Relationships of Job and Family Involvement, Family Social Support, and Work-Family Conflict With Job and Life Satisfaction

Gary A. Adams, Lynda A. King, and Daniel W. King Central Michigan University

A model of the relationship between work and family that incorporates variables from both the work-family conflict and social support literatures was developed and empirically tested. This model related bidirectional work-family conflict, family instrumental and emotional social support, and job and family involvement to job and life satisfaction. Data came from 163 workers who were living with at least 1 family member. Results suggested that relationships between work and family can have an important effect on job and life satisfaction and that the level of involvement the worker assigns to work and family roles is associated with this relationship. The results also suggested that the relationship between work and family can be simultaneously characterized by conflict and support. Higher levels of work interfering with family predicted lower levels of family emotional and instrumental support were associated with lower levels of family interfering with work.

The growing body of occupational stress research regarding the relationship between work and family has suggested that there are interconnecting and possibly reciprocal influences between these two domains (Greenhaus & Parasuraman, 1987; Kanter, 1977; Rice, Near, & Hunt, 1980; Schmitt & Bedeian, 1982). Much of this research has proceeded along two lines of inquiry. The first has focused on work-family conflict, where researchers argued that conflict between the work and family domains can be a source of stress that influence important psychological and physical outcomes (e.g., Bacharach, Bamberger, & Conley, 1991; Frone, Russell, & Cooper, 1992). The second line of inquiry has focused on social support. Researchers have contended that social support provided by members of the work and/or family domains can have a positive influence on workers' general health and well-being (e.g., Beehr & McGrath, 1992; S. Cohen & Wills, 1985). There has been little integration of these two streams of research (Greenhaus, 1988; Jackson, Zedeck, & Summers, 1985). This is unfortunate because most studies tend to provide a glimpse of either the

sented and empirically tested.

view of the whole interface.

Models of work-family conflict propose that (a) work-family conflict arises when demands of participation in one domain are incompatible with demands of participation in the other domain, and (b) this conflict can have an important effect on the quality of both work and family life (Burke, 1988; Greenhaus & Beutell, 1985; Kopelman, Greenhaus, & Connolly, 1983). In addition, recent research in this area explicitly recognized that relationships between work and family are bidirectional. That is, work can interfere with family, and family can interfere with work (Frone et al., 1992; Gutek, Searle, & Klepa, 1991; Kanter, 1977; Rice, Near, & Hunt, 1979, 1980).

positive or negative aspects of the work-family interface

and consequently do not usually provide an accurate

both the work-family conflict and social support litera-

tures to further understanding of the joint influence of

these factors on well-being. In the sections that follow, re-

search from the work-family conflict perspective and the

social support perspective is briefly overviewed. Then,

the two perspectives are integrated, and the role of in-

volvement as an important antecedent of both conflict

and social support is highlighted. Following this, a model

relating work-family conflict, social support, and job and

family involvement to job and life satisfaction is pre-

The purpose of the present study was to draw upon

Empirical evidence supports the contention that both of these types of work-family conflict can have a negative

Gary A. Adams, Lynda A. King, and Daniel W. King, Department of Psychology, Central Michigan University. Lynda A. King and Daniel W. King are now at the National Center for Post-Traumatic Stress Disorder, Veterans Affairs Medical Center, Boston, Massachusetts.

Correspondence concerning this article should be addressed to Gary A. Adams, who is now at the Department of Psychology, University of Wisconsin, 800 Algoma Boulevard, Oshkosh, Wisconsin 54901.

Work-Family Conflict

effect on important work and family-related outcomes that in turn influence general health and well-being. With regard to work-related outcomes, Burke (1988) found that a higher level of work interfering with family was related to more psychological burnout and alienation and less job satisfaction in a sample of police officers. Similarly, Bacharach et al. (1991) found that work interfering with family was significantly related to burnout, which then was related to lower job satisfaction for both a sample of nurses and a sample of engineers. More recently, Thomas and Ganster (1995) reported that work interfering with family was negatively related to job satisfaction and positively related to depression and health complaints among health care workers. With regard to family-related outcomes, a series of studies investigating dual-career families conducted by Higgins and his colleagues (Duxbury & Higgins, 1991; Higgins & Duxbury, 1992; Higgins, Duxbury, & Irving, 1992) found work interfering with family had a significant relationship with family-related outcomes. For instance, in a study of 220 career-oriented individuals, Higgins et al. (1992) found that work interfering with family was related to lower quality of family life. This lower quality of family life was in turn related to lower levels of life satisfaction among workers.

