

Interrole conflict, family support and marital adjustment of employed mothers: A short term, longitudinal study

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Summary

Previous research has found that employed mothers experience conflict between the roles of mother and employee, and that interrole conflict is negatively correlated with marital adjustment. Furthermore, research has shown that social support and personality hardiness moderate the interrole conflict/marital adjustment relationship. However, a longitudinal assessment of the effect of interrole conflict on marital adjustment has not been conducted, nor has the moderating role of social support and hardiness been considered within the same analysis. To address these two issues, the interrole conflict, family support, personality hardiness and marital adjustment of 51 employed mothers were assessed twice, three months apart. Using hierarchical regression analyses, interrole conflict and family support exerted main effects on marital adjustment at time 1. More importantly, a significant interrole conflict/family support interaction predicted change in marital adjustment over three months. High family support exerted a negative impact on marital adjustment when interrole conflict was high. The alternative hypothesis that initial levels of marital adjustment predict change in interrole conflict was tested but not supported.

Introduction

Most families no longer fit the traditional stereotype in which fathers are breadwinners and mothers homemakers. Rather, dual parent employment is now the modal pattern (Segal, 1984), and there are predictions that two-thirds of all mothers in North America will be employed by 1990 (McCroskey, 1982). However, social values have not kept pace with these changing demographic trends; maternal employment is still widely believed to exert a negative effect on children (Fallows, 1983; Smith, 1981). Given the imbalance between demographic trends and societal values, it is not surprising that interrole conflict, or the collision of role demands, is experienced as stressful (Cooper and Davidson, 1983). The present study explores the work/family interface, focusing on how employed mothers' work/family conflicts affect their marital adjustment. Although work/family conflicts may also influence work variables (Crouter,

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1984), the present study focuses only on the relationship between interrole conflict and family variables.

There is evidence that interrole conflict is associated with lower family and marital adjustment (Barling, 1986; Pleck, Staines and Lang, 1980; Suchet and Barling, 1986). However, like other stressors and their negative consequences, the correlation between interrole conflict and marital satisfaction is not perfect. This suggests that individuals whose level of interrole conflict is not associated with their marital satisfaction may possess resistance resources which protect them from the negative effects of interrole conflict. Two such resistance resources are social support (Cohen and Wills, 1985) and personality hardiness (Maddi and Kobasa, 1984).

Although most studies report beneficial effects of social support, there is disagreement concerning the process by which it affects the impact of stress (Beehr, 1985; Cohen and Wills, 1985). Some findings suggest that social support exerts a main effect, influencing the outcome regardless of the level of stress. Others support a buffering hypothesis, finding that social support exerts an effect on outcome only when stress levels are high. Furthermore, both positive and reverse buffering effects have emerged, suggesting that under certain conditions, social support may increase the negative effects of a stressor (e.g. Kobasa and Puccetti, 1983).

Diversity in conceptualizing social support across studies may account for the emergence of both positive and reverse buffering effects. Support varies along different dimensions, *viz.* type (e.g. emotional, instrumental), source (e.g. friends, family, supervisor) and level (high/low). Although most studies do not define support according to these three dimensions, research findings suggest that various sources and types of support differentially moderate interrole conflict. For example, some findings suggest that to be effective, the source of support must be compatible with that of the stressor. Thus, because employed mothers may feel that work interferes with their family, the appropriate source of support would be family-based (Cooke and Rousseau, 1984; Etzion, 1984; Pleck *et al.*, 1980). Therefore, the present study measures family support as a moderator of the interrole conflict/marital adjustment relationship, rather than friend or co-worker support.

A second variable that moderates several stress/outcome relationships is personality hardiness (Kobasa, 1982; Maddi and Kobasa, 1984). Personality hardiness consists of three components: (a) commitment to, and a sense of purpose and involvement in various aspects of one's life, (b) a sense of control over the events and direction of one's life, and (c) the perception of change as a challenge rather than a threat. In numerous cross-sectional and longitudinal studies, Kobasa and her associates (e.g. Kobasa, 1979; Kobasa, Maddi and Kahn, 1982; Kobasa and Puccetti, 1983) consistently show that personality hardiness moderates the negative effects of job stress on illness. Personality hardiness has also been shown to moderate the interrole conflict/marital adjustment relationship for fathers (Barling, 1986).

