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# Anticipated vs Experienced Work-Family Conflict: Newcomer Expectations and Early Socialization Outcomes

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**ANTICIPATED VS EXPERIENCED WORK-FAMILY CONFLICT: NEWCOMER EXPECTATIONS AND EARLY SOCIALIZAITON OUTCOMES**

by

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**ABSTRACT**

ANTICIPATED VS EXPERIENCED WORK-FAMILY CONFLICT: NEWCOMER
EXPECTATIONS AND EARLY SOCIALIZAITON OUTCOMES

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Applying met expectations and newcomer socialization theory, congruence and discrepancy between anticipated work-family conflict (AWFC) and experienced WFC were examined in relation to job satisfaction, affective commitment, and turnover intent. It was hypothesized that when AWFC and WFC are in agreement outcomes are more favorable. Further, it was hypothesized that when the discrepancy is such that WFC is higher than AWFC outcomes are more favorable than vice versa. Data were collected from 205 adults, first as graduating seniors in college and again three months after starting their post-graduation jobs. Polynomial regression revealed that congruence between work interference with family (WIF) and anticipated work interference with family (AWIF) was related to increased job satisfaction and affective commitment but not decreased turnover. When WIF was higher than AWIF, job satisfaction and affective commitment are higher than when WIF was lower than AWIF, but this was not the case for turnover intent. Hypotheses regarding family interference with work (AFIW) were not supported. Unexpectedly, men reported higher levels of AWIF and AFIW than women. Findings expand understanding of the nature of relationships between WIF and work-related outcomes by applying the concept of met expectations. Future research should examine interventions to provide realistic previews regarding expected levels of WIF for individuals prior to entering the organization to determine if job satisfaction and affective commitment can be improved indirectly through the formation of realistic expectations regarding WIF.

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# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

**INTRODUCTION**

The successful incorporation of individuals into an organization has become increasingly important as people have become more mobile in their career development paths (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007). Younger baby boomers have held an average of 11.3 jobs between the ages of 18 and 46, suggesting that incoming employees from younger generations are remaining with an organization for less than 31 months (Bureau of Labor Statistics, 2012). As newcomers become incorporated into an organization, their experiences in the socialization process have implications for job attitudes, performance, organizational commitment, and intention to remain with or leave the organization (Bauer et al., 2007). Organizational socialization literature suggests that the encounter stage, the point where newcomers transition from being an outsider to joining an organization, is a pivotal moment for individuals as they form a relationship with the organization, and consideration of newcomers' experiences at this stage and how they cope with these experiences is essential in adopting effective socialization practices (Hess, 1993; Louis, 1983).

It is particularly important to consider that as individuals prepare to enter the workforce, they form expectations regarding the nature of their work which may be met or unmet. When newcomers enter unfamiliar organizational settings, they often experience "reality shock" as they are confronted with discrepancies between anticipations and experiences (E. C. Hughes, 1958). When organizational newcomers encounter a mismatch between their expectations and the realities of their lives within the organizational context, the discrepancy determines whether newcomers' expectations are undermet, met, or overmet (Major, Kozlowski, Chao, & Gardner, 1995). Newcomer expectations are an influential factor in explaining job satisfaction, organizational commitment, and voluntary turnover (Porter & Steers, 1973; Wanous, Poland,

Premack, & Davis, 1992). *Met expectations* are conceptualized as the degree to which an individual's positive and negative experiences in a job are similar or different relative to what the individual expected to encounter (Porter & Steers, 1973).

While the effects of unmet expectations have implications for newcomers in any context, this study examines these effects in the context of a science, technology, engineering, and mathematics (STEM) career trajectory. A national demand for skills in STEM is increasing as the U.S. endeavors to be globally competitive in areas of innovation and research. Therefore, it is of national concern that approximately 48% of bachelor's degree and 69% of associate's degree students declaring a STEM major do not persist through to degree completion (Chen, 2013; National Science Board, 2007). To address this issue, it has become essential to consider factors influencing the decision of students and professionals in STEM to leave these careers. As STEM students prepare for a career in STEM, they may form expectations regarding the work-family conflict (WFC) they will face in their chosen career field, and the fulfillment of expectations made as a student may play a role in the decision of STEM professionals to persist in or leave their chosen career path.

More broadly, this information will help to bridge the gap between WFC and career development literature. Both men and women in STEM have been found to be influenced by a desire for a balance between work and family roles in their occupational decision making. Women refer to other life interests, issues involving spouses or partners, and issues related to children as two of the most common reasons for changing career goals away from being a research focused professor (Mason, Goulden, & Frasch, 2009). Men have these concerns as well but were less likely to cite them than women. In a recent survey, 55% of those in the IT workforce indicated that they checked in frequently with their office during nonwork hours

(Collett, Potter, Keefe, & Mayor, 2014), suggesting that there is ample opportunity for work to affect IT professionals' fulfillment of family obligations. Work-family culture is a significant predictor of organizational and occupational commitment for both men and women in IT professions, though it has been found to be weighted more strongly for women in predicting occupational commitment (Major, Morganson, & Bolen, 2013). Considering the prevalence of work-family concerns in demanding career fields such as STEM, it is important to examine the effects of met and unmet expectations regarding WFC and how this may influence workplace outcomes such as turnover intent, affective organizational commitment, and job satisfaction. For example, a student expecting a low level of WFC in their career field may experience a high level of WFC upon entering the workforce, and the discrepancy between expectations and experienced conflict may influence the professional sentiments and job-related attitudes of that individual.

Hypotheses were examined using polynomial regression analysis with response surface methodology, which has been supported as a superior method to difference scores and direct measures in examining met expectations (Edwards, 1994, 2002, 2007; Edwards & Cable, 2009; Irving & Meyer, 1994; Shanock, Baran, Gentry, Pattison, & Heggestad, 2010). Difference scores are not subject to tests of construct validity, and recent research suggests that polynomial regression analyses with response surface methodology, which retains the interpretability of the original measures utilized, is preferred (Edwards, 1991; Irving & Meyer, 1994). Direct retrospective measures, another method commonly used to assess congruence and discrepancy between expectations and experiences, ask participants to report the degree to which their expectations have been fulfilled (Lambert, Edwards, & Cable, 2003). These measures fail to take into account the direction of the discrepancy and rely on individuals' recollection of previous

expectations (Irving & Montes, 2009; Lambert et al., 2003). Both difference scores and direct retrospective measures limit the development of met expectations theory, as they fail to consider more complex relationships regarding the influence of expectations on later outcomes.

Utilizing polynomial regression, it is possible to examine the congruence and discrepancy between two variables in relation to a proposed outcome while retaining information about the direction of discrepancy. Further, the three dimensional surface provided through response surface methodology provides a clearer and more comprehensive picture of the relationships between variables, as it allows for more than a single plane from which to view predicted values. Most importantly, polynomial regression can be used to test specific hypotheses regarding the (1) congruency, (2) degree of discrepancy, and (3) direction of discrepancy between independent variables in relation to proposed outcomes. Thus, by utilizing polynomial regression analyses in this study a clearer picture of the relationship between anticipated and experienced work-family conflict is provided, and specific hypotheses regarding the effects of incongruence between expectations and reality of WFC was tested statistically. This allows us to form a more comprehensive understanding of the role of WFC, both experienced and anticipated, as individuals move through their career paths and lives.

The goal of this study was to contribute to existing knowledge regarding the effects of WFC by better understanding the role of WFC in influencing work-related outcomes for newcomers. In this study, the influence of AWFC in the established relationships between WFC and job satisfaction, affective organizational commitment, and turnover intent (Amstad, Meier, Fasel, Elfering, & Semmer, 2011) was explored. This was accomplished by examining how discrepancies between the WFC individuals expect to encounter in their future career, measured prior to their entrance into the workforce, and actual levels of WFC experienced, measured upon

entrance into a new job, relate to early job satisfaction, affective organizational commitment, and turnover intent. To gain a better theoretical understanding of these relationships, met expectations theory was applied. This study extends past research regarding the work-life interface, by investigating the influence of expectations regarding WFC in influencing work-related outcomes for organizational newcomers.

**Met Expectations and Newcomer Socialization**

Porter and Steers (1973) conceptualized *met expectations* as the degree to which an individual's expectations of what they will encounter on the job are similar or different relative to that individual's actual experiences on the job. According to the met expectations hypothesis, the more congruence between an individual's expectations and reality, the greater the individual's satisfaction and adjustment (Porter & Steers, 1973; Wanous et al., 1992). In theories of organizational socialization, met expectations has been considered an important factor contributing to successful socialization (Feldman, 1976; Van Maanen, 1976). *Socialization* is defined as the process through which newcomers are incorporated into organizations and transformed into effective and engaged members (Feldman, 1976; Feldman, 1989). Socialization experiences are related to job satisfaction, organizational commitment, intentions to remain, and organizational turnover (Bauer et al., 2007). "Anticipatory socialization" is the first stage of the socialization process and includes all learning that takes place before an individual enters an organization (Feldman, 1976; Merton, 1957). In this stage, expectations are formed. In the encounter stage, the time when individuals enter the organization, newcomers' expectations are compared to their actual experiences on the job, and discrepancies between expectations and experience contribute to feelings of reality shock (Dugoni & Ilgen, 1981; E. C. Hughes, 1958; Van Maanen, 1976). *Realism* refers to the extent to which individuals have an accurate

understanding of what life in an organization is like (Feldman, 1976). It is necessary to examine the role of newcomer expectations in influencing outcomes such as job satisfaction and organizational commitment to better understand the importance of forming a realistic understanding of what organizational life will be like prior to socialization.

