WORK-FAMILY CONFLICT AND HOME-BASED WORK

By

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Submitted to the Faculty of Graduate Studies
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for the Degree of

MASTER OF SCIENCE

Department of Family Studies
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ABSTRACT

This study examines the effect of home-based employment on the work-family conflict of women in dual-earner couples with young children. From the perspective of gender roles, it was predicted that home-based women would experience lower levels of work-family conflict than women who work outside the home because they would feel less in opposition to traditional gender-role concepts. Using data from the 1988 National Child Care Study, a sample of 4743 women provided information about their family and work characteristics, and the level of tension they feel in juggling work, family, and child care responsibilities. Home-based and non home-based women differed on a number of work, family and demographic characteristics, but there was no significant difference between the two groups in their levels of work-family conflict. Workplace location did make a difference, however, in subgroups of the sample selected by occupational classification. Home-based women in clerical and service occupations reported less tension than their non home-based counterparts; while home-based women in primary occupations (farming, fishing, forestry, mining) reported more tension than their non home-based counterparts. In a regression analysis assessing the prediction of work-family conflict, it was found that total hours worked, age of youngest child, and total family income were significant contributors, but not workplace location. The findings suggest more research is needed to examine the role of "subjective" factors in the perception of work-family conflict.

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Chapter 1

Introduction

Coping with the challenges of raising a family in the 1990's is difficult for most couples. Coping with all of the stressors associated with getting and keeping a job, added to the stressors of doing a good job of parenting, can prove to be a balancing act that even the most resilient may find stressful. As greater numbers of women are participating in the work force and remaining there through the childbearing years (Statistics Canada, 1990; Hayghe, 1986), the difficulty of balancing work and family responsibilities raises important questions for research in the family. The phenomena of role overload and role conflict are well-documented in the literature. Women, particularly those with children requiring daycare, have the most to do and the least time in which to do it (Lewis & Cooper, 1987). They are also the most likely to report role-related tensions (Kelly & Voydanoff, 1985) and spillover between their work and family roles (Crouter, 1984). As a group, they have been reported to be at greater risk of poor mental health than other employed women (McLanahan & Adams, 1987).

The term that is most often used in the literature to describe the role-related tension that working women experience is "work-family conflict." It has been an important topic of research (Menaghan & Parcel, 1990, Moen & Dempster-McClain, 1987). As a type of stress, work-family conflict has been linked to increased health risks, less effective parenting, and decreased life satisfaction (Kelly & Voydanoff, 1985; Greenhaus & Beutell, 1985; Voydanoff, 1987; Pleck, 1985; Pleck, Staines, & Lang, 1980).

The amount of work-family conflict women experience has been found to depend on a number of factors. There have also been a number of variables which have been found to

modify the stress associated with balancing work and family responsibilities. The husband's equal participation in household tasks and the care of children is one of the variables which has been identified as decreasing work-family conflict (Hoffman, 1989; Ross, Mirowsky, & Huber, 1983). However, this practice has not reached acceptance in the majority of families (Feree, 1990; Pleck, 1983). Alternatively, many employed women with children attempt to cope with their roles of wife, mother, and worker by adopting a coping strategy which has been called "the superwoman" (Emmons, Biernat, Tiedje, Lang, & Wortman, 1990).

Others use more self-preserving strategies such as reducing time doing housework, delegating tasks, or giving up leisure activities (Piotrokowski, 1987). Many women choose to leave the full-time workforce, as has been documented in the significant numbers of part-time working mothers (Lero, 1993). A growing number of professional women with children have opted for what the business community has termed "the mommy track" (Schwartz, 1989), recognizing their difficulty in meeting family and work responsibilities and letting their careers take a secondary role. Some non-professional couples have been reported to stagger their work hours or work non-day shifts in an attempt to manage role overload and conflict (Lero, Goelman, Pence, Brockman, & Nuttall, 1992; Presser, 1987).

At the societal level, attention is also increasingly being focused on the role of the workplace in reducing work-family conflict for dual-earner families. Society has made considerable progress in establishing "family-responsive" policies for the workplace. Large corporations have become increasingly involved in their employees' nonwork lives by developing and testing such initiatives as employee assistance programs, on-site daycares, parental leave, flexitime, and flexiplace, to name a few (Guzzo, Nelson, & Noonan, 1992).

One such initiative, home-based employment, is steadily gaining in popularity according to recent statistics. It is estimated that 23% of Canadian households are involved in some form of "home enterprise" (Orser & Foster, 1992). With the sophistication of home office technology, telecommunications to link homes to offices, and computerization of the majority of office functions, many office workers and professionals can be released from the confines of the standard "nine to five" business day in a conventional office.

Home-based employment has been offered by the popular press as a panacea for dual-earner couples attempting to manage the multiple demands of job and family. It has often been claimed that by eliminating the daily commute between home and office, workers can spend more time with their families, and women with young children may eliminate the need for outside daycare altogether. The assumption has been that work-family conflict will be significantly reduced and responsibilities juggled more efficiently.

Family research, however, has only recently begun to examine this assumption (Carsky, Dolan, & Free, 1991; Christensen, 1986; Horvath, 1986). As Kraut (1988) has stated,

> we have little information about the texture of the lives of those who work from home and the ways working from home differs from working in a conventional location. For example, we know little about the interaction between the family and the work spheres and the manner in which accommodations between them are made. (p.47)

In order to gain more insight into the impact that this alternative to traditional workforce participation has on families, more information is needed about how couples with children cope in this arrangement, whether it helps to ease the day-to-day juggling of work and family responsibilities, and whether it decreases work-family tension and conflict.

