The Effect of Feminization Across Occupations on Anticipated Work-Family Conflict

By Natalia Velenchenko

Abstract
Work-family conflict (WFC) arises when an individual’s work and family demands become incompatible, making participation in both difficult. It has been linked to a variety of negative consequences, such as increased job stress and decreased organizational commitment and job performance. The amount of WFC individuals expect before entering the workforce, called anticipated work-family conflict (AWFC), is important because it may influence their career and life choices. While researchers have found conflicting results regarding the effect of gender on anticipated work-family conflict, little to no research has been done to study the effect that feminization across occupations - the extent to which each occupation is typically dominated by female employees - has on anticipated work-family conflict levels. This study investigates the effect of feminization across occupations on AWFC levels for students at the University of Minnesota Medical School. Although it was not found that the level of feminization of occupation had a significant effect on AWFC, it was found that self-efficacy was a strong predictor of both time-based and strain-based AWFC. In addition, not having a father present during late childhood and adolescence was also a predictor of strain-based AWFC. Having a better understanding of what students’ expectations for work-family conflict are when they first begin their career path could help managers develop more effective policies that allow employees to have the best work-life balance possible within their careers.

Keywords: anticipated work-family conflict, AWFC, gender, feminization, masculinization, self-efficacy, family background

1. Introduction

Work-family conflict (WFC) occurs when an individual’s work and family demands are incompatible, making participation in both increasingly challenging (Cinamon, 2006). Time-based WFC occurs when there are competing time requirements across work and family roles, strain-based WFC occurs when there are pressures in one role affecting one’s performance in the other role, and behavior-based WFC occurs when there is an incompatibility among the necessary behaviors for both roles. WFC has been linked to negative consequences such as increased job stress and decreased organizational commitment and job performance. It is important to employees because it directly impacts their work-life balance, as well as their experience and satisfaction levels with their career (Nart & Batur, 2014). Managers should be particularly interested in WFC and how it is affected by various other factors, so it can be
reduced to improve employee commitment (Zheng & Wu, 2018).

Although a significant amount of research has been done on WFC and its impact on the individual and the organization, less has been done on the expectations individuals have for work-family conflict before entering the workforce. This anticipated work-family conflict (AWFC) is important because the level of WFC an individual expects in a given occupation may influence their career choice while they are still in school. In addition, the level of work-family conflict a student anticipates in a career may also influence how that individual pursues and establishes partnering relationships. Students are a great population to study for AWFC, because most students do not yet have family demands and therefore provide a “clean” measure of expectations relating to the level of WFC they anticipate in their future career.

Gender is a central dimension when investigating aspects of WFC. Women have traditionally held the role of caregiver; thus, it is likely that occupations that have been more accommodating for women and have provided better opportunities for work-life balance will attract more females and become “feminized” (Pleck, 1977). Therefore, AWFC may be lower for more feminized occupations. While labor markets can be characterized by gender segregation (e.g., teachers versus construction laborers), there is also segregation within occupations, such as medical doctors, as seen specifically in a selection of specialties in Table 1.

Of the existing research regarding AWFC, there are currently no published studies that investigate the effect the level of feminization of an occupation has on anticipated work-family conflict.

Table 1: Relationship between Gender and Specialty Among U.S. and Canadian Medical School Graduates who are Active Residents (A Selection)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>% Men</th>
<th>% Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurological Surgery</td>
<td>83%</td>
<td>17%</td>
<td>1,221</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>15%</td>
<td>85%</td>
<td>4,356</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>89%</td>
<td>11%</td>
<td>3,472</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>60%</td>
<td>74%</td>
<td>6,838</td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td>78%</td>
<td>22%</td>
<td>184</td>
</tr>
<tr>
<td>Urology</td>
<td>75%</td>
<td>25%</td>
<td>1,178</td>
</tr>
</tbody>
</table>

This paper addresses this gap by evaluating the differing levels of work-family conflict medical students going into a feminized occupation versus medical students going into a masculinized occupation anticipate having in their future work. It examines the following research questions: first, controlling for family background and self-efficacy, do individuals pursuing a more feminized occupation have expectations of lower work-family conflict than those pursuing a masculinized occupation? Second, is the difference in anticipated work-family conflict between feminized and masculinized occupations greater for female students than for male students? Analyzing anticipated work-family conflict levels within the same occupation allows for a more homogeneous sample in terms of abilities and interest as opposed to across occupations.

To test the hypotheses of this research, an online survey was distributed to students at the University of Minnesota Medical School and quantitative data was analyzed to find whether the results were significant. Although it was not found that the level of feminization of
occupation had a significant effect on AWFC, it was found that self-efficacy was a strong predictor of both time-based (e.g., when time demands associated with one’s work or family role limit the amount of time one can devote to the other role) and strain-based (e.g., when pressures in one role impair one’s performance in the other role) AWFC. In addition, not having a father present during late childhood and adolescence was also a predictor of strain-based AWFC.