In a repeated measures study, organizational newcomers' role expectations regarding conflict, clarity, and acceptance were measured prior to organizational entry and again four weeks after entering a new job, and met expectations significantly predicted job satisfaction, organizational commitment, and turnover intent (Major et al., 1995). In line with this, in their meta-analysis of the effect of met expectations on newcomer attitudes and behavior, Wanous et al. (1992) found that met expectations had a corrected correlation of .39 with job satisfaction and organizational commitment and .29 with intent to remain. Additionally, in a study of occupational therapy students who were surveyed prior to entering the profession and again 14 months later, pre-entry expectations were found to positively correlate with job satisfaction, and this relationship was fully mediated by post-entry experiences (Sutton & Griffin, 2004).

In contrast to met expectations, unmet expectations can lead to difficulty in adjusting to a new role. Porter and Steers (1973) suggested that when expectations are unmet individuals' attitudes and commitment towards the relevant object may be more negative and this may result in an increased propensity to withdraw. Though Porter and Steers (1973) considered the implications of undermet expectations, suggesting that low levels of expectations may be desirable as they will be more likely to be fulfilled, they neglected to discuss the implications of unmet expectations in terms of overmet expectations (Wanous et al., 1992). The direction of discrepancy between expectations and actual experiences has been found to be an important factor in understanding the impact of unmet expectations (Dean, Ferris, & Konstans, 1988). In a

repeated measures analysis of pre-entry and post-entry expectations regarding jobs, co-worker relationships, and career progression Dean et al. (1988) utilized difference scores to produce three variables: undermet expectations, met expectations, and overmet expectations. They found a negative relationship between unmet expectations and organizational commitment, and in looking at the direction of discrepancy, they found that the relationship between undermet expectations an organizational commitment was stronger and the relationship between overmet expectations and commitment was nonsignificant.

Considering the problems associated with utilizing difference scores in met expectations research (Edwards, 1994; Irving & Meyer, 1994; Johns, 1981), Irving and Montes (2009) conducted polynomial regression and response surface analyses to examine the effects of unmet, met, and exceeded expectations. Expectations were found to be associated with decreased satisfaction, regardless of what the expectations pertain to (i.e., skill development opportunities, support, or compensation). However, the authors found that met expectations were not always associated with high levels of satisfaction, and exceeded expectations, in the case of skill development, were negatively associated with satisfaction. This suggests a need for further research examining met expectations, especially research that takes into consideration the focus of the expectations (e.g., skill development, support, compensation, and work-family conflict).

*Unmet Expectations and Work-Family Conflict.* In balancing work and family roles, met expectations theory is particularly relevant. In terms of preferred vs actual work hours, Clarkberg and Moen (2001) found that there is a disparity between couples' reported preferences for work hours and their actual work hours such that there is a widespread unmet preference for reduced work hours. The authors suggest that all-or-nothing assumptions about work may lead to a feeling that one must work long hours to be viewed as committed and productive and attain

professional advancement opportunities. In another study regarding preferred and actual working hours, authors found that, contrary to expectations, the negative relationship between mismatch and affective commitment seemed to be stronger for men than for women (Hetty van Emmerik & Sanders, 2005). The authors recognized that while some full-time employees may desire to work fewer hours, others may want to work additional hours, suggesting that matches between preferred and actual working hours can occur in both directions. It isn't always obvious if the direction of the discrepancy is more influential in one direction or the other, which is why it is important to consider this in conducting research dealing with met expectations.

In another study, women completed questionnaires about the division of childcare labor first before the birth of their first child and again after returning to work, and researchers found that unmet expectations were associated with increased distress upon returning to work (Goldberg & Perry-Jenkins, 2004). Recently, Shockley and Allen (2018) examined the division of paid and family labor in dual-earner couples by looking at the congruence between post-child division of labor and pre-child expectations for division of labor, utilizing the met expectations framework. They found that congruence between wives' expectations and actual division of paid labor was significantly related to husband's well-being and congruence between husbands' expectations and actual division of household labor was significantly related to wives' well-being, emphasizing the importance of early expectations in influencing later outcomes related to work and family. While expectations have been examined to some extent in work-family research, the influence of a discrepancy between AWFC and WFC on work-related outcomes has yet to be examined.

**Anticipated and Experienced Work-Family Conflict**

*Work-family conflict* (WFC), is defined as the perception that role pressures to participate

in the work or family domain interfere with participation in the other domain (Greenhaus &

Beutell, 1985). The conflict paradigm used to describe WFC suggests that each individual has a

limited pool of resources that can be allocated into their various roles in life (Goode, 1960).

When demands in one domain are high, an individual may deplete a greater proportion of

resources in that domain leaving fewer resources available to fulfill the demands of another role.

There are two directions of WFC, *work interference with family* (WIF) and *family interference*

*with work* (FIW). In their meta-analysis, Mesmer-Magnus and Viswesvaran (2005) found that

these two concepts are related with a weighted mean observed correlation of $r_{wm} = .38$, but the

authors concluded that the unique variance explained by the two concepts supports the

independent consideration of WIF and FIW. In further support of their independent

consideration, WIF has been found to be more prevalent than FIW (Eagle, Miles, & Icenogle,

1997). WIF tends to affect work-related outcomes more strongly, while FIW affects family-

related outcomes more strongly (Amstad et al., 2011). Considering that the focus of this study is

on work-related outcomes (i.e., job satisfaction, organizational commitment, and turnover

intent), the effects of WIF and FIW are considered separately with the expectation that WIF will

be more strongly related to the proposed outcome variables.

  *Anticipated Work-Family Conflict.* WFC is the foundational concept behind *Anticipated*

*Work-Family Conflict* (AWFC), the expectation of incompatible pressures of future work and

future family roles (Cinamon, 2006). Specifically, it is the expectation that participation in one's

future family role will interfere with participation in the future work role, a definition adapted

from the widely used Greenhaus and Beutell (1985) definition of WFC. In the context of this

study, AWFC refers to student expectations of conflicting pressures between work and family

roles in their future careers prior to entering their chosen career field. Research supports that

AWFC has the same bidirectional composition as WFC, such that it has components of work interference with family (WIF) and family interference with work (FIW; Cinamon, 2006). These are labeled anticipated work interference with family (AWIF) and anticipated family interference with work (AFIW). Outcome expectations are imagined consequences of decisions or behaviors (Lent, Brown, & Hackett, 1994). AWFC can be conceptualized as a type of outcome expectation concerning beliefs about the likely outcomes of participating in future work and family roles (Westring & Ryan, 2011). As AWFC is an expectation, it is important to examine the influence of the congruency between AWFC and experienced WFC in predicting work-related outcomes to further understand the effects of met expectations.

   *AWFC and Career Development.* As young adults plan their future careers, AWFC is thought to play a crucial role in the determination of which path to take (Cinamon, 2010). In a study of college seniors, those with working mothers were found to anticipate less career-marriage conflict (CMC) than seniors with at-home mothers (Barnett, Gareis, James, & Steele, 2003). Seniors' expectations about the timing of their marriages and having children were found to relate to their anticipated CMC, such that those who planned to form a family later in life had lower levels of anticipated CMC.

   In Cinamon's (2010) study of 387 unmarried students without children from two universities in central Israel, participants were categorized into profiles describing the importance ascribed to work and family roles. The *dual high profile* included those who attributed high importance to both roles. The *work profile* and *family profile* included those who attributed the highest relative importance to work and family roles respectively. The *dual low profile* included those who attributed low importance to both work and family roles. Those in the work profile were found to have the highest levels of AWFC, while those in the family profile

were found to have the lowest levels of AWFC. In Cinamon and Rich's (2002a) study, participants in the work profile reported the highest levels of actual WFC among married employees. While participants in the dual profile reported lower levels of  AWFC than those in the work profile (Cinamon & Rich, 2002a), actual levels of WFC have been found to be highest for working adults with families in the dual high profile (Cinamon & Rich, 2002b). Due to established AWFC, those who attribute high importance to both work and family roles may be mentally unprepared for high levels of actual WFC that sometimes accompany investment in a demanding career (Cinamon, 2010).

Similarly, AWFC may not align with experienced WFC upon entering a demanding career. For example, in a study of applicants for police officer positions in a Midwestern city neither applicants nor their families viewed policing as being high in WFC, despite substantial evidence indicating that WFC is a major difficulty for those in the policing profession (Ryan, Kriska, Bradley, & Joshua, 2001). Additionally, those with spouses and children did not view AWFC as different when compared to those without. Ryan et al. (2001) suggest that realistic views of difficult job aspects may be important for applicants, their families, and the organization, as hiring and turnover costs are likely to increase when individuals have low AWFC upon entering a demanding career and later experience greater WFC than was expected. Considering the importance of AWFC in the career planning of young adults and the demanding nature of careers in STEM, it is important to consider the possibility of a discrepancy between individuals' AWFC and experienced WFC upon entering the workforce and to examine the outcomes of such a discrepancy.

