Role Conflict and Self-Efficacy Among Employed Parents: Examining Complex Statistical Interactions

Lucie Houle, François Chiocchio,* Olga E. Favreau and Martine Villeneuve

In response to growing concerns with explaining how work and family interfere with each other and with statistical approaches that do not capture the way in which predictors interact, this study tested statistical interactions involving personal and social resources of 410 full-time employed women and men. The results indicate that self-efficacy is a strong predictor of family interfering with work (FIW) and work interfering with family (WIF). Gender moderates the relation between supervisor support and WIF moderates the impact of efficacy beliefs and instrumental support at home on FIW. Specifically, while supervisor support is negatively related to WIF in women and men, high levels of support more strongly affected men’s perceptions of WIF. In low self-efficacy men, high levels of support at home improved their perceptions of FIW but these perceptions worsened in women. These findings contrast with earlier research that focus predominantly on the predictive value of structural demands (for example, the number of hours worked per week and family size). This study shows that gender plays a critical yet intricate role as a predictor of the successful management of work and family roles: it is not gender per se but its interaction with personal and social variables that informs us about differences in the experience of employed parents.

Keywords: role conflict, self-efficacy, social support, gender

Role conflict between work and family has become a well-documented subject of interest in the scientific and popular press (Dansereau, 1999; Duxbury and Higgins, 2003; Eby et al., 2005; Johnson et al., 2001). Role
conflict between work and family is a form of inter-role conflict that is characterized by the presence of multiple and often incompatible sets of demands. Its directionality varies as a function of the source of the interference (Greenhaus and Beutell, 1985; Gutek et al., 1991; Kahn et al., 1964; Netemeyer et al., 1996). Namely, when family responsibilities impede upon work, family interfering with work (FIW) is said to occur. Conversely, work interfering with family (WIF) happens when professional obligations get in the way of family commitments.

While there is no integrated theory of work and family, many consider that role conflict between these two life spheres results from the joint influence of demands and resources at individual, family and professional levels (Aycan and Eskin, 2005; Beauregard, 2005; Grandey and Cropanzano, 1999; Greenhaus and Beutell, 1985; Kelley and Voydanoff, 1985; Voydanoff, 2005). However, the research emphasis thus far has been placed on the identification of potential sources of strain and demands. For instance, several studies have examined the effects of socio-demographic variables and of structural and psychological role characteristics such as the number of hours worked per week, type of employment and family size (for reviews, see Byron, 2005; Carrier, 1993; Eby et al., 2005). Far less is known about the influence of personal and social resources or the extent to which gender moderates the relationships between these resources and role conflict (Barnett and Hyde, 2001; Frone, 2003; Parasuraman and Greenhaus, 2002). This study addresses these issues by examining the relations among efficacy beliefs, social support, gender and work and family role conflict.

Theoretical and empirical background

Cognitive models of stress and coping suggest that appraisals of one’s coping abilities play a central role in coping patterns and experiences of stress (Folkman, 2001; Lazarus and Folkman, 1984). One general class of appraisals gaining increasing attention in the work and family literature is that of self-evaluation (Beauregard, 2005; Cinamon, 2006; Fride and Ryan, 2005; Judge et al., 1998). Specifically, one’s sense of control or efficacy has been identified as an important asset in combating the stress associated with multiple roles (Kossek et al., 2006; Martire et al., 1998; Noor, 2002; Rosenbaum and Cohen, 1999; Thomas and Ganster, 1995). According to social-cognitive theory, self-efficacy refers to individuals’ belief in their capacity to produce a given form of behaviour (Bandura, 1977). Those with a strong sense of efficacy display positive self-evaluations of their coping abilities and believe in their ability to mobilize the necessary resources for accomplishing specific tasks (Wood and Bandura, 1989). Furthermore, they are more likely to perceive events in a less distressing light and, as a result, to experience positive emotions (Maddux, 2002). Among employed parents
Greater sense of efficacy has been associated with reduced levels of FIW and WIF (Butler et al., 2004; Cinamon, 2006; Erdwins et al., 2001; Yardley, 1994). However, some have also reported that efficacy beliefs were not linked to levels of stress or to either forms of work or family role conflict (Beauregard, 2005; Dwyer and Cummings, 2001). Given these few and conflicting results, additional research in this area seems warranted.