The results of this study are of interest to medical students, managers in the health care industry, career counselors, and Organizational Behavior Professionals. Having a better understanding of student expectations for work-family conflict at the beginning of their career path could help managers develop more effective policies that allow employees to have the best work-life balance possible within their careers. The results regarding the relationship between self-efficacy and time-based and strain-based AWFC may have broader implications for other industries.

2. Literature Review

Upon examining previous research, three key variables were found to be studied most often regarding their effect on anticipated work-family conflict: gender, family background, and self-efficacy. It is important to understand the findings of past research related to anticipated work-family conflict and how they have contributed to the development of the research questions included in this study to show how this paper supplements current findings on this topic. Previous research has not considered a potentially important variables the level of feminization of the occupation an individual plans to work in upon graduation. While the three key variables discussed individual factors, this research studied a job-related feature, which is a unique contribution to research.

2.1 Past Research on the Effect of Gender on Anticipated Work-Family Conflict

Research on the effect of gender on anticipated work-family conflict has yielded contradictory findings in past studies, suggesting that there are other variables affecting AWFC levels. Bagraim and Harrison (2013) investigated the nature of anticipated work-family conflict among business students who intended to work and start a family. They distributed a self-report survey online to business students at a top South African university. AWFC was measured by adapting an eight-item measure of work-family conflict to the future tense and using a 5-point Likert scale. Bagraim and Harrison found that there was no significant difference in anticipated conflict between males and females. Coyle, Leer, Schroeder, and Fulcher (2015) found similar results in their research when they examined 121 undergraduate students at two different colleges in the southeastern United States. Again, they used a survey to collect their data, and they recruited participants through introductory psychology classes. Coyle et al. (2015) used an 8-item scale to assess AWFC, and responses were scored using a 4-point Likert scale; a t-test showed no significant difference in overall anticipated conflict between men and women.

Although these research studies have concluded that gender is not a significant predictor of AWFC, there are also numerous studies that show either men or women anticipate greater
work-family conflict compared to the opposite gender. Livingston and Burley (1991) assessed students from a university in Northern Louisiana. They assessed AWFC on a modified version of the Interrole Conflict Scale, a scale that quantifies the extent to which a person experiences pressures in one role that are incompatible with pressures that arise in another role, and found that men anticipated greater work-family conflict than women. Cinamon (2006), however, studying 358 students from two universities, found that women anticipated higher levels of work-family conflict. Because there have been inconsistencies in findings related to the effect of gender on AWFC, it appears that another factor, perhaps related to gender, may be a likely determinant of anticipated work-family conflict levels for students.

2.2 Past Research on the Effect of Family Background on Anticipated Work-Family Conflict

Several studies, including Cinamon (2006), have analyzed the effect of family background on AWFC. The first part of Cinamon’s questionnaire collected demographic information such as gender, age, religion, and more. Cinamon included a measure consisting of two items relating to parental sharing of family responsibilities during the participants’ late childhood and adolescence: one pertained to parents’ sharing of housework and the other pertained to the parents’ sharing of child care. There was a significant difference in AWFC between the two groups who reported different child care sharing models among their parents, but there were no significant differences between the two groups who reported different housework models among their parents. Due to these findings, it appears there is a significant relationship between the child care sharing model a student is exposed to during their late childhood and adolescence and later, their level of AWFC.

2.3 Past Research on the Effect of Self-Efficacy on Anticipated Work-Family Conflict

Self-efficacy, the belief in one’s ability to perform certain tasks, has been identified as an important variable for understanding career development (Cinamon, 2006). In Cinamon’s study (2006), eight items related to self-efficacy in being able to handle future work and family conflicts invited participants to rate their confidence from not at all confident (0) to very confident (9). Participants on two college campuses completed individual questionnaires voluntarily during their breaks. Cinamon found that there were negative correlations between AWFC related to self-efficacy in one’s ability to manage that conflict. Bagraim and Harrison (2013) used six questions to measure self-efficacy for managing future work-family conflict providing possible responses ranging from complete lack of confidence (0) to totally confident (9). Using a hierarchical multivariate regression model, they also found that self-efficacy was a significant predictor of AWFC. This signifies that self-efficacy in one’s ability to manage conflict does predict one’s anticipated work-family conflict level. However, one limitation of these research studies is that the measure of self-efficacy used is domain-specific, which may be inherently related to AWFC assessments. This opens the question of whether a general measure of self-efficacy will be predictive of AWFC. To ensure the relationship between self-efficacy and AWFC is valid, this research uses a more general measure of self-efficacy that does not relate to one’s confidence in their ability to handle work and family conflicts specifically.
Conclusion

Past research has made apparent that family background and self-efficacy appear to predict anticipated work-family conflict, but the effect of gender on anticipated work-family conflict is inconclusive. Contradictory evidence of the effect of gender may be due to other factors, such as work conditions. This thesis evaluates a previously unexplored dimension of work conditions, level of feminization of occupation, given that these conditions may affect access to policies useful in addressing WFC, like flexibility.