Although researchers have tended to focus on work interfering with family, several empirical studies supported a relationship between family interfering with work and some of these work and family outcomes as well. For instance, Wiley (1987) noted that family interfering with work was negatively related to job satisfaction, organizational commitment, and life satisfaction in a sample of employed graduate students. Along these same lines, Frone et al. (1992) documented that a higher level of family interfering with work was related to incidence of clinical depression and distress on the job for a large, community-based sample of working adults.

Social Support

Research investigating the effects of social support demonstrated that it is indeed related to increased health and well-being (for reviews, see Beehr & McGrath, 1992; S. Cohen & Wills, 1985; Vaux, 1988). Although there is no single, accepted definition of social support within the occupational stress literature, there is a growing consensus that social support can come from both work and nonwork sources and that this support is primarily in the form of either emotional support (e.g., listening and providing empathy) or instrumental support (e.g., tangible assistance aimed at solving problem; Beehr & McGrath, 1992; R. D. Caplan, Cobb, French, Harrison, & Pinneau, 1975; Kaufmann & Beehr, 1986; McIntosh, 1991).

Although social support from work-related sources

probably figures more importantly in the occupational stress process than does support from non-work-related sources (Beehr, 1995), nonwork sources also seem to play a role (Kahn & Byosiere, 1991; LaRocco, House, & French, 1980). Prominent among the nonwork sources of social support is social support from family members. Indeed, as a primary source of support (Beehr, 1985), family members have a unique opportunity to provide both emotional support and instrumental support to the worker outside of the work environment (G. Caplan, 1976).

In the organizational sciences, social support from family has received less research attention than work-related sources of social support, and few studies have examined emotional and instrumental support types separately. Furthermore, most of these studies have operationalized nonwork support sources in terms of a combined reference to "family and friends." In studies that have examined nonwork social support (but did not distinguish between emotional and instrumental support), social support from family and friends has been more strongly associated with general health and well-being and weakly associated with work-related strains. For instance, using a stratified (by occupation) random sample of workers, LaRocco et al. (1980) found family and friend support did not predict work-related outcomes (e.g., job satisfaction), but it did predict general well-being (e.g., depression and anxiety). Additionally, in a study of workers in the construction industry, Ganster, Fusilier, and Mayes (1986) documented social support from family and friends to be more strongly correlated with health complaints than other indices of wellbeing. In one of the few studies that did examine nonwork sources of emotional and instrumental support separately, Kaufmann and Beehr (1989) reported emotional support from family and friends was significantly related to a composite of variables (job satisfaction, boredom, and depression) that they labeled strain reactions, but that instrumental support from family and friends did not.

In summary, the literature generally suggests that family social support can play an important role in the occupational stress process. However, it is probably more strongly related to general health and well-being than to specific work-related strains.

Integrating Work-Family Conflict and Family Social Support

As noted earlier, research from both the work-family conflict and the social support perspectives has generally developed independently of one another, and there are few studies that have sought to integrate them. Clearly, work-family conflict and family social support are both

likely to have a relationship with both domain-specific and general measures of health and well-being. However, it is also likely that aspects of each may influence and be influenced by aspects of the other. That is, a specific form of conflict may influence a particular type of support, and another type of support may influence an alternative form of conflict.

Thomas and Ganster (1995) conducted one of the few studies that examined the relationship of social support with work-family conflict. They were concerned with whether supportive workplace programs could influence work-family conflict. The results from a sample of health care providers with at least one family member living in the home suggested that support from supervisors helped reduce work-family conflict. Similarly, Burke (1988) documented that a lack of social support in the nonwork environment was related to work-family conflict in a sample of police officers. Another study, Bedeian, Mossholder, and Touliatos (1987) indirectly addressed the relationship of support to work-family conflict. These researchers found that the propensity to provide emotional support to one's partner in a dual-career relationship was inversely associated with the degree to which one's job affects one's home and family life.