The purpose of this thesis will be to examine the effect of home-based employment on the work-family conflict of families with young children. Specifically, this thesis will focus on the work-family conflict experienced by women in dual-earner families with young children. Because parenting demands are high when children are young, this group is at the greatest risk of experiencing work-family conflict, and the impact of "family-responsive" policies is likely to be the most dramatic in these families.

Chapter 2

Work-Family Conflict

The purpose of this chapter is to review the literature on the experience of work-family tension arising from conflict between work and family responsibilities in the dual-earner couple with children. The review will cover theory and research concerning the effects on work-family conflict of: 1) the objective conditions associated with role overload in the performance of multiple roles and, 2) the subjective influence of gender and gender-role socialization. First, however, the concept of work-family conflict will be defined.

Definition of Work-Family Conflict

The definition of work-family conflict proposed by Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) has been widely accepted in the family literature (e.g., Greenhaus and Beutell, 1985; Kopelman, Greenhaus, & Connolly, 1983; Voydanoff, 1988). According to this definition, work-family conflict is the interrole conflict that may be experienced by an individual when the role pressures from the work and family domains are incompatible or conflicting. A role is "a set of activities and relations expected of a person occupying a particular position in society, and of others, in relation to that person" (Bronfenbrenner, 1979).

Work-family conflict is referred to variously in the literature as "job-family role strain" (Bohen & Viveros-Long, 1981; Keith & Schafer, 1980; Kelly & Voydanoff, 1985), "interrole conflict" (Kopelman, Greenhaus & Connolly, 1983), "work-family interference" (Moen & McClain, 1987), and "work-nonwork role conflict" (Wiley, 1987). It is also more simply referred to in the literature as "role strain" (Marks, 1977; O'Neil & Greenberger, 1994).

Work-family conflict is typically measured by asking questions that gauge a subject's perception of overload within roles and conflict between roles (Guelzow, Bird, & Koball, 1991). Work-family conflict has also been measured by a subject's response to one question, "How much do your job and your family life interfere with each other?" (Moen & McClain, 1987; Voydanoff, 1988). In some studies, the distinction is made between family interfering with work and work interfering with family through two separate measures (Gutek, Searle & Klepa, 1991).

Prevalence of Work-Family Conflict

In a synopsis of a Conference Board of Canada publication (1990) reporting the findings of a survey of 7,003 public and private-sector employees, almost two-thirds of the employees indicated that the juggling of their various roles was at the very least "somewhat difficult to accomplish." Almost 80% reported that they experienced stress or anxiety as a result of having to manage both home and work responsibilities, and over 25% reported that they felt "a lot" or "a moderate degree" of stress. A sizeable portion of the sample reported that they were considering leaving their job because of family responsibilities (14.3%) or had done so in the past (11.6%). Almost 7% of the respondents indicated that they had changed from full-time to part-time status in the past, in order to meet family needs. A recent study of over 14,000 Canadian private sector employees (Higgins, Duxbury & Lee, 1992), yielded similar findings. One-quarter of the respondents reported experiencing high levels of role overload, feeling that they had more to do than they could handle and felt physically and emotionally drained.

Pleck, Staines, and Lang (1980) analyzed the results from the 1977 Quality of Employment Survey (Quinn & Staines, 1979) and found that 35% of employed women reported experiencing moderate or severe conflict when asked the question: "How much do your job and your family interfere with each other?"

Three examples of the types of situations which might be experienced as work-family conflict by employed, married women with young children are: problems in the management of the household, such that there is more work than can be handled to afford free time for the mother; strain in the marital relationship involving conflicts over finances, division of labour, and balance of power; and concerns about the maternal role with respect to adequacy of child care and missing out on parent-child pleasures (Barnett & Baruch, 1985). Emmons et al. (1990) documented that over 75% of their sample of professional women with preschool children reported experiencing conflicts between work and family almost every day. The situation most frequently reported by women in their sample was having to rush their children to get ready in the morning so that they themselves would not be late for work.

Based on these types of day-to-day situations and concerns of dual-earner women, at first glance, it appears easy to answer the question of whether there will be an appreciable difference in work-family conflict between the home-based and non home-based groups. Why would home-based mothers not find it easier to cope with their dual responsibilities than women in traditional employment? They are able to take care of both roles in one location, reduce their commuting time from work to home every day, eliminate the stressful morning routine, and perhaps take care of family emergencies when they arise. The answer seems

obvious, until one considers the multitude of variables that have been found to be associated with work-family conflict.

Objective Conditions and Work-Family Conflict

There are two implicit viewpoints concerning the phenomenon of work-family conflict: the rational view and the gender view (Gutek, Searle & Klepa, 1991).

According to the rational view, there is a direct correspondence between objective conditions and the perception of work-family conflict. The amount of conflict an individual perceives will have a direct relation to measurable factors such as the number of hours spent performing work or family responsibilities. This view is evident in studies in which the time spent in paid work and family work, measured in absolute terms, is examined in relation to the level of work-family conflict (Pleck, 1985). Other objective variables examined in relation to work-family conflict include characteristics of the work environment (shift work, autonomy, flexible work schedule) and characteristics of the family environment (number of children, age of youngest child).

According to the gender view, the association between the objective factors and work-family conflict differs for men and women. Specifically, this view is that the amount of conflict an individual perceives will vary depending on whether the objective conditions under which work and family roles are performed are consistent with gender-role expectations.