3. Hypothesis

To build upon past research regarding anticipated work-family conflict, the following two research questions were established:

**Question 1:** Does the level of feminization of the occupation an individual is pursuing affect their expectations of work-family conflict?

**Question 2:** Does the difference in anticipated work-family conflict between feminized and masculinized occupations vary for male and female students?

Because women have traditionally been responsible for most family work and caregiving, it can be inferred that the more women there are in an occupation, the more likely it is that the occupation has accommodations for and is compatible with caregiving (Pleck, 1977). Therefore, there will be less work-family conflict for individuals in these feminized occupations because these roles will allow individuals to have more control over balancing work and family demands and will, therefore, make participation in both work and family life less challenging. Expectations of the relationship between the level of feminization of an occupation and its accommodations are likely to be shared by those outside of the occupation, including students.

According to prior published research, family background and self-efficacy may affect work-family conflict levels, so these variables were controlled in this study (Cinamon, 2006).

**Hypothesis 1:** Controlling for family background and self-efficacy, individuals pursuing a more feminized occupation will have expectations of lower work-family conflict than those pursuing a masculinized occupation.

As women have traditionally been responsible for most family work and caregiving, it’s also possible that work-family conflict and anticipated work-family conflict will matter more to women. If women expect that they will experience a lower level of work-family conflict in a feminized occupation compared to a masculinized occupation, then their personal expectations will be more sensitive to the level of feminization of an occupation because they will recognize that it will be harder for them to fulfill their work and family roles in a masculinized occupation. On the other hand, because men have traditionally not been responsible for as much family work as women and will expect fewer household responsibilities, they will have a lower expectation of work-family conflict overall and will be less sensitive to the difference in accommodations stemming from the level of feminization of an occupation. Therefore, it can be hypothesized that:

**Hypothesis 2:** Controlling for family background and self-efficacy, the difference in anticipated work-family conflict between feminized and masculinized occupations...
occupations will be greater for female students than for male students.

4. Method

4.1 Data Collection

To test these hypotheses, a Qualtrics survey was constructed and distributed to medical students online through established school Facebook pages in August of 2017 (See Appendix). A monetary incentive was offered with the chance to win one of fifteen $20 Target gift cards for taking the survey so as many responses as possible could be received. The survey was closed after being completed by 103 respondents. This population was of interest due to the opportunity to assess individuals going into the medical industry at the same university (e.g., similarities in abilities and preferences) but within different occupations in the industry which vary in the extent to which they are feminized. This method of data collection was comparable to similar methods of past research regarding work-family conflict.

4.2 Measures

Below the measures are described, which are then reported in terms of descriptive statistics in Table 3.

Self-efficacy. To collect data relating to levels of self-efficacy, the survey asked students to rate their confidence in being able to handle a variety of conflict situations along a 10-point Likert scale ranging from not at all confident (0) to very confident (9) (e.g., “please rate your confidence in being able to fulfill all your responsibilities despite having a trying and demanding period in your life”). These items were adapted from Cinamon’s (2006) questionnaire measuring self-efficacy for the management of work-family conflict to be general statements, instead of measures of the participants’ confidence in being able to handle future work and family conflicts specifically. The self-efficacy index was calculated by finding the average value given by each respondent relating to the six statements measuring self-efficacy. The average value of the self-efficacy index was 6.73.

Anticipated work-family conflict. Statements from Carlson, Kacmar, & Williams’s (2000) work-family conflict questionnaire were converted into future tense to measure participants’ anticipated work-interfering-with-family conflict levels. The introduction of the questionnaire encouraged participants to think about the career they will have after their medical training when providing their responses to nine statements relating to anticipated work-family conflict on a 5-point Likert scale ranging from strongly disagree to strongly agree. There were three statements measuring time-based work-interfering-with-family conflict (e.g., “I expect that my work will keep me from my family activities more than I would like”), three statements measuring strain-based work-interfering-with-family conflict (e.g., “I expect that I will often be so emotionally drained when I get home from work that it will prevent me from contributing to my family”), and three statements measuring behavior-based work-interfering-with-family conflict (e.g., “I expect that the behavior that is effective and necessary for me at work will be counterproductive at home”). AWFC indexes were calculated based on the average values provided by each respondent for each of the subtypes of AWFC as well as for anticipated work-family conflict “combined”, which includes values from all nine questions relating to AWFC. The average
value of the combined value of AWFC was 2.91. Of the three subtypes of WFC, students anticipated the most time-based work-family conflict and the least behavior-based work-family conflict. The average for the time-based AWFC index was 3.77, and the average for the behavior-based AWFC index was 2.15. Values for anticipated strain-based work-family conflict fell in between the values for time-based and behavior-based anticipated work-family conflict.