Zedeck, Cranny, Vale and Smith (1971) state that moderators should be studied jointly. Specifically, studies including either social support or hardiness alone may incorrectly estimate the effects of each (Ganellen and Blaney, 1984). In the present study, the effect of both social support and personality hardiness on the interrole conflict/marital adjustment relationship are examined.

Like much of the social support research (Cohen and Wills, 1985), previous studies on the interrole conflict/marital adjustment relationship have relied exclusively on cross-sectional designs. Although the prevailing viewpoint in this literature is that interrole conflict affects marital adjustment (Barling, 1986; Houseknecht and Macke, 1981; Suchet and Barling, 1986), the rival hypothesis that marital adjustment influences interrole conflict remains equally plausible. Consequently, the present study utilizes a short-term, longitudinal design to study the relationship between interrole conflict and marital adjustment. Although there is currently no empirical data

indicating an appropriate time lag within which to study stress/outcome relationships, a three-month time lag was chosen in the present study. Interrole conflict is chronic in nature in that it is experienced frequently and is of long-term duration (Pratt and Barling, 1988). Thus, interrole conflict should be associated with outcomes over the long-term. Practical considerations also dictated that the time lag be no longer than three months.

Method

Procedure

Fifty-one full-time employed mothers participated at both time periods, three months apart. There were two methods of subject recruitment. First, 200 questionnaires were distributed among five day-care centres to be completed by married mothers who were employed outside the home. Due to administrative difficulties at the day-care centres, no more than 125 questionnaires reached mothers who qualified for the study. Thirty-two mothers completed the questionnaires — a 26 per cent response rate. Due to the small number of respondents and low response rate, newspaper birth lists dating back five years were then used to identify mothers with children the same age as those in the day-care sample. Eighty-five mothers met the eligibility requirements for inclusion in the study in that they were employed full-time outside the home, were married, and had at least one child living at home. Fifty-six of the 85 mothers contacted participated, yielding a 66 per cent response rate. The day-care sample was of higher socioeconomic status (SES)¹ than mothers contacted via birth lists ($t(49) = 2.11, p < 0.05$). The samples did not differ according to mothers' mean age, number of years married, or number of children in the family, nor did they differ according to mean marital adjustment, interrole conflict, social support or personality hardness. Failure to find any differences between the two samples on any variable other than SES justified pooling their data, forming one group of 88 mothers. Fifty-eight per cent of the initial sample responded at both testing phases, and the final sample consisted of 51 employed mothers.

Subjects

All 51 mothers were employed full-time outside the home, and had at least one child in day-care. On average, the mothers were 31.3 years old ($S.D. = 3.7$), had been married an average of 8.6 years ($S.D. = 2.7$), and had an average of 15 years of education ($S.D. = 2.3$). Seventy-six per cent had at least two children; and most of the children (69 per cent) were four years of age or younger.

Assessment

At both time periods, the mothers received identical questionnaires. The order in which the scales were presented was randomized across all subjects.

Marital adjustment was measured using Locke and Wallace's (1959) 15-item Short Marital Adjustment Test. Although the Short Marital Adjustment Test is widely referenced as psychometrically acceptable (O'Leary and Turkewitz, 1978), reliability data is rarely presented. In the present study, the Short Marital Adjustment Test was internally reliable ($\alpha = 0.73$), and its three month test-retest reliability was 0.68. The Short Marital Adjustment Test has substantial clinical utility: Scores below 100 indicate a marriage 'at risk' (O'Leary and Turkewitz, 1978).

¹ SES was calculated by multiplying occupational level by years of formal education completed.

Family support was assessed with Prociano and Heller's (1983) 20-item Perceived Social Support — Family scale which assesses the receipt of emotional support from one's family (Tardy, 1985). Subjects used a three-point rating scale (yes, don't know, no) to report their agreement or disagreement with each of the 20 items. The range of the scale extends from 0 to 40. Prociano and Heller (1983) found the scale to be internally consistent ($\alpha = 0.90$) and its test-retest reliability is greater than 0.80 (Tardy, 1985). An internal reliability coefficient of 0.91 and a three month test-retest reliability of 0.72 were obtained in the present study.

Kobasa's (1979) original hardiness scale presents items from six other scales, with two scales each corresponding to the three facets of hardiness. The 20-item short form of the hardiness scale, which correlates with the long form and retains its psychometric properties (Barling, 1986), was used in the present study. Possible scores range from 0 to 54. Subjects described their personality hardiness using a five-point rating scale extending from 'never' to 'very often'. The internal consistency of the short form of the hardiness scale is acceptable ($\alpha = 0.76$; Barling, 1986), and the present results also show that the scale is internally ($\alpha = 0.76$) and temporally ($r = 0.63$) consistent over a three-month period.

