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# Perceptions of Work-Family Role Combination and Well-Being in Dual-Income Parents

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A Thesis submitted to the School of Graduate Studies of the University of Ottawa as partial fulfillment of the requirements for the degree of Doctor of Philosophy

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## ABSTRACT

Two hundred and eighty-one dual-income parents (140 men and 141 women) employed full-time, with at least one child aged 12 or younger completed a questionnaire on perceptions of work-family interference and enhancement. It was hypothesized that both types of perceptions would contribute unique variance to explanations of well-being (marital, parenting and job satisfaction) in this sample, and that levels of interference and enhancement may vary by gender and by direction of interference and enhancement. No gender differences in total enhancement were found; however, after controlling for employment and household labour hours, women perceived more total interference and work-to-family interference than did men. There were no gender differences in family-to-work interference, or in direction-specific enhancement. Multiple regression analyses supported hypotheses in that perceptions of interference and enhancement both contributed to explanations of well-being; however, support depended on gender, the direction of interference and enhancement, and the aspect of well-being assessed. Men and women were similar in how specific directions of interference related to well-being. For both men and women, family-to-work interference predicted marital satisfaction, whereas work-to-family interference predicted parenting satisfaction. Men and women differed in how specific directions of enhancement related to well-being. All three aspects of women's well-being were related to one or the other direction of enhancement, whereas only job satisfaction was related to enhancement (work-to-family) for men. Results provide preliminary empirical support for the theory that perceptions of interference and enhancement are independent dimensions of the work-family interface which conjointly influence well-being. Support is also provided for the independence of subtypes or directions of both interference and enhancement. It is concluded that

work-family research models should include measures of both enhancement and interference, because exclusion of enhancement measures risks overstating the negative effects and understating the positive effects of work-family role combination. Further, measures should assess direction-specific enhancement and interference, because levels of interference and enhancement and their relation to well-being vary depending on direction of interference and enhancement. Finally, models should continue to test for gender effects, particularly if direction-specific measures of both enhancement and interference are to be used. Implications for families, policy and organizations are discussed.

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# Perceptions of Work-Family Role Combination and Well-Being in Dual-income Parents

Questions about how men and women are managing to balance work and family responsibilities, and how this affects their well-being are the focus of a burgeoning "work and family" literature (Voydanoff, 1989). Contributions to this literature are made by sociologists, demographers, business analysts, organizational psychologists, vocational psychologists, social psychologists, and family psychologists. Although contributions to this literature are made by researchers from diverse backgrounds, there is consensus on two central themes. One is that the worlds of work and family are interdependent (Kanter, 1977). More specifically, structural and psychological conditions of employment can influence family functioning, and family-related experiences can influence job-related functioning. The second is that well-being can be significantly affected by how compatible the worlds of work and family are perceived to be. For example, employees who perceive there to be high (versus low) levels of interference or conflict between employment and family roles tend to report higher levels of psychological distress (Frone, Russell, & Cooper, 1992), and lower quality of work and family life (Duxbury & Higgins, 1991).

Questions remain regarding how perceptions of work-family interference may be influenced by gender. Most studies of the work-family interface have not addressed this issue explicitly (i.e., by including gender in analyses). Those in which gender effects were examined have yielded conflicting results. The main purpose of the proposed study is to examine specifically the role of gender in determining levels of interference and the relation between perceptions of interference and well-being.

Another issue in studies of interference is the neglect of the possibility raised by role

theorists that employment and family can have mutually enhancing effects (Sieber, 1974). Existing models have focused almost exclusively on the negative or interference side of the work-family interface. Consistent with role theory, recent studies have demonstrated empirically that work and family can influence each other positively and that such effects can enhance well-being (Marshall & Barnett, 1993; Tiedje et al., 1990). Only one attempt has yet been made to incorporate both the positive and the negative dimension of the work-family interface in one model (Tiedje et al., 1990). No attempt has been made to test such a model for gender differences and similarities. A secondary goal of the proposed study is to include both dimensions of the interface, thereby allowing explicit tests of their joint effects on well-being in men and women.

A final issue to be addressed in the proposed study has to do with the nature of the work-family interface construct. Work-family researchers have proposed that perceptions of interference may be bi-directional, that is, work may be perceived to interfere with family and vice versa (Frone et al., 1992; Gutek, Searle, & Klepa, 1991). Further, the causes and consequences of interference may vary according to the type or direction of interference assessed (Frone et al., 1992; Gutek et al., 1991). Moreover, levels of direction-specific interference may vary by gender (Greenhaus & Beutell, 1985). For example, Gutek et al. (1991) found that women reported more work-to-family interference than did men, whereas men and women did not differ with regard to the level of family interference with work they reported. Thus, differentiating the directions of interference may yield more specific conclusions about the nature of interference and how it relates to well-being. It may also help clarify previous inconsistencies with respect to gender differences.

Work-family theorists have also proposed that perceptions of work-family enhancement may be bi-directional, that is, family life may be perceived to enhance employment-related functioning and vice versa (Belsky, Perry-Jenkins, & Crouter, 1985; Lambert, 1990). No attempt has been made to assess these distinct directions of enhancement simultaneously, but it seems plausible that, as with interference, the level of enhancement and its relation to well-being may depend on the direction assessed. It may also be that gender plays a role in determining levels of direction-specific enhancement and how these perceptions relate to well-being. The final goal of the proposed study is to differentiate perceptions of interference and enhancement by direction and to determine what these refinements can add to explanations and predictions of well-being for men and women.

## Literature Review

### Dual-Income Families and the Work-Family Interference

The influx of women into the labour force is one of the most significant social trends of the past few decades (Matthews & Rodin, 1989). The concomitant rise in the proportion of dual-income families (defined here as families with both spouses working outside the home) has made this the predominant family form in Canada (Statistics Canada, 1994). More than ever, men and women are being confronted with the challenges of balancing employment and family responsibilities (Lero, Pence, Shields, Brockman, & Goelman, 1992).

These social trends have generated increased recognition in the scientific community of the interdependence of work and family (Gutek, Nakamura, & Nieva, 1981; Kanter, 1977; Voydanoff, 1989). Much has been written about the nature of work-family linkage and its relation to well-being (Barnett & Marshall, 1991). Work-family conflict is a central construct in

emergent theories and research on this topic (Voydanoff, 1989). Work-family conflict is defined as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p.77). The term "work-family conflict" has been used interchangeably with other work-family constructs such as role strain or role overload (e.g., Galambos & Walters, 1992). The specific construct of interest here is interference. The use of the term "interference" emphasises that perceived interference (versus overload or strain) is the focus. The term "work" refers to paid employment. Although it is recognized that work is carried out in the context of both employment and family, the term work is retained here to maintain consistency with other research in the field.

## Work-Family Interference and Well-Being

Current models of the work-family interface propose that when employment and family life are perceived to be mutually incompatible or interfering, psychological well-being is compromised (Duxbury & Higgins, 1991; Frone et al., 1992; Kopelman, Greenhaus, & Connolly, 1983). Specifically, when levels of interference are perceived to be high, functioning in the employment and family domains may be adversely affected. The extent of negative impact of work-family role combination on well-being should be related directly to the level of perceived incompatibility or interference between these roles. The greater the perceived interference the greater the negative relation should be. This constitutes the interference hypothesis. The

rationale behind this hypothesis is consistent with the scarcity hypothesis in role theory, which holds that work-family role combination leads to competing demands on an individual's limited time and energy, which inevitably leads to strain (Goode, 1960).

Well-being has been variously defined and measured in studies of interference. Well-being is defined here as global satisfaction in the employment and family domains, although is recognized that global well-being extends beyond mere satisfaction. This is consistent with the original model of Kopelman et al. (1983) and with current models (Duxbury & Higgins, 1991; Frone et al., 1992) on which the proposed study is based. Previously, indices of family well-being have been constructed to mirror measures of employment well-being (e.g., Kopelman et al.), an atheoretical approach. Family researchers generally distinguish between marital and parenting satisfaction as the central aspects of family well-being (e.g., Kline & Cowan, 1989; Kurdek, 1996). Therefore, these aspects of family well-being are measured separately in the present study.

The most frequently studied index of employment well-being is job satisfaction (Price & Mueller, 1986). A significant negative relation was found between interference and job satisfaction in six studies (Adams, King, & King, 1996; Belsky et al., 1985; Cooke & Rouseau, 1984; Googins & Burden, 1987; Kopelman et al., 1983; Pleck, Staines, & Lang, 1980), whereas no relation was found in two other studies (Kline, 1989; Tiedje et al., 1990). Work-family interference has also been associated negatively with quality of work life (Duxbury & Higgins, 1991), and positively with job distress (Frone et al., 1992) and work stress (Small & Riley, 1990).

Researchers have examined various indices of family well-being in models of interference. Perceptions of interference have been found to relate negatively to quality of family life (Duxbury & Higgins, 1991), parenting satisfaction (Tiedje et al., 1990), family satisfaction (Kopelman et al.,

1983; Pleck, Staines, & Lang, 1980), and marital satisfaction (Belsky et al., 1985; Small & Riley, 1990), and positively to family distress (Frone et al., 1992). No relation was found between marital role quality or parenting stress and interference in two other studies (Kline, 1989; Marshall & Barnett, 1993).

In sum, most research to date supports what the interference hypothesis predicts will be a negative relation between interference and both family and employment-related well-being. No relation was found in two studies of the link between interference and family well-being and also in two studies of the link between interference and employment-related well-being. These inconsistencies may be attributable to methodological problems. For example, in one study (Kline, 1989), only half the sample were employed, potentially making interference less of an issue and reducing its relation to both family well-being and employment well-being. Marshall and Barnett's (1993) measures of role quality tapped which role characteristics were valued, but valuation was confounded with actual experience (i.e., whether or not these valued characteristics existed), making their results difficult to interpret. In the Tiedje et al. (1990) study, a typology of the interference variable was created based on a median split. The subsequent reduction in statistical power may have accounted for the non-significant relation between interference and job satisfaction (Cohen & Cohen, 1983). Further, men were not included in this study, making it difficult to know how well their results apply to men. The following section addresses the role of gender in determining levels of interference and its relation to family well-being and employment well-being.

Work-Family Interference and Gender

Few studies have examined directly and systematically the role of gender in determining

levels of interference or the relation between interference and well-being. Traditionally, men and women have been socialized to ascribe different meanings to employment and family roles. Men have assumed the role of provider and women have assumed the role of homemaker and nurturer (Baruch, Biener, & Barnett, 1987). Attitudes and expectations regarding men's and women's roles have shifted toward greater egalitarianism, particularly among young employed women (Barnett, 1993; Glass, 1992). As noted, women's employment outside the home has become the social standard, and dual-income families predominate over the traditional family form of husband as breadwinner, wife as homemaker (Statistics Canada, 1994). Dual-income men's involvement in family activities, such as spending time with children, continues to increase (Statistics Canada, 1994). Assuming a high degree of correspondence between gender role attitudes and behaviours, one would expect to find more egalitarian sharing of family labour and hence few gender differences in levels of interference in dual-income men and women.

There is much evidence to suggest, however, that changes in labour practices at home and in employing organizations have not kept pace with attitudinal shifts (Glass, 1992; Hochschild, 1989) and that labour practices remain divided along traditional gender lines (Blair & Johnson, 1992; Hochschild, 1989; Mederer, 1993; Statistics Canada, 1994). Although men in dual-income families have increased their family involvement, particularly in child-related tasks (Pleck, 1985), women have retained primary responsibility for family work. Moreover, women have retained responsibility for the "traditionally female" tasks, such as cooking, cleaning, and household planning (Blair & Johnson, 1992; Perry-Jenkins & Folk, 1994). Compared to traditionally male tasks, female tasks tend to be more schedule-bound, more frequent, and lacking a leisure component (Blair & Johnson, 1992), and they tend to overlap more with employment (Duxbury &

Higgins, 1991). Thus, the nature and extent of family work performed by dual-income women exposes them to greater levels of interference than is the case for men. If gender-linked labour practices persist, as these studies suggest, dual-income women would be expected to experience greater levels of interference than would men.

Gender differences in levels of interference or some similar construct have been documented by several researchers. Greenhaus, Bedian, and Mossholder (1987) found higher levels of interference among women than men in a sample of married accountants employed full-time. Gutek et al. (1991) found higher levels of interference from work to family among women than among men in two independent samples of full-time employed men and women. This finding was replicated in a dual-income sample where both partners were employed full-time (Duxbury, Higgins, & Lee, 1994).

On the other hand, many studies have not found gender differences. Using a one-item measure of interference, Voydanoff (1988) found no differences in a U.S. national probability sample of married men and women working 20 hours or more per week. Staines and Pleck (1983) also found no gender differences when they examined a broader cross-section of the same sample employing the same measure. Three other studies used the same broad measure of interference (the Job-Family Role Strain scale), which mainly tapped work-to-family interference and included items tapping role overload as well as conflict (Bohen & Viveros-Long, 1981). No differences between men's and women's levels of interference were found in any of these studies (Duxbury & Higgins, 1991; Galambos & Walters, 1992; Googins & Burden, 1987).

In sum, data on gender differences in levels of interference are equivocal; however, the interpretation of findings is hampered by variability across studies in the definition and

measurement of interference. One plausible explanation for the discrepancy across studies has to do with the type or direction of interference assessed. In all studies yielding gender differences, interference measures tapped only perceptions that employment interfered with family. In studies where no differences were found, measures tapped perceptions of interference in both directions, that is, work-to-family and family-to-work, or included items tapping other constructs (Duxbury & Higgins, 1991; Galambos & Walters, 1992; Pleck, 1983; Voydanoff, 1989). It may be that the specificity necessary to detect gender differences was not provided by these measures. This issue is examined in detail later in the section on gender and direction-specific interference.

Gender and the interference-well-being relation.

As discussed above, rather than increasing egalitarianism in family labour practices as women move into the paid labour force, a new norm is emerging, that of "double work" for women (de Koninck, 1991; Hochschild, 1989; Holder & Anderson, 1989). de Koninck described reconciliation as a process inherent in double work. Reconciliation refers to "the need for female workers not only to perform double work, but to perform each job well, without interference from the other job" (p. 239). It follows that when interference is perceived, both employment and family well-being should be impacted negatively. Women's well-being should be affected to a greater degree than should men's by this interference because the same reconciliation standard does not apply to men. The "reconciliation" hypothesis thus predicts that the negative relation between interference and well-being will be stronger for women than it is for men.

## Work-Family Enhancement and Well-Being

Much less theory and research exists on enhancement and positive effects than exists for interference and negative effects. It is important to examine these potential positive effects,

otherwise the impact of negative effects may be overstated. Work and family theorists contend that work-family role combination may generate perceptions that employment and family are mutually enhancing, and that such perceptions may influence well-being in a positive way (Belsky et al., 1985; Crouter, 1984; Lambert, 1990). From this perspective, the extent of positive impact of work-family role combination on well-being should be related directly to the extent to which these roles are perceived to be mutually enhancing. The greater the perceived enhancement, the greater the positive effect should be. This "enhancement" hypothesis is consistent with the expansion hypothesis forwarded by some role theorists who argue, in contrast to scarcity theorists, that the effects of role combination on well-being should be positive (e.g., Marks, 1977; Sieber, 1974).

Only three studies have examined perceptions of enhancement and their relation to well-being. All three studies examined the relation between some measure of enhancement and an index of employment well-being. In two studies, no relation was found between enhancement and job satisfaction (Belsky et al., 1985; Tiedje et al., 1990). In a third, no relation was found between enhancement and perceived job role quality (Marshall & Barnett, 1993).

All of these studies also examined the relation between enhancement and some aspect of family well-being. Marshall and Barnett (1993) found a positive relation between parent role quality, but not marital role quality, and enhancement. Similarly, Tiedje et al. (1990) found parenting satisfaction to be higher when high levels of enhancement were combined with low levels of interference, but found no relation between enhancement/interference type and marital satisfaction. In contrast, Belsky et al. (1985) found a positive relation between enhancement and marital satisfaction.

In sum, initial studies have not found consistent support for what the enhancement hypothesis predicts should be a positive enhancement-well-being link. Stronger support has been established for a relation between enhancement and family well-being (versus employment well-being). This suggests that the enhancement hypothesis may be domain-specific. It may also be, however, that this apparent domain-specificity is an artifact of differences in the conceptualization and measurement of enhancement across the three studies. For example, the enhancement-family well-being link may be stronger than the enhancement-employment well-being link because two of the three studies used measures which tapped only one direction of enhancement (i.e., work-to-family enhancement). Had family-to-work enhancement been measured, a relation to employment well-being may have emerged. This issue is discussed in detail in the section below on direction-specific perceptions and well-being.

Finally, it has been argued that perceptions of enhancement and interference are independent dimensions and not simply opposite ends on an "work-family perceptions" continuum, and that perceptions of interference and enhancement may occur simultaneously (Tiedje et al., 1990). The logical extension of this line of thinking is that these perceptions may influence well-being simultaneously, and in opposing directions. If this is the case, then perceptions of interference may have overshadowed those of enhancement, potentially washing out the relation between enhancement and well-being in the studies reviewed above. This rationale argues for a two-dimensional model of the work-family interface, that is, one which includes perceptions of enhancement as well as interference to allow tests of their joint effects on well-being.

Only one study has examined both interference and enhancement simultaneously (Tiedje et

al., 1990), and the findings provided support for the two-dimensional model. Unfortunately, these researchers examined the relation between well-being and interference/enhancement type, rather than between well-being and independent levels of enhancement and interference. With this approach, independent tests of the enhancement and interference hypotheses could not be conducted because main and interactive effects of enhancement and interference could not be disentangled. Further, the reduction in statistical power associated with the creation of typologies from measures of continuous data risks understating existing relations (Cohen & Cohen, 1983). Moreover, this study examined women only. The extent to which their data apply to men is thus unknown. The next section reviews research on gender differences in levels of enhancement and the enhancement-well-being relation.