Family background. To control for family background, the survey asked students what their mother’s and father’s occupational statuses were during their late childhood and adolescence. Options included “mother/father not present”, “mother/father not working for pay”, “mother/father working part time for pay”, and “mother/father working full time for pay”. Responses for the questions relating to family background were translated into indicator variables, which took the value of 0 or 1 to indicate the absence or presence of each categorical type. For example, students who responded that their mother worked part time were given the value 1 for “Mother Worked Part Time” and the value 0 for “Mother Worked Full Time”. Students who responded that their mother was not working during their late childhood and adolescence were given the value 0 for both “Mother Worked Part Time” and “Mother Worked Full Time”. There were no students who responded that their mother was not present. The same process was done for the questions relating to fathers. The average value was highest for “Father Worked Full Time” (0.92), indicating that the majority of survey respondent’s fathers worked full time during their late childhood and adolescence. The next highest average value was for “Mother Worked Full Time”, at 0.51, and the lowest average values were for “Father Worked Part Time” and “Father Not Present” at 0.02.

Gender role attitudes. Students were asked how they believe parents should share housework and child care, assuming heterosexual partnerships, and were given the options to respond with “most of the work should be done by the mother”, “most of the work should be done by the father”, or “the work should be divided equally between parents”. Responses for the questions relating to gender role attitudes were transferred into indicator variables which took the value of 0 or 1 to indicate the absence or presence of each categorical type. For example, students who responded that they believe most housework should be done by the mother were given the value 1 for “Most Housework Done by Mother” and the value 0 for “Most Housework Done by Father”. Students who responded that they believe most housework should be done by the father were given the value 1 for “Most Housework Done by Father” and the value 0 for “Most Housework Done by Mother”. Students who responded that the work should be divided equally between parents were given the value 0 for both “Most Housework Done by Mother” and “Most Housework Done by Father”. The same process was done for questions relating to child care.

Other than the variable “Most Housework Done by Father”, the average and standard deviations for the three other variables relating to gender role attitudes were similar, with “Most Housework Done by Mother” having the highest average at 0.04 and “Most Child Care Done by Father” having the lowest average at 0.01. Overall, the majority of students believed that both housework and child care should be divided
equally between parents.

Demographic. The survey collected information from respondents including age, gender, marital status, and if they have children and/or expect to have (more) children in the future.

Of the 103 survey respondents, 56 were female and 47 were male. The gender responses were transferred into indicator variables which took the value of 0 for males and 1 for females. The average of this indicator variable was 0.54, indicating that 54% of respondents were females.

Feminization. Because the first four years of medical school encompasses a broad range of subjects and specialties, the survey asked students to provide their year in medical school and their specific future desired area of study within medicine. This was used to find the value for the level of feminization of the occupation the student pursues. The values used for “Feminization” are the percent of female U.S. and Canadian Medical School Graduates who were active residents in 2015-2016 in the medical occupation chosen as the “Desired Area of Study” by each student, according to the Association of American Medical Colleges, as seen in Table 2.

There were five survey respondents who put “Other” as their “Desired Area of Study” in medicine, so an average value of the percent of female U.S. and Canadian Medical School Graduates who were active residents in 2015-2016 as opposed to males for these five respondents’ value of “Feminization” was used. The results were not sensitive to dropping these individuals from the study. The average value was 0.48, indicating a fairly even spread of feminized and masculinized occupations chosen.

4.3 Descriptive Statistics

The sample consists of 103 students, 54% of which are female, in years 1-4 at the University of Minnesota Medical School. The majority of respondents, 79%, are between the ages of 22-26, and 84% of respondents listed their marital status as “single”. Only six survey participants have children. Descriptive statistics were generated to evaluate the basic characteristics of the survey data and to provide a summary of the sample. Averages, standard deviations, minimums, and maximums for each of the variables measured are shown in Table 3.

<table>
<thead>
<tr>
<th>U.S. and Canadian Medical School Graduates</th>
<th>University of Minnesota Medical School Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Men</td>
<td>% Women</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Allergy and Immunology</td>
<td>31%</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>64%</td>
</tr>
<tr>
<td>Colon and Rectal Surgery</td>
<td>60%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>56%</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>63%</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>42%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>55%</td>
</tr>
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<td>Medical Genetics</td>
<td>26%</td>
</tr>
<tr>
<td>Neurological Surgery</td>
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</tr>
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<td>Neurology</td>
<td>54%</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>76%</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>15%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>58%</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>85%</td>
</tr>
<tr>
<td>Oncology</td>
<td>62%</td>
</tr>
<tr>
<td>Pain Medicine</td>
<td>76%</td>
</tr>
<tr>
<td>Pathology: Anatomic and Clinical</td>
<td>52%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>25%</td>
</tr>
<tr>
<td>Physical Medicine and Rehabilitation</td>
<td>61%</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>73%</td>
</tr>
<tr>
<td>Preventive Medicine</td>
<td>53%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>45%</td>
</tr>
<tr>
<td>Radiology: Diagnostic</td>
<td>76%</td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td>72%</td>
</tr>
<tr>
<td>Surgery: General</td>
<td>59%</td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td>78%</td>
</tr>
<tr>
<td>Urology</td>
<td>75%</td>
</tr>
<tr>
<td>Vascular Surgery: Integrated</td>
<td>59%</td>
</tr>
<tr>
<td>Other</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>53%</td>
</tr>
</tbody>
</table>