With regard to the influence of work-family conflict on social support, Jackson et al. (1985) suggested that "if the negative effects of the employees' jobs reach their family, families may find it difficult to be supportive" (p. 584). A similar suggestion was made by Beehr and McGrath (1992) who proposed that a person experiencing stress may display a tendency to withdraw from potentially supportive people and/or influence the willingness of others to provide support. Given that there is evidence to suggest that distressed workers may create discord within their family life (e.g., Barling & Rosenbaum, 1986; Jackson & Maslach, 1982), it would not be surprising to find that the presence of work-family conflict may limit the family's ability or desire to provide social support (Beehr, 1995).

Of course, work-family conflict and social support from family have their own antecedents (Granrose, Parasuraman, & Greenhaus, 1992; Greenhaus & Beutell, 1985). One antecedent likely to influence both of these is the degree of importance the worker assigns to work and family roles (Greenhaus & Parasuraman, 1987). Although past research found job involvement may lead to a sense of competence and higher levels of job satisfaction (Sekaran, 1989), it may also lead to work-family conflict. Research investigating this latter issue has been mixed. Using a general measure of work-family conflict, Higgins et al. (1992) found that job involvement was positively related to work-family conflict, but that family involvement was not. However, research examining specific forms of work-family conflict is also somewhat

mixed. For instance, Frone et al. (1992) noted job involvement was significantly related to work interfering with family among white-collar workers but not among blue-collar workers. They also found family involvement was significantly related to family interfering with work.

It is reasonable to suspect job and family involvement are also related to social support from family. Job involvement may lead to work interfering with family, which in turn leads to lower levels of both emotional and instrumental support from family members. Workers who are highly involved in their jobs may devote more time and energy to the work role than to the family role (Greenhaus & Beutell, 1985). Disproportionate emphasis on the work role would then lead to work interfering with family and an associated decrease in family social support. Family involvement, on the other hand, can lead to higher levels of social support from family because workers who enjoy high levels of family involvement are likely to devote more time and energy to family and thereby increase the family's opportunity and motivation to provide support.

Overview of Model and Related Hypotheses

Figure 1 presents a conceptual model relating job involvement, family involvement, emotional support from family, instrumental support from family, work interfering with family, and family interfering with work to job and life satisfaction. Job involvement is hypothesized to have a positive relationship to job satisfaction (Sekaran, 1989) and to work interfering with family (Frone et al., 1992). Family involvement is hypothesized to have a positive relationship to both types of family social support and to family interfering with work. Work interfering with family is hypothesized to have a negative association with job and life satisfaction (Higgins et al., 1992), and family interfering with work is hypothesized to have a negative association with job satisfaction. Work interfering with family is also hypothesized to have a negative association with both types of family social support. Emotional and instrumental support from family are hypothesized to be positively associated with life satisfaction (LaRocco et al., 1980) and negatively associated with family interfering with work. Finally, job satisfaction is hypothesized to have a positive association with life satisfaction.

Method

Sample

The participants in this study were 163 full-time workers (58 men and 104 women, with 1 nonresponse to the gender inquiry) enrolled in either weekend or evening courses as part of an extended degree offered by a medium-sized comprehensive uni-

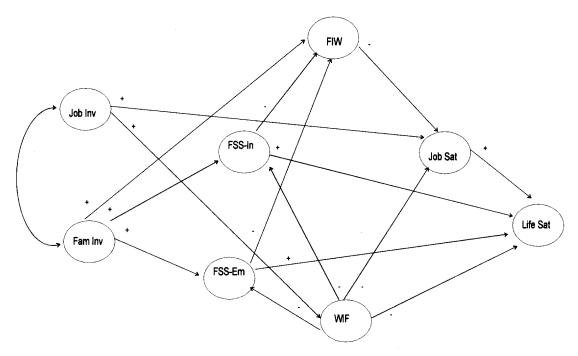


Figure 1. Hypothesized model relating involvement, social support, and work-family conflict to job and life satisfaction. Job Inv = job involvement; Fam Inv = family involvement; FSS-In = family social support-Instrumental; FSS-Em = family social support-emotional; FIW = family interfering with work; WIF = work interfering with family; Job Sat = job satisfaction; Life Sat = life satisfaction. Plus and minus signs indicate the direction of the influence of one variable on the other.

versity located in Michigan. This program is a multisite, offcampus effort aimed at nontraditional students who are usually working adults. All participants were living with at least one family member. These participants ranged in age from 21 to 62 years old (M = 37.90, SD = 9.31). They were drawn from a diverse array of occupational groups including managers, health care workers, educators, and clerical workers. (A complete listing of job titles is available from the authors upon request.) Two graduate students trained in survey administration visited classrooms and asked potential participants to volunteer to take part in the study. During these classroom visits, potential participants were informed of the purpose of the study and the criteria for inclusion (employed full-time and living with at least one family member). Participants were requested to complete the questionnaire at their leisure and return it in a stamped, preaddressed envelope. A total of 400 questionnaires were distributed, with a 41% response rate.

