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Current Empirical Research

# Understanding work-to-family conflict: the role of organization and supervisor support for work-life issues

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**Abstract**

This study examined organization and supervisor support for work-life issues in the reduction of work-to-family conflict and its subsequent outcomes. Specifically, these sources of support were explored as antecedents, mediators and moderators in relation to work-to-family conflict and satisfaction. Observed variable path analysis was used with a sample of 207 health care workers to determine the specific relationship between organization and supervisor support for work-life issues, perceived work overload, job control, work-to-family conflict and satisfaction outcomes. Overall, results supported a complex relationship between organization and supervisor support for work-life issues and work-to-family conflict, which reflected both direct and partially mediated paths through work overload and job control. Implications for future research and practice in addressing work-to-family conflict are discussed.

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**Keywords:** organization support; supervisor support; work-life issues



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## **The role of organization and supervisor support for work-life issues in work-to-family conflict**

Work-family conflict is defined as a type of inter-role conflict in which participation in one role (e. g., work) makes it difficult to participate in another role (e.g., family) (Greenhaus and Beutell, 1985). Work-family conflict has been further divided into work-to-family conflict and family-to-work conflict. Work-to-family conflict occurs when a person's work life interferes with family life (e.g., a manager who is required to attend a late meeting at the office and as a result misses his son's violin recital). Family-to-work conflict occurs when family life interferes with work life (e.g., a manager who goes to work too tired to focus because she spent the night awake with her sick child).

Work-family conflict reflects a complex interplay of factors at the individual, work group and organizational levels. Factors related to work-family conflict for individuals include: work overload (e.g., the amount of work an employee is expected to complete on a regular basis; Duxbury *et al.*, 1994), job control (e.g., the degree of choice employees have with respect to when and how their work gets done), supervisor support (e.g., the extent to which a manager recognizes and allows employees to manage their work and family



demands; Thomas and Ganster, 1995), and organization support (e.g., the extent to which the organization has policies and programs to support employees managing work and family demands; Thomas and Ganster, 1995).

These issues can be combined in many ways to elucidate work-family conflict. For example, a single parent who works in an environment with high work overload, low job control, low supervisor support and low organizational support will most likely have high work-to-family conflict. However, organizations may have opportunities to reduce work-to-family conflict by increasing job control (e.g., allowing the employee to work flexible hours; Ganster and Fusilier, 1989), increasing supervisor support (e.g., allowing the employee to work from home occasionally) or organizational support (e.g., by implementing family-friendly work policies) even when the workload cannot change. Therefore, by focusing research on understanding the complex interplay of factors, practical solutions can be identified without losses to organizational competitiveness.

The prevalence, antecedents and outcomes associated with work-family conflict have been researched extensively over the past 15 years (e.g., Frone *et al.*, 1994; Frone *et al.*, 1997a). Overall, there is consensus that work-to-family conflict leads to a variety of negative outcomes for both employees (e.g., job and family distress, decreased job and family satisfaction) (Frone *et al.*, 1997a; Ford *et al.*, 2007; Gordon *et al.*, 2007) and the organizations to which they belong (e.g., lower organization performance, lower morale, higher turnover rates) (Fu and Shaffer, 2001).

It has recently been established that organizations and supervisors who are generally supportive of their employees can reduce work-family conflict (Frone *et al.*, 1997b; Carlson and Perrewé, 1999; Erdwins *et al.*, 2001; Behson, 2002; Frone, 2003). Several studies (Thompson *et al.*, 1999; Allen, 2001; Clark, 2001; Behson, 2002) have extended this relationship to specific support for work-family issues. However, research has yet to explore how these supports actually reduce work-family conflict.

Therefore, a primary goal of this research was to expand the nomological network of relationships between organization and supervisor support for work-family issues and work-family conflict. The nomological network refers to the pattern of theoretical and empirical relationships among different constructs and is used to establish construct validity (Cronbach and Meehl, 1955). Specifically,

the study was designed to include job control and work overload as relevant variables in the nomological network. These two variables were chosen as they are common predictors of work-family conflict (for work overload see Duxbury *et al.*, 1994; Frone *et al.*, 1997b; for job control see Greenberger and Strasser, 1986; Ganster and Fusilier, 1989). At present, there remains little research examining the mechanisms through which job control and work overload affect work-to-family conflict (Thomas and Ganster, 1995), and more specifically in the context of organization and supervisor support for work-family issues.

In addition, only a few studies have explored work-family conflict in health care organizations. Mauno *et al.* (2005) explored the relationship between work-family culture and job satisfaction across four industries (healthcare, education, information technology and manufacturing) in Finland. They found that the health care organization was more positive with respect to work-family culture and this related to work-to-family conflict and job satisfaction. Bruck *et al.* (2002) found that work-to-family conflict related to both global and composite job satisfaction. Burke and Greenglass (2001) found that work-to-family conflict partially mediated the relationship between workload and job satisfaction for about 700 (mostly female nurses) in a hospital. These results are consistent with a qualitative study conducted with hospital and bank managers in Australia (Burchielli *et al.*, 2008). This study found that all managers experienced both work overload and work-to-family conflict and hospital managers reported the importance of specific support for work-life balance from colleagues and the organization.

None of these studies addressed the mediated role of organization and supervisor support with workload and job control in relating to work-to-family conflict and job satisfaction. As the North American population ages, the need for effective health care organizations will become more prominent and, by extension, the need for the effective managing of work and family issues for health care workers. Understanding and managing these issues will help health care organizations to manage employee work-to-family conflict and stress as well as ensuring that they continue to attract and retain their highly specialized talent.

This study contributes to the work-family conflict literature in three ways. First, it assesses the integrated impact of specific support measures for work-life issues (organization and supervisor), with



job control and work overload on work-to-family conflict. Second, it provides a comprehensive test of these complex relationships using competing theoretical models that, to date, have only been partially tested. Finally, the study focuses on employees of health care organizations in order to determine the generalizability of prior research into this domain. Therefore, this study has the potential to move the work-to-family literature forward by determining which of the prior competing models best explains the complex relationships between work-life support (organizational and supervisor) and their intervening variables (job control and work overload). In other words, this study can help to identify the type of support that is needed for organizations to reduce work-to-family conflict and how this support can have an impact.