Work-Family Enhancement and Gender

There is very little theory or research to guide predictions about how levels of enhancement or the enhancement-well-being link might vary by gender. Men and women may be expected to differ in levels of perceived enhancement because they tend to differ in the types of jobs they have and, as discussed, in their respective employment/family role involvements. On average, men are employed in higher status, more rewarding jobs than are women and have traditionally been more invested in the socially esteemed "provider" role (both in terms of hours worked and psychological involvement) (Duxbury et al., 1994; Statistics Canada, 1994). Women, on average, occupy lower status, less rewarding jobs than do men and are involved more heavily with family work, which has been socially de-valued (Holder & Anderson, 1989). Further, inherent in the traditional work-family role arrangement is the support of the wife for her husband's employment, or more accurately his role as provider (Baruch, Biener, & Barnett, 1987).

The same support for her as family worker and caregiver by her husband or employer has not traditionally been expected. Thus, men's employment and family roles, by traditional standards, are more mutually supportive or enhancing than are women's. To the extent that this traditional standard persists, men would be expected to experience higher levels of enhancement than would women. This is consistent with the traditional gender role expectations hypothesis.

Of the three studies of enhancement reviewed above, one did not sample men (Tiedje et al., 1990), and one did not provide data on mean levels of enhancement for men or women (Belsky et al., 1985). In the one study where gender differences in enhancement were examined, no differences were found (Marshall & Barnett, 1993). In testing the enhancement-well-being relations, Marshall and Barnett included job role quality as an index of employment well-being, and marital and parental role quality as indices of family well-being. They found no gender differences in the magnitude of relations between any of these indices and enhancement. Belsky et al. related enhancement to various aspects of marital role quality and to job satisfaction in a prospective study of first-time parent couples. No relation was found between enhancement and job satisfaction for either men or women. Increases in marital satisfaction from 3 to 9 months post-partum were related to higher levels of enhancement for wives, but not for husbands. No gender differences were found for the link between enhancement and any of the other three aspects of marital role quality assessed (conflict, communication, feelings).

In sum, available data suggest that men and women may be more similar than different in levels of perceived enhancement and in how these perceptions relate to well-being. However, as discussed, research is underdeveloped on this dimension of the work-family interface. Perceptions of enhancement might be best explained in a model which conjointly considers perceptions of

interference and enhancement. This rationale also applies when considering the role of gender. That is, one should examine both interference and enhancement to best understand how either process may relate to gender. One objective of the proposed study is to explore these joint effects. Another issue that was raised earlier has to do with the nature of enhancement perceptions assessed. It may be that these perceptions can be differentiated by direction (i.e., work-to-family and family-to-work), and that gender differences in levels of enhancement emerge when direction of enhancement is specified. This issue is addressed below.

Direction-Specific Perceptions and Well-Being

Interference.

Work-family theorists have proposed specific subtypes or directions of interference. Employment-family interference may comprise perceptions that family interferes with work (family interference with work) or that work interferes with family (work interference with family) (Crouter, 1984; Greenhaus & Beutell, 1985; Gutek et al., 1991; Frone et al., 1992). Preliminary research supports the independence of the family interference with work and work interference with family constructs (Gutek et al., 1991; Frone et al., 1992). As discussed, prior research supports the differentiation of interference subtypes when making gender comparisons on interference levels. Specification of interference subtype may also enhance our understanding of the relation between interference and well-being, and of how this relation may vary by gender. The interference hypothesis predicts that total interference should be related negatively to well-being for both men and women. The interference hypothesis would also predict a negative relation between well-being and both family interference with work and work interference with family for both men and women; however, family enhancement of work studies have tested this

empirically.

Work-family theory suggests that, although both family interference with work and work interference with family may be related negatively to well-being, the magnitude of this relation may depend on interference type, that is, family interference with work and work interference with family may not carry equal weight or importance as predictors of well-being. The usual expectation within employing organizations is that employment should be allowed to interfere with family, whereas family demands should be flexible in order to accommodate employment (Duxbury & Higgins, 1991; Pleck, 1985). Thus, family interference with work constitutes a contravention of organizational expectations, whereas work interference with family does not. Noncompliance with such standards is presumed to result in role strain or decreased well-being (Frone et al., 1992; Greenhaus & Beutell, 1985). This line of thinking supports the asymmetry hypothesis, which holds that family interference with work should be more strongly related to well-being than is work interference with family. This differential effect is not presumed to vary by gender.

In one model of direction-specific interference, which combined data on men and women, family interference with work was found to be related to employment well-being, whereas work interference with family was not related to either family well-being or employment well-being (Frone et al., 1992). This study's data are thus consistent with the asymmetry hypothesis, but the nonsignificant relation between work interference with family and any aspect of well-being is not consistent with prior research. The authors suggest that this may be because their model accounted for the overlap between work interference with family and family interference with work in predicting well-being, and argue that the relation between work interference with family

and well-being in previous research may be a spurious result of failure in other studies to control for the relation between work interference with family and family interference with work. Whether or not they are correct in their interpretation, the Frone et al. data support the argument for differentiation between work interference with family and family interference with work in models of interference and well-being. This issue will be discussed further below in the section on gender and direction-specific interference.

Enhancement.

As noted, work-family theorists assume that the relation between employment and family domains is reciprocal (Crouter, 1984; Lambert, 1990), that is, employment may be perceived to enhance family, and family to enhance employment. These two types of enhancement are denoted work enhancement of family and family enhancement of work, respectively. No research has directly tested this theoretical distinction, but it is supported indirectly by data in the studies reviewed below.

It was noted above that the proposed positive enhancement-well-being link (the enhancement hypothesis) has been only partially supported. Specifically, enhancement was found to relate consistently to measures of family well-being, and to parenting role quality in particular, but not to measures of employment well-being. Before these results can be considered substantive, alternative explanations must be ruled out. Two of these are addressed here and relate to the conceptualization and measurement of enhancement. First, both studies in which a positive enhancement-parenting role quality relation was found used measures of enhancement which tapped perceptions of work-to-parenting satisfaction only. It should not be surprising that no relation between enhancement and marital satisfaction was found in either study (Marshall &

Barnett, 1993; Tiedje et al., 1990). In the third study, the measure of enhancement tapped work-to-marriage enhancement and a positive relation to marital satisfaction was found (Belsky et al., 1985). This suggests that measures of enhancement and well-being should tap the same domains if hypothesized relations between these variables are to be detected.

Second, it is possible that the nonsignificant findings regarding the enhancement-employment well-being relation may be a function of the direction of enhancement measured. None of the above studies employed a pure measure of family enhancement of work. Following the logic of the Frone et al. (1992) model, one would not expect work enhancement of family to be directly related to employment well-being, whereas family enhancement of work should be. Thus, it may be that work enhancement of family is not related directly to employment well-being, but it is premature to conclude the same for family enhancement of work.

In light of these data and methodological considerations, it is proposed that the domains tapped by measures of enhancement and well-being should be concordant. It is proposed further that as with interference, both directions of enhancement may need to be assessed to appropriately test the enhancement hypothesis. Because perceived enhancement in both directions may influence well-being, tapping only one direction may lead to underestimates of the level of enhancement perceived, and to misunderstanding of the true relation between enhancement and well-being. Biased estimates of the relative strengths of the relations between enhancement/interference and well-being (i.e., the relative merits of the enhancement and interference hypotheses) may be the result. A second exploratory objective of the proposed study is to measure of family enhancement of work and work enhancement of family separately, across both marital and parental domains, and to explore their relations to employment well-being and

family well-being.

Gender and Direction-Specific Interference

It was noted above that gender differences in levels of interference have not been found consistently, but also that gender effects may become apparent when the direction of interference is specified. In previous research on this issue, two frameworks have been used to explain gender differences: the gender role view and rational view (Gutek et al., 1991). From a rational standpoint, levels of perceived conflict should be a direct linear function of the level of structural involvement (i.e., time invested) in the employment and family domains (Gutek et al.). From this standpoint, women should perceive greater levels of family interference with work than should men because, on average, women spend more time than do men in family-related tasks. By the same token, men spend more time in employment-related activities, on average, than do women and should thus perceive more work interference with family.

From the gender role perspective, the nature and extent of interference perceived is presumed to be a function of gender role expectations, and not just structural processes (Greenhaus & Beutell, 1985). This view assumes that men are expected to put employment first, and women are expected to put family first, and further that perceptions of work interference with family and family interference with work are influenced directly by these expectations (Gutek et al., 1991). Specifically, perceptions of work interference with family are more likely to arise for women than for men because sanctions against this type of interference are heavier for women than for men. By the same token, perceptions of family interference with work are more likely to arise for men than for women, because sanctions against this type of interference are generally heavier for men than for women (Greenhaus & Beutell, 1985; Gutek et al., 1991).

Several studies have examined direction-specific interference and gender. Whereas findings regarding global (i.e., mixed-directional) interference were inconclusive, women have consistently reported greater levels of work interference with family than have men (Duxbury et al., 1994; Greenhaus, et al., 1987; Gutek et al., 1991; Higgins, Duxbury, & Lee, 1994). No gender differences in levels of family interference with work were found in two studies (Duxbury et al., 1994; Gutek et al.). In a third study, mothers with children under 13 reported more family interference with work than did fathers (Higgins et al., 1994).

In sum, studies of direction-specific interference have generated more consistent results regarding gender effects than have studies of nonspecific interference. Furthermore, a more consistent pattern of results emerges for work interference with family than for family interference with work. Findings from all five studies of work interference with family and gender are consistent with the gender role expectations hypothesis (i.e., that women should perceive higher levels of work interference with family than should men). Findings regarding family interference with work were less consistent, but provided modest support for the rational view (i.e., that women should report more family interference with work than should men). The relative lack of consistency in the family interference with work findings may reflect the fact that compared to work interference with family, family interference with work is less expected or acceptable for either men or women (i.e., by organizational standards) (Pleck, 1977). One would thus expect similar and low levels of family interference with work for both men and women.

These studies can also guide predictions regarding the role of gender in the family interference with work/work interference with family-well-being relations. The asymmetry hypothesis discussed above predicts that family interference with work should have a relatively

stronger (negative) relation to well-being than should work interference with family, mainly because family interference with work constitutes a contravention of organization sanctions, whereas work interference with family does not. To the extent that organizational standards affect employed men and women equally, this relatively greater negative effect of family interference with work should not vary by gender. The reconciliation hypothesis predicts further that both the family interference with work-well-being and the work interference with family-well-being relations should be stronger for women compared to men because competence in role integration is presumed to be more central to women's than to men's sense of well-being (de Koninck, 1991).

There is only one study in which gender differences in the relative strength of family interference with work/work interference with family-well-being links were examined (Frone et al., 1992). As noted, family interference with work was related to employment well-being, whereas work interference with family was not related to either family well-being or employment well-being. When the full model, consisting of 16 different paths including those between work interference with family/family interference with work and employment well-being and family well-being, was tested for gender differences, none were found. These data provide support for the asymmetry hypothesis, however, replication is necessary because this study was exploratory in nature and the first of its kind. Moreover, enhancement was not included in the model. The studies reviewed here provide further support for the differentiation between interference types when testing for the effects of gender on levels of interference and its relation to well-being.

Gender and Direction-Specific Enhancement

As discussed, relative to men, employed women continue to perform the majority of

household labour (Statistics Canada, 1994), allowing men to focus on their employment role relatively unencumbered by family demands. It is also consistent with the traditional nurturing role of wives to provide husbands with a home environment that is a haven from the pressures of employment (Baruch & Barnett, 1987). Assuming that such traditional gender-linked practices persist, one would expect men to perceive greater levels of family enhancement of work compared to women.

It is difficult to predict how levels of work enhancement of family might vary by gender. Assuming that a positive and reciprocal relationship exists between family enhancement of work and work enhancement of family (Lambert, 1990), men also would be expected to experience greater levels of work enhancement of family than would women. As noted, no gender differences in levels of enhancement were found in the one study which tested for them (Marshall & Barnett, 1993). This study employed a measure of work enhancement of family, specifically employment enhancement of parenting. Thus, these findings indicate that men and women may not differ in levels of work enhancement of family. They are not directly relevant, however, to the question of gender differences in levels of family enhancement of work.

With regard to the links between well-being and direction-specific enhancement, the enhancement hypothesis predicts that both family enhancement of work and work enhancement of family will be related positively to well-being for both men and women.

## Summary and Rationale for the Proposed Study

The bulk of existing research indicates that work-family role combination can give rise to perceptions of interference, and that interference is related negatively to well-being (Duxbury &

Higgins, 1991; Frone et al., 1992; Kopelman et al., 1983). The assumption that interference and well-being are related negatively constitutes the interference hypothesis. There were only three studies in which this hypothesis was not supported (Kline, 1989; Marshall & Barnett, 1993; Tiedje et al., 1990). Possible methodological and theoretical explanations for these inconsistencies were identified. Specifically, conceptualization and measurement of the interference variable, sample gender and employment level, and exclusion of enhancement were raised as possible explanations. The proposed study was designed to help resolve these issues.

Following the logic of previous models of interference (Duxbury & Higgins, 1991; Frone et al., 1992; Kopelman et al., 1983), the interference hypothesis predicts that interference should be related negatively to both employment-related and family-related affective well-being (i.e., satisfaction). Equally plausible, however, is the enhancement hypothesis, which predicts that enhancement will be related positively to well-being (Belsky et al., 1985; Tiedje et al., 1990). Assuming that both the enhancement and interference hypotheses may be tenable, it was proposed that an adequate test of either hypothesis must include both interference and enhancement because they may have simultaneous and opposing influences on well-being (Tiedje et al., 1990).

Previous research has yielded conflicting findings regarding gender differences in levels of interference. The traditional gender role expectations hypothesis predicts that women should report higher levels of interference than should men. Support for this hypothesis varies according to the type or direction of interference specified. Support is strong when measures tapped work interference with family specifically and exclusively, but not when measures are non-specific with respect to direction or are too inclusive. These studies support the distinction between interference subtypes (Frone et al., 1992; Gutek et al., 1991), and suggest that measures of

interference should assess both directions (family interference with work and work interference with family) to properly test for gender differences in levels of interference (Greenhaus & Beutell, 1985). The proposed study aimed to measure both types of interference in order to assess how they may be differentially related to gender.

Two competing hypotheses are forwarded regarding gender differences in levels of work interference with family and family interference with work. According to the rational hypothesis, levels of family interference with work should be greater for women than for men, and levels of work interference with family should be greater for men than for women. The opposite effects are predicted by the gender role expectations hypothesis. That is, levels of work interference with family should be greater for women than for men, and levels of family interference with work should be greater for men than for women. With respect to gender differences in levels of enhancement, the traditional gender role expectations hypothesis predicts that men will report higher levels of enhancement than will women.

The role of gender in the relation between interference and well-being was also be examined in the present study. It was proposed that the strength of the relations between interference and well-being may depend on gender. The reconciliation hypothesis predicts that interference will have a stronger negative impact on women's well-being than it will on men's (de Koninck, 1991). It may also be that the strength of the interference-well-being relation depends on the type or direction of interference assessed (Greenhaus & Beutell, 1985). The asymmetry hypothesis predicts that the relation between family interference with work and well-being relation should be stronger than the work interference with family-well-being relation for both men and women (Frone et al., 1992). It may also be that gender effects on the interference-well-being

relation can be further specified when direction is specified. A subhypothesis of the reconciliation hypothesis predicts that both the family interference with work-well-being and the work interference with family-well-being relations should be stronger for women than for men (de Koninck, 1991).

It was proposed that, as with interference, enhancement may be differentiated by type or direction. The gender role expectations hypothesis predicts that men will experience higher levels of family enhancement of work than will women. Assuming a moderate positive relation between family enhancement of work and work enhancement of family, men may also perceive higher levels of work enhancement of family than do women. Gender comparisons on levels of family enhancement of work and work enhancement of family have not previously been conducted. It was proposed further that models which specify enhancement type may allow a more adequate test of the enhancement hypothesis than do those where enhancement type is not specified. Consistent with the enhancement hypothesis, the relations between work enhancement of family/family enhancement of work and well-being are presumed to be positive, but have not previously been tested empirically. The role of gender in the relations between enhancement type and well-being is also previously untested and was be explored in the present study.

Although no study can possibly include all relevant variables, excluding theoretically important variables risks compromising the validity of study findings. Employment and family work hours are theoretically important here because of their consistent association in previous research with both gender and interference. For example, interference has been found to increase with time spent in both paid work (Bohen & Viveros-Long, 1981; Cooke & Rousseau, 1984; Galambos & Walters, 1992; Greenhaus et al., 1987; Gutek et al., 1991; Holohan & Gilbert, 1979;

Kingston & Nock, 1985; Marshall & Barnett, 1993; Pleck et al., 1980; Voydanoff, 1988), and family work (Googins & Burden, 1987; Gutek et al., 1991; Marshall & Barnett, 1993; Staines & Pleck, 1983; Voydanoff, 1988). As noted above, women continue to do most of the family work (Hochschild, 1989; Statistics Canada, 1994). Thus, it may be that gender differences in family work account for gender differences in interference or its subtypes. In order to rule out this possibility, it is important to include family work in analyses of gender differences in interference/enhancement. This way its effect can be controlled or held constant. The potentially confounding effects of employment hours could be controlled in the same fashion.

## Hypotheses

The hypotheses are presented in two sections. In the first, hypotheses pertaining to gender comparisons in levels of interference, enhancement and their subtypes are presented. In the second, hypotheses pertaining to relations between interference/enhancement, their subtypes, and employment/family well-being are presented.

