering with Work Conflict; 4=Anticipated Time-based Work Interfering with Family Conflict; C=Commonality Estimate
# Appendix Q

## Pattern Matrix for the Anticipated Work-Family Enrichment

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work will help me to understand different viewpoints &amp; this will help me be a better family member.</td>
<td>.58</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will help me to gain knowledge and this will help me be a better family member.</td>
<td>.82</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will help me acquire skills and this will help me be a better family member.</td>
<td>.69</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will put me in a good mood and this will help me be a better family member.</td>
<td></td>
<td>.58</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will make me feel happy and this will help me be a better family member.</td>
<td>.79</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will make me cheerful and this will help me be a better family member.</td>
<td>.80</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will help me feel personally fulfilled and this will help me be a better family member.</td>
<td>.60</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will provide me with a sense of accomplishment and this will help me be a better family member.</td>
<td>.54</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work will provide me with a sense of success and this will help me be a better family member.</td>
<td>.51</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will help me to gain knowledge and this will help me be a better worker.</td>
<td>.61</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will help me acquire skills and this will help me be a better worker.</td>
<td>.46</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will help me expand my knowledge of new things and this will help me be a better worker.</td>
<td>.63</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will put me in a good mood and this will help me be a better worker.</td>
<td></td>
<td>.79</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will make me feel happy and this will help me be a better worker.</td>
<td></td>
<td>.81</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will make me cheerful and this will help me be a better worker.</td>
<td></td>
<td>.81</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will require me to avoid wasting time at work and this will help me be a better worker.</td>
<td></td>
<td>.71</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will encourage me to use my work time in a focused manner and this will help me be a better worker.</td>
<td></td>
<td>.74</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family will cause me to be more focused at work and this will help me be a better worker.</td>
<td></td>
<td>.80</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Factor loadings < .40 are suppressed. 1=Work-Family Development; 2=Family to Work Affect; 3= Family to Work Efficiency; 4=Work to Family Affect and Capital; C=Commonality
# Appendix R

Table R1.

*Factor Matrix for the Work Importance Scale*

<table>
<thead>
<tr>
<th>Subscale Item</th>
<th>Factor 1</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having work/a career that is interesting and exciting to me is my most important life goal.</td>
<td>.63</td>
<td>.40</td>
</tr>
<tr>
<td>I expect my job/career to give me more real satisfaction than anything else I do.</td>
<td>.55</td>
<td>.30</td>
</tr>
<tr>
<td>My life would seem empty if I didn't have a job/career.</td>
<td>.72</td>
<td>.52</td>
</tr>
<tr>
<td>If I chose not to work, I would regret it.</td>
<td>.62</td>
<td>.39</td>
</tr>
<tr>
<td>Although having a job/career requires many sacrifices, the benefits of working are worth them all.</td>
<td>.83</td>
<td>.68</td>
</tr>
</tbody>
</table>

*Note:* C=Commonality Estimate

Table R2.

*Factor Matrix for the Anticipated Work-Family Enrichment Scale*

<table>
<thead>
<tr>
<th>Subscale Item</th>
<th>Factor 1</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Although having a family requires many sacrifices, the love and enjoyment of having a family of one's own are worth it.</td>
<td>.86</td>
<td>.74</td>
</tr>
<tr>
<td>If I chose not to have a family, I would regret it.</td>
<td>.62</td>
<td>.39</td>
</tr>
<tr>
<td>It is important to me that I will be an effective family member.</td>
<td>.90</td>
<td>.81</td>
</tr>
<tr>
<td>The whole idea of having a family and caring from them is not attractive to me. (reverse-coded)</td>
<td>.61</td>
<td>.37</td>
</tr>
<tr>
<td>My life would be empty if I never had a family.</td>
<td>.54</td>
<td>.29</td>
</tr>
</tbody>
</table>

*Note:* C=Commonality Estimate
 References