In the following sections, the literature which provides evidence for the rational and gender viewpoints will be reviewed. This literature will serve as the basis for making a prediction about the work-family conflict experienced by women in families where at least one

worker is home-based. First, the literature which explores the relationship between work-family conflict and objective conditions is reviewed.

Inherent in the rational approach to explaining work-family conflict is the assumption that it is related, in part, to the amount of time and energy one expends in the performance of one's roles. With respect to the effects of time and energy, there have been two divergent views. The "scarcity hypothesis" (Goode, 1960) proposed that individuals have a finite amount of time and energy available for the successful performance of roles. The performance of multiple roles may lead to either incompatible or excessive role expectations, which may then result in physical or mental exhaustion (Gove & Geerken, 1977; Gove & Tudor, 1973). In contrast, the "expansion" hypothesis (Marks, 1977, Sieber, 1974) emphasizes the benefits of multiple role involvement. By being involved in several roles, an individual may have many sources of gratification, stimulation, and social validation which may then result in increased status, privilege, and self-esteem.

Several studies have tested the scarcity hypothesis by using the time and energy shortage as a predictor of work-family conflict. Time has been measured by time spent at work (meaning paid work) and by time spent in child care and household chores or, as it is often referred to in family economics, "household production."

Time Spent in Paid Work. Keith and Schafer (1980) studied time spent at work in relation to work-family conflict in a sample of 135 husbands and wives in dual earner couples. Respondents reported number of hours worked per week at their primary job and any additional jobs. For both men and women, this was the most important variable in explaining work-family conflict, although the relation was stronger for men ($r = .33$) than for women ($r =$

.17). Two of the four questions used in the measure of work-family role strain, however, may have tapped respondents' feelings regarding issues other than their work-family tension. Specifically, respondents were asked if they felt bothered by "thinking the amount of work they have to do may interfere with how well it gets done" and if they felt bothered by "feeling that others in the family will not do household tasks as well as they would do them." Clearly, an element of gender-role concept may have been measured , and likely affected not only the individual levels of work-family conflict reported but the differences reported between men and women.

Kelly and Voydanoff (1985) also studied hours of work as a determinant of work-family role strain in a sample of 468 working parents, including both single and married respondents. They reported that the amount of overtime worked and dissatisfaction with work hours or schedules were significant positive predictors of work-family role strain in men and women. Although the sample was reported to accurately represent the proportion of women in the labour force with young children, the overall response rate was low (20 - 25%); therefore, the findings may reflect certain characteristics of the respondents.

In another comprehensive analysis of work role characteristics and family structure demands using data from the 1977 Quality of Employment Survey, Voydanoff (1988) found that weekly work hours and workload pressure (the extent to which an individual is required to work hard, is required to work fast, and perceives having too much to do in too little time) were positively related to work-family conflict for both men and women.

Guelzow et al. (1991) presented and tested an exploratory path analysis model to explain stress outcomes for men and women in dual-career professional families. One of the four

antecedents of work-family conflict, according to their model, was number of hours spent in paid work. For men, working longer hours was associated with higher levels of marital relationship equity, but not with higher levels of work-family conflict. For women, working long hours was associated with both higher levels of work-family conflict and lower perceptions of marital equity. While equity in the marital relationship appears to be universally related to objective factors such as hours spent in work, the same does not hold for work-family conflict. Instead, the relation between hours worked and work-family conflict is observed only in women.

Finally, in a study conducted to determine whether the rational or the gender-role framework for understanding work-family conflict would receive more support, Gutek et al. (1991) studied a random sample of psychologists and a volunteer sample of managers. They tested a number of hypotheses with respect to both the rational and the gender approach using two measures of work-family conflict: family interference with work (FIW) and work interference with family (WIF). They predicted that if the rational view prevailed, there should be a direct relation between number of hours spent in work activities and WIF for both men and women. The results indicated a fairly high correspondence between hours spent working and WIF in general, but the relation was stronger for women than for men. In both samples, women reported significantly more WIF than men, even though their number of hours of paid employment was comparable. Thus, it appears that this study corroborates the previous studies that spending long hours in paid work may be perceived by women as interfering with their family responsibilities.

According to the rational view, time worked and energy expended is related to the experience of work-family conflict. Hence, it follows that the way in which the time is spent should not affect the outcome. Further insight into this question is provided by studies of time spent in family work.

Time Spent in Family Work. Pleck (1985) reviewed data from two national surveys, the 1975-76 Study of Time Use and the 1977 Quality of Employment Survey, in which data was collected about husbands' and wives' time spent in family and work roles. Increased time spent in paid work and family roles by employed wives was associated with the feeling of time pressure, but it did not appear to have direct negative effects on well-being in these women. Results showed that negative consequences were likely to occur when husbands were perceived as not participating enough in family work, resulting in wives' perception of "inequity" rather than from the direct effect of "exhaustion." These findings are consistent with the findings of Guelzow et al. (1991), who reported that the women in their sample experienced higher work-family conflict if they perceived their marital relationship to be inequitable.

Gutek et al. (1991) reported similar findings regarding women's participation in family work. They predicted that if the rational view was supported, women should report higher FIW than men because they spend more time than men in family work (household chores, household maintenance, child care and shopping) than men. Results did not support this prediction, as women did not report more FIW even though they spent more time in family work than men. Both men and women reported equally low levels of FIW. Gutek et al. concluded from the data that although couples may spend excessive numbers of hours in both

domains, it does not necessarily have an effect on work-family conflict, especially if the time is spent in "gender-appropriate" activity.