### Hypotheses Pertaining to Gender and Interference/Enhancement Levels

1) The traditional gender role expectations hypothesis predicts that women will report significantly higher levels of interference than will men.

2) With respect to enhancement, the traditional gender role expectations hypothesis predicts that men will report significantly higher levels of enhancement than will women.

#### Subhypotheses pertaining to gender and interference/enhancement subtypes.

With respect to direction-specific interference and enhancement, two subhypotheses are forwarded.

1a) In line with the traditional gender role expectations hypothesis, women are predicted to report significantly higher levels of work interference with family and significantly lower levels of family interference with work than will men. This hypothesis will be supported if the ANOVA and ANCOVA results indicate that mean levels of work interference with family are significantly higher for women, and mean levels of family interference with work are significantly higher for men.

The alternative to (1a), the rational hypothesis, predicts that women will report lower levels of work interference with family and higher levels of family interference with work than will men. This hypothesis will be supported if the ANOVA and ANCOVA results indicate that mean

levels of family interference with work are significantly higher for women, and mean levels of work interference with family are significantly higher for men.

2a) In line with the traditional gender role expectations hypothesis, men are predicted to report higher levels of both family enhancement of work and work enhancement of family than are women. This hypothesis will be supported if the ANOVA and ANCOVA results indicate that men's mean levels of family enhancement of work and work enhancement of family are significantly higher than are women's.

Hypotheses Pertaining to Relations Between Interference/Enhancement and Family/Employment Well-being

3) The reconciliation hypothesis predicts that the magnitude of the relation between interference and well-being will be stronger for women than for men. This hypothesis will be fully supported by a significant interaction between gender and interference in both regression equations (i.e., one for each DV). Partial support will be obtained if the interaction is significant in one but not the other equation.

4) The interference hypothesis predicts that a negative relation will exist between interference and employment well-being/family well-being for both men and women. This hypothesis will be fully supported by a significant main effect (standardized Beta weight) for the interference variable for both men and women for both employment well-being and family well-being. Partial support will obtained if the effect is found for only one gender or only one DV.

5) The enhancement hypothesis predicts a positive relation will exist between enhancement and employment well-being/family well-being for both men and women. This hypothesis will be fully supported by a significant main effect for the enhancement variable for both men and women,

and for both employment well-being and family well-being. Partial support will obtained if the effect is found for only one gender or for only one DV.

Subhypotheses pertaining to the relation between interference/enhancement subtypes and employment and family well-being.

3a) In line with the reconciliation hypothesis, it is predicted that the magnitude of both the family interference with work-well-being and the work interference with family-well-being relations will be greater for women than for men. This hypothesis will be fully supported if the magnitude of the interaction terms (gender by work interference with family and gender by family interference with work) are both significant when predicting both DV's. Partial support will be obtained if this relatively greater effect for women holds for one but not the other DV.

4a) In line with the interference hypothesis, it is predicted that both family interference with work and work interference with family will be related negatively to employment well-being and family well-being for both men and women. This hypothesis will be fully supported by significant main effects for each of the family interference with work and work interference with family variables for both men and women, and for both employment well-being and family well-being. Partial support will obtained if the effect is found for only one gender or only one DV.

4b) The asymmetry hypothesis predicts that the magnitude of the family interference with work-well-being relation will be greater than will that for the work interference with family-well-being relation. This hypothesis will be supported if the standardized Beta weight for family interference with work is greater than that for work interference with family when predicting both employment well-being and family well-being, and if this is the case for both men and women. Partial support will be obtained if the family interference with work Beta is larger than the work

interference with family Beta for only one gender or for only one DV.

The relations between enhancement subtypes (family enhancement of work, work enhancement of family) and employment well-being/family well-being will be explored. In line with the enhancement hypothesis, both family enhancement of work and work enhancement of family should be related positively to employment well-being and family well-being for both men and women. This would be evidenced by significant main effects for the family enhancement of work and work enhancement of family variables for both men and women, and for both employment and family well-being. Partial support will obtained if the effect is found for only one gender or for only one DV.

# METHOD

## Participants

Participants were 140 men and 141 women with at least one child under 12 years of age living at home. The criteria for inclusion in the study were:

1)That the participant be employed 35 hours per week for at least one month at the time of participation. This criterion excluded those respondents who may have been experiencing strain associated with transition into the work force.

2) That participants' youngest child be 12 years old or younger. This excluded families with no children for whom they must provide or arrange care during hours of employment.

3) That participants be living with a spouse or partner who was also employed at least 35 hours per week at the time of participation. This criterion ensured that all participants were from dual-income families where both partners are employed full-time.

### Justification of sample size.

The recommended ratio for participants to variables for Standard or Hierarchical MR is 20 to 1 (Tabachnick & Fidell, 1989). With a maximum of 7 variables in any equation, the required number of subjects 140. It was hypothesized that relations between interference and well-being might vary by gender and that analyses may need to be run for men and women separately. Thus, 140 of each gender were required. Equal numbers of men and women were obtained to reduce problems associated with unequal n's (Tabachnick & Fidell, 1989).

## Measures

### Work-family interference.

Perceptions of work-family interference reflect the perceived incompatibility between

employment and family role demands such that functioning in one domain is adversely affected by experiences in the other (Greenhaus & Beutell, 1985). It is proposed that family interference with work and work interference with family are conceptually distinct constructs that need to be assessed independently (Adams, King, & King, 1996; Frone et al., 1992). Thus, one important element of the interference measure is that it should tap perceptions of both family-to-work and work-to-family interference. Indices of work interference with family and family interference with work are discussed separately below. Scores on these indices are summed to create (total) Interference index.

A modified version of Gutek et al.'s (1991) Work Interference with Family (WIF: Appendix A) scale served as the measure of work interference with family. The original WIF contains four declarative statements to which respondents indicate their level of agreement, from 1 = "Strongly Disagree" to 5 = "Strongly Agree", to items such as "My work takes up time that I'd like to spend with my family". Items are summed to yield the WIF score. Higher scores reflect higher work interference with family.

The WIF is reported to have respectable internal consistency. In Gutek et al. (1991), Cronbach's Alphas of .81 and .83 were reported for the WIF in samples 1 and 2, respectively. Test-retest reliability coefficients were not reported for either sample. A positive correlation of the WIF with paid work hours in Gutek et al. provides evidence of the construct validity of the WIF. Three of the items as presented in Gutek et al. were modified for the present study. Specifically, the word "friends" was omitted from the WIF, and the word personal was changed to family in one item. Additionally, the word "work" was replaced by "job" to reduce ambiguity. All changes were intended to make the scale more consistent with the construct of interest (i.e., work

interference with family).

A modified version of Gutek et al.'s (1991) Family Interference with Work scale (FIW; Appendix B) served as the index of family interference with work. The items parallel those on the WIF in the processes they reflect, but they tap the other direction of interference. The original FIW contains four declarative statements to which respondents indicate their level of agreement, from 1 = "Strongly Disagree" to 5 = "Strongly Agree", to items such as "My family life takes up time that I'd like to spend at work". Items are summed to yield the family interference with work score. Higher scores reflect higher family interference with work.

In Gutek et al. (1991), Cronbach's Alphas of .79 and .83 were reported for the FIW in samples 1 and 2, respectively. Test-retest reliability coefficients were not reported for either sample. A positive correlation of the FIW with hours spent in family work in Gutek et al. provides evidence of the construct validity of the FIW. The small size of the positive correlation between FIW and WIF variables provides support for the independence of these two constructs. The finding that items for the two scales loaded on separate and orthogonal factors provides further support for the construct validity of the scales (Gutek et al.). To make the scale more consistent with the construct of interest in the proposed study, modifications in item wording similar to those described for the WIF were undertaken for the FIW.

Modifications in scaling of both the WIF and FIW were also necessary. Specifically, because the underlying dimension of "level of agreement" is assumed to be unipolar, rather than bipolar, anchor labels on the scales were changed. "Strongly Disagree" was changed to "Do Not Agree At All". "Neither Agree nor Disagree" or "Neutral" were changed to "Agree Somewhat", and "Agree Strongly" was left unchanged.

Work-family enhancement.

Perceptions of work-family enhancement reflect the perceived enhancement of functioning in employment or family life due to participation in the other domain (Tiedje et al., 1990). This has also been referred to as positive spillover (Crouter, 1984; Lambert, 1990). Perceptions of work-family enhancement were assessed with three measures.

The first measure was the Work-Parenting Gains scale (WPG: Marshall & Barnett, 1993). The WPG scale (Appendix C) consists of four items tapping the positive influence of employment on parenting. Items are rated on a four-point scale (1 = "not at all true", 4 = "very true"). Cronbach's Alpha for women in the Marshall and Barnett study was .73. Test-retest reliability coefficients were not reported. Significant negative correlations with measures of work-family strains (interference) and a positive correlation with a broader but conceptually similar measure of "work-family gains" in the same study support the construct validity of the WPG. The WPG is specific to enhancement of parenting by employment. It was proposed that family enhancement of work should be distinguished from work enhancement of family in measures of enhancement, and that both central family roles (parenting and marital) be assessed. Separate measures of family enhancement of work and work enhancement of family were developed for this study because none existed previously.

The Work Enhancement of Family scale (WEF: Appendix D) was created to tap work-enhancement of family. The WEF consists of items drawn from other enhancement scales (Belsky et al., 1985; Marshall & Barnett, 1993; Tiedje et al., 1990), plus items created by the researcher to be consistent with enhancement theory. There are seven items in total. Respondents were asked to indicate their level of agreement (1 = "Do not agree at all" 5 = "Agree strongly") with items

such as "I am a better parent because of my job", "Working at my job helps me to appreciate the time I spend with my partner". Higher scores reflect higher work enhancement of family.

The Family Enhancement of Work scale (FEW: Appendix E) was created to tap family enhancement of work. The FEW consists of six items intended to reflect the positive influence that family role experiences may have on functioning in the employment role. Items were drawn from other measures of enhancement (Belsky et al., 1985; Marshall & Barnett, 1993) or were created by the researcher to reflect processes proposed in enhancement theory. Consistent with the WEF and with EFE theory, items focus on both the parent and partner roles. Respondents were asked to indicate their level of agreement (1 = "Do not agree at all" 5 = "Agree strongly") with items such as "My relationship with my partner helps me function better at my job", "Having children helps me cope with job-related stress". Higher scores reflected higher family enhancement of work.

Because both the FEW and WEF were developed for the proposed study, their psychometric properties were unknown. Low negative correlations between the WEF and the WIF in the present study (-.32 for men & -.33 for women) supports the validity of the WEF. Similarly, low negative correlations between FEW and FIW scores would be expected as support for the construct validity of the FEW, however, correlations were nonsignificant for both men and women. Moderate positive correlations (.45 & .48, for men and women, respectively) between the WEF and the FEW were found providing some support their conceptualization as independent but related constructs. The FEW and the WEF demonstrated adequate internal consistency coefficients, and were summed to yield an index of (total) Enhancement.

Job satisfaction.

Consistent with Price and Mueller (1986), job satisfaction is defined as one's positive affective orientation towards one's organization and job. To be consistent with the objectives of this study, a measure of job satisfaction should meet the following criteria: 1) Assess both intrinsic (i.e., job content) and extrinsic (e.g., hours, pay, social and physical context) characteristics, 2) Provide a global versus facet-specific index, 3) Have sound psychometric properties, 4) Be relatively short and easy to complete. Many well-researched measures were considered. The Overall Job Satisfaction scale (OJS; Warr, Cook, & Wall, 1979) and the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Davis, England & Lofquist, 1967, cited in Price & Mueller, 1986) both met the first three criteria better than any other measure reviewed. They are 15 and 20 items in length, respectively, making them longer than other popular measures of global job satisfaction; however, they are much superior in their psychometrics and the extent to which they assess the relevant job characteristics. This tradeoff of brevity for psychometric soundness and conceptual relevance seems acceptable given that both measures could be completed in one or two minutes. The OJS was chosen over the MSQ for the following reasons: 1) the average coefficient of internal consistency across studies was slightly higher for the OJS, 2) The OJS has fewer items, 3) The OJS includes an item about hours of work, which is particularly relevant to the proposed study, whereas the MSQ does not.

On the OJS, respondents are asked to rate their level of satisfaction with each item on a seven point scale, where 1 = "Extremely dissatisfied" and 7 = "Extremely satisfied". Three scores can be obtained, one for satisfaction with intrinsic features, one for satisfaction with extrinsic features, and one for overall satisfaction. The overall score is more valid and reliable and is the

score of interest here. Responses are summed to yield the overall score. Sample items include, "the physical work conditions", "your co-workers", "your immediate boss", "your opportunity to use your abilities".

Evidence of the reliability of the overall score is provided by the Alpha coefficients of .85 and .88 in the samples used in the creation of the measure. These samples were matched on (unspecified) U.S. national demographic characteristics (Price & Mueller, 1986). In a separate study of a diverse sample of employees in an engineering firm, coefficient Alpha was .92 (Clegg & Wall, 1981). A six-month test-retest correlation of .63 was reported. Evidence of the validity of the OJS was provided by significant positive correlations with measures of work involvement, motivation, and general life satisfaction in the original study. In another study, the OJS correlated significantly with organizational commitment, general health, and job level (Cook & Wall, 1980).

The possible range of scores is from 15 to 105. The combined mean score (across both samples) in the original study was 70.5 and in a separate study was 71.9 (Clegg & Wall, 1981). There was reportedly some negative skewing of scores (Clegg & Wall, 1981). In an attempt to remedy this, and to make scaling consistent with the unipolar conception of level of satisfaction proposed here, the scale anchor labels were changed. "Extremely dissatisfied", was changed to "not satisfied at all", "not sure" was changed to "moderately satisfied", and "extremely satisfied" remained unchanged. The modified OJS is presented in Appendix F.

Marital satisfaction.

The construct of marital satisfaction has been the object of much research and many measures of the construct exist (Sabatelli, 1988). The Kansas Marital Satisfaction Scale (KMSS: Schumm et al., 1986) was chosen over other measures of marital satisfaction because of its

excellent psychometric properties and its brevity. The KMSS consists of three items which ask respondents about how satisfied they are with their partner as a spouse, with their marriage, and with their relationship with their spouse. Respondents rate their level of satisfaction on a 7-point scale where 1 represents "extremely dissatisfied" and 7 represents "extremely satisfied". Higher scores thus indicate greater satisfaction.

The psychometric properties of the KMSS have been supported by extensive research. Internal consistencies (Cronbach's Alpha) have ranged from .89 to .96 across several studies (Jeong, Bollman, & Schumm, 1992; Mitchell, Newell, & Schumm, 1983; Schumm, Nichols, Schectman, & Grigsby, 1983; Schumm, Scanlon, Crow, Green, & Bucker, 1983; Schectman, Betsey, Schumm, & Bugaighis, 1985). Test-retest reliability was .71 over a 10 week interval (Mitchell, et al., 1983). The validity of the KMSS is supported by correlations in the expected direction with other measures of marital quality, marital adjustment, and marital satisfaction (Schumm et al., 1986), and several subscales of Moos' Family Environment Scale (Mitchell et al., 1983). The KMSS has also been used to discriminate successfully between separated and married wives (Schumm et al., 1985). It has shown no correlation with social desirability (Jeong et al., 1992).

The KMSS is a short measure of global marital satisfaction, making it ideal for use in the proposed study. Distributions of scores on the KMSS have tended to be depart from normality (Schumm et al., 1983). As with the OJS, scale anchor labels were changed to more accurately reflect the conception of level of satisfaction as a unipolar rather than bipolar construct. This was also presumed to be a way to normalize the distribution. Anchor labels were changed to 1 = "not satisfied at all", 4 = "moderately satisfied", and 7 = "extremely satisfied". The modified KMSS is

presented in Appendix G.

Parenting satisfaction.

The goal of this study was to examine the relation between EFI/EFE and satisfaction (affective WB) in each major life role. The construct of interest here was the affective WB ascribed by respondents to experiences in the parent role, that is, parenting satisfaction. The Satisfaction with Parent Role Scale (SPRS; Picard, 1995) was chosen for several reasons. First, it taps the construct of interest in the study, providing a global index of satisfaction within the parent role. Second, consistent with the assumption in the proposed study that level of satisfaction is a unipolar versus bipolar construct, it has anchor labels which reflect unipolar scaling. Third, it was developed on a Canadian sample of employed parents in dual-income families, making it well-suited for use with the proposed sample. Fourth, preliminary data suggested that the measure is sound psychometrically. The SPRS is presented in Appendix H.

The SPRS contains six items scored on a 7-point likert scale, ranging from 1 = "Do not agree at all " to 7 = "Strongly agree". Sample items include, "I am satisfied with my child rearing skills", "I am satisfied with the amount of time I give to my children", "I am comfortable in my role as a parent". Because the SPRS is new, its psychometric adequacy remains to be proven. In the study for which it was developed, internal consistency (Cronbach's Alpha) was .80. Positive correlations with other measures of WB and negative correlations with perceived stress in the same study supported its validity.

Family work.

Merderer (1993) contends that both accomplishment and management of household chores need to be integrated into definitions of family work. In addition, the time and energy

devoted to child care needs to be considered. Consistent with this conceptualization, the global construct of family work was divided into two related constructs 1) number of hours spent planning or doing household chores (such as meal planning and preparation, cleaning, shopping) and 2) Number of hours spent caring for children or doing things with children (such as dressing, talking, playing, driving places). The focus is on "traditionally female tasks" because they are done more frequently, are more schedule bound, and lack a leisure or relaxation component (Blair & Johnson, 1992). Following Voydanoff (1988), one question asked respondents to estimate the number of hours spent in their last work day and their last nonwork day in planning or performing household chores. A separate question asked about time spent caring for or doing things with children on the respondent's last work and nonwork days. Respondents were also asked about how many days per week they spent in paid work. Weekly totals of time spent in household chores and child care were calculated by multiplying the work day figure by the number of paid work days per week, and the nonwork day figure by the number of nonwork days per week. The two constructs were not combined into one measure of family work in the present study because of their conceptual distinctness, low intercorrelation (.27 and .07 for men and women, respectively), and different pattern of relations with other variables. Significant negative correlations were found between the child care hours index and age of children (i.e., age of child 1 and 2) for both men and women supporting the validity of the index.