Interrole conflict was assessed using Parry and Warr's (1980) 12-item Interaction Strain Questionnaire. This scale is internally consistent ($\alpha = 0.75$), while full-time employed mothers report significantly more interrole conflict than part-time employed mothers (Parry and Warr, 1980). The range of possible scores extends from 0 to 48. A five-point rating scale extending from 'never' to 'very often' was used to obtain the mother's perceptions of the degree to which they experienced interrole conflict. Two items ('My job gives me a welcome break from housework and children'; and 'My spouse thinks it's a good idea for me to go out and work') were eliminated from this study because their restricted ranges reduced the reliability of the scale. The 10-item shortened scale was internally consistent ($\alpha = 0.75$), and yielded a three month test-retest reliability of 0.83.

Results

Three hierarchical regression analyses were computed. First, cross-sectional data obtained at time 1 were analysed. The hypothesis that initial interrole conflict predicts change in marital adjustment was then assessed. Finally, the alternative hypothesis that initial levels of marital adjustment predict change in interrole conflict was tested. Hierarchical regressions were used as they allow the order in which the predictors enter the regression equation to be specified, which is useful for theory/model testing.

The first hierarchical multiple regression analysis used marital adjustment as the criterion variable, and interrole conflict, family support and personality hardiness at time 1 as the predictor variables. SES and mothers' age were positively correlated with personality hardiness ($r = 0.25$; and $r = 0.27$ respectively; both p 's < 0.05). As SES and mothers' age were significantly correlated ($r = 0.29$; $p < 0.05$), and the day-care and community samples differed in terms of SES, only SES was treated as a covariate and included in the first step of the regression analysis. Neither the assumption of multicollinearity (low correlations between the predictor variables; see Table 1) nor linearity was violated.

Interrole conflict correlated with marital adjustment ($F(2, 47) = 6.67$, $p < 0.05$; explaining 12 per cent of the variance in marital adjustment after controlling for SES), as did family support ($F(3, 46) = 11.4$, $p < 0.01$; accounting for an additional 17 per cent of the variance in marital adjustment). No main effect was obtained for personality hardiness, nor were any interaction effects significant (see Table 2).

Table 1. Intercorrelation matrix and descriptive statistics of predictor, moderator and criterion variables ($N = 51$)

	<i>M</i>	<i>S.D.</i>	1	2	3	4	5	6	7	8	9
1. Interrole conflict*	12.46	4.71									
2. Family support*	33.77	8.05	-.29								
3. Hardiness*	21.45	5.56	.07	.30							
4. Marital adjustment*	116.59	22.49	.35	.50	.28						
5. Interrole conflict†	12.59	5.19	.83	-.18	.04	-.36					
6. Family support†	33.84	7.26	-.30	.72	-.19	.40	-.19				
7. Hardiness†	21.49	5.83	.08	-.17	.63	-.22	.08	-.06			
8. Marital adjustment†	113.90	26.27	-.27	-.28	-.33	.68	-.32	.31	-.21		
9. Change in interrole conflict	-0.32	2.83	.17	-.18	.06	.02	-.40	-.18	-.01	.10	
10. Change in marital adjustment	2.69	19.81	-.04	-.03	.01	.23	.01	.04	.04	-.55	-.11

Decimals omitted from intercorrelation matrix.

* $r > 0.23$; $p < 0.05$ (measured at Time 1).

† $r > 0.32$; $p < 0.01$ (measured at Time 2).

Table 2. Summary table of the MR analysis predicting marital adjustment at time 1

	Marital adjustment				
	<i>R</i>	<i>R</i> ²	<i>R</i> ² change	Beta	<i>F</i>
<i>(N = 51)</i>					
Covariate					
SES	0.02	0.00	0.00	-0.02	0.25
Interrole conflict (A)	0.35	0.12	0.12	-0.35	6.67*
Family support (B)	0.55	0.30	0.17	-0.50	11.42†
Personality hardiness (C)	0.58	0.34	0.04	-0.33	2.79
A × B	0.58	0.34	0.00	-0.02	0.03
A × C	0.61	0.37	0.03	-0.48	1.87

* $p < 0.05$.