Another coping resource that has been attracting considerable attention in the search for factors that facilitate the management of work and family roles is social support (Carrier and Roskies, 1993; Eby et al., 2005; Frone, 2003). Social support is a multifaceted concept in the sense that supportive relationships can be found within one’s personal, family or professional environments (Barrera, 1986; Henly, 1997). Support may also come in different forms; being expressed through tangible help and assistance (that is, instrumental support) or supportive actions like listening to one’s problems and sharing advice (that is, emotional support) (Beehr and McGrath, 1992; Caplan et al., 1975; Henly, 1997; Kaufmann and Beehr, 1986). Studies have found that higher levels of emotional and instrumental support from one’s partner and family members were associated with lower levels of work and family role conflict (Adam et al., 1996; Amaro et al., 1997; Aryee et al., 1999; Aycan and Eskin, 2005; Berger et al., 1994; Burley, 1995; Frone et al., 1997). Likewise, supervisor, co-worker and mentor supportiveness have been negatively associated with FIW and WIF (Allen, 2001; Bernas and Major, 2000; Brough and O’Driscoll, 2005; Carlson and Perrewe, 1999; Firth et al., 2004; Frye and Breauh, 2004; Nielson et al., 2001; Nissly et al., 2005; Thompson et al., 2006; Thomas and Ganster, 1995; Warren and Johnson, 1995). Importantly as well, Thomas and Ganster (1995) have found that the presence of a supportive manager had indirect effects on employed parents’ mental and physical health through its effects on perceptions of control. Along similar lines, it has been found that women who received emotional support from their family reported a higher sense of mastery that, in return, translated into lower levels of depression and greater life satisfaction (Martire et al., 1998). Bandura (2000) has proposed that supportive relationships can strengthen efficacy beliefs by offering models, potential solutions to the problems at hand, positive reinforcement and access to effective coping resources. Thus, it is possible that various forms and sources of social support relate indirectly to perceptions of interference by improving employed parents’ sense of efficacy. To our knowledge, this interactive pattern has yet to be tested.

Gender

In recent years there has been a growing interest in the role of gender as a social category that may affect the kind of constraints and challenges faced by employed parents. Despite increased convergence, different sets of expectations and norms prevail regarding men’s and women’s involvement at home.
and work and the kind of activities they should perform (Garey, 1999; Greenstein, 2000; Hays, 1996; Silver, 2000). In other words, gender continues to play a role in structuring men and women’s environment and their beliefs about the enactment of their personal and professional roles. As such, gender may directly affect perceptions about these roles and the level of interference between them. For instance, studies have shown that women report higher levels of family and work stress, spend more time on housework and childcare and tend to view both roles as very important (Cinamon and Rich, 2006; Crompton et al., 2005; O’Laughlin and Bischoff, 2005; Parasuraman and Simmers, 2001). Men, by comparison, are more likely to give precedence to work over family, to devote most of their time to their professional role and report having less difficulty combining work and family (Artazcoz et al., 2004; Scott, 2001).

Along similar lines, research in the field of stress suggests that gender may affect perceptions of coping resources and abilities. For instance, a low sense of control has been associated with high occurrences of burn-out in women but not in men (Frank et al., 1999; Robinson, 2004). Others have shown that compared to men women report higher levels of self-determined motivation in various life contexts such as the work and family domains and tend to adopt more emotional and avoidance coping styles (Matud, 2004; Sénécal et al., 2001; Vallerand, 1997; Vallerand and Bissonnette, 1992). Moreover, women have been found to report higher levels of perceived support in their personal and professional environments and seem to value emotional sources of support more than men (Aycan and Eskin, 2005; Hammer et al., 2005; Griffin, 2006; McDonald and Korabik, 1991; O’Laughlin and Bischoff, 2005). These perceptions may be somewhat conditioned by socialization patterns that associate attributes such as dependence and emotional expressiveness with the traditional feminine role, on the one hand, and assertiveness and instrumentality with the male role, on the other hand. In the work and family literature, research examining the effects of gender on employed parents’ sense of efficacy and perceptions of various sources and types of social support has been scarce (Byron, 2005; Hill, 2005; Voydanoff, 2002). Another critical gap is the paucity of published data examining the moderating effects of gender on the relations among self-beliefs, social support and work and family role conflict (that is, triple interaction). This type of research seems highly relevant given the ongoing debate over whether work and family role conflict is predominantly a woman’s issue or a source of stress that affects both mothers and fathers in a similar manner (Aycan and Eskin, 2005; Brough and O’Driscoll, 2005; Frone, 2003; Winslow, 2005). More and more studies on self-efficacy and the stressor-strain relationships are considering complex interactions among sets of variables to further their understanding of adaptation. Findings from this field indicate that successful adaptation depends on the level of congruence between coping resources, the nature of the stressor and self-appraisals of one’s abilities (Jex et al., 2001; Salanova et al., 2002; Stetz et al., 2006).
The present study

This study explores the effects of personal and social resources on perceptions of work and family role conflict among employed parents who occupy full-time management and professional positions. For both mothers and fathers, combining work and family can be particularly challenging because management and professional jobs command high levels of responsibilities along with substantial time and energy commitments (Bouchard and Laberge, 1997; Parasuraman et al., 1996). Research has shown, for instance, that professionals and managers report higher instances of interference from work and are more likely to experience family stress everyday following work (Grzywacz et al., 2002) compared to non-managers or non-professionals. Importantly as well, recent studies have indicated that many talented and well-educated professional women decide to scale back or simply opt out of the job market once they become mothers; a phenomenon relatively uncommon among men (Belkin, 2003; Tischler, 2004). Given the current need for skilled and experienced workers, understanding the specific needs of this segment has both scientific and practical significance.