Table 2: Relationship Between Gender and Specialty Among U.S. and Canadian Medical School Graduates who are Active Residents and University of MN Medical School Students
5. Results

To test both hypotheses, multivariate linear regression was conducted to determine which independent variables included had a significant relationship with the dependent variable of anticipated work-family conflict. The method of ordinary least squares was used to estimate the unknown parameters in these linear regression models. The results of the multivariate linear regressions can be seen in Tables 4 and 5, which are split in columns by dimension of AWFC. Combined AWFC, which is the average of all AWFC conflict scores for each individual, is followed by time-, strain-, and behavior-based anticipated work-family conflict scores. Full-time work is the comparison group for both "Mother Worked Part Time" and "Father Worked Part Time".

For each variable included in the tables, the corresponding coefficients are listed in the first row, with standard errors listed in the second row for that specific variable. For example, in Table 4, the coefficient of feminization for combined anticipated work-family conflict was 0.214, and the standard error was 0.283. A "*" next to a coefficient indicates a corresponding p-value of <0.02, while "**" next to a coefficient indicates a corresponding p-value of <0.01.

### Table 4: Hypothesis 1 Results

Table 4 shows the results of the multivariate linear regression testing Hypothesis 1 which proposed that, controlling for family background and self-efficacy, individuals pursuing a more feminized occupation will have expectations of lower work-family conflict than those pursuing a masculinized occupation. “Feminization” was never a significant predictor of anticipated work-family conflict; therefore, Hypothesis 1 is not supported by the findings.

### Table 4: Hypothesis 1 Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy Index</td>
<td>6.73</td>
<td>1.49</td>
<td>1.83</td>
<td>10.00</td>
</tr>
<tr>
<td>AWFC Index - Combined</td>
<td>2.91</td>
<td>0.51</td>
<td>1.44</td>
<td>4.22</td>
</tr>
<tr>
<td>AWFC Index - Time</td>
<td>3.77</td>
<td>0.68</td>
<td>2.00</td>
<td>5.00</td>
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<tr>
<td>AWFC Index - Strain</td>
<td>2.62</td>
<td>0.63</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>AWFC Index - Behavior</td>
<td>2.15</td>
<td>0.76</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Mother Worked Part Time</td>
<td>0.22</td>
<td>0.42</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Mother Worked Full Time</td>
<td>0.31</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Father Worked Part Time</td>
<td>0.02</td>
<td>0.14</td>
<td>0.00</td>
<td>1.00</td>
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<tr>
<td>Father Worked Full Time</td>
<td>0.92</td>
<td>0.27</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Father Not Present</td>
<td>0.02</td>
<td>0.14</td>
<td>0.00</td>
<td>1.00</td>
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<td>Most Homework Done by Mother</td>
<td>0.04</td>
<td>0.19</td>
<td>0.00</td>
<td>1.00</td>
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<tr>
<td>Most Homework Done by Father</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Most Child Care Done by Mother</td>
<td>0.01</td>
<td>0.14</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Most Child Care Done by Father</td>
<td>0.01</td>
<td>0.10</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Female</td>
<td>0.54</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
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<tr>
<td>Feminization</td>
<td>0.48</td>
<td>0.18</td>
<td>0.15</td>
<td>0.85</td>
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</table>

### 5.1 Hypotheses 1 Results

The results of the multivariate linear regression testing Hypothesis 1 which proposed that, controlling for family background and self-efficacy, the difference in anticipated work-family conflict between feminized and masculinized occupations will be greater for female students than for male students, can be seen in Table 5. To test hypothesis 2, an interaction term was included called “female*feminization” which is the variable “Feminization” multiplied by the indicator variable “Female”, for which females were given a value of 1 and males were given a value of 0. “Female*feminization” was never a significant predictor of anticipated work-family conflict;
therefore, Hypothesis 2 is not supported by the findings.

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Time</th>
<th>Strain</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Intercept</td>
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<td>3.614</td>
<td>4.828</td>
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<td>0.208</td>
<td>0.196</td>
<td>0.437</td>
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<td>0.070</td>
<td>0.522</td>
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<td>Female *Feminization</td>
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<td>0.087</td>
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<td>-0.735</td>
<td>-0.251</td>
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Table 5: Hypothesis 2 Results

4.3 Control Variables

Although both hypotheses were not supported by the data, it was found that self-efficacy was a strong predictor of both time-based and strain-based anticipated work-family conflict, and survey respondents who had a higher level of self-efficacy had a lower level of combined anticipated work-family conflict. However, self-efficacy was not a predictor of behavior-based anticipated work-family conflict. In particular, an increase of one point in self-efficacy index is significantly associated with a 0.164 decrease in the combined anticipated work-family conflict index. This is equivalent to 32% of the standard deviation of the combined AWFC index (See Table 4).