### Focus on work-to-family conflict

The examination of work-to-family conflict was chosen as the primary area of study because a growing body of research suggests that work-to-family conflict is both more prevalent, and more associated with individual outcomes, than family-to-work conflict. In other words, as suggested by research findings (Kossek and Ozeki, 1998; Duxbury and Higgins, 2001), workers compromise family commitments for work obligations more often than the reverse. This is not to suggest that family-to-work conflict is not important, but it does suggest that research focus on work-to-family conflict first for greater impact with addressing employee work-family issues. Warren and Johnson (1995) argue that researchers should extend previous research by examining the role of the workplace in generating solutions to work-to-family conflict. Similarly, Kinnunen and Mauno (1998) argue that improvements in working life are needed to prevent problems in the work-family interface.

Duxbury and Higgins (2001) conducted a national study on the prevalence of both work-to-family and family-to-work conflict and concluded that the former is more prevalent. They attribute this finding to more permeable boundaries within the family domain, which allows for more spillover from one's work life into one's home life. Work-to-family conflict has also been shown to be more highly associated with negative outcomes such as lower job satisfaction and overall life satisfaction, than family-to-work conflict (Kossek and Ozeki, 1998). Given this prevalence and significant association with organization outcomes, the study of organization factors associated with work-to-family

conflict is a critical component to understanding work-family conflict and how its prevalence can be reduced. Therefore, the current study focuses on the role of organization and supervisor support in the reduction of work-to-family conflict in the context of job control and work overload.

In developing the hypothesized models for the study, several areas of the research literature were explored. First, the literature on general support and work-family conflict was reviewed to determine if general support relationships (e.g., Frone *et al.*, 1997a,b; Carlson and Perrewé, 1999) can be extended to support for work-life issues. Second, the research on organization and supervisor support for work-life issues (specifically) and work-family conflict (Thomas and Ganster, 1995; Thompson *et al.*, 1999; Allen, 2001; Clark, 2001; Behson, 2002) was explored.

### General supervisor support and work-to-family conflict

With respect to general supervisor support, Carlson and Perrewé (1999) conducted one of the earliest studies to investigate the relationship between supervisor support and work-to-family conflict. They tested four competing models depicting the relationships among stressors, strains and social support using structural equation modeling and discovered that social support might best be viewed as an antecedent to perceived stressors. That is, support operates as an antecedent to role-related stress, which in turn mediates the relationship between role-related strain and work-family conflict. They concluded that social support reduces the likelihood that situations will be perceived as stressful thus indirectly affecting work-family conflict through perceived stressors.

Alternatively, other researchers have found that perceived social support (from supervisors, co-workers, family members and friends) typically operates as a moderator, or buffer, and argue that work stressors (e.g., high work overload and low job control) are at least somewhat inevitable in most jobs. Therefore, work support, or the lack thereof, either increases or decreases the experience of work-to-family conflict, depending on the magnitude and type of the support (Ganster *et al.*, 1986; Parasuraman *et al.*, 1992).

### Supervisor support for work-life issues and work-to-family conflict

The research literature on organization and supervisor support for work-life issues is generally



supportive of their direct negative relationship with work-to-family conflict. In their recent comprehensive review of work-family conflict, Bellavia and Frone (2005) report that “workplace cultures that encourage balance between employees’ work and family lives tend to lessen work-to-family conflict (Thompson *et al.*, 1999; Behson, 2002), as do specific indicators of such cultures, such as organizational or supervisor support for balancing work and family life” (127). Supportive work-family cultures may contain family friendly work policies (e.g., child care benefits), programs to support healthy work-life balance (e.g., flexible work arrangements), training programs for supervisors to support work-life issues and management norms to maintain these supports.

In more specific empirical studies, Thomas and Ganster (1995) found that family friendly policies and supervisor support for work-life issues reduced work-life conflict. Mauno *et al.* (2005) found that a supportive work-family culture (which included supervisor support) related to work-family issues. Behson (2002) found that work-family context (defined as those companies having a family friendly workplace culture) had a direct impact on work-to-family conflict beyond perceptions of organizational support more generally. Thompson *et al.* (1999) found that a supportive work-family organizational culture was significantly related to work-to-family conflict whereas supervisor support for work-life issues was not. Clark (2001) found direct negative correlations between supervisor support for work-family issues and operational flexibility (employee input/control of work decisions) with role conflict (between work and family domains), but these relationships were reduced to non-significance when combined in regression analyses.

With respect to indirect relationships, Allen (2001) found that family supportive organizational policies mediated the relationship between supervisor support and work-family conflict (full mediation). Alternatively, Thomas and Ganster (1995) found that supervisor support, in addition to its direct relationship, reduced work-life conflict through control (i.e., partial mediation). Organizational factors such as work overload and job control have been conceptualized as mediators between work-related factors, work-to-family conflict and its outcomes (e.g., Ganster and Fusilier, 1989; Duxbury *et al.*, 1994; Frone *et al.*, 1997b). Generally, high levels of work overload are associated with higher levels of work-to-family conflict. From

a scarcity hypothesis perspective (Goode, 1960), high work demands require more of a individual’s resources (i.e., time and emotional) being allocated to work with fewer resources left for family (Frone *et al.*, 1997b; Carlson and Kacmar, 2000).

In addition, Karasek has studied the effects of job control on worker health extensively over the past 30 years (e.g., Karasek, 1979; Karasek *et al.*, 1981; Karasek, 1990). He has found that increased employee participation has led to a number of individual employee outcomes including reduced psychological strain resulting from stressful events and stress-related physical illness (e.g., coronary heart disease, blood pressure) (Karasek *et al.*, 1988). Consistent with Karasek’s findings, there is a considerable amount of research demonstrating that the amount of control employees perceive to have in their work environment can reduce the experience of work-related stress (Greenberger and Strasser, 1986; Ganster and Fusilier, 1989; Grzywacz and Marks, 2000).

Recently, researchers have begun to explore the impact of job control on the experience of work-family conflict. For example, Voydanoff (1988) found that perceived control over the work situation buffers the effects of some stressful work-role characteristics and the experience of work-family conflict. Similarly, Thomas and Ganster (1995) found strong support for their hypothesis that perceived control over environment mediated the relationship between supervisor and organizational support and work-family conflict. Erdwins *et al.* (2001) found that the relationship from organizational support to work-family conflict was mediated by job self-efficacy (of which the authors stated was very similar to perceived control). Finally, Janssen *et al.* (2004) found a relationship between work demands (overload) and negative work-home interference (work-family conflict).