This study builds upon and extends previous research in a number of ways. Firstly, we assess the direct influence of self-efficacy and its interactive effects with social support on both FIW and WIF. Secondly, we simultaneously consider different forms and sources of social support namely, partner’s and supervisor’s emotional support and instrumental support with family responsibilities. Finally, we examine the possibility that the relationships among self-efficacy, social support and work and family role conflict do not equally apply to men and women. Based on the current literature, the following hypotheses are tested:

Hypothesis 1: A greater sense of efficacy in managing work and family demands will be associated with lower levels of work and family role conflict.

Hypothesis 2: Social support will moderate the relationship between self-efficacy and work and family role conflict.

Hypothesis 3: Gender will moderate the relations among (a) self-efficacy and work and family role conflict, (b) social support and work and family role conflict and (c) self-efficacy, social support and work and family role conflict.

Method

Sample and procedure

This study was part of a larger project on the effects of managing work and family in a Canadian financial institution. Through inter-office mail, 1800
employees received a letter describing the study, a consent form and a self-report questionnaire. No incentives to participate were offered. Completed questionnaires were returned by 1051 employees, for an overall response rate of 58 per cent. From this group we selected respondents who worked as full-time managers or professionals, had a partner and were responsible for at least one child under the age of 18. The resulting sample of 414 participants included 274 (66%) women and 140 (34%) men. On average they had 1.9 children (SD = .75) and 78 per cent occupied middle level positions. Most (93%) were aged between 30 and 50, 56 per cent had been with the company for more than 15 years and 31 per cent had completed a university degree (26% undergraduate and 5% graduate). The mean family income in Canadian dollars fell in the $50,000–74,000 range.

Measures

French being the language used in the company where we collected the data, English versions of questionnaires were translated into French according to the transcultural guidelines provided by Vallerand (1989).

Efficacy beliefs. The work and family efficacy scale (Ozer, 1995) measured efficacy beliefs on the management of work and family demands. Participants rated how confident they felt about handling the demands of work and family on a scale ranging from 0 (not at all) to 10 (extremely demanding). This questionnaire was originally designed for mothers returning to work after maternity leave, with a focus on the management of childcare responsibilities. None of the original items was written in a way that made them inappropriate for men. However, four items were dropped as they were irrelevant to the context of this study. Six items were adapted in order to make them more inclusive by replacing the term ‘baby’ with ‘children’. The resulting 17-item scale showed good reliability with an alpha coefficient of .90, which compares to that of the original 26-item version (α = .94; Ozer, 1995).

Social support. Two sources of emotional support were examined. This type of support is characterized by actions such as offering encouragement and listening to one’s problem, and positive attitudes such as being sympathetic towards one’s situation or pain. Erickson’s (1993) 15-item scale evaluated how often one’s partner was perceived as engaging in emotionally supportive behaviour (one = never and seven = always). Alpha coefficients for the original and translated versions were .94 and .92, respectively. A nine-item scale, the supervisor support scale (Shinn et al., 1989), tapped how frequently the participants’ supervisor was perceived as being emotionally supportive with respect to their management of work and family, with a scale ranging from one (never) to five (very often). Removing one of the items tapping negative attitudes (that is, ‘shows resentment towards my needs as a working parent’)
improved the initial alpha of .59 to .71. Instrumental support at home, which refers to more practical and tangible assistance, was assessed using a scale ranging from one (not at all) to five (completely supportive). Participants indicated the extent they received assistance with housework and childcare activities such as preparing meals, running errands, supervising homework and transporting the children. Relatively good internal consistency was obtained for this measure ($\alpha = .73$).

Role conflict between work and family. Reported levels of work and family role conflict were measured using the job-family role strain scale (Bohen and Viveros-Long, 1981). On the one hand, six items assessed the extent to which family life interfered with work (‘I worry how my kids are while I am working’ or ‘I am comfortable with the arrangements for my children while I am working’). One the other hand, four items examined interference from work with family life (‘My job keeps me away from my family too much’ or ‘My time off from work does not match other family members’ schedules well’). For both, participants were asked to rate how often they experienced these concerns using a scale that ranged from one (never) to five (very often). Alpha coefficients for the translated versions were .66 and .73 for FIW and WIF, respectively, and compared to reliabilities reported in previous research (Higgins et al., 1994).