*AWFC and Gender.* For men, the fulfillment of a professional role in STEM is in line with traditional family obligations, but for women it is in opposition to traditional family

responsibilities (Hawks & Spade, 1998). Difficulty in balancing work and family responsibilities

is seen as a barrier for women entering technical fields (Morgan, 1992). While Shockley, Shen,

DeNunzio, Arvan, and Knudsen (2017) found in their recent meta-analysis that women and men

do not differ significantly in their perceived WFC, Cinamon (2006) found that women reported

higher levels than men of both AWIF and AFIW and lower self-efficacy in managing these

conflicts, though these gender differences were weak ($\eta^2 = .014$). It remains to be seen if these

differences will be consistent across samples, as the sample in the study consisted of unmarried

students in Israel who were largely (82%) Jewish. By examining AWFC and experienced WFC

in STEM undergraduates, we may have the opportunity to gain understanding of factors

contributing to the underrepresentation of women in STEM careers. The *motherhood penalty* is a

phrase often offered as a factor in the underrepresentation of women in STEM, as women in

STEM are more susceptible to biases due to their deviation from traditional gender norms, biases

that become more salient as women become mothers (Correll, Benard, & Paik, 2007). In

identifying obstacles in the pursuit of their careers, women in STEM often emphasize difficulty

in balancing work and family roles in demanding as a serious barrier to their success (Burke &

Mattis, 2007; Ferriman, Lubinski, & Benbow, 2009).

     Recently, in a longitudinal study following the career aspirations of 1,000 women from

the age of 18 to 25, higher desire for a family-flexible job was found to be the strongest predictor

women's decisions to shift away from male-dominated occupational fields (Frome, Alfeld,

Eccles, & Barber, 2006). It was a stronger predictor than both aspiring to a job with higher

occupational time demands and lower intrinsic value placed on physical science. In a study of

practicing physicians who are parents, women were found to be more likely to work fewer hours

than men and were more likely to work their ideal hours, with male physicians working almost

eight hours and women one hour more per week than their preferred number of hours (Grant, Simpson, Rong, & Peters-Golden, 1990). In a study of valedictorians, women expressed the expectation of future conflict between their work and family aspirations, affecting their college major and career choices, while men did not (Arnold, 1993). Additionally, two-thirds of the women valedictorians planned to reduce or interrupt their participation in the labor force to raise children and expressed less clear professional expectations, as college seniors, than valedictorian men. More female students than male students reported a lower ability to make firm career plans because of family aspirations. It is, however, important to note that women have been found to have lower levels of some forms of AWFC than men, and findings have been mixed regarding gender differences in AWFC (Westring & Ryan, 2011). Westring and Ryan (2011) emphasize the importance of considering AWFC in relation to both men and women. Myers and Major (2017) found that gender was found to be a significant moderator of the relationship between work-family balance self-efficacy and commitment to a STEM career. However, unexpectedly, belief in one's ability to achieve work-family balance was more strongly related to men's career commitment than to that of women. The authors suggest that women may be more resilient than men in pursuing STEM careers, leading to greater commitment to their chosen career regardless of having low levels of work-family balance self-efficacy. To understand the factors that may hold women back from continuing their pursuit of a STEM career, it is important that we better understand their expectations regarding the WFC that they will face in their planned careers relative to those of men.

*Hypothesis 1:* AWIF will be higher for women than it is for men.

*Hypothesis 2:* AFIW will be higher for women than it is for men.

**Work-Family Conflict and Work-Related Outcomes**

*WFC and Job Satisfaction.* The most widely studied correlate of WFC, *job satisfaction,* is conceptualized as an attitude concerning the extent to which individuals like or dislike their jobs (Spector, 1997). Globally, this is described as the overall affective reaction of an individual to his or her job. WFC has been found to be significantly negatively related to global job satisfaction ($r = -.30, p < .01$) as well as composite job satisfaction ($r = -.43, p < .01$; Bruck, Allen, & Spector, 2002). Concerning the directions of WFC, Kossek and Ozeki (1998) found that WIF and FIW both relate negatively to job satisfaction, though WIF was more strongly related to job satisfaction than FIW. In a recent meta-analysis of WFC, Amstad et al. (2011) found again, that WIF ($r_{wm} = -.26$) and FIW ($r_{wm} = -.13$) related negatively to work satisfaction (i.e., job satisfaction). The relationship between WIF and job satisfaction was stronger than that between FIW and job satisfaction as would be expected if WIF relates more strongly to work-related outcome variables. However, both WIF and FIW are considered in the present study, as both have demonstrated relationships with job satisfaction.

Job satisfaction was defined by Locke (1969) as the extent to which individual expectations concerning a job match the individual's actual job experiences. This underscores the relevance of considering expectations regarding WFC in predicting job satisfaction. In Faragher, Cass, and Cooper's (2005) meta-analysis of 485 studies, job satisfaction was found to associate strongly with health indicators such as burnout (corrected $r = 0.478$), self-esteem ($r = 0.429$), depression ($r = 0.428$), and anxiety ($r = 0.420$). Considering the importance of expectations in understanding job satisfaction, the impact of job satisfaction on individuals, and the relationship between WFC and job satisfaction, this study will endeavor to examine the role of individual expectations of WFC and the experience of job satisfaction as an organizational

newcomer. Specifically, effects are examined in the context of newcomers in STEM careers to gain understanding about factors contributing to STEM professionals' decisions to remain in or leave their STEM professions.

*Hypothesis 3a*: When AWIF and WIF are in agreement a linear relationship is proposed such that the higher the AWIF and WIF, the lower the job satisfaction.

*Hypothesis 3b*: When WIF is higher than AWIF, job satisfaction will be lower than when WIF is lower than AWIF.

*Research Question 1*: Will degree of disagreement between AWIF and WIF be related to lower levels of job satisfaction?

*Hypothesis 4a*: When AFIW and FIW are in agreement a linear relationship is proposed such that the higher the AFIW and FIW, the lower the job satisfaction.

*Hypothesis 4b*: When FIW is higher than AFIW, job satisfaction will be lower than when FIW is lower than AFIW.

*Research Question 2*: Will degree of disagreement between AFIW and FIW be related to lower levels of job satisfaction.

   *WFC and Organizational Commitment.* Generally, *organizational commitment* is defined as being loyal to the organization, identifying with the organization, and being involved in the organization (Mowday, Steers, & Porter, 1979). In their meta-analysis of WFC, Amstad et al. (2011) found that WIF related negatively to organizational commitment ($r_{wm} = -.17$), and FIW related negatively to organizational commitment as well ($r_{wm} = -.15$). The observed relationships between WFC and organizational commitment underscore the importance of examining this relationship within a STEM context.

Meyer and Allen (1991) found support for a conceptualization of organizational commitment with three components: *affective*, *continuance*, and *normative* commitment. Affective commitment is the individual's emotional attachment to, identification with, and involvement in the organization. Continuance commitment is defined as the individual's perceptions of costs associated with leaving the organization. Lastly, normative commitment is the individual's sense of obligation to continue to work within the organization. In another meta-analysis, Meyer, Stanley, Herscovitch, and Topolnytsky (2002) found that affective commitment correlated negatively with WFC ($\rho = -.20$), while continuance commitment correlated positively with WFC ($\rho = .24$). The authors suggest that continuance commitment may result in a feeling of being "trapped" in an organization, thus creating a source of conflict in the family role. The correlation between normative commitment and WFC was near zero ($\rho = -.04$). Normative commitment will not be included in this study, as the relationship between normative commitment and WFC is weak. The influence of congruence and discrepancy between AWFC and experienced WFC on continuance organizational commitment will not be examined despite the importance of continuance commitment in predicting higher levels of WFC. This is because it is unlikely that the feeling of being "trapped" associated with continuance commitment, while related to experienced WFC, is not clearly connected with anticipations of WFC. Considering the theoretical importance of affective organizational commitment in predicting lower levels of WFC, affective commitment is the focus of this study. Affective organizational commitment has been found to relate positively to job performance, providing further support for its' utility (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989).

*Hypothesis 5a*: When AWIF and WIF are in agreement a linear relationship is proposed such that the higher the AWIF and WIF, the lower the affective commitment.

*Hypothesis 5b*: When WIF is higher than AWIF, affective commitment will be lower than when WIF is lower than AWIF.

*Research Question 3*: Will degree of disagreement between AWIF and WIF be related to lower levels of affective commitment?

*Hypothesis 6a*: When AFIW and FIW are in agreement a linear relationship is proposed such that the higher the AFIW and FIW, the lower the affective commitment.

*Hypothesis 6b*: When FIW is higher than AFIW, affective commitment will be lower than when FIW is lower than AFIW.

*Research Question 4*: Will degree of disagreement between AFIW and FIW be related to lower levels of affective commitment?

   *WFC and Turnover Intentions.* WFC has also been shown consistently to positively relate to turnover intentions. In their meta-analysis of WFC, Amstad et al. (2011) found that WIF related positively to turnover intent ($r_{wm} = .21$), and FIW related positively to turnover intent as well ($r_{wm} = .17$). When employees experience WIF and FIW, it theoretically follows that they will begin to withdraw from work in order to eliminate the conflict (Greenhaus, Parasuraman, & Collins, 2001). In the context of STEM, this may manifest in leaving one's STEM profession in the interest of mitigating WIF and FIW. Job satisfaction, organizational commitment, and turnover intentions are related to each other in addition to their relationships to WFC (Shore & Martin, 1989). Therefore, it is essential that we include each of these work-related outcome variables in examining the influence of WFC in the context of a STEM career trajectory.

*Hypothesis 7a*: When AWIF and WIF are in agreement a linear relationship is proposed such that the higher the AWIF and WIF, the higher the turnover intent.

*Hypothesis 7*: When WIF is higher than AWIF, turnover intent will be higher than when WIF is lower than AWIF.

*Research Question 5*: Will degree of disagreement between AWIF and WIF be related to higher levels of turnover intent?

*Hypothesis 8a*: When AFIW and FIW are in agreement a linear relationship is proposed such that the higher the AFIW and FIW, the higher the turnover intent.