Demographic information.

Information was obtained to describe the sample with respect to demographic characteristics such as age and gender of respondents, number and ages of children, education, income level, and hours employed of respondents and their partners. The Demographic

Questionnaire is presented in Appendix I.

Procedure

Respondents were asked to complete a 15 minute questionnaire, which asked about: their satisfaction in employment, marital and parenting roles; how work and family roles interfere with and enhance each other; weekly hours spent in paid and family work, and a number of demographic characteristics (e.g., age, gender, education and income levels, number and age of children).

Respondents were recruited through the Sowden Market Analysis Research group. Research assistants used a computerized dialling system to randomly dial telephone numbers in the Greater Vancouver area telephone book. Potential respondents were interviewed briefly to determine if they met the criteria for inclusion in the study (see Random Dialling Protocol in Appendix J). Those who met the criteria were given more details about the study and what their participation would involve and were invited to participate. Those agreeing to participate were mailed the questionnaire packet. The packet contained an Information Sheet (Appendix K), which reiterated the details of their participation and provided a means whereby they could request a summary of the results. They were subsequently contacted by telephone by the research assistant to ensure that the questionnaire packet had arrived and to answer any questions. Consent was implied by the return of a completed questionnaire. The Protocol for Second Telephone Contact is in Appendix L.

# RESULTS

## Sequence of Analyses

Data were first checked for adherence to assumptions underlying the analyses. After the data were checked and cleaned, internal consistency of all variables was estimated using Cronbach's Alpha coefficient. Factor analyses were conducted with the interference and enhancement items to establish construct validity of the interference and enhancement measures. Independent samples t-tests were then conducted to identify gender differences on interval variables. Mean comparisons between men and women on predictor variables were planned and therefore no alpha level adjustments were required. The "Bonferroni t" correction was applied where unplanned comparisons were made. For the 11 comparisons, an alpha level of .005 (.05/11) or less was required for these results to be considered statistically significant. Chi-square analyses were conducted for gender differences on nominal variables. Pearson correlations were then conducted to determine the correlation of covariates with predictor variables and the intercorrelation of predictors, which would guide decision-making regarding which variables could be included together in subsequent analyses. Hypotheses were then tested using Analyses of Covariance, and Hierarchical and Standard Multiple Regression.

## Return Rate

A total of 24,802 telephone numbers were dialled. Of these, 14,340 (58%) resulted in one of the following: no answer, busy, number disconnected, foreign language, or some other form of non-contact. Of the remaining 10462, with whom contact was established, 5589 (53%) refused to listen to the protocol, 70 (0.7%) listened to the protocol and were eligible but refused, and 430 (4.1%) were eligible and completed (address was obtained and questionnaire mailed out). A

further 4373 (42%), listened to the protocol but did not meet one or more of the inclusion criteria. Thus, of those known to be eligible (n = 500), 430 completed the questionnaire, resulting in an 86% return rate. It should be kept in mind that the eligibility of 53% of those with whom contact was established could not be determined because they refused to listen to the protocol. This makes it difficult to determine the extent to which this sample represents the subpopulation of dual-income parents with children aged 12 or younger. Comparing the sample to the subpopulation in terms of demographic characteristics (such as family income) can provide an estimate in this regard. The average family income level of this sample was therefore compared with the average family income for dual-income families with both spouses employed full year/full time in the Greater Vancouver area. The average annual family income for this subpopulation (adjusted by a 1.5% cost of living increase from 1991 to 1996) was approximately $77,000, which is slightly lower than the average income for this sample (please refer to Table 3). Thus, the present sample may over-represent slightly the higher income families in this subpopulation in Greater Vancouver.

Data were collected over a 6-week period during July and August, 1996. The quota of women was filled by the fifth week, so only men were recruited during the final week. Only one spouse from each household was permitted to participate to ensure independence of responses. Of the 430 questionnaires mailed to prospective participants, 291 (68%) were returned. Of these, 7 women and 2 men did not meet the inclusion criteria or had missing data on critical variables. One additional woman was deleted from the sample (for reasons to be explained shortly), resulting in a final sample of 141 women and 140 men.

Data Cleaning Procedures

Preliminary analyses were conducted to determine if data adequately met assumptions underlying correlation and Multiple Regression analyses (Tabachnick & Fidell, 1989). Variables were examined for normality, linearity, and homoscedasticity, as were multiple regression residuals. Formal tests of collinearity were not required because none of the predictors or covariates were highly intercorrelated. Several variables violated assumptions of normality and/or yielded univariate outliers. Total child care, family income, household labour, respondent employment hours, and participant employment hours were all positively skewed. Marital satisfaction was negatively skewed. In all cases, the same violations were present for subsamples of men and women. Because marital satisfaction was negatively skewed, this variable was "reflexed" (all values subtracted from the highest value plus one) to create a positive skew, and then a log transformation was applied (Tabachnick & Fidell, 1989). Analyses which included the marital satisfaction variable were conducted twice, first using the original marital satisfaction variable and then using the transformed marital satisfaction variable. Results were then contrasted. Because there were no meaningful differences, the untransformed variable was used.

It was originally proposed that "family well-being" would be represented by summing the standardized values (Z scores) on the parenting and marital satisfaction scales. For several reasons, this turned out to be unsound. First, this variable was negatively skewed, likely due to the influence of the marital satisfaction component. Second, the relation between parenting satisfaction and marital satisfaction was low ($r = .19$ for women, $r = .23$ for men), indicating that the two are distinct constructs. Third, these variables related differently to independent variables in regression analyses. Thus, they were not combined into one index of family well-being, but

were analysed as separate dependent variables (Kurdek, 1996).

Because all remaining skewed variables were measured in meaningful (versus arbitrary) units, applying square root or logarithmic transformations risked complicating the interpretation of results (Tabachnick & Fidell, 1989). Alternatives considered were deleting and recoding outlying cases. With one exception, outlying cases were recoded to a Z score of +3. This was preferrable to deletion because it allowed retention of the cases and their deviancy without allowing the deviancy to perturb correlations (Tabachnick & Fidell, 1989). One woman was an extreme outlier on both household labour and child care. It was discovered that this woman had four children, all with some form of mental or physical handicap. This case was deleted from the sample because her situation was assumed not to be representative of the population to whom inferences would be made. A total of 20 cases were recoded, 10 men and 10 women.

Recoding eliminated outliers and reduced skewness, but did not "normalize" the distributions of these variables. To determine the effect of the remaining skewness on results, analyses involving these variables were conducted twice, once with the recoded variable and once with the log transformation of the variable. No significant differences were found in the results, so the recoded (more interpretable) variables were used in analyses.

Several cases (16 men and 7 women) had missing data on one or more items of the job satisfaction measure. Missing items were assigned the case mean value because most items that were missed were not applicable to the respondent (e.g., satisfaction with immediate boss or coworkers were not applicable for self-employed respondents). Descriptive analyses including job satisfaction were conducted twice, once including the cases with missing data and once without these cases (Tabachnick & Fidell, 1989). Means and standard deviations were nearly

identical for men and women with and without these cases, so all cases were included in all subsequent analyses.

Reliability

Internal consistency coefficients (Cronbach's Alpha) were calculated for men and women separately and for the total sample. Results are presented in Table 1. All measures have adequate internal consistency. Because the total interference variable had a higher Alpha coefficient than the WIF or FIW variables did, greater confidence can be placed in the results employing the total interference measure. Additionally, the relative unreliability of the FIW measure (versus the WIF measure) reduces the reliability of the results pertaining to the relative predictive power of these variables, and of the results regarding gender differences in FIW. The WPG variable was dropped because all three of the other measures of enhancement had superior internal consistency. Item 5 of the parenting satisfaction scale and item 6 of the WEF scale were dropped because this increased the reliability of both scales. Principal Components (PC) factor analysis with Varimax rotation was conducted to determine whether the WIF, FIW, WEF, and FEW items loaded on their respective factors. PC analysis was chosen because the main goal was not to confirm the factor structure of the work-family interface, but rather to explore the extent to which these interference and enhancement measures could be said to be measuring separate constructs. The analysis was conducted for the whole sample and for men and women separately. The solutions were very similar for men and women so their data were combined.

The initial PC extracted 6 factors. There were no instances of an interference item on an enhancement factor or vice versa. In addition, although the four scales did not hold together, directionality was preserved. That is, there was only one factor with mixed-direction items.

Table 1

Internal consistency * of study variables.

| | Total Sample (N = 281) | Men (n = 140) | Women (n = 141) |
|---|---|---|---|
| Total Enhancement | .83 | .83 | .84 |
| Family Enhancement of Work | .78 | .76 | .80 |
| Work Enhancement of Family | .80 | .80 | .80 |
| Total Interference | .76 | .76 | .77 |
| Family Interference with Work | .64 | .67 | .61 |
| Work Interference with Family | .73 | .75 | .71 |
| Work-parenting gains | .73 | 70 | .74 |
| Job Satisfaction | .91 | .91 | .92 |
| Marital Satisfaction | .96 | .94 | .97 |
| Parenting Satisfaction | .82 | .83 | .80 |

* Cronbach's Alpha

Specifically, factor 1 was comprised of WIF items 1, 2, 3, & 4, plus FIW item 1. The rotated factor matrix is presented in Appendix M.

When a four-factor solution was forced, all WEF items loaded on factor 1 and all FEW items loaded on factor 2. WIF items 1, 2, and 4 plus FIW item 1, loaded on factor 3 and WIF item 3 loaded with the remaining FIW items on factor 4. The rotated four-factor matrix is presented in Appendix N. These results provide evidence of the validity of the measures of interference and enhancement employed in this study.

Sample Description and Preliminary Analyses

Table 2 presents descriptive statistics on predictor, criterion, covariate, and demographic variables. Results are presented for men and women separately. Independent samples t-tests were conducted to determine if there were gender differences on any of these variables. Gender differences were found on several variables. Women perceived higher levels of total interference [$t$ (279) = 2.09, $p < .05$] and WIF [$t$ (279) = 1.96, $p = .05$] than did men. Women also reported doing more household labour [$t$ (278) = 5.16, $p < .001$] per week, working fewer hours per week at their own jobs [$t$ (279) = 6.19, $p < .001$], having partners who worked more hours per week at their jobs [$t$ (279) = 3.98, $p < .001$], and having older partners [ $t$ (278) = 4.50, $p < .001$] than did men. Women also reported spending more time in child care than did men [$t$ (278) = 2.87, $p < .01$] and being younger [$t$ (278) = 2.09, $p < .05$] than were men; however these two differences cannot be considered statistically significant because the $p$ value was greater than the corrected value required for unplanned comparisons (.005). Large gender differences were found on both respondent job type [Pearson's Chi square (6) = 41.1, $p < .0001$] and partner job type [Pearson's

Table 2

Means and standard deviations for predictor, criterion, covariate, and demographic variables.

| | MEN | | WOMEN | |
|---|---|---|---|---|
| PREDICTOR | M | SD | M | SD |
| Total Enhancement | 3.07 | .71 | 3.14 | .72 |
| Work Enhancement of Family | 2.86 | .90 | 3.05 | .84 |
| Family Enhancement of Work | 3.33 | .81 | 3.26 | .85 |
| Total Interference* | 2.23 | .65 | 3.05 | .84 |
| Family Interference with Work | 1.70 | .69 | 1.82 | .59 |
| Work Interference with Family* | 2.76 | .87 | 2.96 | .80 |
| CRITERION | | | | |
| Job Satisfaction | 4.86 | 1.13 | 4.89 | 1.09 |
| Marital Satisfaction | 5.93 | 1.16 | 5.70 | 1.26 |
| Parenting Satisfaction | 5.30 | .99 | 5.33 | 1.02 |
| COVARIATES | | | | |
| Child care hours* | 25.60 | 14.44 | 30.79 | 15.76 |
| Household Labour Hours** | 15.36 | 10.05 | 22.07 | 11.67 |
| Respond Employment Hours** | 43.49 | 1.16 | 38.85 | 4.16 |
| Partner Employment Hours** | 39.11 | 4.28 | 41.58 | 5.99 |
| DEMOGRAPHICS | | | | |
| Respondent Age* | 37.47 | 6.37 | 35.97 | 5.65 |
| Partner Age** | 35.33 | 5.56 | 38.71 | 6.93 |
| Number of Children | 1.97 | .80 | 1.89 | .75 |
| Age of Child 1 (youngest) | 5.00 | 3.52 | 5.16 | 3.49 |

* Means differ at $p < .05$, ** Means differ at $p < .001$

Chi square (6) = 43.0, $p < .0001$]. More men than women were employed in managerial (21.4% versus 13.5%) and technical occupations (19.3% versus 6.4%), whereas more women than men held clerical (17.0% versus 2.9%) and administrative positions (20.6% versus 5.0%). The identical pattern of gender differences was found for partner job type. No gender differences were found on any of the other demographic variables measured (i.e., number and ages of children, respondent or partner education, family income) or on job satisfaction, marital satisfaction, or parenting satisfaction. Distributions of sample by gender on family income, job type and education level are presented in Tables 4 to 6, respectively. Twelve men and ten women had at least one child with a mental or physical disability or disorder. Most common among those disabilities described was Attention Deficit Hyperactivity Disorder. Ten men and five women reported having dependents other than their children living in their home.

Pearson correlation analyses were conducted to determine if the proposed covariates (respondent hours per week in child care, household labour, and employment, and partner employment hours) were correlated with any of the predictor variables (i.e., Interference, Enhancement or their subtypes) or if there were any high intercorrelations among predictors which may perturb subsequent regression analyses. Table 6 presents a matrix of intercorrelations between predictors and proposed covariates for men and women. A matrix of intercorrelations among all study variables is presented in Appendix O. The pattern of correlations was different for men and women. With a corrected Alpha level of .002 (accepted Alpha level [.05] divided by the number of predictor-covariate correlations [24]) only two of these correlations were statistically significant for women. Total interference and WIF had significant positive correlations with respondent employment hours [$r(141) = .28$, $p < .001$; .26, $p < .001$,

Table 3

Distribution of family income by gender

| Income Level | Men | Women |
|---|---|---|
| $ 69,000 or less | 18.7 | 22.0 |
| $ 60,000 to 89,000 | 23.0 | 27.7 |
| $ 80,000 to 99,000 | 23.7 | 16.3 |
| $ 90.000 to 119,000 | 16.5 | 23.4 |
| $ 110,000 or more | 18.0 | 10.6 |

Note. Entries are percentages. Categories overlap because the family income variable was created by summing respondent and partner income, each of which had a range of $ 9,999 within each category.

Table 4

Distribution of respondent and partner job type by gender

| | Respondent | | Partner | |
|---|---|---|---|---|
| Job Type | Men | Women | Men | Women |
| Managerial** | 21.4 | 13.5 | 13.6 | 17.7 |
| Professional | 31.4 | 29.1 | 27.1 | 24.1 |
| Technical** | 19.3 | 6.4 | 9.3 | 25.5 |
| Administrative** | 5.0 | 20.6 | 17.9 | 3.5 |
| Clerical** | 2.9 | 17.0 | 14.3 | 1.4 |
| Retail | 3.6 | 2.8 | 3.6 | 5.0 |
| Other | 16.4 | 10.6 | 14.3 | 22.7 |

Notes. Entries are percentages. **Men and women differ at $p < .001$ for both Respondent and Partner comparisons

Table 5

Distribution of respondent and partner education by gender

| | Respondent | | Partner | |
|---|---|---|---|---|
| Education Level | Men | Women | Men | Women |
| High school or less | 26.4 | 22.0 | 27.3 | 28.4 |
| Community college | 22.1 | 31.9 | 28.8 | 30.5 |
| Some university | 19.3 | 14.9 | 16.5 | 15.6 |
| University degree | 19.3 | 21.3 | 19.4 | 17.7 |
| Post-graduate degree | 12.9 | 9.9 | 7.9 | 7.8 |

Note. Entries are percentages

Table 6

Correlation matrix of predictors with covariates.

| PREDICTORS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Enhancement | | 83 | 87 | -28 | -15 | -30 | 20 | 06 | -04 | -07 |
| 2. FEW | 86 | | 45 | -15 | -06 | -18 | 15 | 06 | -08 | -05 |
| 3. WEF | 86 | 48 | | -32 | -19 | -32 | 19 | 04 | 00 | -07 |
| 4. Interference | -19 | 05 | -29 | | 79 | 87 | -07 | 00 | -05 | -05 |
| 5. FIW | -07 | 02 | -14 | 83 | | 39 | 00 | 10 | -06 | -18 |
| 6. WIF | -24 | -09 | -33 | 91 | 52 | | -11 | -07 | -03 | 07 |
| COVARIATES | | | | | | | | | | |
| 7. Child care hours | 07 | 03 | 10 | -09 | -05 | -10 | | 27 | 00 | -18 |
| 8. Household labour hours | -14 | -09 | -15 | 22 | 20 | 19 | 07 | | 03 | -22 |
| 9. Partner employment hours | -03 | -14 | 07 | 03 | 02 | 04 | 07 | 07 | | 29 |
| 10. Respondent employment hours | 04 | 02 | 06 | 28 | 21 | 26 | 10 | -01 | 27 | |

Notes: 1) Correlations below the diagonal are for women, those above the diagonal are for men.
2) Decimals are omitted
3) Correlations > .17 are significant at $p < .05$

respectively]. For men, none of these correlations was significant at the corrected Alpha level. None of the enhancement variables demonstrated significant correlations with any of the covariates for men or women at the corrected Alpha level.