Measures

The survey questionnaire contained items assessing general demographic characteristics, as well as a number of instruments measuring work interfering with family, family interfering with work, emotional and instrumental social support from family, job and family involvement, and job and life satisfaction. All items were rated on a five-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree) unless other-

wise noted, and all items were scored such that a higher score indicated higher standing on the construct being measured. The average of the item scores for the items in each instrument were then taken to arrive at the participant's score on each measure.

Work interfering with family was measured with four items adapted from Kopelman et al. (1983). Sample items include: "My work takes up time that I would like to spend with my family" and "I am preoccupied with my work while I am at home." Family interfering with work was measured with four items adapted from Burley (1989). Sample items include: "I am often too tired at work because of things I do at home" and "I am preoccupied with my personal life while at work."

King, Mattimore, King, and Adams' (1995) Family Support Inventory for Workers was used to measure family social support; it contains a 29-item emotional sustenance subscale and a 15-item instrumental assistance subscale. Sample items from the emotional sustenance subscale are "Someone in my family helps me feel better when I'm upset about my job" and "Members of my family always seem to make time for me if I need to discuss my work." Sample items from the instrumental assistance subscale are "If my job gets very demanding, someone in my family will take on extra household responsibilities" and "Members of my family are willing to straighten up the house when it needs it."

Job involvement was assessed with five items from Kanungo (1982), and family involvement was measured with five paral-

Table 1
Summary Statistics and Intercorrelations for All Variables

	Variable	No. of Items	<i>M</i>	SD	1	2	3	4	5	6	7	8
1.	Job involvement	5	3.00	.72	(.68)							
2.	Family involvement	5	3.77	.72	11	(.80)						
3.	Instrumental assistance	15	3.52	.77	03	.01	(.93)					
4.	Emotional sustenance	29	3.80	.60	04	.22**	.63**	(.95)				
5.	Work interfering with family	4	3.11	.81	.28**	.05	26 **	25**	(.72)			
6.	Family interfering with work	5	2.11	.64	.10	.05	39**	30**	.30**	(.66)		
7.	Job satisfaction	5	3.41	.80	.29**	.03	.17*	.21**	24**	14	(.80).	
8.	Life satisfaction	7	5.74	.93	11	.19*	.28**	.39**	25**	16*	.29**	(.91)

Note. Items in main diagonal are coefficient alpha reliability estimates; all variables were measured on a 5-point response continuum with the exception of life satisfaction, which was measured on a 7-point response continuum. N = 146. * p < .05. ** p < .01.

lel items developed by Frone et al. (1992). Sample items from the job involvement instrument include, "I am very much personally involved in my job" and "Most of my interests center around my job." Sample items from the family involvement instrument include: "I am very much personally involved in my family" and "Most of my interests center around my family."

The measure of job satisfaction was comprised of five items from Hackman and Oldham's (1975) Job Diagnostic Survey. Sample items from this instrument are "Generally speaking I am very satisfied with this job" and "I am generally satisfied with the kind of work I do on this job." Life satisfaction was measured with seven bipolar adjective items (Quinn & Shepard, 1974). Sample items include: miserable-enjoyable and empty-full. These adjective pairs were preceded by instructions asking the participant to "circle one number on every line that describes how you see your life." These items were rated on a 7-point scale, with higher numbers reflecting higher standing on this construct.

Analyses

First, means, standard deviations, internal consistency estimates, and intercorrelations were computed for all variables. Following this, a series of hierarchically nested regression equations (J. Cohen & Cohen, 1983) that are consistent with the model in Figure 1 was used to test the hypothesized relations among the variables. For this analysis, job involvement and family involvement were treated as correlated exogenous variables (so designated by the double arrow curve in Figure 1). To test the overall adequacy of the model specified in Figure 1, we compared the results of the path analysis for this restricted model to a more saturated general model in which all possible paths to downstream endogenous variables were specified. Listwise deletion of missing values was applied during the analysis. Therefore, the path analysis was conducted on 146 cases. All hypotheses were evaluated with one-tailed directional tests.