*Hypothesis 8b*: When FIW is higher than AFIW, turnover intent will be higher than when FIW is lower than AFIW.

*Research Question 6*: Will degree of disagreement between AFIW and FIW be related to higher levels of turnover intent?

**METHOD**

**Participants**

In total, 210 participants completed both Time 1 and Time 2 surveys and passed quality checks (male $n = 128$, female $n = 82$). Participants were all graduating seniors in STEM majors from a large public university in the southeastern United States and had a mean age of approximately 25 years ($SD = 5.62$). The sample was largely Caucasian (71.2%) and male (61%). The majority of participants were single (75.1% at Time 1 and 68.8% at Time 2) and childless (80.0% at Time 1 and 79.5% at Time 2).

**Procedure**

As met expectations are a comparison of an individual's pre-entry expectations and post-entry experiences, it is necessary to utilize a repeated measures design to achieve a within-person comparison of expectations at two points in time (Wanous et al., 1992). To account for individual experience in terms of met expectations, archival data was utilized which included measurement of the work-family conflict undergraduates in STEM expect to experience in the workforce prior to graduation and the work-family conflict experienced as organizational newcomers. As coping with discrepancies between expectations and reality usually occupies newcomers in the first 6 to 10 months on the job (Louis, 1983), newcomer experiences were evaluated in the first few months.

To test the hypothesized relationships, an archival database was used. The study from which these data were collected was reviewed and approved by Old Dominion University's Institutional Review Board (IRB) prior to the collection of data, and the present study was submitted to and approved by the university's IRB Human Subjects Review Committee prior to data analysis. Data were collected via a web-based survey as a part of a larger project examining

embeddedness in the college to work transition of STEM students. From Fall 2014 to Spring 2015, data were collected. Biochemistry, biology, chemistry, civil engineering, computer science, electrical and computer engineering, engineering technology, mechanical engineering, mathematics, modeling and simulation, ocean, earth, atmospheric science (i.e., oceanography, geology), and physics majors were contacted. The students were identified by Old Dominion University's Office of Institutional Research as graduating seniors, and all participants were emailed a direct link to Survey 1. The students were informed that the survey would require approximately 30 to 40 minutes of their time and that they would receive $25 as compensation. They were also informed of the risks and benefits of participation as well as the confidential nature of the study. Participants were sent Survey 2 three months into their post-graduation jobs. Quality checks were questions included in the two surveys to detect careless responding among participants (Meade & Craig, 2012). A sample quality check was "For quality purposes, please select strongly disagree."

**Measures**

*Work-family conflict.* WFC was assessed using two subscales from the 18-item measure developed by Carlson, Kacmar, and Williams (2000). The subscales included are the 9-item WIF scale and the 9-item FIW scale. In the present study, the 9-item WIF and FIW scales have demonstrated acceptable internal consistency with a Cronbach's alpha of .87 and .91 respectively. Participants rated the degree to which they agreed with each statement using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items for WIF include, "The problem-solving behaviors I use in my job are not effective in resolving problems at home" and "My work keeps me from my family activities more than I would like." Sample items for FIW include, "I have to miss work activities due to the amount of time I must

spend on family responsibilities" and "The behaviors that work for me at home do not seem to be effective at work." See Appendix A for a full list of measure items.

*Anticipated work-family conflict.* AWFC was assessed using Westring and Ryan's (2011) adaptation of the 18-item measure of WFC developed by Carlson et al. (2000). The adaptation applied future tense to reflect anticipation rather than experience of work-family conflict. Participants rated the degree to which they agreed with each statement using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items are, "Behavior that is effective and necessary for me at work will be counterproductive at home" and "My work will keep me from my family activities more than I would like." See Appendix B for a full list of measure items.

Coefficient alphas for the dimensions of AWIF and AFIW range from .73 to .83 and .73 to .92 respectively (Campbell, Campbell, & Watkins, 2015; Westring & Ryan, 2011). Test-retest reliabilities have revealed adequate stability for this measure over 3-5 weeks $r = .80$ for AWIF and $r = .70$ for AFIW. In the current study, the 9-item AWIF and AFIW scales have demonstrated acceptable internal consistency with a Cronbach's alpha of .85 and .90, respectively.

*Job satisfaction.* Job satisfaction was measured using three items adapted from the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale (MOAQ-JSS; Cammann, Fichman, Jenkins, & Klesh, 1983). Participants responded to the job satisfaction questions using a 7-point Likert scale anchored by 1 (*strongly disagree*) and 7 (*strongly agree*). The three items used to measure job satisfaction are, "All in all, I am satisfied with my job," "In general, I don't like my job," and "In general, I like working here."

In Bowling and Hammond's (2008) examination of the construct validity of the MOAQ-JSS, the scale that was adapted for this study, the mean sample-weighted internal consistency reliability was found to be .84 ($k = 79$, $N = 30{,}623$), and the mean sample-weighted test–retest reliability was .50 ($k = 4$, $N = 746$). Construct validity was supported in that the MOAQ-JSS was positively related to antecedents such as task significance ($\rho = .17$, $k = 3$, $N = 725$) and autonomy ($\rho = .35$, $k = 13$, $N = 2984$) and negatively related to antecedents such as work–family conflict ($\rho = .41$, $k = 3$, $N = 1204$) and role ambiguity ($\rho = .42$, $k = 14$, $N = 3060$). It was also found to correlate with 22 hypothesized correlates, including pay ($\rho = .43$, $k = 5$, $N = 1322$) and satisfaction with work itself ($\rho = .74$, $k = 2$, $N = 316$). In the current study, the adapted 3-item scale has demonstrated acceptable internal consistency with a Cronbach's alpha of .94.

*Affective commitment.* Affective commitment was measured using the full and validated 6-item subscale of Allen and Meyer's (1990) 18-item measure of organizational commitment. Participants rated their agreement with statements regarding affective commitment using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items for affective commitment are, "I really feel as if this organization's problems are my own," "I would be very happy to spend the rest of my career with this organization," and "This organization has a great deal of personal meaning for me." See Appendix D for a full list of measure items.

Meyer and Allen (1991) reported that internal consistency estimates ranged from .74 to 29 for the Affective Commitment Scale (ACS), .69 to .34 for the Continuance Commitment Scale (CCS), and .69 to .79 for the Normative Commitment Scale (NCS). Allen and Meyer (1990) found support for items from the ACS, CCS, and NCS loading on separate orthogonal factors which provides evidence for the hypothesized independence of the three constructs. Affective and normative commitment, however, were found to correlate significantly with one

another ($r = 22$) suggesting that these constructs are not entirely independent. Construct validity

was supported in that affective commitment was predicted by work experiences such as role

clarity and personal importance. (Randall, Fedor, & Longenecker, 1990). In the current study,

the 6-item scale has demonstrated acceptable internal consistency with a Cronbach's alpha of

.88.

*Turnover intent.* Turnover intent was assessed using two items adapted from  Schmitt,

Oswald, Friede, Imus, and Merritt's (2008) measure of student withdrawal intensions as well as

one item from Lent et al.'s (2003) measure. The two items from Schmitt et al. (2008) were found

to correlate ($r = .73$), and reliability was supported for the two-item construct (Cronbach α =

.84). In the current study, the combined 3-item turnover intent scale has demonstrated acceptable

internal consistency with a Cronbach's alpha of .90. Participants responded to all three items on

a seven-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The items

adapted from the measure of student withdrawal intentions were ''During the next 12 months, I

intend to search for an alternative role (another job, full-time student, etc.) to my present job''

and ''Within this year I intend to search for an alternative role to my present job.'' See Appendix

E for a full list of measure items.

*Gender.*  Participant gender was measured by using a single item, "What is your gender?"

Responses were coded 1 (*male*) or 2 (*female*).

*Control variables.* Number of children and marital status are two demographic variables

that are controlled for in the present study. A single item was used to measure number of

children: "How many children or dependents under the age of 18 are living at home with you?"

Responses were coded 1 (*none*) to 7 (*six or more*). A single item was also used to determine

marital status: "What is your marital status?" Responses for this item were coded 1 (*single*) and 2

(*married/living with a partner*).

**CHAPTER III**

**RESULTS**

**Preliminary Analyses**

Before conducting the main analyses, gathered data were cleaned and assessed for outliers. Missing data were assessed to determine if the data were missing at random using Little's Missing Completely at Random (MCAR) Test (Schafer, 1999), $p = .758$. A case-deletion strategy was not used, as case deletion assumes that the removed cases are a random subsample and can result in seriously biased estimates as well as a loss of power. The internal consistency reliability of all measures of independent and dependent variables exceeded minimum acceptable levels recommended by Nunnally and Bernstein (1994). See Table 1 for coefficient alphas.

Assumptions of multiple regression analysis were also assessed following best practices (Tabachnick & Fidell, 2007). Scatterplots were created depicting the relationship between residuals and predicted values with a loess line, and these plots suggested that the assumption of a linear relationship between the IV and DV was not violated for any of the predictor and outcome relationships. To facilitate the interpretation of results and eliminate non-essential multicollinearity, predictor variables, with the exception of controls, were centered by subtracting a constant from each score prior to creating the interaction term (Cohen, Cohen, West, & Aiken, 2003; Robinson & Schumacker, 2009). While there are multiple ways to center data depending on the research questions, in this case the predictors were centered at the midpoint of their scales, as recommended (Edwards, 1994). Tolerance and Variance Inflation Factors were satisfactory, suggesting that the assumption that the independent variables are not highly correlated with each other was not violated and multicollinearity was not an issue. Scatterplots of unstandardized predicted values plotted against unstandardized residuals did not

indicate that the assumption of homoscedasticity, constant variance of residuals, was violated.