Bielby and Bielby (1988) suggested that women generate as much energy as they need to combine their work and family roles and that time is somewhat elastic. Using the 1973 and 1977 Quality of Employment Surveys, which contained measures of the extent to which one's job demands hard work and the extent to which one exerts substantially more physical or mental effort than required, they found that women, even those with preschool children, reported slightly greater work effort than men. Bielby and Bielby concluded that women must be able to draw on a reserve of energy to fulfil both their work and family roles. This may mean that women's perception of work-family conflict may not necessarily be the result of an objective excess of role demands.

Voydanoff (1988) reported that weekly number of hours spent in child care activities was negatively related to work-family conflict in both men and women. Time spent on home chores was negatively related to work-family conflict in women but not in men. The association between men's participation in child care and lower work-family conflict is consistent with Pleck's (1993) suggestion that men's involvement in primary child care is a growing trend, and that father care is often used by couples as a strategy to balance their work and family responsibilities. By sharing child care responsibilities between mothers and fathers with non-overlapping work schedules, couples are able to reduce child care costs and may also be reducing work-family conflict. Alternately, the association may reflect the recreational rather than custodial aspect of fathers' involvement with their children. Indeed, Shaw (1988) reported that husbands are more likely than their wives to perceive their involvement with

their children as leisure activity and to consider their involvement freely chosen. For women, on the other hand, the negative relation reported between time spent in both child care and home chores and work-family conflict suggests that fulfilling family responsibilities contributes to women's reduced work-family conflict. Again, gender appears to be an important factor in work-family conflict.

Taken together, studies of time spent in paid work and in family work suggest that, although there appears to be some relation between time and work-family conflict in dual-earner couples, it is not a direct relation. Rather, it seems that gender is an important factor. Next, studies which have measured various objective characteristics in the family and work domains will be examined to determine whether they influence work-family conflict.

Work Characteristics and Work-Family Conflict.

Various characteristics of the work domain have been measured as they relate to work-family conflict in dual-earner couples. These characteristics have included job tension, work salience, flexibility (work schedule flexibility, autonomy), and work scheduling variables such as working a non-day shift and shiftwork.

Job Tension. Higgins, Duxbury and Irving (1992) reported a strong relation between work conflict (job-related tension) and work-family conflict in a sample of 220 dual-career couples. However, the relation may have been due, in part, to the overrepresentation of men in the sample (72%) and the selection criterion that all respondents had to be considered managers or professionals. Thus, any conclusions regarding the relation between job tension and work-family conflict with respect to the general population should be considered with caution.

Similarly, Voydanoff (1988) found that "work-role conflict" (inability to satisfy everybody, must do things against their conscience) and "work-role ambiguity" (know what's expected, how well they are doing) were significantly related to work-family conflict in men but not in women. In women, only work hours and workload pressure, as previously reported, were related to work-family conflict.

Work Salience. Greenhaus, Parasuraman, Granrose, Rabinowitz, and Beutell (1989), in their study of various work domain pressures as sources of work-family conflict among highly educated dual-career couples, examined the importance of the work role. Specifically, they examined two measures of an employee's work salience: job involvement (importance of one's job) and career priority (importance of one's career compared to one's partner). The career priority of both the respondent and his or her partner was measured. Greenhaus et al. predicted that highly job-involved employees are likely to devote increased time and energy to their work role, thereby experiencing increased work-family conflict or affecting their partner's work-family conflict as a result of their inability to participate fully in their family role. As hours spent in paid work and family work were not examined in relation to measures of work-family conflict, this notion was not directly tested. Among women, job involvement was a strong predictor of work-family conflict. Among men, work-family conflict was lowest when both partners had a high level of job involvement and when both partners placed the same priority on their careers (whether high or low). When either partner placed either more priority or less priority on their own career in relation to their partner's career, there was increased work-family conflict for men but not for women.

The finding that highly educated women who are highly involved in their careers experience greater work-family conflict, regardless of whose career they consider to be more important, might be interpreted in either of two ways. One interpretation is that perhaps these women are also highly involved and responsible for the majority of the household tasks, and are unable to balance both roles adequately. Another, perhaps related explanation, would be that women feel in conflict with traditional gender roles, and experience guilt in not fulfilling the traditional role of wife and mother. Men, on the other hand, experienced greatest work-family conflict when there was disagreement in the couple about whose career was more important. This finding provides further evidence that there are significant gender differences in the perception of work-family conflict related to gender-roles.

Work Schedule. Characteristics associated with the work schedule, such as working a non-day shift and working weekend days, have also been examined with respect to work-family conflict. Voydanoff (1988) reported that among men, only one of these two characteristics, working a non-day shift, was significantly related (positively) to work-family conflict. Among women, neither characteristic was significantly related to work-family conflict. Kelly and Voydanoff (1985) reported that satisfaction with the number of hours worked and work schedule were both significant determinants of work-family conflict in their study of 486 working parents. Differences between men and women were not specifically examined.

Work Flexibility. Another characteristic of the work domain is the flexibility of the individual's work schedule. This has been variously referred to as "work schedule flexibility," "autonomy," and "schedule control." There is usually the assumption that low levels of

flexibility, autonomy, and schedule control will be associated with greater levels of work-family conflict. The examination of the effect of work flexibility on work-family conflict is important, as it is frequently a characteristic of the home-based job.