Moderator and control variables. Gender was coded 1 for female and 0 for male. As for controls, information on education (1 = high school; 2 = college; 3 = undergraduate; 4 = graduate), age (1 = 25–30; 2 = 31–35; 3 = 36–40; 4 = 36–40; 5 = 41–45; 6 = 46–50; 7 = 51–55; 8 = over 55) and family income (1 = less than $40,000; 2 = $40,000–49,000; 3 = $50,000–74,000; 4 = $75,000–99,000; 5 = $100,000–149,000; 6 = $150,000–199,000; 7 = $200,000 and over) were included. Given that perceptions of interference between work and family result from the combined influence of demands and resources, researchers recommend that sources of strains and demands be considered when examining coping resources (Kelley and Voydanoff, 1985; Warren and Johnson, 1995). Variables chosen for this study have been identified as important sources of strain and demand as they represent structural or psychological family and work characteristics to which individuals must adjust by exerting some effort (Byron, 2005; Voydanoff, 2005). Participants indicated the number of preschool children under their responsibility (children under the age of 5) and the number of hours they worked per week as well as their partner’s weekly worked hours. In addition, four items from Lodahl and Kejner (1965) assessed levels of family and work role salience. Using a seven-point Likert scale (one = strongly in disagreement and seven = strongly in agreement), respondents had to indicate their level of agreement with the statements: ‘my main satisfactions in life come from my family
(work)’ and ‘the most important things that happen to me involve my family (work)’. The first and last two items referred to individuals’ emotional attachment to their family and work role, respectively. Alpha coefficients for the translated measures were .85 for family role salience and .86 for work role salience, which was comparable to the original versions. Seven items assessed the participants’ level of involvement in domestic and childcare responsibilities with a scale ranging from one (not at all) to five (completely involved). This measure showed good internal consistency, with an alpha coefficient of .79.

**Statistical treatment**

Prior to analysis, all major study variables were examined for the accuracy of data entry, missing values and fit between their distributions, and the assumptions of multivariate analysis (Tabachnick and Fidell, 2007). All cases of missing values on socioeconomic characteristics, family and work role salience, and the amount of time spent at work by one’s partner (less than 1% of the sample) were replaced by the mean. All variables were well distributed. Three cases showed strong deviations from the mean and were found to be univariate outliers. Another case was identified through Mahalanobis distance as a multivariate outlier, $\chi^2(19) = 43.82, P < 0.001$. Based on Tabachnick and Fidell’s (2007) recommendations, these four outliers were deleted, leaving 410 cases for analysis.

All hypothesized relations were tested using hierarchical multiple regression analyses. At step 1, background information on age, education and family revenues and sources of strain from the work and family domains were entered as controls. Step 2 examined the direct effects of self-efficacy and social support, while step 3 introduced the moderator gender. Step 4 examined the interactions between (a) gender and self-efficacy and (b) gender and each type and source of social support. Step 5 examined the interaction between efficacy beliefs and each type and source of social support, followed by the three-way interaction between gender, self-efficacy and social support in step six. To reduce multicolinearity between the cross-product terms and their constituents, all continuously measured predictors were centred before creating the cross-product terms and running the analyses (Aiken and West, 1991; Jaccard *et al.*, 1990).

**Results**

Table 1 shows the intercorrelations, the means (M) and standard deviations (SD) for the major study variables. On the one hand, participants reported low levels of FIW (M = 2.14, SD = .57) and moderate levels of WIF (M = 3.06,
SD = 0.76), which suggests that they perceived that there was less interference from their family on their work life than the opposite phenomenon. With respect to their ability to deal with the joint demands of their work and family, the participants reported feeling fairly confident, having a moderate sense of efficacy (M = 6.12, SD = 1.54). On the other hand, the results suggest that the participants perceived there were moderate levels of emotional support on the home and professional front. Specifically, they felt their partner was being emotionally supportive most of the time (M = 3.80, SD = 0.63) and that their supervisor offered moderate levels of emotional support (M = 2.99, SD = 0.60). However, with respect to domestic and childcare responsibilities, they reported low levels of instrumental support at home (M = 2.04, SD = 0.43). Analysis of variance revealed some gender differences. Women reported significantly higher levels of FIW (M[SD] = 2.03[.55]) versus 2.03[.55]; F(1,408) = 8.63, P < 0.01), perceived there were lower levels of emotional support from their partner (M[SD] = 3.75[.66] versus 3.89[.54]; F[1, 408] = 4.47, P < 0.050 and lower levels of instrumental support at home (M[SD] = 1.88[.37] versus 2.36[.36]; F(1,408) = 154.93, P < 0.010) and felt less confident about their ability to deal with the joint demands of work and family (M[SD] = 5.98[1.57] versus 6.41[1.44]; F(1,408) = 7.36, P < 0.01). There were no gender difference on perceptions of WIF (M[SD] = 3.08[.75] versus 3.02[.78] for women and men, respectively; F(1,408) = .46, P > 0.05) and supervisor’s support (M[SD] = 3.03[.61] versus 2.93[.59] for women and men, respectively; F(1,408) = 2.62, P > 0.05).