Tests of Hypotheses

Hypothesis 1, the traditional gender role expectations hypothesis, predicted that women would report greater total interference than would men. Independent samples t-test results reported above supported this hypothesis. Subsequently, proposed covariates (respondent hours in household labour, child care, and employment hours, and partner employment hours) were included as covariates in an Analysis of Covariance (ANCOVA). The ANCOVA results, reported in Table 7, reveal that the gender difference remained statistically significant (although small in absolute terms) after these covariates were controlled, and that hours in household labour also had a significant main effect, whereas none of the other covariates did. These results suggest that perceptions of interference and household labour hours were higher for women than for men, although the size of the difference in interference was quite small.. Hypothesis 1a, also a gender role expectations hypothesis, predicted that WIF would be higher for women than for men and that FIW would be higher for men than for women. The alternative, rational hypothesis, predicted the opposite pattern of results. Table 2 (p. 45) shows that women had significantly higher levels WIF, but that there were no differences in levels of FIW. Table 8 reports the results of the ANCOVA, where covariates were entered with WIF as the DV. Significant main effects were found for both gender and respondent employment hours. These results indicate that women had higher levels of WIF (although the size of the difference was again very small) and that men were employed more hours per week.

Table 7

Analysis of Covariance: Total interference by gender with respondent employment, household labour, and childcare hours, and partner employment hours as covariates.

| Source of Variation | Sum of Squares | Df | Mean Square | F | Sig of F |
|---|---|---|---|---|---|
| Covariates | 3.467 | 4 | .867 | 2.217 | .067 |
| Child care hours | 1.000 | 1 | 1.000 | 2.557 | .111 |
| Household labour hours | 2.285 | 1 | 2.285 | 5.845 | .016 |
| Partner employment hours | .188 | 1 | .188 | .480 | .489 |
| Respondent employment hours | .733 | 1 | .733 | 1.876 | .172 |
| Main Effects | 1.529 | 1 | 1.529 | 3.912 | .049 |
| Gender | 1.529 | 1 | 1.529 | 3.912 | .049 |
| Explained | 5.098 | 5 | 1.020 | 2.608 | .025 |
| Residual | 107.120 | 274 | 3.91 | | |
| Total | 112.219 | 279 | .402 | | |

Hypotheses 2 and 2a, in line with the traditional gender role expectations hypothesis, predicted that men would report significantly higher levels of enhancement than would women. This hypothesis was not supported. No gender differences were found on any of the enhancement variables (see Table 2, p.48).

Hypothesis 3, the reconciliation hypothesis, predicted a significant interaction effect between gender and levels of interference, such that high levels of interference would be associated with lower levels of well-being for women than for men. In testing hypothesis 3, three Hierarchical Multiple Regression (HMR) equations were constructed, one predicting each of three DV`s: job satisfaction, parenting satisfaction, and marital satisfaction. In all equations, gender was entered, followed by Interference and Enhancement at step 2, and then the interaction term (gender by Interf) at step 3. Results of these analyses are reported in Table 9. Although none of the interactions were found to be significant, it should be kept in mind that the HMR strategy employed for testing for interaction effects may be an overly conservative one (Baron & Kenny, 1986). "Eyeballing" the beta weights in Table 11 (below) reveals that interference beta weights were significant for men across all 3 domains of satisfaction, whereas there were only significant for women when predicting parenting satisfaction. Moreover, the magnitude of the beta weights was at least twice that for women in all cases. Nonsignificant interaction effects notwithstanding, this suggests that, contrary to the reconciliation hypothesis, total interference may be more strongly associated with men`s than with women`s satisfaction. Hypothesis 3a, the reconciliation subhypothesis, predicted that interference subtypes (FIW and WIF) would both yield significant interactions with gender in predictions of well-being, such that the relations would be stronger for women than for men.

Table 8

Analysis of Covariance: Work interference with family by gender with respondent employment, household labour, and child care hours, and partner employment hours as covariates.

| Source of Variation | Sum of Squares | Df | Mean Square | F | Sig of F |
|---|---|---|---|---|---|
| Covariates | 7.692 | 4 | 1.923 | 2.831 | .025 |
| Child care hours | 2.297 | 1 | 2.297 | 3.382 | .067 |
| Household Labour | 1.990 | 1 | 1.990 | 2.930 | .088 |
| Partner employment hours | .403 | 1 | .403 | .593 | .442 |
| Respondent Employment Hours | 4.182 | 1 | 4.182 | 6.157 | .014 |
| Main Effects | 4.281 | 1 | 4.281 | 4.865 | .028 |
| Gender | 4.281 | 1 | 4.281 | 6.302 | .013 |
| Explained | 1.206 | 5 | 2.041 | 3.005 | .012 |
| Residual | 186.119 | 274 | .679 | | |
| Total | 196.325 | 279 | .704 | | |

Table 9

Summary of Hierarchical Multiple Regression Analyses with Total Interference.

| Criterion | Block | Step | Predictors | Beta | R sq change |
|---|---|---|---|---|---|
| Job Satisfaction | 1 | 1 | Gender | -.27 | .000 |
| | 2 | 2 | Interference | -.23* | |
| | | 3 | Enhancement | .28** | .12** |
| | 3 | 4 | Gender by interf | .31 | .006 |
| Marital Satisfaction | 1 | 1 | Gender | -.39 | .01 |
| | 2 | 2 | Interference | -.23* | |
| | | 3 | Enhancement | .16* | .06** |
| | 3 | 4 | Gender by Interf | .33 | .007 |
| Parenting Satisfaction | 1 | 1 | Gender | -.22 | .000 |
| | 2 | 2 | Interference | -.33** | |
| | | 3 | Enhancement | .15* | .12** |
| | 3 | 4 | Gender by Interf | .25 | .004 |

Notes: Gender is coded, men = 1, women = 0. Standardized Betas are reported.
* $p < .01$, ** $p < .001$

In testing this hypothesis, six HMR equations were constructed, two for each of the three DVs. In each equation, gender was entered at step 1, FIW or WIF and Enhancement at step 2, and the gender by FIW or gender by WIF interaction term at step 3. Results are presented in Table 10. Again, none of the interaction terms was significant. Comparing the magnitude of the beta weights for men and women in Table 12 below reveals that men and women were indeed quite similar in terms of the pattern and magnitude of the relations between interference subtypes and satisfaction in the various domains.

Hypotheses 4 and 5, the interference and enhancement hypotheses were tested simultaneously using Standard Multiple Regression (SMR). Six SMR equations were constructed, three for men and three for women. For both men and women, Interference and Enhancement were entered simultaneously, in three separate equations, one for each DV. Results are summarized in Table 11.

A different pattern of results emerged for men and women. The interference hypothesis was fully supported for men (i.e., main effects for total interference on all three DV's as indicated by significant standardized Beta weights) but was only partially supported for women (i.e., main effects for interference on parenting satisfaction, but not job or marital satisfaction). The enhancement hypothesis was partially supported for women (i.e., significant main effects for total enhancement on parenting and job satisfaction, but not marital satisfaction). The enhancement hypothesis was also partially supported for men. Total enhancement had significant main effects on job and marital satisfaction but not parenting satisfaction.

Six more SMR's were constructed to explore the relations between EFE subtypes and the satisfaction variables, and to test the interference subhypothesis (4a). These equations also

Table 10

Summary of Hierarchical Multiple Regression Analyses with Interference Subtypes (WIF and FIW).

| Criterion | Block | Step | Predictors | Beta | R sq change |
|---|---|---|---|---|---|
| Job satisfaction | 1 | 1 | Gender | -.16 | .000 |
| | 2 | 2 | WIF | -.13 | |
| | | 3 | Enhancement | .29** | .11** |
| | 3 | 4 | Gender by WIF | .18 | .002 |
| Job Satisfaction | 1 | 1 | Gender | -.19 | .000 |
| | 2 | 2 | FIW | -.25** | |
| | | 3 | Enhancement | .29** | .13** |
| | 3 | 4 | Gender by FIW | .23 | .01 |
| Marital Satisfaction | 1 | 1 | Gender | -.39 | .01 |
| | 2 | 2 | WIF | -.17* | |
| | | 3 | Enhancement | .17* | .05** |
| | 3 | 4 | Gender by WIF | .32 | .007 |
| Marital Satisfaction | 1 | 1 | Gender | -.18 | .01 |
| | 2 | 2 | FIW | -.21* | |
| | | 3 | Enhancement | .17* | .07** |
| | 3 | 4 | Gender by FIW | .10 | .001 |
| Parenting Satisfaction | 1 | 1 | Gender | -.18 | .000 |
| | 2 | 2 | WIF | -.35** | |
| | | 3 | Enhancement | .14* | .13** |
| | 3 | 4 | Gender by WIF | .21 | .003 |
| Parenting Satisfaction | 1 | 1 | Gender | -.10 | .000 |
| | 2 | 2 | FIW | -.17* | |
| | | 3 | Enhancement | .20** | .07** |
| | 3 | 4 | Gender by FIW | .09 | .000 |

Notes: Gender is coded: men = 1, women = 0. Standardized Betas are reported.
* $p < .01$, ** $p < .001$

Table 11

Summary of Standard Multiple Regression Analyses for men and women with Interference and Enhancement as predictors.

| Criterion | Predictor | Beta | | Rsq | |
|---|---|---|---|---|---|
| | | M | W | M | W |
| Job Satisfaction | | | | | |
| | Interference | -.24* | -.06 | | |
| | Enhancement | .22* | .32** | .14** | .11** |
| Marital Satisfaction | | | | | |
| | Interference | -.24* | -.07 | | |
| | Enhancement | .20* | .12 | .11** | .03 |
| Parenting Satisfaction | | | | | |
| | Interference | -.37** | .18* | | |
| | Enhancement | .03 | .27* | .14** | .13** |

Notes: M = Men, W = Women. Standardized Betas are reported.
* $p < .05$, ** $p < .01$

allowed a test of the asymmetry hypothesis (4b), which predicted that the relation between FIW and well-being would be of greater magnitude than would that between WIF and well-being. For each gender, three SMR equations were constructed, one for each DV. In each equation, FIW, WIF, WEF, and FEW were entered simultaneously. Results are summarized in Table 12. For both men and women, FIW yielded significant main effects when predicting marital satisfaction, whereas WIF did not. The opposite pattern emerged when parenting satisfaction was the DV. That is, for both men and women, WIF but not FIW had significant main effects. For job satisfaction, only FIW had a significant main effect, and only for men. These results provide some support for the interference hypothesis, but also indicate that the relation between interference and well-being may depend on the type of interference and the aspect of WB assessed. In this vein, the pattern of results partially supports the asymmetry hypothesis (FIW betas were larger than were WIF betas when predicting marital and job satisfaction, but not parenting satisfaction, for both men and women).

With respect to enhancement subtypes, the results again depended on the domain of satisfaction and the type of enhancement examined, but were more gender-specific. When marital satisfaction was the DV, the Beta weight for WEF was not significant for either men or women, whereas the FEW Beta was significant for women, but not men. With parenting satisfaction as the DV the opposite pattern emerged. The FEW Beta was not significant for either men or women, whereas the WEF Beta was significant, again for women but not men. Only with job satisfaction as the DV was the pattern of relations the same for men and women. The Beta for WEF was significant whereas the FEW Beta was not.

These results provide support for the enhancement hypothesis, but suggest quite clearly

Table 12

Summary of Standard Multiple Regression Analyses with Interference and Enhancement Subtypes by gender.

| Criterion | Predictor | Beta | | Rsq | |
|---|---|---|---|---|---|
| | | M | W | M | W |
| Job Satisfaction | | | | | |
| | WIF | -.13 | .07 | | |
| | FIW | -.24* | -.11 | | |
| | WEF | .26* | .30** | | |
| | FEW | .02 | .11 | .17** | .14** |
| Marital Satisfaction | | | | | |
| | WIF | -.05 | .07 | | |
| | FIW | -.22* | -.23* | | |
| | WEF | .11 | .13 | | |
| | FEW | .15 | .31** | .13** | .11** |
| Parenting Satisfaction | | | | | |
| | WIF | -.37** | -.20* | | |
| | FIW | .07 | .00 | | |
| | WEF | .02 | .18* | | |
| | FEW | .03 | .12 | .16** | .14** |

Notes: M = Men, W = Women. Standardized Betas are reported.
* $p < .05$, ** $p < .01$

that it may be more prudent to specify aspects of WB and subtypes of enhancement, rather than making general statements about how perceptions of enhancement relate to WB. In contrast to the findings regarding the relations between interference subtypes and WB, these data indicate that men and women may be more different than similar in how subtypes of enhancement relate to WB.

The R-square statistics in Table 11 indicate the percentage of variance explained in each DV. For women, the combination of Interference and Enhancement explained 3%, 13%, and 11% of the variance in marital satisfaction, parenting satisfaction and job satisfaction, respectively. For men, these percentages were 11%, 14%, and 14%, respectively. All R-square statistics were significant except the R-square for women's marital satisfaction. Neither Interference nor Enhancement made a significant contribution to the variance explained in this variable for women. The fact that the R-square statistics were statistically significant suggests that these are pertinent and useful predictors; however the modest size of the R-square statistics also indicates that there are other important predictors missing from the analyses.

# DISCUSSION

## Work-Family Interference and Gender

Many studies have examined gender differences in levels of work-family interference. Some studies have found differences (Duxbury et al., 1994; Greenhaus et al., 1987; Gutek et al., 1991), whereas others have not (Duxbury & Higgins, 1991; Galambos & Walters, 1992; Googins & Burden, 1987; Voydanoff, 1988). The present results may help explain this inconsistency. After controlling for household labour and employment hours, there were no differences between men and women in levels of family interference with work; however, women did report higher levels of work interference with family than did men. These findings are consistent with previous research in which interference subtypes were specified. All studies which have tested for gender differences in work interference with family have found higher levels in women than in men (Duxbury et al., 1994; Greenhaus et al., 1987; Gutek et al., 1991; Higgins et al., 1994). Although the differences between men and women were statistically significant, in this and all previous studies, the magnitude of the differences was small, accounting for approximately 2.5% of the variance on average. Of the three studies of family interference with work, gender differences were found in only one, and only in the subgroup of dual-income parents with young children (Higgins et al., 1994).

The present results suggest further that the difference in work interference with family was not merely a function of gender differences in labour practices because differences in work interference with family remained after controlling for both employment and household labour hours. This is more consistent with the gender role expectations than with the rational hypothesis. Gender role expectations may lead women to perceive higher work interference with family, even

though they spend fewer hours in employment because social sanctions against this type of interference are stronger for women than for men (Greenhaus & Beutell, 1985; Gutek et al., 1991).

Neither gender role expectations nor the rational hypothesis seem to provide an adequate explanation for the nonsignificant gender difference in family interference with work. This finding may be better explained by the fact that organizational sanctions against family interference with work tend to be gender neutral, that is, both men and women are expected to schedule family demands around those of employment (Duxbury & Higgins, 1991; Greenhaus & Beutell, 1985; Gutek et al., 1991, Pleck, 1985). This rationale is supported by the fact that perceptions of family interference with work were low relative to work interference with family for both men and women in the present study and in all prior studies (Adams, King, & King, 1996; Frone et al., 1992; Frone & Yardley, 1996; Gutek et al., 1991; Higgins et al., 1994; Netemeyer, Boles, & McMurrian, 1996).

Work-Family Enhancement and Gender

Contrary to the gender role expectations hypothesis, which predicted that men would perceive greater work-family enhancement than would women, no gender differences were found in levels of total enhancement or its subtypes. Although it was not predicted, this result is consistent with one previous study of a sample of dual-income parents very similar to the present one in respondent age, education, employment level, and number and age of children (Marshall & Barnett, 1993). Assumptions underlying the hypothesized gender differences in enhancement were that men's greater involvement in higher status and socially valued work, coupled with expectations for women to support them in this work, should lead to men's greater enhancement.

The data here indicate that traditional work-family role practices persist among dual-income families. Men are employed more hours per week than women are, and women spend more time in household labour and child care than men do. It may be, however, that attitudes or expectations regarding these roles are shifting and that women in dual-income families are feeling more supported by spouses in pursuing employment (Marshall & Barnett, 1993). The increase in availability of family-supportive programmes and benefits (Skrypnek & Fast, 1996) may also be viewed by women as gestures by employers to enhance their ability to balance employment and family responsibilities.

In sum, women consistently perceive more interference from employment to home than do men, despite the fact that men consistently report spending more hours in paid work. At the same time, men and women do not differ in the extent to which family interferes with employment, despite that fact that women consistently report spending more hours in family work. This supports the view of the emergence of a new standard with respect to gender role expectations; that of double work for women (Hochschild, 1989; de Koninck, 1991). This implies that both men and women in dual-income families accept women's employment outside the home, but continue to expect women to take primary responsibility for family work and child care and for reconciling the competing demands of employment and family roles. At the same time, the finding that men and women reported similar levels of work-family enhancement suggests that women and men are more equal with respect to the gains associated with work-family role combination. Although this seems to contradict the view that there is a double standard for women, it may be that women experience benefits of combining employment and family roles, but still hold beliefs that they are not meeting societal expectations regarding work-family priorities. The present data

thus fit well with two dimensional model of the work-family interface, in which perceptions of interference and enhancement are assumed to be coexisting and independent dimensions, rather than opposite ends of the same continuum (Tiedje et al., 1990). As discussed in detail below, the present data also support Tiedje et al.'s model in that perceptions of enhancement and interference independently and jointly affected (or were affected by) well-being.