Results

Table 1 presents the means, standard deviations, and coefficient alphas for all variables and their intercorre-

lations. The internal consistency estimates were reasonable, with five of the eight measures having coefficient alphas higher than .80. Although the coefficient alphas for the remaining three instruments (job involvement, family interfering with work, and work interfering with family) are slightly lower than those reported for these instruments by other researchers (e.g., Frone et al., 1992), they are nonetheless consistent with expectations, given the breadth of the constructs being measured and the relatively small number of items that comprise each of these instruments.

Figure 2 presents the results of the path analysis, where 11 of the 14 hypothesized relationships were supported. Table 2 presents the set of equations that form the basis of the path analysis along with the standardized regression weights for each variable and the overall R^2 for each equation. The results of the path analysis for the model hypothesized (restricted) in Figure 1 was then compared with a more general (saturated) model from Kim and Kohout's (1975) large-sample chi-square statistic, $\chi^{2}(11, N = 146) = 10.92, p = .45$, suggesting that the hypothesized model fit the data, as well as the more saturated general model and, hence, is to be preferred. Tables 3 and 4 present the total, direct, and indirect effects of the involvement, conflict, and support variables on life satisfaction and job satisfaction, respectively. For life satisfaction, the strongest effects came from work interfering with family and emotional sustenance from family. For job satisfaction, the strongest effects came from job involvement and work interfering with family. The results for specific relationships are presented and discussed below.

Job and Family Involvement

With regard to job involvement as a predictor of job satisfaction, consistent with the findings reported by Sekaran (1989), workers who reported higher levels of job

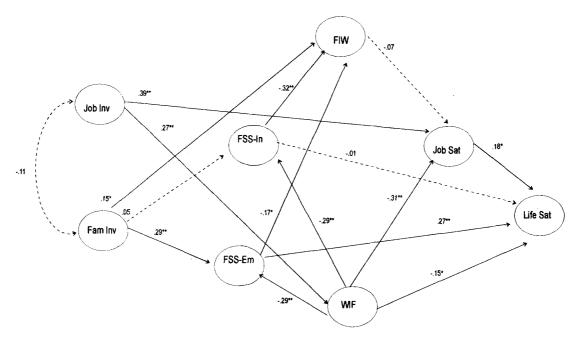


Figure 2. Results of path analysis. Solid lines indicate significant coefficients; broken lines indicate nonsignificant coefficients. Job Inv = job involvement; Fam Inv = family involvement; FSS-In = family social support-instrumental; FSS-Em = family social support-emotional; FIW = family interfering with work; WIF = work interfering with family; Job Sat = job satisfaction; Life Sat = life satisfaction. *p < .05. **p < .01.

involvement also reported higher levels of job satisfaction, $\beta = .39$, t(142) = 4.96, p < .01. Concerning job involvement as a predictor of work interfering with family, the present study found workers who reported higher levels of job involvement also reported higher levels of work interfering with family, $\beta = .27$, t(144) = 3.33, p < .01. These results are similar to those reported by Frone et al. (1992) for white-collar workers. Thus, although job involvement may be associated with job satisfaction, a positive outcome, it is also linked to work interfering with family, a negative circumstance.

However, the results regarding the hypothesized relationships for family involvement were somewhat more mixed. Family involvement was related to family interfering with work, $\beta = .15$, t(142) = 1.80, p < .05. This finding was in keeping with Frone, Russell, and Cooper's (1992) findings that a high degree of family involvement was related family interfering with work. This relationship may come about when workers with family involvement have difficulty balancing the demands of family roles with the demands of work roles.

Furthermore, although family involvement had a positive relationship with emotional sustenance from family, $\beta = .29$, t(143) = 3.82, p < .01, it was not strongly related to instrumental assistance from family, $\beta = .05$, t(143) = .64, ns. One explanation for this difference in relationships is that family involvement may afford the family

with better opportunities to provide supportive emotional behaviors (e.g., taking an interest in the worker or expressing empathy) but not afford better opportunities to provide tangible assistance (e.g., help with household chores). This may occur because tangible assistance might be more susceptible to influence by structural conditions in the home (e.g., working spouse, conflicting time schedules) than emotional support. This possibility and other factors that influence the giving and receiving of social support are in need of future research.