In summary, the literature on the relationship between supervisor and organizational social support (general and specific to work-life issues) has demonstrated a wide range of relationships that include: independent antecedent, moderated, fully mediated, partially mediated and mixed (antecedent and mediated) models. These relationships need to be investigated in one study with competing models to determine which one provides the most explanatory power in assessing the impact of supervisor and organizational social support on work-to-family conflict.

**The current study**

The current study adopts the approach used by Carlson and Perrewé (1999) for general support, applies it to support for work-life issues, and integrates both partial and full models of mediation with job control and work overload. In total, five competing models depicting the relationships among organization and supervisor support for work-life issues, work overload, job control, work-to-family conflict, job satisfaction and life satisfaction are tested. These models have been developed based on the general support literature (e.g., Carlson and Perrewé, 1999) and the specific support for work-family issues (e.g., Thomas and Ganster, 1995).

**Full mediation antecedent model**

Model 1 (Figure 1) is the full mediation antecedent model depicting work overload and job control as mediators between organization and supervisor support of work-life issues and work-to-family conflict. This model applies the conceptualized relationship between general organization and supervisor support and work-family conflict (e.g., Frone *et al.*, 1994; Carlson and Perrewé, 1999) to specific support for work-life issues.

**Partial mediation antecedent model**

Model 2 (Figure 2) is the partial mediation antecedent model. This model integrates the research supporting direct (Thomas and Ganster, 1995; Behson, 2002; Mauno *et al.*, 2005) and indirect

relationships (Thomas and Ganster, 1995) for organization and supervisor support and work-family conflict.

**Organization support mediation antecedent model**

Model 3 (Figure 3) is the organization support mediation antecedent model. Based on the findings of Allen (2001) that organization family-supportiveness mediates the effect of supervisor support on work-family conflict, supervisor support for work-life issues will affect job control and work overload (and ultimately work-to-family conflict) through organization support for work-life issues.

**Moderator model**

Model 4 (Figure 4) depicts supervisor and organization support as moderating the relationship between work overload and job control and work-to-family conflict. Although fewer studies have found that organization and supervisor support operate as a moderator (Parasuraman *et al.*, 1992), this conceptual framework remains the most intuitive and dominant hypothesis regarding the effects of support and organization and supervisor support (Ganster *et al.*, 1986). According to this model work stressors such as work overload and low job control are unavoidable; thus the role of high organization and supervisor support is to buffer (i.e., moderate) the effects of these stressors and reduce work-to-family conflict.

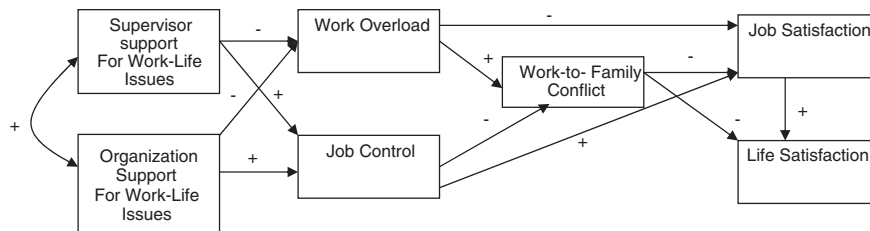


Figure 1 The full mediation antecedent model (Model 1).

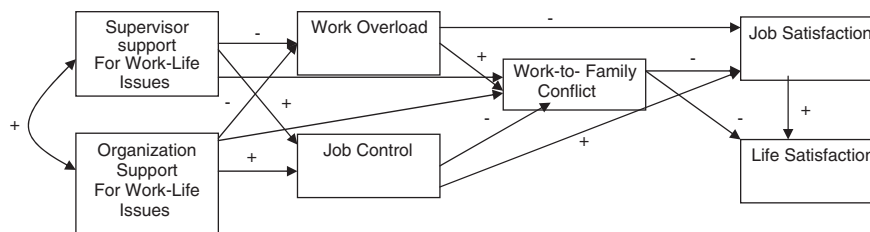


Figure 2 The partial mediation antecedent model (Model 2).

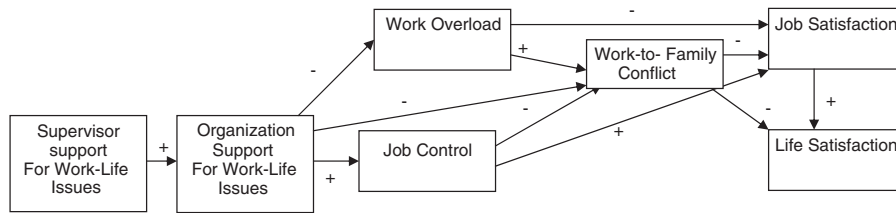


Figure 3 Organization support antecedent mediation model (Model 3).

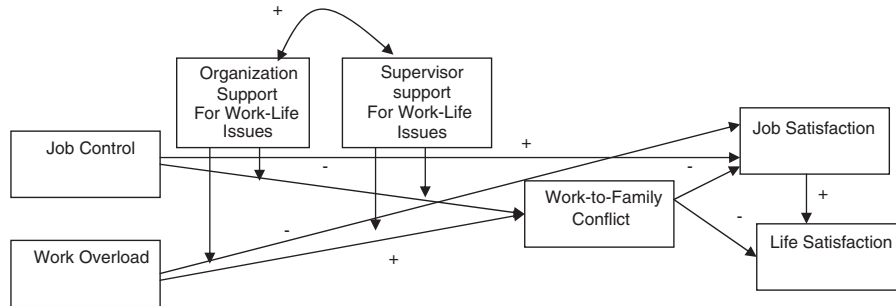


Figure 4 The moderation model (Model 4).