† $p < 0.01$.

To assess whether initial interrole conflict predicts change in marital adjustment, a hierarchical regression analysis was computed with interrole conflict, family support and hardiness at time 1 as predictor variables, and change in marital adjustment as the criterion variable. Treating change scores as the criterion is appropriate and yields the same pattern of results as a pre-posttest analysis as Jackson, Stafford, Banks and Warr (1983) have shown. Also, posttest scores alone cannot provide an indication of the magnitude and direction of change. The assumptions of linearity and multicollinearity were satisfied (see Table 1).

Marital adjustment at time 1, interrole conflict, social support and hardiness at time 2, and SES were controlled statistically by including them in the first step of the regression analysis. Time 2 levels of interrole conflict, family support and hardiness were controlled statistically because pretest and posttest measures are confounded (Huck and McLean, 1975). Although no main effects emerged, there was a significant interrole conflict × family support interaction ($F(9, 40) = 7.44, p < 0.01$), explaining 8 per cent of the variance in change in marital adjustment (see Table 3). To analyse this significant interaction, the sample was dichotomized on both the interrole conflict and support variables. For the low interrole conflict group, change in marital satisfaction did not depend upon the level of family support. There was a significant difference between high and low support mothers in the high interrole conflict group ($t(18) = 2.26, p < 0.05$). Negative change in

marital adjustment for mothers high in both interrole conflict and support ($M = -11.22$) differed significantly from the positive change in marital adjustment of mothers high in interrole conflict but low in family support ($M = 6.54$) (see Figure 1).

Table 3. Summary table of MR analysis predicting change in marital adjustment

(N = 51)	Change in marital adjustment				
	R	R ²	R ² change	Beta	F
Covariates:					
SES				-0.14	
Time 2: Interrole conflict				0.01	
Family support				0.03	
Hardiness				-0.04	
Time 1: Marital adjustment	0.30	0.09	0.09	0.31	0.87
Interrole conflict (A)	0.32	0.10	0.01	-0.19	0.48
Family support (B)	0.37	0.13	0.03	-0.28	1.62
Personality hardiness (C)	0.37	0.13	0.00	-0.04	0.04
A × B	0.52	0.27	0.14	1.88	7.44*
A × C	0.52	0.27	0.00	-0.34	0.13

* $p < 0.01$.

Although the results suggest that high interrole conflict predicts change in marital adjustment when family support is high, the alternative hypothesis that marital adjustment predicts change in interrole conflict remains plausible, and was tested. A hierarchical regression analysis was computed with marital adjustment at time 1 as the predictor, family support and hardiness as the moderator variables, and change in interrole conflict as the criterion variable. Mothers' marital adjustment, social support and hardiness at time 2, interrole conflict at time 1, and SES were covariates. After satisfying the assumptions of linearity and multicollinearity (see Table 1), no

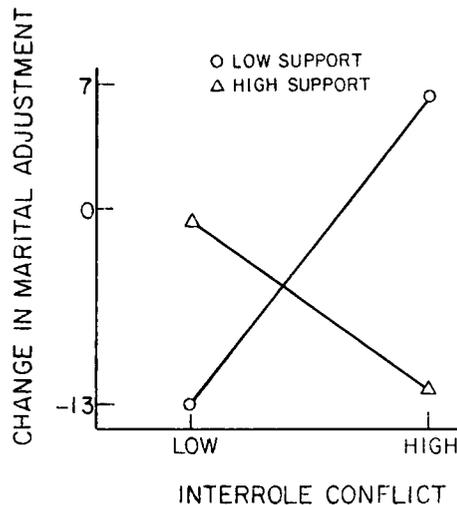


Figure 1. The interrole conflict × social support interaction

significant effects were obtained, suggesting that initial marital adjustment does not predict change in interrole conflict.

Discussion

Interrole conflict and family support exerted main effects on mothers' marital adjustment in the cross-sectional analysis. In contrast, there was a significant interaction between interrole conflict and family support in the longitudinal analysis, such that mothers high in family support and interrole conflict experienced a significantly more negative change in marital adjustment than mothers low in family support and high in interrole conflict. Thus, three issues emerge: (a) The reverse buffering phenomenon, (b) the insignificance of hardiness as a moderator of the interrole conflict/marital adjustment relationship, and (c) the discrepancy between the cross-sectional and longitudinal results.