Work-Family Conflict

Both types of work-family conflict were hypothesized to have specific relationships with job and life satisfaction. Work interfering with family was hypothesized to have a negative relationship with both job and life satisfaction. In terms of its direct effects, work interfering with family was negatively related to both job satisfaction, $\beta = -.31$, t(142) = -3.84, p < .01, and life satisfaction, $\beta = -.15$, t(141) = -1.79, p < .05. Furthermore, as shown in Table 3, work interfering with family had an indirect effect on life satisfaction that was similar in size to its direct effect. The combined direct and indirect effects suggest that work interfering with family has a substantial negative relationship with life satisfaction. Family interfering with work was hypothesized to have a neg-

Table 2
Summary of Regression Equations in the Path Analysis

Equation	β	R^2
1: Life satisfaction		.18**
FSS-Instrumental	01	
FSS-Emotional	27**	
Work interfering with family	15*	
Job satisfaction	.18*	
2: Job satisfaction	,	.20**
Job involvement	39**	20
Family interfering with work	07	
Work interfering with family	31**	
3: Family interfering with work		.19**
Family involvement	.15*	,
FSS-Instrumental	32**	
FSS-Emotional	17*	
4: Work interfering with family	• • •	.07**
Job involvement	.27**	.07
5: FSS-Instrumental		.09**
Family involvement	.05	.07
Work interfering with family	29**	
6: FSS-Emotional		.16**
Family involvement	29**	.10
Work interfering with family	29**	

Note. N = 146. FSS = Family social support.

ative relationship only to job satisfaction. However, family interfering with work was not strongly associated with job satisfaction, $\beta = -.07$, t(142) = -.89, ns.

Work interfering with family was also hypothesized to have a negative association with both types of social support. As shown in Figure 2, these expected relationships were upheld, work interfering with family was negatively related to both emotional sustenance from family, $\beta = -.29$, t(143) = -3.77, p < .01, and instrumental assistance from family, $\beta = -.29$, t(143) = -3.65, p < .01. This finding is consistent with the suggestion that families may find it difficult to provide social support to workers when the demands of the worker's job interfere with the demands of the worker's family (Beehr, 1995; Jackson et al., 1985).

Emotional and Instrumental Social Support

Regarding the relationship of family social support to life satisfaction, emotional sustenance from family had a strong positive relationship with life satisfaction, $\beta = .27$, t(141) = 2.82, p < .01, as hypothesized, whereas instrumental assistance from family did not, $\beta = -.01$, t(141) = -.09, ns. For the relationship between family social support and family interfering with work, instrumental assistance from family displayed a strong negative relationship to family interfering with work, $\beta = -.32$, t(142) = -3.31, p < .01. Emotional sustenance from family was also related to family interfering with work, $\beta = -.17$, t(142) = -1.68, p < .05.

These results suggest that emotional sustenance from family members plays a role in both life satisfaction and family interfering with work, whereas instrumental assistance was related only to family interfering with work. The effect of offsetting many work–family task conflicts may cause instrumental assistance from family to be negatively related to family interfering with work. The effect of providing the worker with advice and guidance regarding work demands may cause emotional sustenance to be positively related to life satisfaction.

Job and Life Satisfaction

Job satisfaction had a positive relationship with life satisfaction, $\beta = .18$, t(141) = 2.33, p < .05, as hypothesized. This finding is consistent with those reported by Rice et al. (1980) in their review of 23 different empirical studies of this relationship. Furthermore, it provides additional support for the assertion by Sekaran (1983) and others (e.g., Higgins et al., 1992) that life satisfaction for some workers may be partially the result of having a good job.

Discussion

The purpose of this study was to integrate findings from the work-family conflict and social support literatures into a common model that would further understanding of relationships between work and family. Generally, the results support the notion that work and family relations are related to job and life satisfaction and that the level of involvement, or degree of importance, the worker assigns to work and family roles is associated with relationships between work and family. In the current study, although high levels of job involvement were associated with high levels of job satisfaction, they were also associated with high levels of work interfering with family. Higher levels of family involvement, on the other

Table 3
Standardized Total, Direct, and Indirect Effects of Job
Satisfaction, Involvement, Conflict, and Social Support
Variables on Life Satisfaction

	Effect				
Variable	Direct	Indirect	Total		
Job satisfaction	.18		.18		
Job involvement		.00	.00		
Family		.08	.08		
Work interfering with family	15	13	28		
Family interfering with work		01	01		
Emotional sustenance from family	.27	.00	.27		
Instrumental assistance from family	01	.00	01		

Note. Empty cells indicate that no effect was hypothesized.