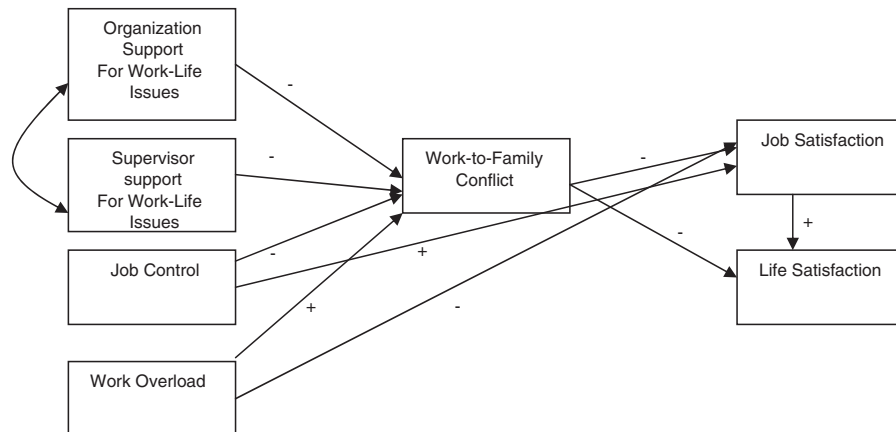


Figure 5 The independent antecedent model (Model 5).

**Independent antecedent model**

The final model (Figure 5) is the null model and depicts supervisor and organization support as direct, independent antecedents of to work-to-family conflict and unrelated to work stressors (Warren and Johnson, 1995). This model is consistent with null models used in previous research (e.g., Carlson and Perrewé, 1999).

It is hypothesized that organization and supervisor support will significantly negatively predict work-to-family conflict and that this relationship will be partially mediated by job control and work overload (thus supporting Model 2 – partial mediation antecedent). This model was favored over the

others due to the strength of the prior research (see Behson, 2002; Mauno *et al.*, 2005; and Thomas and Ganster, 1995) even though these studies did not test the integrated relationships. In addition, despite their importance, job control and work overload only represent two of many organizational options (e.g., family friendly policies, alternative work arrangements, flextime) to address work-to-family conflict.

Prior research in work-family conflict has utilized a wide range of demographic variables as covariates or controls (e.g., age, education, gender, race, marital status, organizational tenure, hours worked per week, income, responsibility for childcare).

Although an exhaustive review of the role of demographic variables is beyond the scope of this study, a short review is warranted to ensure that appropriate controls are exercised in the analysis. Across the studies focusing on organization and supervisor support for work-family issues and work-to-family conflict, the only control variable that consistently related to work-to-family conflict was work hours per week (Thomas and Ganster, 1995; Clark, 2001). Responsibility for dependents was related to work family conflict for one study (Allen, 2001) but not for two other studies (Goff *et al.*, 1990; Behson, 2002). The majority of other demographic variables were not significantly related to work-family conflict consistently across the studies (see Allen, 2001; Behson, 2002; Clark, 2001 [34] Goff *et al.*, 1990; Thomas and Ganster, 1995; Thompson *et al.*, 1999). Therefore, only work status (full or part-time) was used as a proxy for hours worked per week.

## Method

### Participants

Two samples were used in the current study. Sample 1 consisted of 92 (67%) of the workers from an Ontario mental health clinic (80% women, mean age between 41 and 50,<sup>1</sup> 75% full time, 23% part time and 1% casual, (i.e., called into work as needed typically working 0–5 h per week). The staff at the clinic included social workers, mental health workers, psychologists, psychiatrists, nurses, early interventionists, behavior therapists, family support workers and support staff. Sample 2 consisted of 115 (27%) health care workers from a medium sized hospital in Ontario (97% women, mean age between 41 and 50, 58% full time, 39% part time and 1% casual, (i.e., called into work as needed; typically working 5–10 h per week). The staff at the hospital included physicians, nurses, administrative staff, maintenance staff, paramedics, psychologists, psychiatrists, social workers and volunteers. The data were collected by the authors as part of a consulting project assessing work-life and employee well-being issues in both organizations. The purpose of this assessment was to identify areas of strength and improvement in preparation for organizational change. In order to maximize the response rate, the number of questions was kept to a minimum. All employees in both organizations were invited to respond to the anonymous survey (convenience sample; Fink, 1995).

### Measures<sup>2</sup>

**Supervisor support for work-life issues.** This was measured using an eight-item scale developed by the Canadian Aging Research Network (CARNET) (1993). This scale assesses employees' perceptions of general and individual supervisor support for work-life issues and has been used in CARNET's 1993 National Work and Home Life Questionnaire. The internal reliability for this scale was 0.91. See Appendix A for scale items.

**Organization support for work-life issues.** This was measured using a six-item scale developed by CARNET (1993). This scale assesses employees' perceptions of general organization support for work-life issues and has been used in CARNET's 1993 National Work and Home Life Questionnaire. The internal reliability for this scale was 0.92. See Appendix A for scale items.

**Work overload.** Work overload was measured with one item taken from a job stress scale developed by McDermid (2000). The item is: "I have too much work to do" with respondents asked to respond from (1) strongly disagree to (5) strongly agree.<sup>3</sup>

**Job control.** Job control was measured using a five-item scale adapted from Shehadeh and Shain (1990). This scale asks respondents to indicate the degree to which they perceive having control over how and when they work. The internal reliability for this scale was 0.79.

**Work-to-family conflict.** This was measured using an eight-item scale of work interference with family developed by McDermid (2000). This scale assesses the degree to which respondents experience time, strain, energy and behaviorally based work-to-family conflict. The internal reliability for this scale was 0.92.

**Job satisfaction.** This was measured using a four-item scale developed by Hoppock (1935). This scale assesses the degree to which respondents are satisfied with their job and have intentions to [not] change their current job. This scale has been found to be reliable across several studies (e.g., Dunham and Herman, 1975; Dunne *et al.*, 1978; Stahl *et al.*, 1978, as cited in Cook *et al.*, 1981). The internal reliabilities generated across these studies ranged from 0.76 to 0.89. In the current study, the internal reliability for this scale was 0.85.





**Life satisfaction.** This was measured using the Satisfaction with Life Scale (SWLS) developed by Pavot and Diener (1993). The SWLS is a five-item scale developed to assess satisfaction with the respondent's life as a whole. In the current study, the internal reliability for this scale was 0.91.

**Work status.** This was measured using a one-item dichotomous question asking respondents if they worked (1) full time or (2) part time.