## Perceptions of Interference and Their Relation to Well-Being

The interference hypothesis predicted a negative relation between perceptions of work-family interference and well-being. This hypothesis was partially supported by the present data, but support depended on the domain of well-being examined, gender, and direction of interference.

### Domain-Specific Well-Being and Interference

#### Parenting satisfaction.

For both men and women, parenting satisfaction declined as perceptions of interference increased. This is consistent with Tiedje et al. (1990), but not with Kline (1989). The inconsistency with the latter study may be attributable to methodological differences. In the Kline study, the sample was small and one half of the women were unemployed, whereas in the Tiedje et al. study and the present study, all of the women were employed full-time and had partners who were employed full-time. The low employment rate in the Kline study may have resulted in restriction of range of work-family interference, and the small sample size may have entailed a high level of error variance. Kline also measured parenting stress, whereas parenting satisfaction was measured in both the Tiedje et al. study and the present study. Compared to the Kline et al. study, then, the results of the Tiedje et al. study are more comparable to and more consistent with

those in the present study. This suggests that, within the population of dual-income parents who are employed full-time, those who perceive less interference between work and family experience more satisfaction within their role as parents.

Marital satisfaction.

Marital satisfaction was negatively related to perceptions of interference in men but not women. One previous study which sampled men only also found this relation (Small & Riley, 1990). Another study found no relation between marital role quality and interference for either men or women (Marshall & Barnett, 1993). As discussed previously, this lack of association may be attributable to the ambiguous nature of the measure of marital role quality in that study. A third study of men and women in the transition to parenthood found a negative relation between marital satisfaction and interference for both men and women (Belsky et al., 1985). Secondary analyses conducted on the present sample of women revealed that higher levels of marital satisfaction were associated with lower levels of interference among women whose youngest child was older than age 5, but not among women whose youngest child was 5 years or younger. The same interaction was not found for men. Among men, the negative relation between marital satisfaction and interference existed regardless of the age of the youngest child. Thus, it appears that for women with children over the age of 5, as well as for men, interference between work and family roles is inversely related to marital satisfaction. However for women whose children are under 5 years of age this pattern is not evident. The data on women with very young children are thus inconsistent with those of Belsky et al., whereas the data on men and on women with children over 5 are consistent. It may be that the inconsistency in these findings is attributable in part to variation between studies in measures of interference, an issue discussed further below.

Job satisfaction.

As with marital satisfaction, job satisfaction had a negative relation to perceptions of interference for men but not women. The findings regarding men are consistent with the abundance of existing data. Nine previous studies of job satisfaction or a related construct have found this relation (Adams, King, & King, 1996; Belsky et al., 1985; Cooke & Rouseau, 1984; Duxbury & Higgins, 1992; Frone et al., 1992; Googins & Burden, 1987; Kopelman et al., 1983; Pleck, Staines, & Lang, 1980; Small & Riley, 1990); whereas only one has not (Kline, 1989). This latter study examined a small sample of men and women in the transition to parenthood. As discussed, sample size and heterogeneity with respect to employment level in that study may have perturbed their findings enough to make them inconsistent with those here and with those of all other studies of this relation. Thus, the negative relation between job satisfaction and interference in men is a well-established one. Men who perceive more work-family interference are likely to experience lower levels of satisfaction in their marriage.

The lack of relation between job satisfaction and interference in women in the present study is more difficult to explain because it fits with some prior studies (Kline, 1989; Tiedje et al., 1990) but not with others (Adams et al., 1996; Belsky et al., 1985; Cooke & Rousseau, 1984; Googins & Burden, 1987; Kopelman et al., 1983; Pleck et al., 1980) and is not consistent with the interference hypothesis. In five of the six studies where a negative relation was found between job satisfaction and interference, men and women were not distinguished in analyses (Adams et al., 1996; Cooke & Rousseau, 1984; Googins & Burden, 1987; Kopelman et al., 1983; Pleck et al., 1980). The extent to which the relation between job satisfaction and interference in these studies was gender-dependent is thus unknown. It may have been the case that the relation

existed for men but not for women, in which case the results would be consistent with the present data. Differences between samples of the remaining study and the present one may explain the inconsistency between these two studies. Specifically, Belsky et al. sampled couples in the transition to parenthood, a turbulent family life cycle stage associated with intense psychological shifts including role redefinition and re-organization. Less than half the sample of 67 women were employed, and less than one third were employed full-time. The small size of the sample may have contributed to a high degree of error variance in correlations, or may have restricted the range of perceived interference and/or job satisfaction, making it difficult to substantiate a true relation. The present study was very consistent with Tiedje et al. in terms of sample composition and size as well as in the fact that both studies accounted for perceptions of enhancement in the analysis of the relation between interference and job satisfaction. This suggests that the extent to which women perceive their work and family roles to interfere with one another is unrelated to how satisfying they find their job to be. Women's job satisfaction may be more a function of the enhancing aspects of holding both work and family roles, rather than interference that may arise between them. The link between enhancement and job satisfaction is discussed in more detail below.

Gender

The present results point to gender differences in the relations between total interference and well-being. Specifically, although the relation between parenting satisfaction and total interference was found for both men and women, job and marital satisfaction were found to related to total interference for men only. Consistent with Duxbury and Higgins (1991), this implies that men and women are more different than alike in the aspects of well-being found to be

related to interference. However, when the direction of interference is specified this interpretation changes. Specifically, family interference with work was found to be related to marital satisfaction for both and women, whereas work interference with family was not, and work interference with family was found to be related to parenting satisfaction for both men and women, whereas family interference with work was not. Thus, contrary to the reconciliation hypothesis which predicted a stronger link between interference and well-being for women than for men, men and women were similar in how specific aspects of family well-being relate to specific directions of interference. This is consistent with previous research by Frone et al. (1992) who found that their model of the antecedents and consequences of direction-specific interference was generalizable across men and women. In short, existing data suggest that it may be most prudent to specify aspects of well-being as well as direction of interference before drawing general conclusions regarding gender differences and similarities in the relation between interference and well-being.

Direction-Specific Interference

It was hypothesized that the relation between interference and well-being may depend on the direction of interference. Results of analyses which employed direction-specific interference (family interference with work and work interference with family) as predictors of well-being support this assumption. Consistent with the asymmetry hypothesis, family interference with work but not work interference with family, was related negatively to marital satisfaction for both men and women. This is not consistent with Frone et al. (1992) in that they did not find "family distress" to be related to either work interference with family or family interference with work; however, the discrepancy may be due to methodological differences between these studies. For

example, parenting and marital satisfaction were specified in the present study but not in Frone et al., and Frone et al measured "distress" whereas satisfaction was the focus here. It may be that employees whose family demands interfere with employment view themselves as incapable of meeting organizational expectations (i.e., that family will not interfere with employment), expectations which they desire to meet, which may have negative implications for their well-being. This is consistent with role discrepancy theory which postulates that discrepancies between ones desired and one's actual self-state with respect to social roles may have negative implications for well-being (Burke, 1980; Higgins, 1987).

It is unclear why marital satisfaction was related to family interference with work, whereas parenting satisfaction was not. It seems reasonable to expect that those who are relatively dissatisfied with their marriages are more likely to perceive marital relations as interfering with employment. This assumption would be more testable with a measure of interference that was domain-specific, that is, one that tapped perceptions of marriage-employment and parenting-employment interference separately.

Also consistent with the rationale that the relation between interference and well-being may depend on the direction of interference, work interference with family was related negatively to parenting satisfaction for both men and women, whereas family interference with work was not. It may be that the more employment is perceived to interfere with family life, the less able these parents are to meet expectations of others or of themselves in the parenting role, thereby lowering their parenting satisfaction. It may also be that perceptions of interference are influenced by the quality of the parenting experience, such that more difficult or demanding parenting experiences give rise to perceptions that employment interferes with the ability to

adequately meet those demands. It may be that the marital role is not affected the same way because expectations are that, when employment interferes with family, it is acceptable to allow the interference with the marital role, but that it is not acceptable that employment be allowed to interfere with the parent role to the same degree. Again, a measure of interference that is domain-specific may allow a test of the assumption that marital and parenting demands are differentially affected by (or differentially affect) employment experiences. In short, extant theory and data indicate that specification of the direction of interference may clarify our understanding of the relation between interference and well-being for both men and women.

## Perceptions of Enhancement and Their Relation to Well-Being

The enhancement hypothesis predicted that perceptions of enhancement would be associated with well-being for both men and women. As with the interference hypothesis, support for the enhancement hypothesis depended on the domain of well-being assessed, gender, and the direction of enhancement.

### Domain-Specific Well-Being and Enhancement

#### Parenting satisfaction.

A significant relation was found between enhancement and parenting satisfaction for women, but no relation was found between these variables for men. One previous study also found that parenting satisfaction increased when high perceptions of enhancement were coupled with low perceptions of interference (Tiedje et al., 1990). As noted above, Tiedje et al.'s sample was very similar to that of the present study, suggesting that this results may a substantive one in the population of full-time employed dual-income women with young children. Another study found a positive relation between perceptions of enhancement and parent role quality in a

combined sample of full-time employed, dual-income men and women with children (Marshall & Barnett, 1993). Thus, evidence is mounting that the gains associated with work-family role combination have positive implications in the form of increased in parenting satisfaction among dual-income parents. Too few data exist to make conclusions about how this relation might vary by gender.

Marital satisfaction.

Men who perceived greater gains from work-family combination were found to have more satisfying marriages, whereas there was no link found between perceptions of enhancement and marital satisfaction for women. The results are again consistent with the Tiedje et al. (1990) study which employed a similar sample (of women only), but not consistent with another study in which the opposite pattern emerged, that is, a relation was found in women but not in men (Belsky et al., 1985). Secondary analyses were conducted to determine if a relation between marital satisfaction and enhancement might exist for the subsample of women with a youngest child of 2 years or younger, or might not be found for this subgroup of men. These analyses did not, however, reveal any different results depending on age of children. Because the Tiedje et al. sample was very similar to the present sample of women in size and composition, their findings are comparable to those here, however Tiedje et did not sample men. In a third study of full-time employed dual-income men and women, no relation was found between marital role quality and enhancement (Marshall & Barnett, 1993). Men and women were combined in analyses, however, making comparisons with the present results difficult. Thus, the enhancement-marital satisfaction relation may be a substantive one for full-time employed dual-income men with children, whereas this relation may not exist in other subpopulations of men (such as those with no children or only

only one very young child). The limited evidence to date does not support a substantive relation between these variables in full-time employed dual-income mothers who have at least one child under twelve and are not in the transition to parenthood.

Job satisfaction.

Men and women who perceived greater levels of work-family enhancement also experienced a greater degree of satisfaction in their jobs. Although this is consistent with the enhancement hypothesis, it is not consistent with previous studies (Belsky et al., 1985; Marshall & Barnett, 1993; Tiedje et al., 1990). Inconsistencies may be due to methodological differences between the studies. Although conceptualization and measurement of enhancement varied across studies, this does not appear to explain the inconsistency. Two of three prior studies measured work enhancement of family only and found no relation between work enhancement of family and job-related well-being (Marshall & Barnett, 1993; Tiedje et al., 1990); whereas a relation was found between work enhancement of family and job satisfaction in the present study. It may be that the ambiguity associated with Marshall and Barnett's measure of job role quality obscured its relation to work enhancement of family in their study. The fact that Tiedje et al. measured work enhancement of family/work interference with family type, rather than measuring work enhancement of family (and work interference with family) independently, may have attenuated its correlation with job satisfaction. Finally, the sample in the Belsky et al. study was smaller and in a turbulent stage of the family life cycle, which may have perturbed relations between variables. Thus, a relation between job satisfaction and perceptions of enhancement in full-time employed dual-income parents with young children cannot be ruled out; however the abundance of available data do not support this relation for either men or women.

In sum, the present data point to a positive relation between job satisfaction and perceptions of enhancement for both men and women. Although this is inconsistent with prior research, more research on samples of dual-income men and women employed full-time is warranted to determine if the relation is specific to the population represented by the present sample. Similarly, further research is needed to clarify the existing inconsistency with respect to marital satisfaction and perceptions of enhancement. The connection between enhancement and parenting satisfaction in this population appears to be a substantive one, however, the role of gender in this relation and in the relations between enhancement and the other aspects of well-being requires clarification.

Gender, Direction-Specific Enhancement, and Well-Being

In general, too few studies exist to make definitive conclusions regarding the role of gender or specific directions of enhancement in the relations between enhancement and the aspects of well-being examined here. However, the present findings do suggest that men and women may be similar in how job satisfaction relates to perceptions of enhancement and enhancement subtypes. Specifically, enhancement and work enhancement of family were positively related to job satisfaction for both men and women, whereas no relation was found between family enhancement of work and job satisfaction for either men or women. At the same time, men and women differed in how perceptions of enhancement related to parenting and marital satisfaction. Specifically, perceptions of enhancement were related positively to parenting satisfaction for women, and to marital satisfaction for men. When direction of enhancement is considered, gender differences persist, but in a different form, leading to different conclusions. Specifically, for women, parenting satisfaction increased as perceptions that employment enhances

family life increased, and marital satisfaction increased as perceptions that family enhances employment increased. Neither type of enhancement was related to either marital or parenting satisfaction for men.

Thus, both gender similarites and differences were evident in how specific aspects of well-being related to perceptions of enhancement. It may be that specification of direction of enhancement is necessary if gender differences in the relation of enhancement to parenting and marital satisfaction are to be specified. At this preliminary stage of theory building in this area, it seems most prudent to reserve judgment regarding how specific directions of enhancement are related to specific aspects of well-being, and to continue to include measures of enhancement which specify direction.

## Limitations of the Present Study

There are several limitations to the present study. First, it focused on dual-income parents employed full-time with at least one child under 12. The potential drawback to this approach is that it yields results which may or may not be generalizable beyond the focal population. For example, although no relation was found between marital satisfaction and perceptions of interference for women in the present study, it may exist for women in other life cycle stages, such as the transition to parenthood (Belsky et al., 1985). On the other hand, the focus on a specific and well-defined sample allowed reduction in nonrandom variance associated with sample heterogeneity, lessening the likelihood of some uncontrolled factor confounding the results.

Second, measures of interference subtypes demonstrated only modest internal consistency. Therefore, tests of family interference with work and work interference with family effects may not be as powerful or reliable as are tests of variables whose measures displayed stronger internal

consistency. There are at least two reasons to suspect, however, that the results are substantive and not merely an artifact of measurement error. First, the results pertaining to gender differences in work interference with family were consistent with prior studies, one of which used the same measure with minor changes in wording (Gutek et al., 1991). Second, results are also consistent with prior studies in that levels of work interference with family were substantially higher than family interference with work (Adams, King, & King, 1996; Frone et al., 1992; Frone & Yardley, 1996; Gutek et al., 1991; Higgins et al., 1994; Netemeyer, Boles, & McMurrian, 1996). Nevertheless, these findings need to be replicated using more robust measures of interference subtypes before firm conclusions can be drawn.

Third, the study focused on groups of individual men and women. As a result, it was impossible to identify couple level characteristics that might contribute to explanations of well-being of individual men and women, and how these characteristics might interact with those of individual men and women to influence work-family perceptions and their relation to individual and couple adjustment. For example, the "contagion of stress" hypothesis would predict that one partner may absorb job-related strain experienced by the other (D'Ercole, 1988). Conversely, social support theory would predict that the negative effects of job-related strain may be buffered by a supportive partner (Adams et al., 1996). Both types of "transmission" or crossover effects (between partners) have been documented in the literature (e.g., Galambos & Walters, 1992; Gray et al., 1990; Jones & Fletcher, 1996) but their implications for perceptions of interference, and particularly enhancement, have not been fully explored.

Fourth, these data are cross-sectional and therefore do not explain the direction of effects in a causal sense. Although existing models have conceptualized perceptions of interference as

influencing well-being (e.g., Duxbury & Higgins, 1991; Frone et al., 1992), it seems equally plausible that work-family perceptions (of interference and enhancement) could be influenced by one's sense of well-being. Additionally, one study found that the influence of family interference with work on job satisfaction was mediated by emotional and instrumental support from family (Adams et al., 1996). A prospective design, where these variables are measured at different points in time, is required to unravel the direction of effects and the influence of mediational variables.

Finally, the present study was designed in the spirit of model building rather than model testing. Because too few studies existed to propose a more elaborate model, the present study focused on examining the relative importance of perceptions of interference versus enhancement as predictors of well-being by including them in the same model. Although the main thesis was supported (i.e., that perceptions of enhancement are important variables to consider), this needs to be corroborated by further research with a more complete model, that is, one which includes more of the theoretically relevant variables.

## Implications for Research

In the present study, enhancement variables accounted for significant variance in specific aspects of well-being for both men and women, and this variance was unique and independent of that accounted for by perceptions of interference. Thus, the data support the theory that perceptions of enhancement are important to consider in work-family research, and that research models attempting to explain the connections between work-family role combination and well-being could be improved by including perceptions of both interference and enhancement (Tiedje et al., 1990). Models which do not include perceptions of enhancement (e.g., Frone et al., 1992)

may yield findings which are not consistent with studies that do (e.g., Tiedje et al. and the present study).