The more confident participants felt about their ability to deal with professional and family demands, the less interference they perceived between

### Table 1: Means, standard deviations, and correlations for study variables by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men M (SD)</th>
<th>Women M (SD)</th>
<th>WIF</th>
<th>FIW</th>
<th>Self</th>
<th>PES</th>
<th>ISH</th>
<th>SES</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIF</td>
<td>3.02 (.78)</td>
<td>3.09 (.75)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>FIW</td>
<td>2.03 (.55)</td>
<td>2.20 (.58)</td>
<td>.51**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>6.41 (1.44)</td>
<td>5.98 (1.57)</td>
<td>-.58**</td>
<td>-.53**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>3.89 (.54)</td>
<td>3.75 (.66)</td>
<td>-.13**</td>
<td>-.21**</td>
<td>.24**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISH</td>
<td>2.36 (.36)</td>
<td>1.88 (.37)</td>
<td>.00</td>
<td>-.08</td>
<td>.15**</td>
<td>.26**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>2.93 (.59)</td>
<td>3.03 (.61)</td>
<td>-.14**</td>
<td>-.06</td>
<td>.18**</td>
<td>.04</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>—</td>
<td>—</td>
<td>.03</td>
<td>.14**</td>
<td>-.13**</td>
<td>-.10*</td>
<td>-.52**</td>
<td>.08</td>
<td></td>
</tr>
</tbody>
</table>

Note: * P < 0.05. ** P < 0.01.

Intercorrelations for men (n = 139) are presented above the diagonal and intercorrelations for women (n = 271) are presented below it. FIW, family interfering with work; ISH, instrumental support at home; PES, partner’s emotional support; Self, self-efficacy; SES, supervisor’s emotional support; WIF, work interfering with family; gender 0, men; 1, women.
their work and family roles ($r = -0.58$ for FIW, and $-0.53$ for WIF, $P < 0.01$). Moreover, the findings indicate that the more supported emotionally and instrumentally participants felt, the greater was their sense of efficacy. Significant positive relations between self-efficacy and all three measures of social support were also noted and these ranged from moderate to low ($r = 0.24, 0.18$ and $0.15$, $P < 0.01$, for partner's emotional support, supervisor's emotional support and instrumental support at home, respectively). Emotional support from one's partner correlated moderately with WIF ($r = -0.13$, $P < 0.01$) and with FIW ($r = -0.21$, $P < 0.01$) and supervisor's emotional support related significantly only to WIF ($r = -0.14$, $P < 0.01$). Gender related significantly to FIW ($r = 0.14$, $P < 0.01$), partners' emotional support ($r = -0.10$, $P < 0.05$) and instrumental support at home ($r = -0.52$, $P < 0.01$). Being a working mother was associated with higher levels of perceived interference from the family to work and lower levels of perceived support from the family domain. Strong significant relations were obtained between FIW and WIF ($r = 0.51$, $P < 0.01$).

Tables 2 and 3 present the results for the prediction of conflict between work and family roles. The results are organized around the relative contribution of each set of variables in the testing of hypotheses and the identification of key predictors. As shown in Table 2, background variables and sources of strains accounted for 6 per cent of the variance in the prediction of interference from the family to work ($F = 3.13$, $P < 0.01$). After controlling for the effects of these variables, self-efficacy and social support ($\Delta F = 39.55$, $P < 0.01$) accounted for an additional 27 per cent of the variance in the prediction of FIW. In line with hypothesis 1, having a greater sense of efficacy was associated with lower levels of FIW. The introduction of gender and of the interaction terms between gender and social support did not significantly add to the prediction of FIW. The significant interaction terms in steps 5 and 6 lent some support to hypotheses 2 and 3. To gain insight into the relationship among gender, efficacy beliefs, instrumental support at home and FIW, the three-way interaction was plotted. As shown in Figure 1, when efficacy beliefs were high, there was a positive relationship between instrumental support and levels of interference from the family irrespective of gender. However, gender mattered when efficacy levels were low: in women with a low sense of efficacy, the relationship between instrumental support and FIW was positive while in men it was negative. In other words, under conditions of low efficacy, reported perceptions of FIW worsened in women but improved in men. The final model accounted for 35 per cent of the variance in FIW, which was best predicted by family role salience ($\beta = .10$, $P < 0.05$), family responsibilities ($\beta = .10$, $P < 0.05$), efficacy beliefs ($\beta = -.49$, $P < 0.01$), the interaction between self-efficacy and instrumental support at home ($\beta = .19$, $P < 0.05$) and the three-way interaction between gender, self-efficacy and instrumental support ($\beta = -.21$, $P < 0.05$).