### Procedure

Participants were asked to fill out a 13-page online or paper survey (whichever they preferred). The organization invited staff to participate in the survey by sending out an organization-wide email, advertising the survey in the organization's newsletter and placing posters on the wall. In total, 70.5% of the respondents chose to complete the survey online, after which an anonymous email containing the survey data was sent to a confidential survey email account hosted on an external server. The other 29.5% of the respondents chose to complete the paper version of the survey. It took respondents approximately half an hour to complete the survey. All participants were invited to enter a draw for a chance to win one of four prizes.

### Method of data analyses

Observed variable path analysis (with correction for scale reliability) was used to assess the relative fit of the five models to draw conclusions regarding the underlying relationships among the variables. This approach provides better estimates of population parameters because of the adjustment for measurement error (Bollen, 1989). This approach was chosen over using a full measurement latent variable model because of the small sample size. For example, Model 1 using this approach estimates 12 paths and six variances, whereas the full measurement and structural model would estimate 12 paths and 37 variances.

Due to the uncommon practice of testing moderation using path analysis (Shumacker and Lomax, 1996), it is worth noting that the procedure used to test the moderation model (Model 4) in the current study is a method described by Mathieu *et al.* (1992). Specifically, the variables involved in the interaction (i.e., supervisor support for work-life issues, organization support for work-life issues, work overload and job control) were centered and multiplied together to create a composite product variable. These variables were then entered into

Model 4, with direct paths leading to work-to-family conflict. This method has been used by Carlson and Perrewé (1999) and has been found to be a reliable and relatively parsimonious method of moderation (Cortina *et al.*, 1996, as cited in Carlson and Perrewé, 1999).

Testing moderation and mediation using observed variable path analysis (with corrections for scale reliability – see Bollen, 1989) was chosen over multiple regression for the following reasons. First, one of the main goals of the current study was to compare the overall fit of three theoretical models; thus overall fit indices are desired, which are not possible to obtain in multiple regression. In other words, observed variable path analysis allows one to model complex relationships more easily than can be assessed in multiple regression (e.g., multiple mediators, multiple dependent variables). Second, multiple regression assumes that measures are perfectly reliable whereas this approach used observed data that had been adjusted for reliability. The option of adjusting scores for reliability reduces bias in the parameter estimate (Bollen, 1989).

Model fit was assessed using the generalized likelihood ratio ( $\chi^2$ ), the root mean square error of approximation (RMSEA), Bentler-Bonett Normative Fit Index, Parsimony Fit Index, Comparative Fit Index, Expected Cross-Validation Index (ECVI) and the Akaike Information Criterion (AIC). In addition, and consistent with the approach of Carlson and Perrewé (1999), the percent of significant paths for each model was also reported. Individual parameter estimates within each model were also examined to determine the fit of specific aspects of the models.

Several researchers have argued for greater inclusion of theoretically derived *a priori* models in SEM research that include equivalent and non-equivalent alternatives (Bentler and Chou, 1987; James and James, 1989; MacCallum *et al.*, 1993; Medsker *et al.*, 1994; McDonald and Ho, 2002; Tomarken and Waller, 2003). These alternatives provide a stronger test of models than simply comparing the research model to the null model. Despite the potential use of competing theoretical models, there has been little development of statistical indices to compare non-nested models, primarily due to differences in model complexity (i.e., degrees of freedom) that can affect the fit indices. Therefore, the approach taken here was three-fold. First, models were compared using criteria that attempted to correct for differences in degrees of

freedom (as in non-nested models) (i.e., ECVI, Carlson and Perrewé, 1999; RMSEA and AIC, Kelloway, 1998; Kline, 1998). Second, the models were compared using the percentage of significant paths (Carlson and Perrewé, 1999). Third, they were compared against common criteria for the null model as if they were analyzed as separately studied independent models. Although none of these indicators are ideal, they reflect the best knowledge to date with respect to comparing competing, non-nested models.

### Results

Descriptive statistics among the variables of interest are given in Table 1 and intercorrelations among the variables of interest are given in Table 2. A one-way ANOVA was conducted to determine if there were significant differences between men and women on the variables of interest. Previous research has shown that men and women may differ in the extent that they experience work-to-family conflict and its antecedents and outcomes (e.g., Moen and Yu, 2000; Fu and Shaffer, 2001). There were no significant differences between men and women for any of the variables of interest with the exception of a marginally significant

difference with men being higher than women ( $P=0.047$ ) in job control. Independent *t*-tests across the two organizations revealed significant differences in supervisor support, organization support, work-to-family conflict and job control with the public health unit having the higher mean for all variables with the exception of work-to-family conflict.

### Model estimation and parameter estimates

Table 3 shows the fit indices for the sample. Two of the antecedent models (Model 2 and Model 3) produced the best overall fit (evidenced in the superiority of Model 2 and Model 3 for 7 of the 8 fit indices). Model 2 demonstrated a slight advantage over Model 3 across all indicators with the exception of the percentage of significant paths; however, in the absence of formal statistical tests for determining the significance of these differences both models warrant further investigation. Parameter estimates within the models were examined to determine if each path in the model was predicting the endogenous variable as expected. The standardized<sup>4</sup> path coefficients for Models 2 and 3 are presented in Figures 6 and 7, respectively. As shown in Figure 6, 11 of the 14 estimated

**Table 1** Descriptive statistics for samples<sup>a</sup>

Variable	Public Health Clinic (N=92)		Hospital (N=115)		Total	
	M	SD	M	SD	M	SD
Supervisor support	3.96**	0.73	3.46**	0.80	3.68	0.80
Organization support	3.65**	0.82	3.16**	0.79	3.38	0.84
Work Overload	3.89	1.05	3.56	1.00	3.73	1.09
Job control	3.60**	0.77	3.28**	0.67	3.42	0.74
Work-to-family conflict	2.51*	0.73	2.77*	0.82	2.65	0.79
Job satisfaction	3.61	0.70	3.62	0.67	3.61	0.68
Life satisfaction	3.50	0.85	3.33	0.67	3.41	0.76

<sup>a</sup>The means and standard deviations are reported after dividing by the number of items on the corresponding scale, to report a standardized value out of five across all scales. This was done to facilitate cross-scale comparisons.