The present findings thus provide empirical support for the inclusion of enhancement in models examining theoretical antecedents and consequences of work-family interference. For heuristic purposes, the present study focused on theoretical consequences of work-family interference and enhancement; however their relation to theoretical antecedents warrants further study. One would expect, for example, that family-supportive employment programmes which have been implemented to reduce interference, may also give rise to perceptions of work-family enhancement, however these relations have not been tested directly. The implication is that the positive impact of such programmes may be underestimated if perceptions of enhancement are neglected. Similarly, the connections between family support and perceptions of enhancement merit further study. Both instrumental and emotional support from family have demonstrated negative relations to perceptions of interference (Adams et al., 1996). One would also expect that such support would give rise to perceptions of work-family enhancement, and perceptions of family enhancement of work in particular. There is at least one study in which social support was found to be positively related to work-parenting gains, although this relation was found for men only (Marshall & Barnett, 1993). Thus, extant theory and data point to a link between theoretical antecedents of interference and perceptions of enhancement. The extent to which these relations might depend on the antecedent, the type of enhancement, and gender are also questions for future research.

The present results support the independence of subtypes of interference and enhancement, and suggest that specification interference and enhancement subtypes in research

models may result in more accurate explanations of well-being (Adams et al., 1996). This was evidenced by the finding that women's marital satisfaction was not associated with either total interference or enhancement, whereas it was associated with both family enhancement of work and family interference with work. It may be useful to refine measures of interference and enhancement even further to specify the domain of interference and enhancement (e.g., employment interference with parenting, employment enhancement of marital relations). Differentiating interference and enhancement by domain would allow a test of the possibility raised above that the marital domain is more permeable, with respect to interference from employment, than is the parenting domain, and that interference in the parenting domain is more predictive of declines in well-being than is interference in the marital domain.

Gender differences also emerged when enhancement and interference subtypes were specified. For example, women had higher levels of work interference with family, but not total interference or family interference with work. In addition, the pattern of relations between enhancement subtypes and satisfaction in the family domains differed for men and women. This suggests that it may be premature to assume that men and women can be grouped together in tests of models which include enhancement/interference subtypes, particularly if parenting or marital satisfaction are the DVs of interest. The low correlation between parenting and marital satisfaction, coupled with the different pattern of relations between these variables and enhancement subtypes suggest that these two constructs are distinct and should be treated that way in work-family research models (Kline & Cowan, 1989, Kurdek, 1996).

Another direction for future work-family research is to develop measures which tap expectations regarding work-family role reconciliation (Googins & Burden, 1987). In this way,

men's and women's views regarding who should be responsible for reconciling work-family demands can be assessed and contrasted directly. This should help clarify the role of gender role expectations in observed gender differences and similarities in perceptions of interference and enhancement.

Further, developing and including measures which capture the discrepancy between actual work-family role arrangements (who does what) and role expectations (who should be doing what), may add to predictions of the impact of work-family role expectations on role satisfaction for both men and women (Higgins, 1987). For example, one would expect a greater negative influence of perceived interference on well-being among individuals who expect that they should be able to effectively combine employment and family roles, compared to individuals who do not hold such expectations, or who hold these expectations to a lesser degree. It would be interesting to examine gender differences in the extent to which discrepancies exist and the extent to which these discrepancies relate to well-being. Moreover couple level analyses could be conducted to examine within couple processes (e.g., crossover or transmission effects) that may mediate the impact of both work-family role combination and expectations on well-being.

Finally, in contrast to the findings of Belsky et al. (1985), the present data showed no relation between interference and marital satisfaction among women with children under 5, whereas the relation did exist for women with older children. It was mentioned above that differences between studies with respect to direction or type of interference assessed may have contributed to this discrepancy. It may also be that life cycle stage plays a role. In order to clarify that role, future research should continue to examine the moderating influence of family life cycle on the interference-marital satisfaction relation. Moreover, the present data suggest that there

may be gender differences in the role played by family life cycle stage. Specifically, with respect to the interference-marital satisfaction relation, the moderating influence may exist for women, whereas it may not for men. This again supports the need to continue to examine the role of gender in this area.

## Implications for Families

Dual-income families are currently the norm amongst two-parent families in Canada (Statistics Canada, 1994). Whether societal expectations have shaped this trend or shifted as a results of it is still the subject of debate. The fact remains that the dual-income family is more of a permanent social fixture than a blip in the broader social trend. Questions about whether or not this is acceptable seem to have given way to questions about how to best make it work. It seems clear from these results that work-family issues are not solely women's issues. Clearly, dual-income men experience both costs and benefits to their well-being from work-family role combination. These data demonstrate that the satisfaction that men can gain within their parent and marital roles may increase as the amount of interference between these roles and their job decreases. This suggests that attention needs to be directed toward understanding the processes of work-family interference for men as well as women, and toward ways to reduce that interference because this may lead to higher levels of family-related well-being among men. Attending to work-family interference in both men and women makes sense because, as discussed above, the benefits of lowering men's interference may "cross-over" to their partners (and vice versa). A greater sense of overall life satisfaction may be the result for both partners and indirectly for children in dual-income families.

## Implications for Policy and Organizations

Previous research suggests that perceptions of family interference with work are less prevalent than are perceptions of work interference with family among both men and women (Adams, King, & King, 1996; Frone et al., 1992; Frone & Yardley, 1996; Gutek et al., 1991; Higgins et al., 1994; Netemeyer, Boles, & McMurrian, 1996). The present study confirms another common finding which is that perceptions that employment interferes with family are slightly more prevalent among women than among men. It had been proposed (the reconciliation hypothesis) that negative implications of this asymmetry in interference (work interference with family is acceptable but family interference with work is not) would be greater for women because socio-cultural expectations are that they should not allow employment to "take priority" over family and should shoulder the main responsibility of reconciling work-family interference role demands. The general pattern of findings here do not support this view however. Perceptions of interference were related to reduced job satisfaction for both men and women.

This suggests that employers should be sensitive to the fact that their male employees are affected by the interference between work and family roles to the same degree the their female employees are, and that the satisfaction that employees (male or female) get from their jobs may improve as the ease with which work and family can be successfully integrated. Previous research suggests that there are many good "bottom line" reasons to keep employees satisfied (Price & Meuller, 1986). Helping employees to better balance the demands of work and family may be one way for employers to contribute to employee satisfaction and indirectly to their own bottom line. The results here suggest that work-family programmes should be designed with men as well as women in mind.

Although Canadian policy-makers are apparently aware that employment and family are interdependent social systems, and acknowledge the importance of facilitation of work-family role integration in principles adopted in 1987 (Women's Policy Office, 1993, cited in Skrypnek & Fast, 1996), there has been no systematic attempt by Canadian governments (federal or provincial) to compel organizations to act in ways that are consistent with these principles (Skrypnek & Fast, 1996). This may explain the gap between organizational policy and practice, and the underutilisation of family-supportive programmes even when they are preferred and available (Skrypnek & Fast, 1996). As long as organizations are permitted to foster expectations among employees that family should not interfere with employment, and to informally penalize employees for accessing programmes that may facilitate their integration of work-family roles, the potential impact of these programmes will not be realized by employees or well understood by researchers.

## Conclusion

The data here support what is now a well accepted conclusion in this area of research: that the worlds of family and work are interdependent rather than independent. What this study adds to this research is the empirical substantiation of the theory that the interplay between these worlds can be positive as well as negative in nature, and that both types of effects are associated with well-being. So, when it is said, "when there are storms at work, people tend to get drenched at home" (Evans & Bartolome, 1984, p. 20), it should also be said that rainbows at 'work', tend to yield pots of gold at home.

The data here also support the view that both interference and enhancement can be bi-

directional; flowing from home to job, and from job to home. Thus, it can now also be said with relative certainty that when there are storms at home, people tend to get drenched at 'work'. The data are clear though, that this drenching is not as complete, even though the storms at home and on the job may be equally big. In the same vein, it can be said that rainbows at home tend to yield pots of gold at 'work'. The data here suggest that the pots of gold may be just as abundant on the job as at home.

This study provides further evidence of a new labour standard in Canada, that of double work for women (de Koninck, 1991). Although men and women experience similar levels of gratification from combining employment and family roles (equal pots of gold), the double work standard makes women more vulnerable to the strains associated with work-family roles combination. Persistently higher levels of interference (more storms) among women may be the result. This makes it imperative that work-family research models continue to include both enhancement and interference variables (that we continue to look for rainbows as well as watch for storms), and continue to test for gender effects, rather than assume that they are not significant. If one accepts the premise that the most beautiful rainbow follows the most torrential storm, one must accept the possibility that perceptions of enhancement among women are 'biased' or inflated by their contrast with social history - the experience of torrential storms. If so, and if current labour practices persist, then we should expect women's perceptions of enhancement to fade over time. This has implications for families, organisations, and governments, and suggests that the nature of gender differences and similarities need continued exploration at all levels of the social structure, in order to arrive at acceptable alternative solutions to the double work standard for women.

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# Appendices

# Appendix A

## Work Interference with Family

Please indicate the extent to which you agree with the following statements by circling the appropriate response.

| | Do Not Agree At All | | | Agree Somewhat | Agree Strongly |
|---|---|---|---|---|---|
| Because of my job, I come home too tired to do some of the things I'd like to do with my family. | 1 | 2 | 3 | 4 | 5 |
| My job demands so much of me that it takes away from my family interests. | 1 | 2 | 3 | 4 | 5 |
| My family dislikes how often I am preoccupied with my job while I am at home. | 1 | 2 | 3 | 4 | 5 |
| My job takes up time that I'd like to spend with my family. | 1 | 2 | 3 | 4 | 5 |

# Appendix B

## Family Interference with Work

Please indicate the extent to which you agree with the following statements by circling the appropriate response.

| | Do Not Agree At All | | | Agree Somewhat | Agree Strongly |
|---|---|---|---|---|---|
| I'm often too tired at work because of the things I have to do at home. | 1 | 2 | 3 | 4 | 5 |
| My family demands are so great that it takes away from my job. | 1 | 2 | 3 | 4 | 5 |
| My superiors and peers dislike how often I am preoccupied with my family life while at work. | 1 | 2 | 3 | 4 | 5 |
| My family life takes up time that I'd like to spend at work. | 1 | 2 | 3 | 4 | 5 |

Appendix C

Work-Parenting Gains

Please indicate the extent to which you agree with the following statements by circling the appropriate response.

| | Not At All True | Somewhat True | Fairly True | Very True |
|---|---|---|---|---|
| My being employed has a positive effect on my children | 1 | 2 | 3 | 4 |
| My job helps me to better appreciate the time I spend with my children | 1 | 2 | 3 | 4 |
| Working at my job makes me feel good about myself, which is good for my children | 1 | 2 | 3 | 4 |
| The fact that I am employed makes me a better parent | 1 | 2 | 3 | 4 |

# Appendix D

## Work Enhancement of Family

Please indicate the extent to which you agree with the following statements by circling the appropriate response.

| | Do Not Agree At All | | | | Agree Somewhat |
|---|---|---|---|---|---|
| My relationship with my partner is enriched because of my job. | 1 | 2 | 3 | 4 | 5 |
| I am a better parent because of my job. | 1 | 2 | 3 | 4 | 5 |
| My job makes it easy for me to enjoy my family time. | 1 | 2 | 3 | 4 | 5 |
| My job helps me to appreciate the time I spend with my child. | 1 | 2 | 3 | 4 | 5 |
| My job helps me to appreciate the time I spend with my partner. | 1 | 2 | 3 | 4 | 5 |
| Having a job helps me cope with family-related stress. | 1 | 2 | 3 | 4 | 5 |
| I learn things in my job that help me in my family life. | 1 | 2 | 3 | 4 | 5 |

# Appendix E

## Family Enhancement of Work

Please indicate the extent to which you agree with the following statements by circling the appropriate response.

| | Do Not Agree At All | | Agree Somewhat | | Agree Strongly |
|---|---|---|---|---|---|
| My partner helps me keep my work life in perspective. | 1 | 2 | 3 | 4 | 5 |
| Being a parent helps me keep my work life in perspective. | 1 | 2 | 3 | 4 | 5 |
| My relationship with my partner helps me function better at work. | 1 | 2 | 3 | 4 | 5 |
| Having children helps me cope with job-related stress. | 1 | 2 | 3 | 4 | 5 |
| Having a family helps me manage my time on the job | 1 | 2 | 3 | 4 | 5 |
| I learn things in my family life that help me in my job | 1 | 2 | 3 | 4 | 5 |

Appendix F

Overall Job Satisfaction Scale

Please indicate your level of satisfaction with each of the following features of your job:

| | Not at all Satisfied | | | Moderately Satisfied | | Extremely Satisfied | |
|---|---|---|---|---|---|---|---|
| The physical work conditions | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The freedom to choose your own method of working | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your co-workers | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The recognition you get for good work | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your immediate boss | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The amount of responsibility you are given | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your rate of pay | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your opportunity to use your abilities | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Relations between management and workers in your firm | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your chance of promotion | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The way your firm is managed | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The attention paid to suggestions you make | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your hours of work | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The amount of variety in your job | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your job security | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

# Appendix G

## Kansas Marital Satisfaction Scale

Please indicate how satisfied you are with:

| | Not at all Satisfied | | | Moderately Satisfied | | | Extremely Satisfied |
|---|---|---|---|---|---|---|---|
| Your marriage | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your wife/husband as a spouse | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Your relationship with your husband/wife | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

# Appendix H

## Satisfaction with Parent Role Scale

To what extent do you agree or disagree with the following:

| | Do not Agree At All | | | Agree Moderately | | | Agree Strongly |
|---|---|---|---|---|---|---|---|
| I feel good about the amount of involvement I have with my children | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am pleased with the amount of responsibility I take for raising my children | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am satisfied with my child -rearing skills | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am satisfied with the amount of time I give to my children | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I think parenthood is an important and valuable part of life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I am comfortable in my role as parent | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix I

## DEMOGRAPHIC INFORMATION

1. Please indicate your gender: male female (circle one).

2. How many children do you have living at home? _____

3. How old are they?_____

4. Does any of your children have a chronic illness or disability?
   a. yes b. no

   **If yes**, please specify _____

5. Do you have any other dependents living in your home (e.g., grandparents, relatives) for whom you must provide some care?

   a. yes b. no

6. What is your age? _____ YEARS

7. What is your partner's age? _____ YEARS

8. Which of the following best describes

YOUR EDUCATION:
a. High school or less
b. Community college
c. Some university
d. A university degree
e. Post-graduate degree

YOUR PARTNER'S EDUCATION:
a. High school or less
b. Community college
c. Some university
d. A university degree
e. Post-graduate degree

9. Which of the following best describes

| YOUR INCOME | YOUR PARTNER'S INCOME |
|---|---|
| Before taxes: | Before taxes: |
| a. Less than $10,000 | a. Less than $10,000 |
| b. $10,000 to $19,999 | b. $10,000 to $19,999 |
| c. $20,000 to $29,999 | c. $20,000 to $29,999 |
| d. $30,000 to $39,999 | d. $30,000 to $39,999 |
| e. $40,000 to $49,999 | e. $40,000 to $49,999 |
| f. $50,000 to $59,999 | f. $50,000 to $59,999 |
| h. $60,000 to $69,999 | h. $60,000 to $69,999 |
| i. $70,000 to $79,999 | i. $70,000 to $79,999 |
| j. $80,000 to $89,999 | j. $80,000 to $89,999 |
| k. $90,000 to $99,999 | k. $90,000 to $99,999 |
| L. 100,000 or more | L. 100,000 or more |

10. Which of the following categories best fits the work

| YOU DO: | YOUR PARTNER DOES: |
|---|---|
| a. Managerial | a. Managerial |
| b. Professional | b. Professional |
| c. Technical | c. Technical |
| d. Administrative | d. Administrative |
| e. Clerical | e. Clerical |
| f. Retail | f. Retail |
| g. Other _____ | g. Other _____ |

11. Approximately what number of **hours** per week are you currently working (for pay)?

_____ (HRS)

12. Approximately what number of **hours** per week is your partner currently working (for pay)?

_____ (HRS)

13. How many **days** per week are you currently working (for pay)?

_____ (days).

14. Approximately how many **hours** did you spend planning or doing household chores (e.g., meal planning and preparation, cleaning and deciding when and what to clean, laundry, shopping, and household planning, bill paying):

    (a) On your last work day? _____ (hrs)

    (b) On your last nonwork day? _____ (hrs)

15. Approximately how many **hours** did you spend caring for or doing things with your child(ren) (such as dressing, talking, playing, driving places):

    (a) On your last work day? _____ (hrs)

    (b) On your last nonwork day? _____ (hrs)

Appendix J

Random Dialling Protocol

"Hello, may I speak with Mr(s)_____ please? Hello Mr(s)_____, my name is _____, I'm calling about a study being conducted by researchers at the University of Ottawa, about how dual-income families are meeting the challenges of balancing work and family life. Participation in the study involves completing a 15 minute questionnaire asking parents how they meet the challenges of juggling employment and family responsibilities. We are looking for a specific group of parents. Is it OK with you if I ask you some questions to see if you fit the description?"

**(If yes): go to "CRITERIA"**

**(If no)**: "Would there be a better time for me to call back?"

**(If yes): Write down the time, date, name, and number to call.** "Thank you very much - I'll call you back then."

**(If no):** "OK. Sorry to have disturbed you. Bye."

## CRITERIA

1) "Are you currently living with your spouse/partner?"

**If yes: Go to question 2**

**If no:** "I'm sorry, but we are looking for parents who are currently living with a spouse/partner. Thank you for your interest in the study."

2) "Do you currently have any children 12 or under living in your home?"
**If yes: Go to Question 3.**

**If no:** "I'm sorry but we are looking for parents who have children living with them." Thank you for your interest in the study."

3) "Are you currently employed (i.e., working for pay) 35 or more hours per week?"
**If yes: Go to question 4**

**If no**: "I'm sorry but we are looking for parents who are employed 35 or more hours per week." Thank you for your interest in the study."

4) "Is your spouse/partner currently employed 35 or more hours per week?"

**If yes, participant is eligible. Continue with "PROTOCOL".**

**If no:** "I'm sorry but we are looking for parents who have partners who are employed 35 or more hours per week." Thank you for your interest in the study."