For the prediction of WIF, Table 3 shows that background variables and sources of strains accounted for 14 per cent of the variance in WIF ($F = 8.41$, $P < 0.01$).
Table 2: Summary of hierarchical regression analysis for variables predicting family interfering with work (N = 410)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Age</td>
<td>-.30</td>
<td>.20</td>
<td>-.08</td>
<td></td>
<td></td>
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<tr>
<td>Family revenue</td>
<td>.03</td>
<td>.15</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family role salience</td>
<td>.28</td>
<td>.13</td>
<td>.10**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family responsibilities</td>
<td>.51</td>
<td>.24</td>
<td>.10**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preschool children</td>
<td>.01</td>
<td>.36</td>
<td>.00</td>
<td></td>
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</tr>
<tr>
<td>Work role salience</td>
<td>-.06</td>
<td>.11</td>
<td>-.02</td>
<td></td>
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</tr>
<tr>
<td>Hours worked per week</td>
<td>.42</td>
<td>.37</td>
<td>.05</td>
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</tr>
<tr>
<td>Partner’s weekly worked hours</td>
<td>-.06</td>
<td>.17</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>.33***</td>
<td>.27***</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>-1.10</td>
<td>.22</td>
<td>-.49***</td>
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<tr>
<td>Partner’s emotional support</td>
<td>-.57</td>
<td>.48</td>
<td>-.10</td>
<td></td>
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<tr>
<td>Instrumental support at home</td>
<td>.64</td>
<td>.75</td>
<td>.08</td>
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<tr>
<td>Supervisor’s emotional support</td>
<td>-.09</td>
<td>.47</td>
<td>-.02</td>
<td></td>
<td></td>
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<tr>
<td>Step 3</td>
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<td></td>
<td>.00</td>
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</tr>
<tr>
<td>Gender</td>
<td>.71</td>
<td>.42</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td>.34***</td>
<td>.01</td>
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<tr>
<td>Gender × partner’s emotional support</td>
<td>.18</td>
<td>.56</td>
<td>.03</td>
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<td>Step 5</td>
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<td>.00</td>
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<td>.08</td>
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<td>.19**</td>
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<td>-.21**</td>
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*  P = 0.05. **  P < 0.05. ***  P < 0.01.
Table 3: Summary of hierarchical regression analysis for variables predicting work interfering with family (N = 410)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
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<td>−.09</td>
<td>.03</td>
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<tr>
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<td>.11</td>
<td>.02</td>
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<tr>
<td>Family responsibilities</td>
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<td>.20</td>
<td>−.02</td>
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<td>Preschool children</td>
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<td>.31</td>
<td>.07</td>
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<td>−.08</td>
<td>.10</td>
<td>−.03</td>
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<td>Hours worked per week</td>
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<td>Partner’s weekly worked hours</td>
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<td>−.06</td>
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<td>Gender × instrumental support at home</td>
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<td>Gender × self-efficacy</td>
<td>−.09</td>
<td>.22</td>
<td>−.04</td>
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<td>Step 5</td>
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<td>Self-efficacy × partner’s emotional support</td>
<td>−.11</td>
<td>.29</td>
<td>−.04</td>
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<td>Self-efficacy × instrumental support at home</td>
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<tr>
<td>Self-efficacy × supervisor’s emotional support</td>
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<td>Gender × self × partner’s emotional support</td>
<td>.10</td>
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<td>Gender × self × instrumental support at home</td>
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<tr>
<td>Gender × self × supervisor’s emotional support</td>
<td>−.34</td>
<td>.28</td>
<td>−.09</td>
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* P = 0.05; ** P < 0.05; *** P < 0.01.
After controlling for the effect of these variables, self-efficacy and social support explained an additional 25 per cent of the variance in WIF ($\Delta F = 40.21, P < 0.01$). The addition of gender, of the interaction terms between self-efficacy and social support and of the triple interaction terms between gender, self-efficacy and social support did not significantly add to the prediction of WIF. In step 4, the interaction term between gender and supervisor support was significant, lending some support to the second hypothesis. As depicted in Figure 2, gender moderated the relationship between this source of support and WIF. High levels of supervisor’s emotional support more strongly related to working fathers’ perceptions than to those of working mothers. The full set of variables accounted for 41 per cent of the variance in WIF, which was best predicted by family income ($\beta = -.09, P < 0.05$), number of hours worked per week ($\beta = .25, P < 0.01$), self-efficacy ($\beta = -.45, P < 0.01$), emotional support from supervisor ($\beta = -.15, P = .05$), and the interaction between gender and supervisor’s support ($\beta = .15, P = .05$).
Discussion