Moen and Dempster-McClain (1987), using the 1977 Quality of Employment Survey, analyzed the relationship between two characteristics of the work domain, flexitime (difficulty in getting work hours permanently changed) and autonomy (difficulty in getting time off from work to take care of family matters), and employed parents' preference to work less hours. The findings showed that neither flexibility nor autonomy were related to parents' preference for reduced work hours. However, mothers and fathers with high levels of perceived work-family conflict were likely to want their hours reduced. They did not measure work-family conflict as a dependent variable; hence, the relation between work-family conflict and flexibility remains largely unknown.

Voydanoff (1988), on the other hand, did find that certain work role characteristics related to flexibility were positively related to work-family conflict. Specifically, schedule control (difficulty in changing hours and days worked) and autonomy (freedom to decide how to get the job done, when to take breaks, who to work with) were identified as variables which appeared to have a moderating effect on work-family conflict. For men, schedule control moderated the effects of working a non-day shift, and autonomy moderated the effects of work-role ambiguity (not knowing what's expected and how well one is doing). For women, schedule control moderated the effects of weekend work. Autonomy moderated the effects of ambiguity, but exacerbated the effect of workload pressure. In other words, women with high workload pressure and autonomy were more likely to have high work-family conflict.

Work flexibility and autonomy were examined by Greenhaus et al. (1989) in their study of various work domain pressures as sources of work-family conflict among highly educated dual-career couples. Specifically, Greenhaus et al. examined "time-based work-family conflict," in which the time devoted to one role makes it difficult to participate in the other role, and "strain-based work-family conflict," in which there is an element of intrusion or interference by strain symptoms. Results indicated that women and men reported similar levels of work-family conflict, although there were some differences in the relative importance of the sources of conflict by gender. For men, autonomy (ability to use one's own approach on the job) and work schedule flexibility (ability to make adjustments concerning daily work hours) were negatively related to strain-based conflict. For women, autonomy was the only significant variable related to work-family conflict; the relation was negative, in that the greater a woman's ability to use her own approach on the job the less work-family conflict she experienced. Flexibility was unrelated to work-family conflict. Perhaps for this group of highly educated women, the measure of "autonomy" was a better index of their work flexibility, in that higher status within an organization may have been associated with the freedom to change working hours. Another explanation is that work-family conflict may be decreased more by having a rewarding (autonomous) occupation than by being able to change one's hours to take care of family matters (flexibility). It should be pointed out that, because the 119 couples in this sample were highly educated and cannot be considered an occupationally diverse group, the findings may not be generalizable to the larger population.

Bohen and Viveros-Long (1981) investigated the prediction that flexible work schedule would have a positive effect on the ability of families to balance their work and family lives.

They had 706 federal employees, some in an agency on "standard time" and some in a "flexitime" agency, complete questionnaires measuring work-family conflict, participation in family work (number of weekly hours), and family equity (sharing of family work between husband and wife). The expectation that parents on flexitime would experience less work-family conflict was not supported. Mothers and fathers, whether married or single, did not have less work-family conflict than those on standard time. With regard to family work, as measured by hours spent on home chores and child rearing, they found that the flexitime mothers did one and one-half hours more family work per week than their standard time counterparts and also a larger share of the work in relation to their husbands than their standard time counterparts. However, men on flexitime with employed wives did not spend significantly more time on family work than those "standard time" husbands with employed wives. With respect to family equity, it was found that men with employed wives reported doing 40% of the home chores in their families, irrespective of work schedule. In other words, schedule flexibility had no significant influence on the reported sharing of family work. When asked who takes the primary responsibility for family work in the family, less than 40% of the women said the responsibility was equally shared with their husbands and only about a third of the employed women expressed a desire for their husbands to do more around the house. The majority (65%) of women in both the standard and flexitime groups, however, indicated that they would like their husbands to spend more time with their children. The findings suggest that flexible work schedules are not associated with lower work-family conflict or a more equal sharing of family work. It should be noted that the samples were drawn from two selected federal agencies and, therefore, the results cannot be generalized

outside of those two agencies. Also, "before and after" data were not obtained to determine whether there were changes in family functioning (e.g., family equity as measured by family work) as a result of flexible work schedules. As well, information regarding changes in behaviour or perception of work-family conflict after "flexitime" began was not provided.

One of four antecedents of work-family conflict examined by Guelzow et al. (1991) was flexibility of work hours (being able to take time off work for family needs). They found that having a flexible work schedule significantly reduced work-family conflict in men but not in women.

Thus, it appears that work characteristics do not fully explain the variance in the reported work-family conflict of dual-earner couples. For example, work flexibility was not consistently found to be related to work-family conflict, and where a relation was found, there was evidence that gender may have played an important role in its impact on work-family conflict.

Family Characteristics and Work-Family Conflict

Number of Children. Keith and Schafer (1980) predicted that the number of children in the home would be positively associated with work-family conflict. As predicted, men and women with more children at home experienced greater work-family conflict than couples with fewer or no children in the home. Similarly, Voydanoff (1988) found that the presence of children in the home, regardless of age, was positively related to work-family conflict.

Guelzow et al. (1991) found that there was a significant positive direct effect of number of children on work-family conflict in men, but no effect was found in women (even when there were young children in the home). This finding is in contrast to other studies which have

emphasized the increased time and energy required by mothers when there are young children in the home, and lends further support to the notion that gender may play a more important role in work-family conflict than objective work and family characteristics.