# PROTOCOL

"You are eligible to participate. If you agree to take part, you will be mailed a questionnaire which asks you about your experiences in trying to balance job and family responsibilities, your satisfaction in your employment and family life, and some background information. The responses you give will be kept in strictest confidence. If you wish to remain anonymous you may choose not to put your name on the questionnaire. It should not take more than about 15 minutes to complete the questionnaire. You are, of course, free to leave any question blank. The questionnaire comes with a stamped addressed envelope in which it is to be returned so there is no cost to you."

"Does this sound like something you might like to do?"

**(If yes),** "Can you please tell me the **address** to which you would like me to send the questionnaire?"

**(If no)**, "Thank you for your time, sorry the project was not of interest". "Do you think that your partner/spouse might be interested?" **(If yes)** "may I please speak with your spouse?"

Reiterate **protocol** to partner.

"It would be very helpful to us if you could complete and return the questionnaire as soon as possible after it arrives. Someone will call you again in a few weeks to see if you have received your questionnaire and if you have any questions."

# Appendix K

## Protocol for Second Telephone Contact

"Hello, may I speak to _____ ? This is _____ from the University of Ottawa" **(remind participant who you are if she seems hesitant).**

"I'm calling to find out if you have received the questionnaire and to see if you have any questions"

"I'd like to take this opportunity to thank you very much for taking the time to fill out the questionnaire. Your participation will help us better understand how parents balance work and family demands. I'd just like to remind you that if you would like a summary of the results of this study simply fill in your address on the Information Sheet and send it along with the questionnaire when you return it."

"Thanks Again!"

Appendix L

## INFORMATION SHEET

Dear Participant:

This is to outline some of the details of the investigation we described to you in our telephone conversation.

The purpose of this study is to find out more about how parents are affected by attempting to balance their work and family demands.

Completing the enclosed questionnaire should take about 15 minutes. It would be a great help to us if you could return your completed questionnaire as soon as possible in the addressed stamped envelope provided.

Please be assured that all information you provide will be kept strictly confidential. If you wish to remain anonymous you may choose not to put your name on the questionnaire. You may, of course, leave any question blank should you prefer not to answer it.

If you provide us with your address below, we will gladly send you a summary of the results of the study. If you wish to ensure your anonymity, you may wish to use an alternate (i.e, non-identifying) name or address.

ADDRESS: _____

_____

_____

Thank you very much in advance for helping us learn more about how employed parents cope with balancing job and family demands.

Todd Mason M.A.
Doctoral Student
Clinical Psychology Programme
University of Ottawa
604-936-7258

Dr. Catherine Lee
Associate Professor
Research Supervisor
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University of Ottawa
613-562-5800 (4450)

# Appendix M

Principal Components Analysis of Total Interference and Total Enhancement scale items: Varimax rotation.

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 | Factor 6 |
|---|---|---|---|---|---|---|
| WIF2 | .79 | | | -.24 | | |
| WIF1 | .75 | -.12 | -.17 | -.10 | | .10 |
| WIF4 | .74 | -.16 | | | | |
| FIW1 | .53 | -.20 | | .26 | | .43 |
| WIF3 | .49 | -.17 | | -.38 | | .33 |
| | | | | | | |
| WEF2 | -.13 | .83 | .12 | .15 | | |
| WEF1 | | .77 | | .19 | .22 | |
| WEF7 | | .68 | .31 | | | |
| WEF3 | -.36 | .47 | | .42 | | |
| | | | | | | |
| FEW5 | | .14 | .79 | | .10 | |
| FEW4 | -.13 | | .79 | .20 | .21 | |
| FEW6 | | .42 | .63 | | .16 | |
| | | | | | | |
| WEF4 | | .23 | .17 | .83 | .12 | -.11 |
| WEF5 | | .25 | .19 | .80 | .16 | -.16 |
| | | | | | | |
| FEW1 | | | | | .90 | |
| FEW3 | | | .27 | | .82 | |
| FEW2 | | | .38 | .24 | .56 | .13 |
| | | | | | | |
| FIW2 | .26 | | | | | .77 |
| FIW4 | | | | -.28 | | .73 |
| FIW3 | .13 | | | -.11 | | .69 |

Note: loadings < .10 omitted.

# Appendix N

Principal Components Analysis of Total Interference and Total Enhancement scale items: Four factor solution forced with Varimax rotation.

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
|---|---|---|---|---|
| WEF2 | .79 | | -.15 | .15 |
| WEF1 | .67 | .20 | | |
| WEF3 | .64 | | -.27 | -.19 |
| WEF7 | .63 | .25 | -.15 | .19 |
| WEF4 | .60 | .24 | | -.54 |
| WEF5 | .58 | .29 | .12 | -.55 |
| | | | | |
| FEW3 | | .82 | | -.11 |
| FEW1 | | .73 | | -.14 |
| FEW2 | .19 | .69 | | |
| FEW4 | .23 | .66 | -.10 | |
| FEW5 | .27 | .57 | | .10 |
| FEW6 | .43 | .51 | | .19 |
| | | | | |
| WIF4 | -.13 | | .73 | |
| WIF1 | -.22 | | .71 | .12 |
| FIW1 | | | .68 | .12 |
| WIF2 | -.14 | | .68 | .25 |
| | | | | |
| FIW4 | | | | .71 |
| FIW3 | | | .25 | .58 |
| WIF3 | | | .40 | .55 |
| FIW2 | .13 | | .44 | .52 |

Note: loadings < .10 omitted.

# Appendix O

## Matrix of intercorrelations of all study variables.

| Dependent Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Job satisfaction | | 05 | 17 | 29 | 16 | 33 | .30 | .31 | .21 | .15 | .10 | .01 | 22 | .03 | 06 | 23 | 18 | .11 | 04 | 18 | .16 | 05 | .01 | .02 | .01 | 16 |
| 2. Marital satisfaction | 09 | | 23 | 27 | 22 | 23 | .30 | .26 | .24 | 06 | 02 | 04 | .04 | 03 | 04 | 16 | .12 | .04 | .02 | .03 | 05 | .02 | 03 | 01 | .07 | .05 |
| 3. Parenting satisfaction | 22 | 19 | | 13 | 10 | 13 | .38 | .21 | .40 | 29 | 17 | 17 | .04 | .19 | .09 | 07 | 01 | 03 | .08 | 13 | 11 | 02 | 03 | 00 | .05 | .11 |
| Predictors | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. Enhancement | 34 | 14 | 31 | | 83 | 87 | .28 | .15 | .30 | 20 | 06 | .04 | .07 | .10 | .16 | .30 | 11 | .14 | 08 | .01 | 02 | 00 | 19 | 04 | .01 | .02 |
| 5. FEW | 25 | 22 | 22 | 86 | | 45 | .15 | .06 | .18 | 15 | 06 | .08 | .05 | .02 | .07 | .10 | 11 | .16 | 16 | .02 | 04 | 09 | 14 | 09 | .03 | .04 |
| 6. WEF | 34 | 01 | 31 | 86 | 48 | | .32 | .19 | .32 | 19 | 04 | 00 | .07 | .14 | .18 | .39 | 09 | .09 | 00 | 01 | .01 | .08 | 19 | .01 | 01 | 01 |
| 7. Interference | .12 | .09 | .23 | .19 | .05 | .29 | | 79 | 87 | .07 | 00 | .05 | .05 | 14 | 10 | .25 | .01 | 17 | 07 | .05 | .11 | .02 | .02 | .05 | 12 | 11 |
| 8. FIW | .12 | .14 | .12 | .07 | 02 | .14 | 83 | | 39 | 00 | 10 | .06 | .18 | 02 | 00 | .32 | 04 | 13 | 09 | 00 | .02 | 00 | .01 | 03 | 24 | 02 |
| 9. WIF | .10 | .04 | .27 | .24 | .09 | .33 | 91 | 52 | | .11 | .07 | .03 | 07 | 20 | 17 | .10 | .05 | 15 | 03 | .08 | .14 | .04 | .03 | .10 | 00 | 14 |
| Covariates | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. Child care hours | .04 | 20 | 23 | 07 | 03 | 10 | .09 | .05 | .10 | | 27 | 00 | .18 | .17 | .18 | .40 | .10 | .12 | .09 | 02 | 29 | .11 | .01 | .05 | .09 | .29 |
| 11. Household labour hours | .01 | .03 | 04 | .14 | .09 | .15 | 22 | 20 | 19 | 07 | | 03 | .22 | .05 | .05 | .16 | .12 | .03 | 00 | .02 | 20 | 06 | 18 | .04 | 17 | .20 |
| 12. Partner employment hours | 00 | .17 | 14 | .03 | .14 | 07 | 03 | 02 | 04 | 07 | 07 | | 29 | .01 | .02 | 16 | .01 | 06 | 10 | 26 | .24 | 06 | 17 | 04 | 00 | 24 |
| 13. Respondent employment hours | .02 | .04 | .04 | 04 | 02 | 06 | 28 | 21 | 26 | 10 | .01 | 27 | | 03 | 06 | 11 | 16 | .03 | .04 | 21 | .51 | .03 | .04 | .13 | 00 | 51 |

| Demographic variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14. Child 1 age | 09 | *05* | 02 | 09 | 07 | 10 | *05* | *02* | *07* | *37* | 05 | *09* | *10* | | 88 | 71 | 12 | 09 | 04 | 02 | *12* | 55 | *10* | 46 | *16* | 12 |
| 15. Child 2 age | 09 | 04 | 00 | *03* | 06 | *11* | 05 | 03 | 05 | *42* | 13 | *09* | *12* | 88 | | 91 | 29 | 10 | 11 | 06 | *16* | 63 | *13* | 52 | *17* | 16 |
| 16. Child 3 age | *07* | *02* | *25* | *35* | *28* | *32* | *15* | *39* | 05 | *49* | *47* | *09* | *14* | 57 | 92 | | 00 | 12 | 04 | 09 | *19* | 67 | *03* | 51 | *36* | 19 |
| 17. Number of children | 10 | *02* | 05 | 03 | 05 | 00 | 12 | 13 | 10 | *02* | 12 | 04 | 09 | 20 | 14 | *20* | | *03* | *02* | 10 | *07* | 35 | *02* | 24 | 05 | 07 |
| 18. Other dependents | 01 | *26* | *02* | *01* | *01* | *01* | 02 | 06 | *01* | *04* | *21* | 02 | 03 | *13* | *18* | . | 03 | | 01 | *07* | *05* | 03 | 02 | 04 | 02 | 05 |
| 19. Child disability | *03* | 03 | *06* | *08* | *05* | *10* | 07 | 01 | 10 | 06 | 05 | 09 | 01 | *01* | 03 | 15 | 22 | 10 | | 00 | 04 | *03* | *06* | 02 | *06* | *04* |
| 20. Family income | 14 | 03 | 03 | 09 | 08 | 07 | 01 | 02 | 00 | *08* | *02* | 17 | 20 | 06 | 13 | 10 | *04* | 08 | *10* | | *08* | 33 | 33 | 30 | 32 | 08 |
| 21. Nonwork days per week | 00 | *14* | 10 | *05* | *03* | *06* | 00 | 00 | 00 | 09 | 10 | 05 | *26* | *14* | *18* | 05 | *07* | 04 | *04* | 07 | | *01* | *04* | 06 | *03* | * |
| 22. Partner age | 10 | *08* | 05 | 06 | 07 | 04 | 04 | 06 | 01 | *21* | 12 | *04* | 05 | 51 | 52 | 31 | 33 | *09* | 05 | 25 | *06* | | 14 | 74 | 07 | 01 |
| 23. Partner education | *02* | 01 | 04 | 17 | 18 | 10 | *03* | *04* | *02* | *10* | *18* | *10* | 05 | 03 | 02 | 22 | 04 | 20 | *03* | 25 | *05* | 07 | | 16 | 48 | 04 |
| 24. Respondent age | 16 | 00 | 10 | 18 | 18 | 14 | *03* | 02 | *06* | *23* | 09 | *10* | *03* | 63 | 60 | 49 | 35 | *06* | 09 | 22 | *06* | 66 | 18 | | 17 | *06* |
| 25. Respondent education | 08 | 01 | 06 | 19 | 20 | 13 | *01* | *07* | 03 | *15* | *25* | *12* | 03 | 01 | *06* | *12* | 02 | 14 | *10* | 27 | *07* | 08 | 61 | 24 | | 03 |
| 26. Workdays per week | 01 | 14 | *10* | 05 | 03 | 06 | 00 | 00 | 00 | *09* | *10* | *05* | 26 | 14 | 18 | *05* | 07 | *04* | 04 | *07* | * | 06 | 05 | 06 | 07 | |

Notes: 1) Correlations below the diagonal are for women, those above the diagonal are for men.

2) Decimals are omitted

3) Correlations > .17 are significant at $p < .05$

4) Correlations in italics are negative

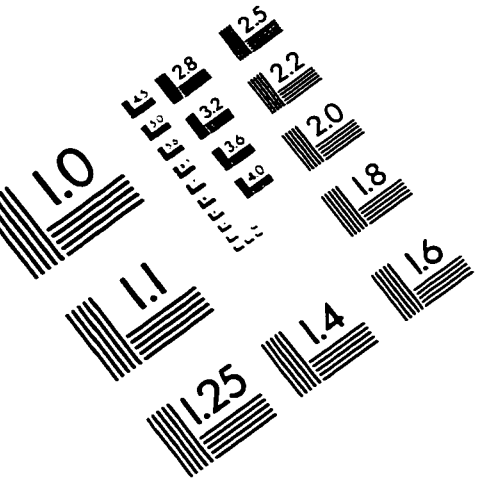
5) ' . ' Indicates that the correlation could not be computed, perhaps because there were only 5 female cases with dependents.

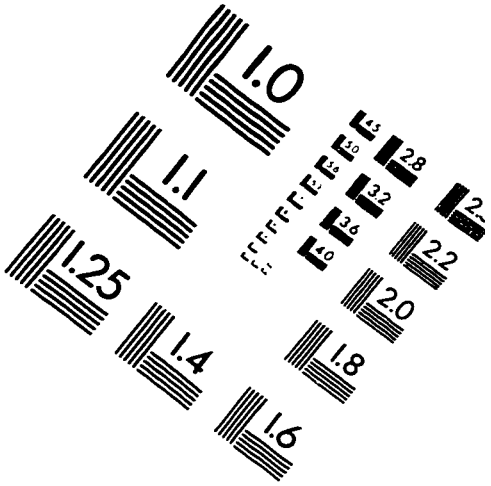
6) Child 3 age correlation with job and parenting satisfaction and Child 2 age correlation with WEF are not statistically significant because of the smaller number of cases with 2 or 3 children.

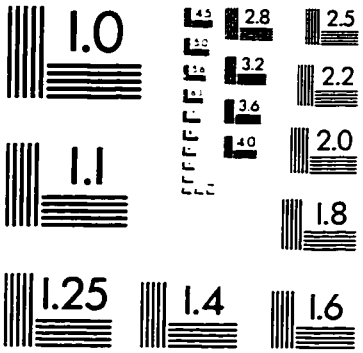
7) * The correlation between nonwork days per week and work days per week is -1.00 because non work days was computed as 7 minus work days.

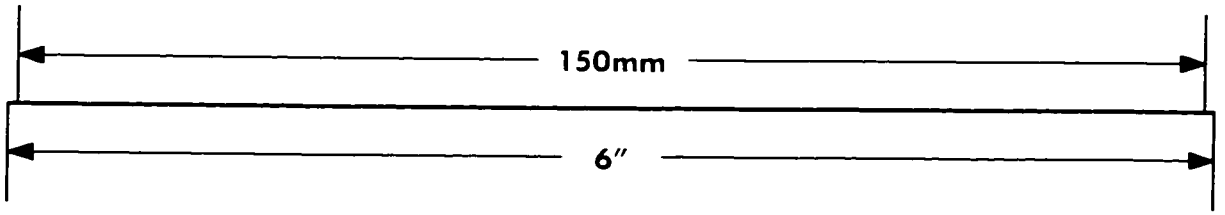
8) For dependents (other dependents in the home), and child disability, 0 = No, 1 = Yes.

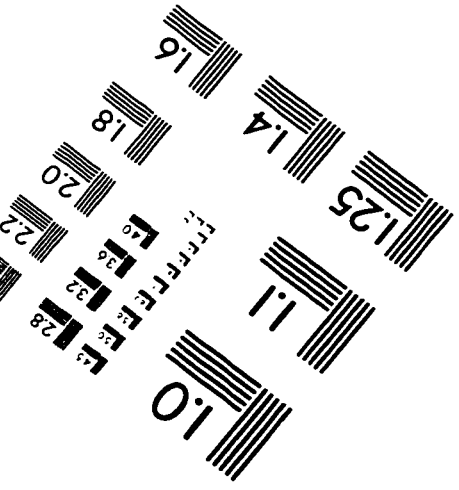
# IMAGE EVALUATION TEST TARGET (QA-3)

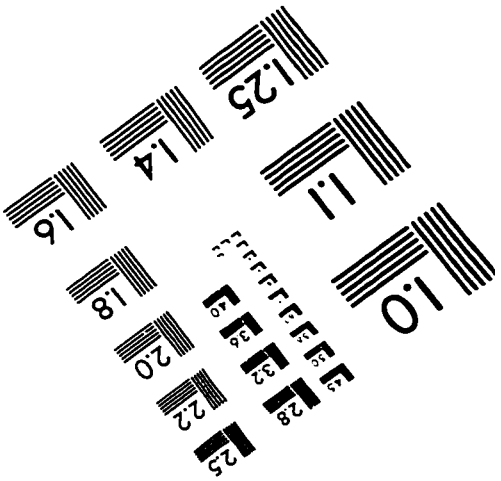
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