The reverse buffering phenomenon that emerged in this study is not uncommon (Beehr, 1985), and may be a function of the type, source and level of family support received when interrole conflict is high. First, employed mothers experiencing interrole conflict may not benefit from emotional support which does not resolve conflicts that are a source of distress. Perhaps instrumental, rather than emotional support, reduces the impact of interrole conflict because it addresses employed mothers' time- and behaviour-based conflicts by, for example, performing activities such as helping with household tasks and sharing child-care duties. An examination of the items on the Perceived Social Support-Family Scale (Tardy, 1985) shows that it primarily measures emotional support. Further research might assess the moderating effect of instrumental support on mothers' interrole conflict. Second, support derived from the family may be of less use to employed mothers experiencing high interrole conflict than other sources of support. A mother who experiences high emotional support from her family may feel a stronger sense of guilt or dissonance when she divides her attention between work and family demands. Marital adjustment may decrease if the mother perceives that she is neglecting her marital relationship. Third, scores on the Perceived Social Support-Family scale can range from 0-40. The mean score for mothers in the high interrole conflict/low support group was 23 — a moderate rather than low score. The mean score for mothers in the high interrole conflict/high support group was 38 — a very high level of support. High levels of emotional support from the family may encourage ineffective coping (e.g. self pity), and dependency may be fostered by extremely high levels of such support, but not by moderate levels (Kobasa and Puccetti, 1983). On the other hand, high levels of instrumental support may moderate the interrole conflict/marital adjustment relationship.

Nonetheless, all explanations for the reverse buffering phenomenon (e.g. Beehr, 1985) remain speculative as research to date is based entirely on correlational designs. A different methodology is required to answer questions about the support process. Specifically, there is a need for experimental studies which allow greater control to be exerted over the source, type and level of support. This strategy is important, because in non-experimental research, various types and sources of support are confounded (Beehr, 1985).

No significant moderating effects emerged for personality hardiness. Perhaps any effects of hardiness are gender-specific. All studies showing a significant moderating effect for personality hardiness have been conducted on males. Like the present study, the only other studies on females failed to find a moderating effect for hardiness, in that personality hardiness did not moderate either the stressful life events/depression relationship (Ganellen and Blaney, 1984), the stress/illness relationship (Schmied and Lawler, 1986), or the relationship between supervisor support, role stress and burnout (Pratt and Barling, 1986). Future studies should assess whether

the characteristics of personality hardiness (*viz.* commitment, perceived control and accepting a challenge) are more appropriate to males as a result of socialization processes, and if so, what personality characteristics might buffer the interrole conflict/marital adjustment relationship for females.

Discrepancies between cross-sectional and longitudinal results are not uncommon in the social support literature (Depner, Wethington and Ingersoll-Dayton, 1985; Hobfall and London, 1986) possibly because cross-sectional studies focus only on static relationships, whereas longitudinal analyses assess dynamic processes. A further reason for the discrepancy between the present cross-sectional and longitudinal results is that because it takes time to elicit and enact social support, any moderating effects of support will only emerge over the long-term. The chronic nature of interrole conflict and the time it takes to enact social support render a long-term moderating effect more likely than an immediate effect.

An issue which was not addressed in the present longitudinal design is the temporal relationship between interrole conflict and social support. The results suggest that high interrole conflict together with high family support predicts change in marital adjustment, but no conclusions can be derived regarding the dynamic relationship between interrole conflict and family support. Data collected over three time periods could address the direction of the predictive relationship between interrole conflict and social support.

Presently, there is no theoretical or empirical basis for deciding upon an appropriate time lag between testing phases to study the effects of interrole conflict and family support on marital adjustment. Any correlations between variables measured at different points in time may be an artifact of the time interval. The effect of family support may be underestimated if assessment precedes its enactment, or if the assessment is conducted after the effects of family support have dissipated. Conversely, the impact of family support might be exaggerated if short-term effects that dissipate over time were overemphasized (Depner *et al.*, 1984). In the absence of adequate guidelines on which to base such decisions, use of multiple time series designs investigating time lags of varying lengths might be appropriate.

The results of the present study support the hypothesis that interrole conflict predicts change in marital adjustment under conditions of high family support. The rival hypothesis that marital adjustment predicts change in interrole conflict was excluded. In addition, questions were raised concerning (a) the gender-specific nature of personality hardiness, (b) the use of longitudinal designs and appropriate time lags between testing phases, and (c) the use of a different methodology for isolating the type, source and level of support.

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