Age of Youngest Child. Kelly and Voydanoff (1985), in a study of 486 working parents, reported that the presence of a child under the age of six was among the strongest predictors of work-family conflict. Friedman (1988) reviewed five studies from the 1980's in which employees at various levels and in various occupations were asked questions about balancing work and family responsibilities. Friedman reported that the presence of a young child in the home was consistently linked with increased work-family conflict in men and women. Parents with young children reported experiencing stress associated with coordinating outside child care arrangements, taking time off to look after a sick child, and losing productive time at work while worrying about their young children. Although both male and female parents of young children reported experiencing difficulties balancing their work and family responsibilities, Friedman found that work-family conflict was generally greater for the mothers than for the fathers, and frequently resulted in higher absenteeism and decreased productivity in the female employees as compared with the males.

To summarize the evidence described thus far, there does not appear to be consensus with regard to the objective or "rational" work and family characteristics and the experience of work-family conflict. Rather, it appears that work-family conflict may be moderated by other factors (O'Neil and Greenberger, 1994). One factor that has frequently been offered as having a significant moderating effect on work-family conflict, for which there appears to be considerable evidence in the studies reviewed thus far, is gender and gender-role socialization

(Barnett, Biener, & Baruch, 1987). The association between gender-roles and work-family conflict will be examined in the following section.

Gender-Roles and Work-Family Conflict

From the perspective of gender-roles, the amount of work-family conflict an individual perceives is assumed to depend, not on objective conditions associated with the performance of roles, but on the individual's perception of his or her gender-role identity. This refers to the individual's concept of what he or she should be doing, with regard to the performance of work and family roles.

The idea that there are different roles for men and women within the family was first introduced into the literature by Parsons and Bales (1955). They described the male role as instrumental and the female role as expressive. The wife provides the expressive nurturance to family members and the husband provides the economic or instrumental sustenance. The separation of work and family was an arrangement that Parsons and Bales considered most beneficial to the family system, as it is in keeping with the gender-specific attributes of the husband and wife. Fundamental to this theory is the assumption that these role expectations are internalized, and men and women are motivated to conform to avoid personal dilemma. Other theorists have maintained that men and women conform to traditional role expectations in order to gain rewards and avoid sanctions from societal pressure. Regardless of which assumption is accepted, the traditional gender-role view is that men and women conform to gender-role expectations to avoid psychological harm.

There is considerable evidence in the literature to support the idea that traditional gender-role attitudes continue to affect the work and family roles for men and women within

the family. The following section will examine gender-role identity as it relates to the work and family roles of men and women and the perception of work-family conflict in dual-earner families.

The Effect of Traditional Gender-Roles on Work Attitudes and Behaviour. Pearlin (1975) studied the antecedents of depression in men and women in various social roles, and found that men were more depressed by strains encountered at work and women were more depressed by marital problems. This gender difference was attributed to the differential importance men and women attach to the work and family domain. Several studies have reported negative outcomes for men and women who do not conform to the traditional gender-role stereotypes of the man going out to work and the woman looking after the children (Staines, Pottick, & Fudge, 1986). These findings are often referred to in the literature as a "breadwinner adequacy" issue for men and neglect of the maternal role for women (Bernard, 1981; Gronseth, 1971).

Rapoport and Rapoport (1985) identified the birth of the first child as "the pivotal point" at which dual-earner couples are faced with these major identity dilemmas concerning their social roles. "Identity tension line" was the term they coined to refer to the limit to which an individual could modify his or her behaviour before psychological discomfort, or tension, arose. For men, tension arises when they take more responsibility in the home or when their wives earn more, are perceived to be more successful than the husband, or are perceived as not fulfilling their family role. For women, tension arises when they begin to doubt their self-perceptions as good wives and mothers.

Brett and Yogev (1988) found that, for men who restructure their work arrangements to accommodate their families, there was an associated psychological cost. These men scored significantly lower on a measure of self-efficacy, which was derived from their responses to questions about how much they considered things to be going their way, whether they were effectively coping with important changes, and whether they considered themselves to be on top of things. The researchers suggested that these men may have felt inadequate, overloaded, guilty, or in too much opposition to traditional sex-role stereotypes.

In a recent study of professional working mothers and their husbands (Emmons et al., 1990), the majority of the women in the sample viewed their careers as having a positive effect on their marital role, but a large percentage of these women viewed their careers as having a negative effect on their parental role, i.e., their relationships with their children (40.4%). Emmons et al. studied the coping strategies these working professional mothers employed to handle their role conflict, and compared the efficacy of these strategies in reducing stress. Of the four categories of coping strategies identified, the "superwoman" strategy, whereby increased demands are responded to with increased effort, was the dominant strategy used. The authors observed that this strategy was associated with benefits for the parenting role, likely because doing things for one's children alleviates worries that the children are suffering because of one's career. The results of the study showed that women worry about fulfilling their traditional role, and will respond to role overload by increasing their efforts rather than by divesting themselves of some of their responsibilities.

Bohen and Viveros-Long (1981) found similar trends when they interviewed mothers and fathers about the general effects of work on family life. Differences were found between

mothers and fathers on a range of work-family attitudes and behaviours. Mothers not only tended to worry more than the fathers about whether they were neglecting their children, but they also tried to spend more "quality time" with their children in an effort to lessen their anxiety. Mills, Pedersen, and Grusec (1989) found similar evidence that women and men differ in how they react when confronted with dilemmas regarding the needs of others based on sex-roles. Evidence that traditional gender-role norms prevail can also be observed in the division of labour in the home.