\* $P < 0.05$ . \*\* $P < 0.001$  for mean differences between the two samples.

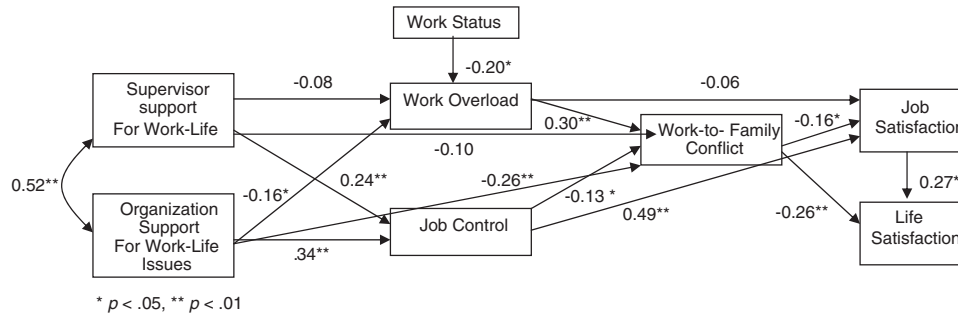
**Table 2** Intercorrelations among the study variables for total sample

Variable	1	2	3	4	5	6	7
1. Supervisor support for work-life issues	—	0.52**	-0.16*	0.42**	-0.34**	0.31**	0.24**
2. Organization support for work-life issues	—	—	-0.21**	0.47**	-0.44**	0.31**	0.15*
3. Work overload	—	—	—	-0.23**	0.40**	-0.24**	-0.11
4. Job control	—	—	—	—	-0.37**	0.56**	0.30**
5. Work-to-family conflict	—	—	—	—	—	-0.37**	-0.36**
6. Job satisfaction	—	—	—	—	—	—	0.37**
7. Life satisfaction	—	—	—	—	—	—	—

**Table 3** Fit indices for the three models for the total sample

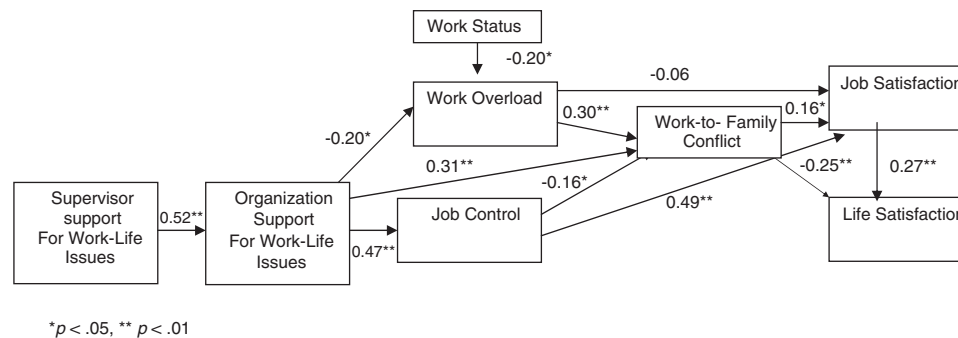
Model	$\chi^2$	df	N	NFI	PNFI	CFI	AIC	RMSEA	ECVI	% Paths Significant
Full Mediation antecedent	35.53*	16	207	0.90	0.40	0.94	91.53	0.08	0.44	83
Partial mediation antecedent	12.68	14	207	0.97	0.38	1.00	72.68	0.00	0.35	79
Organization support mediation antecedent	27.52	16	207	0.93	0.41	0.97	83.52	0.06	0.41	92
Moderator	382.03*	51	207	0.47	0.31	0.49	406.03	0.16	1.97	71
Independent antecedent	84.31*	17	207	0.77	0.36	0.80	138.31	0.14	0.671	80

\* $P < 0.001$ .



**Figure 6** Standardized path coefficients for Model 2.

\* $P < 0.05$ , \*\* $P < 0.01$ .



**Figure 7** Standardized path coefficients for Model 3.

\* $P < 0.05$ , \*\* $P < 0.01$ .

parameters for Model 2 were significant in the expected direction. As shown in Figure 7, 11 of the 12 estimated parameters for Model 3 were significant in the expected direction. In Model 2, the paths from supervisor support to work overload ( $\beta = -0.08$ ,  $P > 0.05$ ), supervisor support for work-life issues to work-to-family conflict ( $\beta = -0.10$ ,  $P > 0.05$ ) and work overload to job satisfaction ( $\beta = -0.06$ ,  $P > 0.05$ ) were not significant. In Model 3, the path from work overload to job satisfaction ( $\beta = -0.06$ ,  $P > 0.05$ ) was not significant.

In summary, the study found two models (2 and 3) that provided the best fit to the data. First,

work-to-family conflict was significantly negatively related to job and life satisfaction (in both models). Second, work overload was positively related to work-to-family conflict and partially mediated the relationship between organization support for work-life issues and work-to-family conflict (in both models). Third, job control was negatively related to work-to-family conflict and partially mediated the relationship between organizational support for work-life issues and work-to-family conflict (in both models). Fourth, job control fully mediated the relationship between supervisor support for work-life issues and work-to-family

conflict (in both models) with organizational support being an additional full mediator of this relationship in Model 3.

### Discussion

The primary goal of the current study was to test the direct and indirect relationships among organization and supervisor support for work-life issues, work overload, job control, work-to-family conflict and job and life satisfaction with an integration of the findings across the general support and support for work-family issues literatures. The impetus of this investigation was to determine the dominant relationship regarding the role of organization and supervisor support for work-life issues in reducing work-to-family conflict. While it is well established that supervisor and organization support have significant roles in the reduction of work-to-family conflict (e.g., Frone *et al.*, 1997a, b; Erdwins *et al.*, 2001), this study addresses the need to examine the complex relationships among all of these variables within one study to determine the process by which the reduction occurs.