Identifying sources of strains and demands within the professional and family domains has been a dominant theme in the literature on work and family role conflict, with a disproportionate emphasis on structural characteristics such as the number of hours worked per week, and a relative neglect of psychosocial factors (Byron, 2005; Eby et al., 2005; Frone, 2003; Parasuraman and Greenhaus, 2002). The findings of this study emphasize the complexity of the phenomena (that is, complex statistical interactions between constructs) and reinforce the importance of adopting a broader perspective and of considering multiple levels of analysis such as in a demands-and-resource approach (Kelley and Voydanoff, 1985; Voydanoff, 2005). Moreover, among all the variables considered in our model, self-efficacy was the strongest predictor of interference, accounting for 24 and 20 per cent of the variance in FIW and WIF, respectively. This is an important contribution because so far research on personal resources and work and family role conflict has focused predominantly on personal dispositions and personality traits such as attachment styles, hardiness and the big five personality dimensions (that is, type A behaviour, neuroticism, agreeableness, conscientiousness and openness to experience) (Bernas and Major, 2000; Rantanen et al., 2005; Sumer and Knight, 2001; Wayne et al., 2004). Little was known about the effect of more malleable cognitive variables such as efficacy beliefs.

Our findings also indicate that gender plays a critical yet intricate role in the search for factors that contribute to the successful management of work and family roles. Specifically, and in accordance with recent reviews (Byron, 2005; Hill, 2005; Huang et al., 2004), our results indicate that it is not gender per se but its interaction with personal and social variables that informs us about differences in the experience of employed parents. On the one hand, gender moderated the relationship between supervisors’ emotional support and WIF. While this source of emotional support was negatively related to WIF in both sexes, women’s reported levels of WIF progressively decreased as levels of perceived supervisor support increased. In men, when levels of supervisor support became high, their perceptions of WIF were more strongly affected. On the other hand, the triple interaction between gender, self-efficacy and instrumental support at home indicates that under conditions of low efficacy, men seem to benefit from high levels of support, as shown by improvements in reported levels of FIW. This pattern lends some support to Bandura’s (2000) proposition that supportive relationships are beneficial under conditions of low efficacy. However, the pattern observed in women suggests that this may not always be the case and that the opposite effect may also occur. Indeed, in women with a low sense of efficacy, perceptions of FIW worsened under conditions of high support. This result is an important contribution. While this type of pattern has been observed in the
literature on wellbeing and health (Lu, 1995; Lu and Argyle, 1992), it had yet to be documented in studies on work and family role interference. It may explain to some extent why previous findings regarding the beneficial effects of social support on perceptions of conflict have been mixed (Eby et al., 2005; Frone, 2003). Furthermore — given Lu and Argyle’s (1992) study showing that receiving support is related to anxiety and feelings of guilt and dependency — this result points to the possibility that women with low self-efficacy might perceive the provision of support as a discouraging confirmation of their dependence, rather than as an opportunity to reverse the negative impact of FIW.

Beyond creating a contrast and informing us about the specific needs of men and women, these findings also speak, albeit indirectly, of the possible difficulties that employed mothers face as they try to reconcile their personal choices with society’s expectations. Social constructions of motherhood remain highly child-centred, calling for high levels of emotional, temporal and economic investment (Garey, 1999; Hays, 1996). Those with a low sense of efficacy may view high levels of instrumental support at home as a confirmation of their inability to be ‘good mothers’. It may also be that women view family responsibilities as opportunities to spend time with family members, to display affection and to engage in significant exchanges. Thus, they may feel that high levels of instrumental support prevent them from being as involved as they would like to be in their children’s lives. Feeling hindered rather than supported, those with a low sense of efficacy may become discouraged or try to compensate by spending more time with their family. In return, this exacerbates their perceptions of interference from the family. Guendouzi (2006) has noted that accessibility or being there for one’s family remains a key issue in the lives of working mothers, often resulting in feelings of guilt and negative self-perceptions. Likewise, studies have shown that even if some policies such as flexitime improve women’s organization and time management, they do not necessarily reduce feelings of conflict because women feel bad about how their family role is enacted (Bohen and Viveros-Long, 1981; Goff et al., 1990).