For time-based anticipated work-family conflict specifically, a one point increase in self-efficacy index is significantly associated with a 0.148 decrease in the time-based anticipated work-family conflict index, which is equivalent to 22% of the standard deviation of the time-based AWFC index. For strain-based anticipated work-family conflict, a one point increase in self-efficacy index is significantly associated with a 0.251 decrease in the strain-based anticipated work-family conflict index, which is equivalent to 30% of the standard deviation of the strain-based AWFC index.

Not having a father present during late childhood and adolescence was also a predictor of strain-based anticipated work-family conflict, and survey respondents who did not have a father present during late childhood and adolescence had a lower level of anticipated work-family conflict across all dimensions. A father not present relative to a father working full-time is predicted to decrease combined anticipated work-family conflict by 0.903, which is equivalent to 177% of the standard deviation of the combined AWFC index. A father not present relative to a father working full-time is predicted to decrease strain-based anticipated work-family conflict by 1.21, which is equivalent to 146% of the standard deviation of the strain-based AWFC index.

6. Discussion

The primary objective of this study was to examine the relationship between the level of feminization of an occupation and their anticipated work-family conflict level. Although a relatively homogenous group of individuals was examined, and, therefore, controlled for ability and investment in human capital, it was not found that the level of feminization of occupation affects AWFC. Instead, for example, if teachers (feminized occupation) and construction laborers (masculinized occupation) would have been compared, the relationship between the level of feminization of occupation and some outcome could have been due a lot more to skills, motivations, abilities, and more. While it was found that level of feminization is not a significant predictor of anticipated work-family conflict, and thus neither hypothesis was supported,
some interesting patterns in the data were found.

6.1 Findings Relating to Levels of Anticipated Work-Family Conflict

University of Minnesota Medical School students who participated in this study anticipated significantly more time-based work-family conflict on average compared to strain-based and behavior-based work-family conflict (p-values < 0.01), and they anticipated significantly more strain-based work-family conflict than behavior-based work-family conflict (p-value < 0.02). It would be interesting to see in future research if students consistently anticipate more time-based work-family conflict in future occupations across other industries or if this finding is specific to the medical industry.

6.2 Findings Relating to Self-Efficacy

In Cinamon’s research (2006) on anticipated work-family conflict discussed earlier, she found that self-efficacy in one’s ability to manage work and family conflict was negatively correlated to AWFC. Bagraim and Harrison (2013) also found that self-efficacy to manage work-family conflict was an important predictor of anticipated work-family conflict. Although neither Cinamon (2006) nor Bagraim and Harrison (2013) split anticipated work-family conflict into its three subtypes of time-based, strain-based, and behavior-based AWFC in their research, their findings signified that self-efficacy in one’s ability to manage conflict is a predictor of AWFC. However, in previous studies, the way self-efficacy was measured as one’s confidence in their ability to handle work and family conflicts specifically seemed confounded with anticipated work-family conflict. Making the measure of self-efficacy more general in this study made it possible to look at the variable across all domains (e.g., ability to overcome conflicting demands). Because self-efficacy was still found to be related to AWFC, this contributes to current research by showing that self-efficacy, even more broadly measured, is predictive of AWFC.

Findings on self-efficacy were also consistent with past work in that this research found that survey respondents with higher levels of self-efficacy had significantly lower levels of anticipated work-family conflict across all dimensions, when time-based, strain-based, and behavior-based anticipated work-family conflict were combined into one value. However, when anticipated work-family conflict was split into time-based, strain-based, and behavior-based values, it was found that only time-based and strain-based anticipated work-family conflict were predicted by values of self-efficacy, whereas behavior-based AWFC was not.

Why might this be? One possible explanation of why self-efficacy was not a predictor of behavior-based AWFC could be that behavior-based AWFC is harder for students to imagine and predict before they are actually in the occupation. For example, one of the three statements relating to behavior-based AWFC in the survey was “I expect that the problem-solving behaviors I will use in my job will not be effective in resolving problems at home”. Perhaps it is more difficult for students to imagine what problem-solving behaviors they will be using in their job and at home in advance compared to imaging the amount of time they will be devoting to work and family life, such as one of the statements relating to time-based AWFC in the survey assessed: “I expect that my work will keep me from my family activities more than I would like”. In addition to having difficulty predicting behavior-based WFC, it could also mean that students simply do not expect any carryover between the behaviors necessary...
in future work and family life. Overall, these findings add to current research, providing additional evidence that higher levels of self-efficacy correspond to lower levels of anticipated work-family conflict. They also show that more research is necessary to fully understand the differing relationships between self-efficacy and the three types of work-family conflict, and specifically, as to why self-efficacy did not significantly predict behavior-based work-family conflict in this research.