Lastly, Q-Q plots revealed that the assumption of normality of residuals may have been violated

for both job satisfaction and turnover intent, but not for affective organizational commitment.

However, violations of this assumption affect standard errors of regression coefficients, not

regression coefficients themselves. Descriptive statistics, reliability estimates, and

intercorrelations were calculated for all study variables in IBM SPSS Statistics Version 24.

Table 1

*Means, Standard Deviations, and Intercorrelations of Variables*

| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. WIF | 2.42 | .76 | (.87) | | | | | | | | |
| 2. FIW | 1.99 | .67 | .55** | (.91) | | | | | | | |
| 3. AWIF | 2.57 | .70 | .18* | .31** | (.85) | | | | | | |
| 4. AFIW | 2.21 | .67 | .20** | .46** | -.68** | (.90) | | | | | |
| 5. Job Satisfaction | 5.44 | 1.59 | -.38** | -.28** | -.08 | -.05 | (.94) | | | | |
| 6. AC | 3.31 | .92 | -.38** | -.26** | -.05 | -.05 | .77** | (.88) | | | |
| 7. Turnover Intent | 3.06 | 1.45 | .19** | .11 | .03 | -.01 | -.61** | -.57** | (.90) | | |
| 8. Gender | 1.39 | .49 | -.01 | -.10 | -.20** | -.25** | -.08 | .01 | .11 | | |
| 9. Marital Status | 1.33 | .50 | -.07 | .03 | .05 | .04 | .05 | .11 | -.07 | -.16* | |
| 10. Number of Children | 1.41 | .97 | -.11 | -.01 | -.06 | .01 | .07 | .11 | -.02 | -.10 | .46** |

*Note:* N = 205. Values in parentheses represent coefficient alphas. WIF = Work Interference with Family; FIW = Family Interference with Work; AWIF = Anticipated Work Interference with Family; AFIW = Anticipated Family Interference with Work; AC = Affective Commitment, Gender coded = 1 = male, 2 = female); Marital Status coded 0 = single, 1 = married/living with a partner; Number of Children coded 1 = 0 to 7 = 6 or more. *$p < .05$. **$p < .01$.

**Main Analyses**

To examine Hypotheses 1, an independent-samples *t*-test was conducted to compare

mean gender differences in anticipated work interference with family (AWIF). The independent

*t*-test assumption of homogeneity of variance was tested and satisfied using Levene's Test of

Equality of Error Variances, $F(203) = 1.30$, $p = .256$. The male participants ($M = 2.68$, $SD = .72$)

and the female participants ($M = 2.40$, $SD = .64$) significantly differed on AWIF $t(203) = 2.86$, *p*

$= .005$. This indicates that males had higher AWIF than women, contrary to Hypothesis 1. To

examine Hypotheses 2, another independent-samples *t*-test was conducted to compare mean

gender differences in anticipated family interference with work (AFIW). The independent *t*-test assumption of homogeneity of variance was tested and satisfied using Levene's Test of Equality of Error Variances, $F(203) = .94$, $p = .333$. The male participants ($M = 2.34$, $SD = .66$) and the female participants ($M = 2.00$, $SD = .62$) significantly differed on AFIW, $t(203) = 3.70$, $p < .001$. This indicates that, contrary to Hypothesis 2, males had higher AFIW than women.

Hierarchical polynomial regression and response surface methodology was used to examine Hypotheses 3 a-b, 4 a-b, 5 a-b, 6 a-b, 7 a-b, and 8 a-b concerning the effects of congruence and direction of discrepancy between AWIF and work interference with family (WIF), as well as AFIW and family interference with work (FIW), on job satisfaction, affective commitment, and turnover intentions (Edwards, 2007; Shanock et al., 2010). Research questions 1-6 regarding degree of discrepancy were also examined using polynomial regression. Polynomial regression provides information about combinations of variables beyond that provided by traditional moderated regression (Shanock et al., 2010). Polynomial regression also has several advantages to the use of traditional difference scores. Polynomial regression does not confound the effects of the predictors on the outcome and allows us to retain interpretability of the independent effect of each predictor. Additionally, polynomial regression with response surface methodology provides a third dimension through which we can retain valuable information, better interpret results, and visualize the observed relationships.

The following assumptions specified by Edwards (2002) for conducting a polynomial regression analyses were met: (1) the two predictor variables were commensurate, meaning they represented the same conceptual domain, (2) the two predictor variables were measured on the same numeric scale. In order to maintain interpretability in the context of polynomial regression with response surface methodology, AWIF, AFIW, WIF, and FIW were centered around the

same value (Edwards, 1994). As suggested by Edwards (1994), the midpoint of the predictor

variables' shared scale was used as a center value. In this case three was subtracted from each

score, as AWFC and WFC were measured on a 5-point Likert scale with 1 = *strongly disagree*

and 5 = *strongly agree*.

Following the procedure outlined by Shanock et al. (2010), a quadratic equation was

estimated with the work-related outcome of interest as a dependent variable and the AWFC and

WFC variables of interest as the independent variables. Three new terms were computed: (1) the

square of the centered AWFC variable; (2) the cross-product of the centered AWFC and WFC

variable; and (3) the square of the centered WFC variable. This was done separately for AWIF

and AFIW. In order to provide a more accurate depiction of the effect of congruence on the

outcome variables, the addition of the squared term allows the model to be fitted to non-linear

data (Edwards & Cable, 2009). The quadratic equation follows the general form $Z = b_0 + b_{c1}C1 + b_{c2}C2 + b_{c3}C3 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e$, where Z is the outcome variable of interest

(job satisfaction, affective commitment, or turnover intent), C1, C2, and C3 are controls (gender,

marital status, and number of children), X and Y are the two fit components (AWFC and WFC,

respectively), $b_0$ is the y-intercept, and e is the error term. Next, separate polynomial regression

analyses were conducted by regressing each outcome variable (i.e., job satisfaction, affective

organizational commitment, and turnover intent) on the centered predictor variables (AWIF,

AFIW, WIF, and FIW), the product of the centered predictors, the variable of centered AWFC

squared, and the variable of centered WFC squared in IBM SPSS Statistics Version 24.

If the $R^2$, variance in the outcome explained by the regression equation, was determined

to be significantly different from zero (Edwards, 2002; Shanock et al., 2010), the results were

evaluated further to determine if the nature of the relationship was in line with predictions. The

significance slope of the line of perfect agreement, which indicates the relationship when AWFC and WFC are congruent; the curvature along the line of incongruence, which indicates influence of degree of discrepancy between AWFC and WFC on predicted values; and the slope of the line of incongruence, which indicates the influence of the direction of the discrepancy between AWFC and WFC, were assessed as each relates to the outcome variable of interest using the calculations provided by Shanock et al. (2010). From this information, the three-dimensional response surfaces corresponding to each polynomial regression equation were plotted in Microsoft Excel and interpreted. Specifically, agreement, degree of discrepancy, and direction of discrepancy between AWFC and WFC and work-related outcomes were interpreted in relation to the proposed hypotheses.

Table 2

*Polynomial Regression Analysis Depicting Relationship between Anticipated Work-Family Conflict and Experienced Work-Family Conflict Congruence and Work-Related Outcomes*

| | Predictor | Job Satisfaction | | Affective Commitment | | Turnover Intent | |
|---|---|---|---|---|---|---|---|
| | | b | (se) | b | (se) | b | (se) |
| Polynomial regression analysis | Constant | 4.995** | | 3.085** | | 3.174** | |
| | WIF | -1.067** | .206 | -.519** | .120 | .254 | .199 |
| | AWIF | .097 | .198 | .103 | .115 | -.140 | .191 |
| | WIF$^2$ | -.289* | .132 | -.113 | .077 | .093 | .127 |
| | WIFxAWIF | .002 | .196 | .129 | .114 | -.409* | .189 |
| | AWIF$^2$ | .181 | .158 | .035 | .092 | .050 | .153 |
| | $R^2$ | .167** | | .162** | | .060* | |
| Response surface analysis | $a_1$ | -.97* | .29 | -.42* | .17 | .11 | .28 |
| | $a_2$ | -.11 | .27 | .05 | .15 | -.27 | .26 |
| | $a_3$ | -1.16** | .28 | -.62* | .16 | .39 | .27 |
| | $a_4$ | -0.11 | .30 | -.21 | .17 | .55 | .29 |
| | | | | | | | |
| Polynomial regression analysis | Constant | 4.895** | | 3.034 | | 3.082 | |
| | FIW | -.737 | .382 | -.301 | .222 | -.149 | .357 |
| | AFIW | .215 | .274 | .032 | .160 | -.052 | .257 |
| | FIW$^2$ | -.043 | .198 | .034 | .115 | -.150 | .185 |
| | FIWxAFIW | .133 | .284 | .055 | .166 | -.230 | .266 |
| | AFIW$^2$ | -.096 | .179 | -.101 | .104 | .225 | .168 |
| | $R^2$ | .292* | | .279* | | .171 | |
| Response surface analysis | $a_1$ | -.52 | .40 | -.27 | .23 | -.20 | .38 |
| | $a_2$ | -.01 | .22 | -.01 | .13 | -.16 | .17 |
| | $a_3$ | -.95 | .53 | -.33 | .31 | -.10 | .49 |
| | $a_4$ | -.27 | .51 | -.12 | .30 | -.30 | .50 |