^{*} p < .05. ** p < .01.

Table 4
Standardized Total, Direct, and Indirect Effects of
Involvement, Conflict, and Social Support Variables
on Job Satisfaction

	Effect				
Variable	Direct	Indirect	Total		
Job involvement	.39	09	.30		
Family involvement		01	01		
Work interfering with family	31	01	32		
Family interfering with work	07		07		
Emotional sustenance from family		.01	.01		
Instrumental assistance from family		.02	.02		

Note. Empty cells indicate that no effect was hypothesized.

hand, were associated with higher levels of emotional sustenance from family members, which, in turn, had a positive relationship with life satisfaction.

The results also suggest that relationships between work and family are characterized by both conflict and support. Furthermore, a specific form of conflict, work interfering with family, is associated with social support and that social support has a different relationship with the other form of conflict, family interfering with work. That is, higher levels of work interfering with family predicted lower levels of both emotional and instrumental support from family, whereas higher levels of emotional and instrumental support from family predicted lower levels of family interfering with work. Overall, such results might suggest that future attention to subdimensions of conflict and support would assist in understanding the subtleties of work–family dynamics.

Conceptually, while the present investigation included only job and family involvement as antecedents, there are a number of other variables that could influence workfamily conflict and support. Noticeably missing from the model tested here are the large variety of family demands that create strain within the family and for individuals. For instance, a worker whose spouse stays home and cares for one school-age child may be able to draw upon more social support than a worker whose spouse works full-time and must care for multiple preschool-age children. In the latter case, the family may be more a source of added demands than of support. Future researchers are encouraged to develop "finer" measures of these and other related family demands.

Similarly, although the present study focuses on job and life satisfaction as outcomes, there are other outcomes that could be considered. It would seem worthwhile to examine whether work and family demands "spillover" onto one another, influencing job performance, family functioning, and mental health. Indices of family functioning could include variables such as marital satisfaction, family cohesion and communication, and

spousal abuse. Indices of workers' mental health could include variables such as depression, anxiety, and somatic health complaints.

Some degree of caution should be exercised regarding the types of inferences drawn from the present study's results because of particular characteristics of the sample and the cross-sectional nature of the data. The participants in this study comprised a convenience sample of working adults living with at least one family member and enrolled in one or more college courses. Taken together, these aspects of the sample seem to suggest that there may be a high potential for work–family conflict within this particular group of participants. Given the likelihood of additional time constraints imposed by school-related activities, the participants in this sample may be more likely to experience work–family conflict than a comparable sample of working adults who are not also pursuing an education.

The use of cross-sectional data precludes definitive assertions regarding causality and directionality. It is possible that work and family involvement, rather than being antecedents of work-family conflict, may actually be the result of such conflict. For example, some workers may increase their level of job involvement as a result of being confronted with a high degree of conflict within the family. It also seems possible that many of the relationships observed in this study are potentially bidirectional. Although this seems to be the case for the relationship between job and life satisfaction (Schmitt & Bedeian, 1982), this possibility of nonrecursiveness or bidirectionality might extend to all relationships. As Hoyle (1995) strongly emphasized, "Directionality is a form of association distinguished from nondirectional association either by logic (e.g., income cannot cause biological sex), theory (e.g., group cohesion effects group performance), or, most powerfully, by research design (e.g., a manipulated variable to which subjects are assigned randomly cannot be caused by a dependent variable)" (p. 10). The statistical procedure of path analysis as used here cannot unequivocally sort out the true direction of relationships.

Lag effects also cannot be addressed through use of cross-sectional designs. That is, some of the results in the present study may have been a consequence of portions of the sample being in an early stage of work-family conflict (characterized by initial family support), whereas a similar portion of the sample was in later stages (characterized by the family's withdrawal of support). Given these possibilities, it is clear that future research using longitudinal designs is needed. Another suggestion for future research is to examine the relationships among the forms of conflict and types of support with more advanced statistical methodologies such as structural equation modeling. Unfortunately, this methodology was not

advisable in the current study because of the relatively small sample size (Hu, Bentler, & Kano, 1992).

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Received August 15, 1995
Revision received March 6, 1996
Accepted March 6, 1996