6.3 Findings Relating to Family Background

In Cinamon’s research (2006) on anticipated work-family conflict, she also analyzed the effect of family background on anticipated work-family conflict by measuring two items related to parental sharing of family responsibilities during the participants’ late childhood and adolescence. One pertained to parents’ sharing of housework and the other pertained to the parents’ sharing of child care. There was a significant difference in AWFC between the two groups who reported different child care sharing models among their parents, but there were no significant differences between the two groups who reported different housework models among their parents. Respondents who had been exposed to a model of sharing child care in which the work was divided equally between their parents anticipated significantly lower levels of work-interfering-with-family conflict compared to those who were exposed to a model of sharing child care in which most of the work was done by the mother.

Instead of measuring and controlling for family background the same way as Cinamon (2006), this study’s respondents were asked what their mother’s and father’s occupational statuses were during their late childhood and adolescence. It was found that not having a father present during late childhood and adolescence was a predictor of strain-based AWFC, and survey respondents who did not have a father present during late childhood and adolescence had a lower level of anticipated work-family conflict across all dimensions.

It is interesting that the two survey respondents who did not have a father present during late childhood and adolescence had a significantly lower level of anticipated work-family conflict across all dimensions. This particular finding was not expected and warrants further research due to the small sample size and variety of possible explanations. One possible explanation as to why not having a father present during late childhood and adolescence corresponds to a lower level of AWFC could be that students in this situation learned better coping methods and have seen their mother be successful taking on the majority of their family’s work and family responsibilities, so they therefore believe they will be able to do the same. They also simply could have had unrealistic expectations of their future work-family conflict.

In addition to asking these questions on family background, the same two items Cinamon (2006) used to measure the effect of family background on anticipated work-family conflict were included in this research as general questions instead of as questions on the participants’ backgrounds. For example, whereas the participants in Cinamon’s research (2006) could choose “most of the work was done by my mother”, “most of the work was done by my father”, or “the work was divided equally between my parents” for two questions relating to parents’ sharing of housework and child care, students who responded to this
study’s survey were asked “how do you believe parents should share housework?” and “how do you believe parents should share child care?” and could respond with “most of the work should be done by the mother”, “most of the work should be done by the father”, or “the work should be divided equally between parents”.

For the question “how do you believe parents should share housework?”, only 4% of respondents (four individuals), answered that “most of the work should be done by the mother, while the other 96% of respondents answered that “the work should be divided equally between parents”. For the question “how do you believe parents should share child care?”, 1% of respondents (1 individual) answered that “most of the work should be done by the father”, 2% answered that “most of the work should be done by the mother”, and the other 97% answered that “the work should be divided equally between parents”. The clear majority of survey respondents believe the responsibilities of housework and child care should be divided equally among parents.

This egalitarian attitude towards parental responsibilities, opposed to the traditional attitude towards parental responsibilities in which the mother would be responsible for the majority of housework and child care, may be one explanation as to why Hypothesis 2 was not supported in this study. Perhaps this hypothesis was not supported because the majority of both female and male survey participants expect shared responsibilities among parents and therefore female students are not as sensitive to the level of feminization of the occupation they hope to work in as expected.

### 6.4 Strengths and Limitations

This survey methodology allowed for gaining a sizeable number of participants pursuing occupations represented by varying percentages of females, which was necessary to study the effect of level of feminization of occupation on anticipated work-family conflict; however, it is recognized that the main limitations of this research are the sample size and background of the students. While the results of this study can provide a point of reference for future research, it is important to recognize the results may not be highly generalizable as all survey respondents were medical school students and are not representative of the general population. There is also no evidence of cause and effect relationship with individual surveys. Although higher levels of self-efficacy were found to be linked to lower levels of AWFC, this correlation does not necessarily mean that students expect less work-family conflict due to their higher levels of self-efficacy.

There is also always the chance that response bias will be present in survey responses. For example, this study was only able to take the first 103 survey responses, so it could have missed out on responses from a portion of the population who would have responded at a later time. Finally, because feminization of an occupation relates to the process of an occupation becoming feminized over time, and is therefore not a static state, there could be misalignment between measures. This research looked at a single measure that does not capture how feminization might be changing over time for each occupation. It’s possible that occupations that have the same level of feminization in 2016 could be on different trajectories, which could create a mismatch between students’ expectations and the current feminized status of the occupation.

### 6.5 Implications and Future Research

Although it was not found that perceptions
WFC are related to the level of feminization of an occupation, they are related to one’s own self-efficacy. To the extent that AWFC is a relevant driver of career decisions, it is important for managers and career counselors to emphasize how an individual could mitigate and cope with AWFC through self-efficacy. Future research could therefore include studying the extent to which individuals are actually able to cope with WFC by improving their self-efficacy. Future researchers will also want to better understand the effect of self-efficacy on time-based and strain-based anticipated work-family conflict, and assess whether self-efficacy can influence behavior-based anticipated work-family conflict in other industries or occupations.