Gender and the Division of Household Labour. Safilios-Rothschild (1972) reviewed several studies of the division of household labour and reported that women do not appear to want men to perform the amount of housework that they are willing to perform. To account for this, she introduced the notion of the woman's psychological investment in the domain of the home. Women feel psychological pressure to conform to traditional concepts of gender-roles, and deviation from this concept is psychologically uncomfortable or harmful. To avoid such discomfort, women prefer that household work be done by them rather than their husbands.

As an indicator of how powerful gender-role concepts may be in affecting perceptions of equity in the household division of labour, DeFrain (1979) found, in a study of 100 "androgynous" parents who believed that they shared child care and work responsibilities equally, that the housework was divided in a traditional manner. Women spent the most time in what would traditionally be considered "women's work" and the men spent the most time in what would traditionally be considered "men's work."

Luxton (1990), in her study of the gendered division of labour in working class families, encountered similar attitudes in the wives she interviewed. She found that 14% of the working mothers in her sample considered the home as their domain and sustained a "full double day of labour themselves," often "running themselves ragged" in their attempts to maintain traditional roles in the family. A further 35% of women were found to maintain gendered attitudes towards division of labour in the home, but "eased up on their standards" and "let their husbands help out" in order to cope. Luxton's study demonstrated that changes are beginning to occur in working class households with regard to domestic sharing, but the exclusive identification of domestic labour as a woman's responsibility is preventing the accomplishment of equity between the sexes. The distinction between the actual time spent doing an activity and the responsibility for seeing that a particular job gets done was an important concept. As in the case of caring for the children, both spouses may share in the day-to-day duties, but in many instances it is the mother who takes the main responsibility for choosing the day care, purchasing clothing, etc. This difference between "helping out" and actually taking the responsibility of caring for children may help account for the differences noted earlier (e.g., Gutek et al., 1991) in the perceived work-family conflict of working mothers and fathers.

Higgins, Duxbury, and Lee (1992), in their study of 14,549 private sector Canadian employees, found that female respondents indicated that they had the primary responsibility for child care in 71.6% of the cases compared to 4.7% of the male respondents. Similarly, Emmons et al. (1990) found that, although the majority (62.8%) of the professional working mothers in their sample described their husbands as contributing a "satisfactory amount"

toward household chores and child care, they also responded that it was their responsibility to see to it that most household tasks (e.g., cleaning the house, managing the finances, grocery shopping, cooking, laundry) were accomplished. The only task for which they considered their husbands to have ultimate responsibility was household repairs. The mothers in this study also appeared to have more responsibility for child care than the fathers. Although husbands and wives agreed that both partners shared equally three of the eight child care activities assessed in the study, the percentage of wives doing more than their husbands was greater than the percentage of husbands doing more than their wives.

Results of Statistics Canada's 1990 General Social Survey showed that the division of labour in the household tends to follow traditional patterns in the majority of Canadian families (Marshall, 1993). According to the data collected, women are likely to assume primary responsibility for housework (e.g., meal preparation, meal clean-up, house cleaning, laundry) and men are likely to assume primary responsibility for repairs, maintenance, and outside work. In families in which both partners were employed full-time, this was also the case. The majority (80%) of working wives had responsibility for all or most of the daily housework. Only 10% of the dual-earner couples reported sharing responsibility for the housework equally, and in 10% of the couples the husband had all or most of the responsibility for housework. Several characteristics were associated with the likelihood that the wife would not be solely responsible for the housework. Younger couples (under 35) were less likely than older couples (35-64) to have the wife assume full responsibility for the housework. Couples with one child were also less likely than couples with four or more children at home to have the wife assume full responsibility for the housework. This finding

suggests that women with larger families and greater household workloads do not receive more help from their husbands, as would be expected. According to this study, they actually receive less help from their husbands. The education of both partners and relative incomes of husband and wife also made a difference. In those couples with higher educational attainment and in which the wife's income was equivalent to the husband's, the wife was less likely to assume sole responsibility for the housework. It should be noted that responsibility for child care was not measured in this survey; therefore, the extent to which the husbands took a more active role in this activity is unknown.

Thus, although some characteristics are associated with a more equal sharing of domestic responsibilities, particularly in couples with one child, it appears that traditional gender-role patterns are continuing to have an impact on dual-earner couples' attitudes and behaviour regarding their roles within the home. Given the greater psychological investment in the home of women than men, one can speculate that home-based employment may provide greater opportunity for working mothers to perform their family roles, thereby decreasing their perception of role overload. Alternatively, their presence in the home may cause their husbands and children to do less, thereby increasing their work load and their perception of work-family conflict. In order to predict whether fulfilling family and work roles in one location will result in more or less work-family conflict for women with young children, more evidence is needed regarding the permeability of the work-family boundary.

Work-Family Boundary Permeability and Work-Family Conflict. Pleck (1977) suggested that the boundaries of men's and women's work and family roles are "asymmetrically permeable." Whereas family responsibilities are allowed to intrude upon women's work, the

work role is allowed to intrude upon men's family role. An examination of the research which has directly or indirectly tested this model will follow. The results will have obvious relevance for predictions regarding the work-family conflict experienced by women when there is no work-home boundary, as in home-based employment.