*Note.* $a_1 = (b_1 + b_2)$, where $b_1$ is beta coefficient for WIF and FIW respectively and $b_2$ is beta coefficient for AWIF and AFIW respectively. $a_2 = (b_3 + b_4 + b_5)$, where $b_3$ is beta coefficient for WIF squared and FIW squared respectively, $b_4$ is beta coefficient for the cross-product of WIF and AWIF above and the cross product of FIW and AFIW below, and $b_5$ is beta coefficient for AWIF and AFIW squared respectively. $a_3 = (b_1 - b_2)$. $a_2 = (b_3 - b_4 + b_5)$.
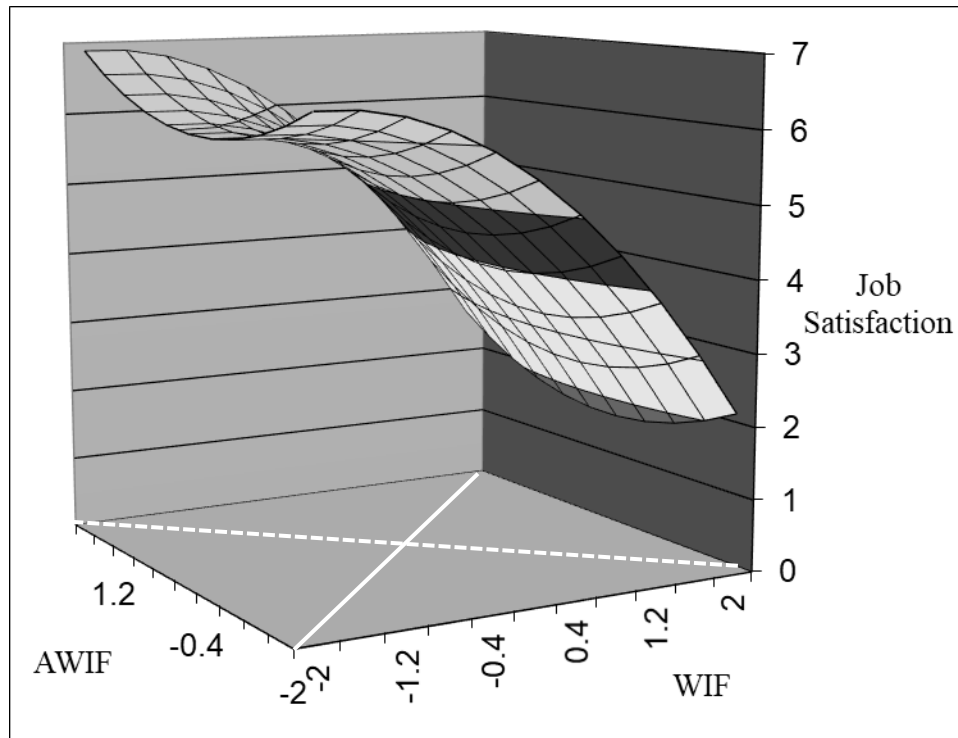*$p < .05$, **$p < .01$.

*Figure 1.* Congruence between anticipated work interference with family (AWIF) and experienced work interference with family (WIF) and job satisfaction.

*Note.* The solid line represents the line of congruence (X = Y). As one moves from the bottom left corner of the graph, where AWIF and WIF are both low to the far corner of the graph, where both AWIF WIF are high, job satisfaction decreases. The dashed, white line depicted represents the line of misfit (X = -Y). As one moves from the center of the graph, where AWIF and WIF are both equal to the left corner of the graph, where AWIF is high and WIF is low, there is little change in job satisfaction. By contrast, when one moves from the center of the graph to the right corner of the graph, where AWIF is low and experienced WIF is high, there is a negative relationship with job satisfaction.
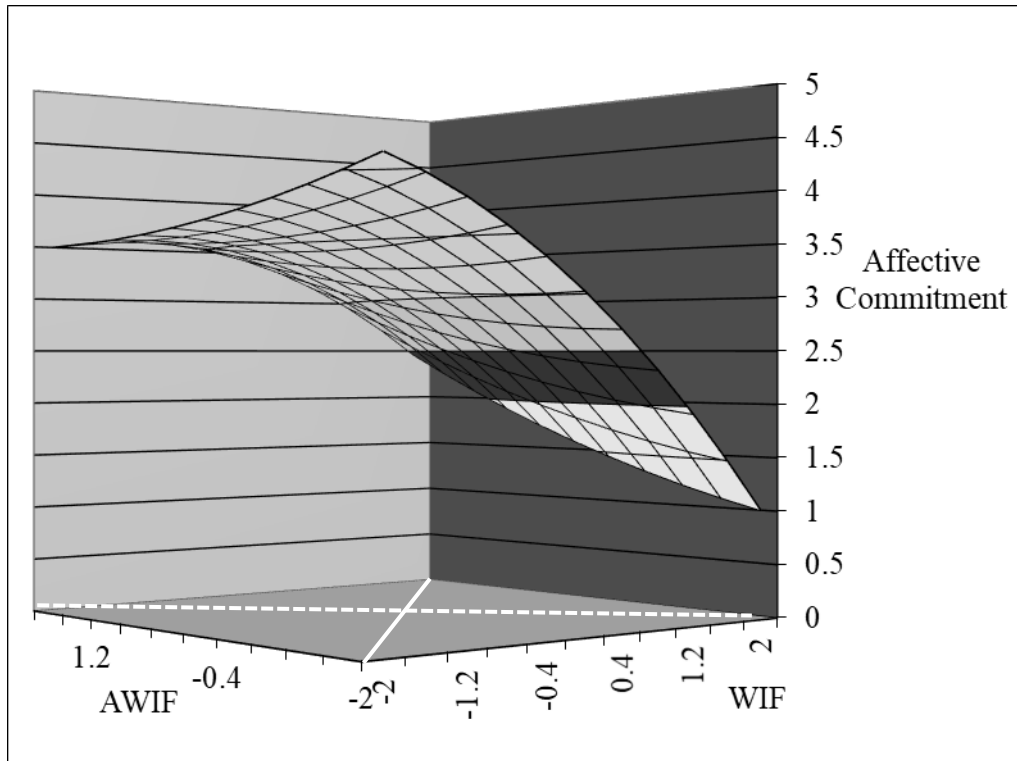
*Figure 2*. Congruence between anticipated work interference with family (AWIF) and experienced work interference with family (WIF) and affective commitment.

The surface test for AWIF and WIF predicting job satisfaction resulted in a significant negative $a_1$ value (see Table 2). This indicates that, in support of Hypothesis 3a, when AWIF and WIF were in agreement, job satisfaction decreased as AWIF and WIF increased. In Figure 1, following the line of congruence, the lowest level of job satisfaction is at the back corner of the graph where AWIF and WIF are both high and the highest level of job satisfaction is at the front of the graph where AWIF and WIF are both low. Similarly, the surface test for AWIF and WIF predicting AC resulted in a significant negative $a_1$ value (see Table 2). In support of Hypothesis 5a, this indicates that when AWIF and WIF were in agreement, AC decreased as AWIF and WIF increased. In Figure 2, following the line of congruence, the lowest level of AC is at the back corner of the graph where AWIF and WIF are both high, and the highest level of AC is at the front of the graph where AWIF and WIF are both low. Hypothesis 7a was not supported, as the

surface test for AWIF and WIF predicting turnover intent congruence did not result in a significant $a_1$ value (see Table 2). Hypothesis 4a, 6a, and 8a were not supported either, as the surface tests for AFIW and FIW predicting job satisfaction, affective commitment, and turnover intent did not result in significant $a_1$ values (see Table 2).

In examining Research Questions 1-6, the surface test for AWIF and WIF predicting job satisfaction, affective commitment, and turnover intent, did not result significant $a_4$ values (see Table 2). This suggests that the curvature along the line of incongruence is not significant, meaning that degree of discrepancy (i.e., incongruence in either direction) between AWIF and WIF does not significantly influence job satisfaction, affective commitment, and turnover intent. The same was found regarding the effect of degree of discrepancy between AFIW and FIW on job satisfaction, affective commitment, and turnover intent (see Table 2). It should be noted that all polynomial regression analyses were run controlling for gender, and results were not influenced. The polynomial regression analyses were also run controlling for marital status and number of children. Again, results did not differ between the models including controls and the model without.

Regarding direction of discrepancy, Hypotheses 3b was supported. A significant negative $a_3$ (see Table 2) indicated that job satisfaction was lower when the discrepancy was such that WIF was higher than AWIF than vice versa. Figure 1 depicts these results. In the right corner of the graph where WIF is high combined with low AWIF, job satisfaction is very low. In contrast, there was little change in job satisfaction levels when the discrepancy was such that WIF was lower than AWIF. The surface analysis resulted in a significant negative $a_3$ (see Table 2) for AWIF and WIF predicting AC. Therefore, Hypothesis 5b was also supported. This indicates that AC was lower when the discrepancy was such that WIF was higher than AWIF than vice versa.

Figure 2, depicts this relationship. The left corner of the graph where WIF is low combined with high AWIF, AC is still relatively high. In contrast, in the right corner of the graph where WIF is high combined with low AWIF, AC is relatively low. AC levels decreased less when the discrepancy was such that WIF was higher than AWIF, in comparison to WIF being lower than AWIF. Hypothesis 7b was not supported as the $a_4$ value (see Table 2), representing direction of discrepancy between AWIF and WIF, was not found to relate significantly to turnover intent. Regarding AFIW and FIW, the $a_4$ values (see Table 2) determined from the surface analysis, was not found to relate significantly to job satisfaction, affective commitment, or turnover intent, indicating that direction of discrepancy between AFIW and FIW did not significantly influence these outcomes. Thus, Hypotheses 4b, 6b, and 8b were not supported.