In addition, while it was found that not having a father present during late childhood and adolescence had a strong significant effect on AWFC, it is important to note that only two students in this study grew up under these conditions. Future researchers will also want to better understand the impact of household roles when individuals are growing up and what drives this significant effect, particularly on strain-based AWFC.

One other possible area to explore in the future is the expected source of conflict. WFC is bi-directional, meaning there can be work-interfering-with-family conflict (when work experiences interfere with family life) and family-interfering-with-work conflict (vice versa); within these two categories, there are the three subtypes of conflict including time-based, strain-based, and behavior-based. It may be of interest to see the effect of gender, self-efficacy, and family background on expectations for these different, specific sources of conflict as well. Follow-up research could also include studying whether there actually are significant differences in the work-family conflict experienced by individuals in a feminized occupation versus individuals in a masculinized occupation to see whether differing expectations would be valid. It would also be interesting to compare anticipations of work-family conflict to actual work-family conflict once students begin working in the occupations they are now pursuing, as level of feminization of occupation could matter for actual WFC once students begin their full-time roles.

7. Conclusion

The information discovered in this study provides insight into the effects of self-efficacy, family background, and level of feminization of an occupation on anticipated work-family conflict. It is important for managers to have an understanding of work-family conflict due to both its negative consequences such as increased job stress and decreased organizational commitment and job performance, and its potential to shape applicants’ perceptions around career choice before entering the workforce. Having a better understanding of what students’ expectations for work-family conflict is before beginning their career path should help managers develop more effective policies that allow employees to have the best work-life balance possible within their careers.
Appendix: Thesis Survey

Professional School Year:
• 1st year
• 2nd year
• 3rd year
• 4th year
• 5th year +

Future Desired Area of Study:
• Allergy and Immunology
• Anesthesiology
• Colon and Rectal Surgery
• Dermatology
• Emergency Medicine
• Family Medicine
• Internal Medicine
• Medical Genetics
• Neurological Surgery
• Neurology
• Nuclear Medicine
• Obstetrics and Gynecology
• Ophthalmology
• Orthopedic Surgery
• Otolaryngology
• Pain Medicine
• Pathology: Anatomic and Clinical
• Pediatrics
• Physical Medicine and Rehabilitation
• Plastic Surgery
• Preventive Medicine
• Psychiatry
• Radiology: Diagnostic
• Radiation Oncology
• Surgery: General
• Thoracic Surgery
• Urology
• Vascular Surgery: Integrated
• Other
Self-Efficacy (Adapted from Rachel Cinamon, 2006)

Please rate your confidence in being able to handle the following situations:

(Along a 10-point Likert scale ranging from not at all confident (0) to very confident (9))

- Attend other responsibilities without it affecting your ability to complete pressing tasks at hand.
- Fulfill all your responsibilities despite going through having a trying and demanding period in your life.
- Fulfill your responsibilities effectively after a long and demanding day.
- Invest in your responsibilities even when under heavy pressure due to other obligations.
- Succeed in your responsibilities although there are many difficulties in your life.
- Focus and invest in tasks even though issues are disruptive.

Work-Interfering-With-Family Conflict (According to Carlson, Kacmar, and Williams, 2000)

When answering these questions, think about the career you will have after your professional training.

(Along a 5-point Likert scale with possible responses including strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree)

**Time-based work interference with family conflict**

- I expect that my work will keep me from my family activities more than I would like.
- I expect that the time I will have to devote to my job will not keep me from participating in household responsibilities and activities.
- I expect that I will have to miss family activities due to the amount of time I must spend on work responsibilities.

**Strain-based work interference with family conflict**

- I expect that when I get home from work I won’t often be too frazzled to participate in family activities/responsibilities.
- I expect that I will often be so emotionally drained when I get home from work that it will prevent me from contributing to my family.
- I expect that due to all the pressures at work, sometimes when I come home I will be too stressed to do the things I enjoy.

**Behavior-based work interference with family conflict**

- I expect that the problem-solving behaviors I will use in my job will not be effective in resolving problems at home.
- I expect that behavior that is effective and necessary for me at work will be counterproductive at home.
- I expect that the behaviors I perform that make me effective at work will help me to be a better parent and spouse.
Mother’s Occupational Status During Late Childhood and Adolescence:

- Mother not present
- Mother not working for pay
- Mother working part time for pay
- Mother working full time for pay

Father’s Occupational Status During Late Childhood and Adolescence:

- Father not present
- Father not working for pay
- Father working part time for pay
- Father working full time for pay

How do you believe parents should share housework?

- Most of the work should be done by the mother
- Most of the work should be done by the father
- The work should be divided equally between parents

How do you believe parents should share child care?

- Most of the work should be done by the mother
- Most of the work should be done by the father
- The work should be divided equally between parents

Age:

- Under 22
- 22-24
- 24-26
- 26-28
- 28-30
- 30+

Gender:

- Male
- Female
- Other
- Prefer Not to Answer
Marital Status:
- Single
- Married
- Divorced
- Widowed

Do you have children?
- Yes
- No
References