As for the men, tangible assistance with family tasks may not come into as much conflict with society’s views of fatherhood, which remain somewhat tied to their economic contribution (Barnett and Hyde, 2001). Accordingly, those with a low sense of efficacy may more readily accept and take advantage of the help provided. This may be different, however, in the context of work where men may face more pressure to be assertive and independent or remain unsure of the extent to which prioritizing one’s family is acceptable. Thus, unless they perceive a strong signal of support from their supervisor, men may not take advantage of this type of support or take concrete action to limit the intrusion of professional responsibilities upon their family. Greater perceived supervisor-subordinate similarity in work–family values has been linked to higher supervisor support and to lower levels of interference.
between work and family roles (Nielson et al., 2001; Thompson et al., 2006). Men have also been found to be more emotionally inhibited than women and are less likely to seek emotional support (Matud, 2004; Ptacek et al., 1994). If so, they may have been less responsive than women to this type of support and its benefits on perceptions of WIF became apparent mainly when strong supportive attitudes were displayed.

In light of the previous discussion, future studies examining the interrelations among gender, self-perceptions, social support and role interference may want to incorporate measures of gender role identity and of the importance attributed to family and work roles. Also, given our cross-sectional design, studies would do well to test whether efficacy beliefs and social support lead to lower levels of interference, and whether having low levels of interference leads to the development of positive self-perceptions and more supportive networks, or the extent to which these phenomena influence each other. Other questions that have yet to be addressed include whether efficacy beliefs mediate the potentially negative effects of FIW and WIF on wellbeing and the extent to which these beliefs influence coping strategies.

The subject of coping among work–family researchers has received very limited attention (Eby et al., 2005). Moreover, it is important that research on gender, work and family continues to target specific segments of the workforce such as professionals and managers. Previous studies have been inconsistent in describing the segments under study (Byron, 2005; Eby et al., 2005) and, to some extent, our study could also have given more attention to the social context of the respondents’ lives (for example, family circumstances, workplace setting). Doing so will further our understanding of gender as an organizing principle that perpetuates differences in opportunities and expectations in family and in the workplace, and puts employed mothers more at risk of experiencing negative outcomes or less flourishing careers. At the same time, given current changes in the characteristics of the workforce, analyses similar to ours should be performed in other groups such as single-headed families or self-employed parents, as well as in small businesses and companies outside the financial industry. From a measurement point of view, additional research with reliable instruments that assess negative attitudes towards combining work and family would be valuable. The initially low alpha on our measurement of supervisor’s support improved when an item pertaining to such attitudes was dropped. Studies should also consider more structural aspects of social support such as network size and density as well as instruments that measure both perceived support and actual support. The sole reliance on self-report questionnaires raises concerns over common method variance which may be addressed by complementing respondents’ perceptions with those of their supervisors or partners.

From a practical point of view, our findings suggest that organizations and employees will benefit from implementing training programmes that (a) teach managers about the needs and challenges of combining work and
family and (b) help them find effective solutions to organize work in a way that limits its intrusion upon family life without compromising performance. For women in particular, the approach adopted by the Fleet Financial Group (Rayman et al., 1999) seems particularly promising. Like many organizations, this company reviewed core business processes in order to improve its efficiency. However, unlike most, it searched for solutions that improved not only processes but individuals’ ability to balance work and personal life. As more and more companies adopt this position and move away from the traditional separation of work and family life, women will be able to develop more positive self-perceptions and will no longer feel that their professional ambitions are in opposition to those of their family. Until then, careful thought should be given to gender in the design of work–family programmes, along with the fact that different interventions may lead to different outcomes (that is, reducing FIW but not WIF). As for leaders, they can send strong supportive messages by formally rewarding forms of behaviour that contribute to the creation of a family-friendly culture and contribute to the development of a strong sense of efficacy by helping employees find, within their personal or professional circles, examples of individuals who have achieved a satisfying work–family balance and to whom they can relate in terms of age, abilities and challenges (Bandura, 1977, 1997). Employees should also be encouraged to start with tasks and issues that they can tackle easily. Positive mastery experiences that build skills and abilities gradually are the most powerful (Bandura, 1997). In our fast-paced world interference between work and family is inevitable. By developing their personal and social resources employed mothers and fathers will be in a better position to deal with life’s challenges and its many dilemmas.

Acknowledgement

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Note

1. Vallerand suggests seven steps: preparing a preliminary version, assessing its quality with a committee, pretesting the preliminary version, verifying content and convergent validity, verifying reliability, verifying construct validity, and establishing norms. This last step was not carried out.
References