**Additional Analyses**

Considering the nonsignificant results found in the polynomial regression analysis of the congruence and discrepancy between AWIF and WIF predicting turnover intent, a follow-up analysis was conducted to determine if the relationship would be stronger between WIF and turnover intentions when AWIF was low. In other words, it was proposed that AWIF would moderate the positive relationship between WIF and turnover intentions. The interaction between AWIF and WIF in predicting turnover intentions was found to be significant ($B = -.403$, $p = .031$), suggesting that the relationship between WIF and turnover intent depended on the level of AWIF. This relationship was further examined using a test of simple slopes (see Figure 7).
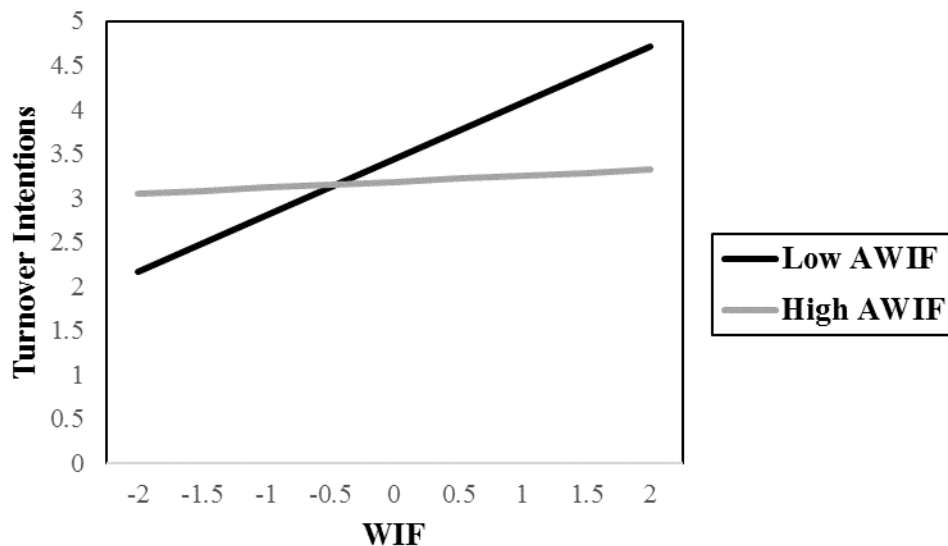
*Figure 3*. Simple slopes analysis of the relationship between WIF and turnover intent at low (+1SD) and high (-1SD) levels of AWIF.

*Note.* WIF and AWIF were centered on their scale midpoints.

The nature of the interaction for high and low AWIF is depicted in Figure 3. At low levels of AWIF, the relationship between WIF and turnover intentions was positive and statistically significant, simple slope = .636, $t = 3.438$, $p < .01$. At high levels of AWIF, the positive relationship between WIF and turnover intentions was positive and not statistically significant, simple slope = .067, $t = .356$, $p > .05$. Therefore, AWIF was found to moderate the relationship between WIF and turnover intentions such that WIF displayed a positive relationship with turnover intentions only when AWIF was low.

**CHAPTER IV**
**DISCUSSION**

This study makes several contributions to the literature regarding work-family interface. First, Porter and Steers's (1973) met expectations framework was applied to examine the effects of congruence and discrepancy between anticipated work family conflict (AWFC) and experienced work-family conflict (WFC) in predicting work-related outcomes, providing a more comprehensive understanding of the influence of WFC anticipations and later experiences. Specifically, the influence of congruence and discrepancy between AWFC and WFC were examined in relation to job satisfaction, affective organizational commitment, and turnover intent. Second, gender differences in AWFC were also explored, as it is important to understand the expectations of women regarding the WFC that they will face in their planned careers relative to men's AWFC, especially in the context of male-dominated STEM professions. Further, through a follow-up analysis, the role of AWIF as a moderator in the relationship between WIF and turnover intentions was examined. Though polynomial regression has been utilized in examining the congruence and discrepancy between pre-child expectations and post-child division of labor (Shockley & Allen, 2018), polynomial regression analysis has been relatively underutilized in the work-family literature. By utilizing polynomial regression with response surface methodology, specific hypotheses and research questions regarding congruence, discrepancy, and direction of discrepancy were examined while avoiding the numerous drawbacks associated with difference scores and direct retrospective measures of met expectations (Edwards, 1994, 2002, 2007; Edwards & Cable, 2009; Irving & Montes, 2009).

Hypotheses 1 and 2 proposed that women would experience higher levels of AWIF and AFIW than men. Contrary to expectations, men were found to have significantly higher levels of both AWIF and AFIW than women. Findings have been mixed regarding gender differences in

AWFC (Westring & Ryan, 2011). Though women have been found to report slightly higher levels than men of AWIF and AFIW and lower self-efficacy in managing WFC in prior research (Cinamon, 2006), it may be that women in STEM are different than women in fields that are not male-dominated. Myers and Major (2017) found that belief in ability to achieve work-family balance was more strongly related to men's career commitment than women's career commitment in STEM professions. The finding in the present study that men in STEM majors experience greater AWIF and AFIW, than women in these majors may be attributable to the resiliency that women build as they work towards a STEM profession (Myers & Major, 2017) or, possibly, the self-selection of more resilient women into these fields. The students who completed the first survey were at the end of their undergraduate careers, so women had ample time to build resiliency regarding concerns about future WFC. Additionally, it may be that the many difficulties women face going into male-dominated professions, such as the chilly climate, stereotypes, lack of mentorship opportunities (Fouad, 2011; Hughes, 2014; Schuster & Martiny, 2017) make their concerns regarding future WFC less prevalent. In contrast, for men, who encounter fewer barriers than women in male-dominated careers, WFC may be amongst their biggest concerns as they prepare to enter the workforce. In this line of thinking, it follows that they would report higher levels of AWFC than women.

As expected, congruence between AWIF and WIF was related to both job satisfaction and affective commitment. As AWIF and WIF increased in conjunction, job satisfaction and affective commitment decreased. This is in line with research suggesting that inflated expectations set individuals up for unfavorable affective responses to the job (Wanous et al., 1992). However, the expected relationship between congruence of AWIF and WIF and turnover intentions was not found to be significant. It may be that, as the participants were not only

newcomers to their job but also to their career, they had not had enough experience to lead them to feelings that would make them want to find another job, despite lower levels of affective commitment and job satisfaction. This relationship may be different in a sample with individuals who have more experience in their chosen career field. Hypotheses regarding the effect of congruence between FIW and AFIW on job satisfaction, organizational commitment, and turnover intentions were not supported. This may be because the relationships between FIW and work-related outcomes are weaker than the relationships between WIF and work-related outcomes (Amstad et al., 2011) and, therefore, do not significantly impact work-related outcomes.

While degree of discrepancy between AWIF and WIF in predicting job satisfaction, affective commitment, and turnover intent was not found to be significant in general, the direction of the discrepancy between AWIF and WIF was found to relate significantly to job satisfaction and affective commitment. This indicates that, while discrepancy in either direction may not influence these outcomes, job satisfaction and affective commitment levels suffered more when the discrepancy was such that experienced WIF was higher than AWIF, rather than vice versa. In contrast, direction of discrepancy between AWIF and WIF in predicting turnover intent was not found to be significant. While it is possible that turnover intent is truly uninfluenced by discrepancy and congruence between AWIF and WIF, these findings may be due to the lack of experience in participants, as they had just entered, not only the job, but also the workforce upon completing the second survey. Because the participants are organizational newcomers as well as career newcomers, they may still be gathering information and familiarizing themselves with their organizations and work. Additionally, they may be focused on gaining career experience. Therefore, it may premature for them to be seriously considering

leaving the organization. The relationships between discrepancy and degree of discrepancy between AFIW and FIW in predicting job satisfaction, affective commitment, and turnover intentions were not found to be significant. This, again, may be due to the weaker relationships between FIW and work-related outcomes that have been consistently observed (Amstad et al., 2011).

While congruence and degree of discrepancy between AWIF and WIF did not relate significantly to turnover intent, despite the significant findings for job satisfaction and affective commitment, additional analyses were conducted to determine if AWIF might moderate the relationship between WIF and turnover intent. The findings supported that, AWIF did, indeed, moderate the relationship between WIF and turnover intent such that the relationship between WIF and turnover intent was significant at low levels of AWIF but not at high levels of AWIF. AWIF emerged as an important moderator, suggesting that high levels of AWIF can buffer against the later effects of experienced WIF on turnover intent.

**Theoretical Implications**

Gender differences regarding AWIF and AFIW were observed, suggesting that, though women and men have not been found to differ in their experiences of WFC (Shockley et al., 2017), expectations of WFC may actually be higher for men than women. This expands our understanding of gender differences related to WFC. It may be worthwhile to consider specific questions related to gender regarding WFC, at least in terms of expectations. As the findings in this study suggest that higher levels of AWIF buffer the negative effects of WIF on work-related outcomes, it is of theoretical importance that women were found to experience lower levels of AWIF than men. It may be particularly important for women to develop realistic expectations of

AWIF in order to better prepare them for the difficulties related to work and family that they might experience in their chosen careers.