Two of the antecedent models (Models 2 and 3) best represented the relationships among organization and supervisor support for work-life issues and work-to-family conflict. Moreover, although the moderation model is intuitively appealing, it produced the worst fit to the data. Therefore, consistent with the findings of Carlson and Perrewé (1999), the results of the current study suggest that organization and supervisor support for work-life issues can best be conceptualized as antecedents to job stressors (e.g., work overload), which subsequently reduce work-to-family conflict. These findings are also similar to those of Thomas and Ganster (1995), indicating that organization and supervisor support for work-life issues may be conceptualized as reducing work-to-family conflict through an increase in job control. Although job control and work overload have been found to be significant and often the most prevalent predictors of work-to-family conflict, it is important for future research to explore the effects of other work-related stressors on work-to-family conflict such as lack of meaningfulness at work and physical exertion (Kittel and Leynen, 2003).

Identifying ways in which organization and supervisor support reduce the impact of work-related stressors has practical implications for organizations aiming to reduce the stress associated with work-to-family conflict among their employees. Specifically, if research continues to demonstrate

that organization and supervisor support operate as antecedents to work demands and job control, it may not be enough for organizations to focus on secondary interventions that simply buffer the effects of work overload and low job control. Rather, managers should implement primary interventions that reduce work demands and increase job control, as Quick *et al.* (1992) suggest. These may include developing more economical ways of performing tasks, job re-design, implementing new work systems and giving employees more decision-making power. In addition, organization characteristics may constrain the options that organizations and supervisors have in addressing work-to-family conflict.

However, unlike Carlson and Perrewé (1999), these findings suggest that the true relationship among these variables may be one of partial, not full, mediation. This is interesting given that, although work-related stressors have been found in previous research to relate directly (Frone *et al.*, 1997b), to work-to-family conflict (e.g., Frone *et al.*, 1992a, b; Grandey and Cropanzano, 1999), and work-related support has been found in previous research to relate directly to work-to-family conflict (e.g., Frye and Breugh, 2004; Thompson *et al.*, 2004), there is a lack of research testing a partial mediation model. Given that the partial mediation models produced the best overall fit to the data, it is likely that both support and work-related stressors partially, and directly, affect work-to-family conflict. This finding has significant implications for the research literature as it suggests that organizations have multiple options to consider in addressing work-to-family conflict. These include increasing perceptions of organization and supervisor support for work-life issues, increasing job control and decreasing work overload. This study provides a more holistic direction for future research and practice in understanding these issues as they relate to work-to-family conflict. Moreover, the partial mediation effects may suggest that there are other mediators that need to be identified beyond job control and work overload playing a role in these relationships.

Although both Models 2 and 3 had excellent fit to the data, Model 2 had a slightly better overall fit than Model 3. This is interesting, given the findings of Allen (2001) that employee perceptions of organization support for work-life issues mediate the relationship between supervisor support for work-life issues and work-family conflict. However, drawing on the conclusions of Carlson and Perrewé



(1999), the current study incorporates the mediating effects of work stressors (i.e., work overload and a lack of job control). Given that work stressors such as lack of job control and work overload have been found to relate directly to supervisor support (e.g., Frone *et al.*, 1997b; Erdwins *et al.*, 2001), it is not surprising that the model that represented these direct relationships fit better than the one that did not reflect these relationships. The relative fit of Models 2 and 3 needs to be tested in future research to further explore the relationship among these variables.

In terms of the predicted paths within Models 2 and 3, almost all of the paths were significant in a meaningful way (based on prior research), with the exception of the non-significant paths from supervisor support for work-life issues to work overload and from work overload to job satisfaction in Model 2, and the non-significant path from work overload to job satisfaction in Model 3. The lack of relationship between supervisor support for work-life issues and work overload contradicts some prior research (e.g., Carlson and Kacmar, 2000). One reason may be that work-to-family conflict fully mediates this relationship. That is, work overload impacts negatively on job satisfaction only through work-to-family conflict. Conversely, the relationship between job control and job satisfaction is only partially mediated by work-to-family conflict. Therefore, job control may lead to satisfaction directly, as well as through a reduction in work-to-family conflict. These results support the positive benefits of reducing work overload and providing a sense of job control to employees.

Although the current study extends previous research, it differs from the previous work in three primary ways. First, the current study integrated the general supervisor social support and support for work-life issues literatures by developing conceptual models from both domains and testing these in a competitive framework. As a result this study found support for the application of general support models to the support for work-life issues and their importance in reducing work-to-family conflict. Therefore, future theoretical models and interventions should focus on this specific type of support to decrease work-family conflict.

Second, this study demonstrated that job control and work overload are important mediators between support for work-life issues and work-to-family conflict. This finding extends the literature on specific support for work-life issues to include these variables. In addition, the partial mediation

results suggests that there may be additional variables not assessed in this study beyond job control and work overload that are important in reducing work-to-family conflict. As organizations continue to struggle with these issues, this finding suggests that there may be other solutions to be discovered to address work-to-family conflict in the workplace.

Third, the sample in the current study consists of health care workers, as opposed to government employees or the public. Health care workers experience higher levels of work stress and job dissatisfaction resulting from unsatisfactory working conditions (Aiken *et al.*, 2002; Tomlinson, 2002) and have higher levels of work-interference with family (Burke, 2001), compared to other industries. Little prior research exists examining the prevalence of work-to-family conflict among health care workers and, more importantly, ways in which this conflict may be reduced. A recent Health Care Labour Market Survey, conducted by Ontario's district health councils polled 860 agencies regarding health care staff needs. It was found that health care workers are primarily interested in self-scheduling, flexible work hours and assistance with work-life issues initiatives rather than financial incentives, as previously thought (Tomlinson, 2002). These interests support the positive benefits of job control as found in this study.

#### Limitations and directions for future research

Despite the unique contributions of this study there are four main limitations. First, the results of the current study are mainly generalizable to women. Although there were a small number of men, there were not enough men in the overall study to warrant conclusions regarding the male population. Although several studies have found little or no support for gender differences in work-to-family conflict directly (e.g., Frone *et al.*, 1992b; Byron, 2005), Byron (2005) did find evidence for indirect effects of gender (e.g., mothers experience more work-to-family conflict than fathers and flexible scheduling had a greater benefit for women over men). Potential gender differences are more difficult to assess in health care organizations because they may be confounded with occupation (e.g., the majority of nurses are female). It should be noted that the low number of men is partially a function of the population of interest in the current study (i.e., health care workers). Therefore, it may be appropriate to generalize to the population of health care workers, nonetheless.