The findings of this study contribute to existing knowledge regarding the effects of WFC by demonstrating the role of expectations regarding WFC in influencing the relationship between experienced WFC and work-related outcomes for organizational newcomers. The results emphasize the important role of met expectations in influencing WIF in influencing work-related outcomes. Additionally, this study furthers our understanding of the importance of direction of discrepancy between expectations and reality. In this case, we observed that higher WFC than AWFC resulted in increased job satisfaction and affective commitment, while discrepancy in the other direction was not found to have the same influence on these outcomes.

Additionally, the results obtained in this study help to bridge the gap between WFC and career development literatures, as they suggest that the effects of WFC are not limited to one's experiences of WFC on the job. Expectations individuals form regarding the WIF they will experience on the job play a unique role in influencing the relationship between future experiences of WIF and job satisfaction, affective commitment, and turnover intent. This emphasizes the importance of considering the career progression of individuals, including their changing goals, values, and expectations, rather than limited snapshots of their current experiences.

**Practical Implications**

In terms of practical implications, the results of this study suggest the importance of providing an accurate picture of the level of WIF individuals are expected to encounter upon entering their chosen job or career. Realistic job previews have been found to be related to initial expectations and turnover (Phillips, 1998) and offer a potential method through which future

employees can form expectations of WIF commensurate with the WIF they will experience on the job. Additionally, universities should work to provide their students with information about the WIF they might face in their career of choice. This is of particular importance in STEM fields, where there is a national effort to increase participation (National Science Board, 2007). The results suggest that higher levels of AWIF are related to more positive outcomes than lower AWIF, suggesting that it may be particularly important to inform future employees of the harsher realities of WIF, as those who enter the workforce expecting these higher levels of AWIF are better prepared to deal with the WIF they encounter on the job. Conversely, those who experience lower levels of WIF than anticipated will not be negatively impacted. Overall, the findings presented suggest that it may be more important to provide students and future employees with a clear picture of the potential difficulties they will face in balancing their work and home roles than to minimize the WFC that they can expect to encounter on the job or in their career.

## Limitations

As discussed earlier, though several effects involving WIF and AWIF predicting work-related outcomes were found to be significant, those involving FIW and AFIW were not. Although the sample size for the study was large enough to detect small effects with sufficient power (Shieh, 2009), a potential limitation of this study is that the sample size may have been insufficient to detect the effects between FIW and AFIW in predicting work-related outcomes, as the effects of FIW on work-related outcomes have been found to be comparatively smaller than those of WIF (Amstad et al., 2011). Future research might reexamine the proposed relationship with a larger sample size. Additionally, effects observed in this study were likely to be a conservative estimate, considering that the sample population was largely unmarried (75.1%

single at Time 1 and 68.8% single at Time 2) and childless (80.0% at Time 1 and 79.5% at Time 2). The effects would likely be stronger in a sample with a larger proportion of married participants.

Additionally, this project was a part of a larger study in which the variables were chosen prior to the development of the proposed hypotheses. This limited the predictors, outcomes, and scales utilized in the analyses. For example, in the original study, AWIF, AFIW, WIF and FIW were measured with multi-dimensional scales, though these variables were examined as a whole, rather than through facet-level relationships. This might introduce measurement error, which can influence effects estimates. However, it is likely that undergraduate students who are largely unmarried and childless, are not able to differentiate between the facets of AWIF and AFIW. Lastly, common method bias may be of concern, as cross-sectional data were utilized. In a review of common method variance Spector (2006) suggested that common method variance might inflate correlations, though it may not be a universal inflator of correlations.

**Future Research Directions**

Considering the observed gender differences regarding AWIF and AFIW were obtained in the male dominated field of STEM, future research should examine gender differences in AWIF and AFIW in fields with more equal gender distributions or where women constitute the majority. It may be that in fields that are not male dominated women and men experience a similar amount of AWFC, while women in STEM fields develop a resiliency to concerns regarding WFC or self-select into STEM due to their resiliency (Myers & Major, 2017). This is an important topic to examine further, as fostering resiliency of women in STEM is something that might lead to the increased representation of women in these fields. Additionally, future intervention studies should examine the effects of providing women in STEM with realistic

previews of the WFC, and specifically WIF, they will be likely to encounter in their careers. More research could examine increased AWIF as a buffer as these women experience WIF in their careers, resulting in more favorable outcomes regarding job satisfaction, affective commitment, and turnover intent. Additionally, future research should explore the role of resiliency in influencing the AWFC of both men and women while they are in their undergraduate studies and how this may change as they progress in their studies and are more exposed to their chosen field of study.

Regarding the significant influence of congruence and direction of discrepancy between AWIF and WIF and the moderating role of AWIF on the relationship between WIF and turnover intentions, future research should examine the effects of realistic job previews regarding WFC in influencing job satisfaction, affective commitment, and turnover intent. The findings in the present study suggest the importance of examining the effects of providing realistic previews of WIF. Realistic previews of the WIF employees are likely to experience on the job may lead to higher levels of job satisfaction and affective commitment to the organization. Further, realistic previews of WIF may buffer the effects of WIF on turnover intent. Additionally, preparing students for the WFC, especially WIF, they will experience in their future careers may have favorable effects regarding work-related outcomes.

Though congruence, degree of discrepancy, and direction of discrepancy between AFIW and FIW were not found to influence the proposed work-related outcomes significantly in this study, it may be worthwhile to apply the unmet expectations framework to examine the relationship between AFIW and FIW congruence, degree of discrepancy, and direction of discrepancy and home-related outcomes. These effects would likely be stronger than those examined in this study considering that prior research indicates that WIF tends to affect work-

related outcomes more strongly, while FIW affects family-related outcomes more strongly

(Amstad et al., 2011). Some outcomes that would be interesting to examine are marital

satisfaction, family-satisfaction, family-related stress, family-related performance, and life

satisfaction. Additionally, it is important that future research examine the role of AWIF in

influencing the relationship between later experiences of WIF and FIW and other commonly

associated outcomes. For example, it would be interesting to examine the effects on OCB, work-

related stress, burnout, work-related performance, and employee health outcomes.

**Conclusion**

The present study applies the met expectations framework and newcomer socialization

theory to understand how the congruence and discrepancy between AWFC and WFC relate to

job satisfaction, affective commitment, and turnover intent. Findings indicate that congruence

and direction of discrepancy between AWIF and WIF are significantly related to job satisfaction

and affective commitment, though the same relationships were not found to be significant for

AFIW and FIW. Additionally, findings suggest that high AWIF mitigates the established

relationships between WIF and turnover intent. The presented findings indicate the importance

of helping students and job applicants to prepare themselves for the WIF that they are likely to

experience when they enter the workforce.

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# APPENDIX A

# WORK-FAMILY CONFLICT

*Work Interference with Family*
1. My work keeps me from my family activities more than I would like.
2. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.
3. I have to miss family activities due to the amount of time I must spend on work responsibilities.
4. When I get home from work I am often too frazzled to participate in family activities/responsibilities.
5. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
6. Due to all the pressures at work, sometimes when I get home I am too stressed to do the things I enjoy.
7. The problem-solving behaviors I use in my job are not effective in resolving problems at home.
8. Behavior that is effective and necessary for me at work would be counterproductive at home.
9. The behaviors that I perform that make me effective at work do not help me to be a better parent and spouse.

*Family Interference with Work*
10. The time I spend on family responsibilities often interfere with my work responsibilities.
11. The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.
12. I have to miss work activities due to the amount of time I must spend on family responsibilities.
13. Due to stress at home, I am often preoccupied with family matters at work.
14. Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.
15. Tension and anxiety from my family life often weakens my ability to do my job.
16. The behaviors that work for me at home do not seem to be effective at work.
17. Behavior that is effective and necessary for me at home would be counterproductive at work.
18. The problem-solving behavior that work for me at home does not seem to be as useful at work.

## APPENDIX B

## ANTICIPATED WORK-FAMILY CONFLICT

*Work Interference with Family*
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. I think that when I get home from work I will often be too frazzled to participate in family activities/responsibilities
5. I will often be so emotionally drained when I get home from work that it will prevent me from contributing to my family.
6. 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
7. The problem-solving behaviors I will use in my job will not be effective in resolving problems at home.
8. Behavior that is effective and necessary for me at work will be counterproductive at home.
9. 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

*Family Interference with Work*
10. The time I will spend on family responsibilities will often interfere with my work responsibilities.
11. 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.
12. I will have to miss work activities due to the amount of time I will have to spend on family responsibilities.
13. Due to stress at home, I will often be too preoccupied with family matters at work.
14. Because I will often be stressed from my family responsibilities, I will have a hard time concentrating on my work.
15. 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
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 C**

**JOB SATISFACTION**

1. All in all, I am satisfied with my job
2. In general, I don't like my job (REVERSE)
3. In general, I like working here

*Note.* Item 2 was reverse scored.

# APPENDIX D

## AFFECTIVE ORGANIZATIONAL COMMITMENT

1. I would be very happy to spend the rest of my career with this organization
2. I really feel as if this organization's problems are my own
3. I do not feel a strong sense of belonging to my organization (REVERSE)
4. I do not feel emotionally attached to this organization (REVERSE)
5. I do not feel like part of the family at my organization (REVERSE)
6. This organization has a great deal of personal meaning for me

*Note.* Items, 3, 4, and 5 were reverse scored.

**APPENDIX E**

**TURNOVER INTENTIONS**

1. There is a good chance that I will search for another job this year.
2. During the next 12 months, I intend to search for an alternative role (another job, full-time student, etc.) to my present job.
3. Within this year I intend to search for an alternative role to my present job.

**VITA**

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