Second, in terms of the measures used in the current study, the use of a single item for work overload is problematic.<sup>3</sup> When instruments are designed to minimize the number of questions while at the same time providing information across many areas, sometimes key issues do not receive the necessary number of questions. Future research should replicate this study with a workload measure using multiple items.

Third, the theoretical goal of this study was to compare results across models using the same measures. Unfortunately, generally accepted indicators for comparing non-nested models do not currently exist and therefore the study was limited in its ability to definitively test competing models. Several indicators were chosen that attempt to address the issue of comparing models that differ in their complexity (i.e., RMSEA, ECVI, percentage of significant paths and AIC) but more appropriate indicators designed for this purpose are needed. A number of researchers have argued for the inclusion of theoretically derived competing models in SEM research (Tomarken and Waller, 2003), but in order for these to be fully utilized, appropriate indicators will need to be developed.

Finally, due to constraints resulting from the small sample size, the current study only examined organization determinants of work-to-family conflict, not family determinants or family-to-work conflict. Although a limitation to the current study, several studies (e.g., Wiley, 1987; Kossek and Ozeki, 1998; Kinnunen and Mauno, 1998; Duxbury and Higgins, 2001) have shown that the occurrence of work-to-family conflict is more prevalent than family-to-work conflict. Therefore, of the two aspects of the work-family dynamic, work-to-family conflict was chosen as the focus of this research.

The results of this study have important implications for future research. First, it suggests that organizations hoping to address work-to-family conflict need to consider multiple issues in their organizations that include: organization policies and culture, manager views with respect to work-life issues, work overload and job control. Moreover, given the support for partial mediation there may be additional ways that health care organizations can leverage organizational and supervisor support for work-life issues to reduce work-to-family conflict.

In addition, it would be interesting to repeat this study with support for work-life measures that reflect the well-established four types of social support (i.e., self-esteem, emotional, instrumental

and informational) (House, 1981). Himle *et al.* (1991) found that informational and instrumental support provided by co-workers and supervisors had buffering effects on work overload. However, there was no evidence of significant buffering effects from emotional or approval support. Therefore, it would also be valuable to replicate this study using measures of faceted organization and supervisor support for work-life issues. It might be found that supervisor emotional support acts as a moderator of the relationship between work demands and work-family conflict while supervisor instrumental support acts as an antecedent to work demands. Although the use of House's (1981) dimensions of social support is more readily apparent for supervisor support, they can also apply to organization support. For example, information and instrument support can be provided through organization services such as stress counseling and employee assistance programs. The application of emotional and self-esteem support is less obvious but these could be achieved through internal communications that emphasize the "normalcy" of these issues and how addressing these issues at an individual level represents positive personal growth.

Work-to-family conflict is related to criteria that are important to organizations such as job satisfaction (Burke and Greenglas, 2001; Bruck *et al.*, 2002; and Ford *et al.*, 2007), employee health (Frone *et al.*, 1997a), absenteeism (Goff *et al.*, 1990) and retention/turnover (Carr *et al.*, 2008). Organizations and supervisors who understand work-to-family conflict and deal with it effectively should be able to benefit from higher job satisfaction, lower absenteeism and turnover, which may impact organizational productivity and performance. It is clear that work-to-family conflict is an important issue for effective people management in organizations and can be managed through both organizational programs and supervisor behaviors.

### Conclusions

Although the findings of this study are generally consistent with previous research, this investigation is the first study to directly test competing models of how organization and supervisor support for work-life issues reduces work-to-family conflict through a decrease in work stressors and increase in job control within an organization context. This study gives direction toward causal testing in the area of organization and supervisor support and the reduction of work-to-family conflict. Given the



increasing prevalence of work-to-family conflict (Duxbury and Higgins, 2001), future research is needed to evaluate the effects of interventions in organizations designed to reduce work-to-family conflict through an increase in organization and supervisor support. Moreover, while the findings in the current study must be replicated within other industries, the practical implications for organizations to focus more on work-family supportive cultures and to implement strategies focusing on the reduction in work stressors are clearly indicated.

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### Notes

<sup>1</sup>Due to the sensitivity of the question and the risk of reducing anonymity, we only asked age ranges and, therefore, are unable to report the exact mean age.

Note that the age range 3.5 corresponds to the age range 41–50. The relative distributions of age ranges were 12.1% between 21 and 30, 25.1% between 31 and 40, 43.5% between 41 and 50, and 17.9% between 51 and 60.

<sup>2</sup>Unless otherwise noted, all scales used a 5-point Likert type format with Strongly Disagree (1) to Strongly Agree (5).

<sup>3</sup>An attempt was made to create a work overload scale with two additional items added (“different supervisors and supervisors want me to do different things at the same time” and “at work everybody helps each other out” – reverse scored). Although the internal consistency for this measure was low at 0.60 and 0.51 for each sample, the overall results of the path analysis were similar to the results with the single item.

<sup>4</sup>It is understood that standardized path coefficients can sometimes to be too small when endogenous variables are measured with error; however, the standardized coefficients were not significantly different from the unstandardized coefficients for these data. Therefore, the standardized coefficients are reported for ease of interpretation.

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## Appendix A

### Support for work-life issues

Please indicate the extent to which you agree or disagree with each of the following statements (1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

#### Supervisor

1. My supervisor does not understand that there are times when employees' personal/family demands come before their job.
2. My supervisor does things to help employees deal with issues in their work and their family/personal lives.
3. In scheduling meetings or work hours, my supervisor shows little concern for employees' personal/family demands.
4. My supervisor does what he/she can to make things easier when employees are having difficulties with things at home.
5. My supervisor shows little respect for my personal/family responsibilities.
6. My supervisor does not appreciate how important my personal/family life is for me.
7. My supervisor shows concern about how things are going for me outside of work.

8. My supervisor is not interested in hearing about the demands I face outside of work.

#### Organization

1. People with personal/family responsibilities do not do as well in this organization.
2. This organization frowns on employees who cut back on their hours of work for personal/family reasons.
3. In order to succeed in this organization, employees have to put their family life second.
4. This organization believes that employees who take a leave of absence for personal/family reasons are not as serious about their jobs.
5. This organization tries to help employees make work arrangements that suit their personal/family responsibilities.
6. This organization gives out a message that employees should not allow their personal/family lives to interfere with work.

#### About the authors

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