Duxbury and Higgins (1991) examined gender differences in the antecedents and consequences of work-family conflict in a sample of dual-career managers and professionals. They reported gender differences in 11 of the 17 comparisons tested, many of which provided support for Pleck's hypothesis that wives would allow their family lives to intrude into their work lives more and men would allow their work lives to intrude into their family lives more. Duxbury and Higgins suggested that women who are highly involved in their work role may have greater work-family conflict, due to anxiety and guilt associated with not performing traditional roles. Men who are active in their family roles may also experience greater work-family conflict due to anxiety associated with a lower commitment to their jobs. They concluded that the gender differences observed in this study support the notion that there have been few changes in societal expectations regarding traditional sex-role norms for men and women in performing work and family roles (Hoschschild, 1989; Rapoport et al., 1976).

In keeping with Pleck's notion of gender-based boundary permeability, Andrews and Bailyn (1993) surmised that men and women have different "mental models" of family and work, which affect the direction of spillover between the two spheres. Through interviews with a small sample of MBA graduates ten years after graduation, they found a strong association between gender and perceptual framework. They described men as having a "segmented" mental model, essentially keeping work and family spheres separate, while they

described women as linking work and family in a more "synergistic" way. The women tended to view their own work, their partner's work, and the marriage as being related, such that the more positive one was viewed the more positive the others were viewed. The men either perceived no effects of one sphere on the other, or felt that their career caused problems for their personal relationship. However, in another study, Sekaran (1988) found that it was the men rather than the women who demonstrated more potential for integrating their family and work roles. Sekaran suggested that whereas women cannot fulfil the traditional family role while at work, the traditional "breadwinner role" allows men to feel that they are fulfilling their family roles without having to meet additional demands within the home. Thus, although family and work demands may compete for women's time, they can be satisfied concurrently by men.

Hall and Richter (1988) examined the concept of work-family boundary permeability and found some differences between men and women, but reported primarily on employees as a group. They found that, in general, employees tended to start thinking about work long before they left home in the morning, but did not start thinking about home until they left work in the evening. They found that women thought about work more often at home, but men actually brought work home more. Hall and Richter also concluded that interference is more easily dealt with when home issues come to work than the reverse, and that people have a need to psychologically and physically separate work from home. They suggested the "daily commute" to and from work may be an important "buffer" between work and family stressors. Hall and Richter predicted that when a person is called on to perform two roles simultaneously there is a greater opportunity for role overload and conflict. They

recommended against working at home as a remedy for work/life conflicts and suggested that there is a need for the separation of the two domains.

Taken together, these studies suggest that the boundary between work and family may be more permeable for women than for men, at least on the level of cognition. It is not clear, however, whether working at home should have a negative or positive impact on women's work-family conflict. If, as suggested by Hall and Richter (1988), women are unable to psychologically separate their two roles while at home, they may experience role overload and conflict. It may be, however, that women experience greater "synergy" by being in the home and feeling that they are fulfilling their traditional family roles while retaining their other potentially rewarding role as worker. This may help them cope with the tension arising from conflict between their work and family responsibilities.

Summary

Work-family conflict has been described as role overload or strain arising from the difficulties associated with the performance of multiple roles (spouse, parent, worker). However, the above review of the literature suggests that work-family conflict may not be related to the amount of time and energy expended or the number of roles performed. Work and family characteristics explain only a portion of the variance in work-family conflict levels. Gender-role identity, on the other hand, appears to be a significant factor in the perception of work-family conflict. Traditional gender-role ideology continues to influence the way in which men and women fulfil their work and family roles, and their perceptions of work-family conflict.

In order to determine whether home-based employment will affect the experience of work-family conflict in dual-earner women with children, more information is needed regarding this work arrangement. The next chapter will describe home-based employment and review the available literature concerning its relation to the work-family interface.

Chapter 3

Home-Based Employment and Work-Family Conflict

Definition of Home-Based Employment.

It is important to note that home-based employment is referred to in the literature by numerous terms. In the domain of family economics, home-based employment is frequently referred to as "at-home income generation." In the area of organizational behaviour, descriptors such as "teleworking," "flexiplace," "outwork," "piecework," "cottage industry," "homework," and "telecommuting" are widely used. In the family dynamics literature, the terms "work-at-home" and "home-based employment" are popular. Not surprisingly, there are also different definitions of home-based employment. Stafford, Winter, Duncan, and Genalo (1992) defined it as "income-generating activity that is either performed in the home or on the land immediately surrounding the dwelling; or work that is based in the home for which there is no regular work space, such as an office." In this definition, the worker may perform his or her services away from the primary dwelling, but the crucial aspect appears to be that part of the dwelling is devoted to the income-generating activity. Other definitions of home-based work have been considerably more inclusive. Orser and Foster (1992), in a major study of Canadians in the home-based work force, used the definition of "any paid work activity in or from the home." Included in this definition, besides the part-time and full-time business owners, were what the researchers called "substituters," or employees who spend the work day at home, and the "supplementers," or the employees who have regular offices but bring work home with them. In Horvath's (1986) demographic study of homeworkers, a further criterion was included in the definition, that being that the work had to be the "primary

employment" of the worker. Keeping in mind that there is considerable variation in the definition, the following sections will review the available literature on home-based employment. The purpose will be to examine the characteristics of the work-at-home population, and to report on those studies in particular which have dealt with issues related to the work/family interface. To date, women's work-family conflict in home-based versus regular employment has not been the subject of any known scientific work.

The Growth of Home-Based Work.

There have been a number of explanations offered in the literature as to why home-based employment appears to be increasing in popularity in the United States and Canada. One specific occurrence, the lifting of bans on home-based work by the U.S. Department of Labor, was frequently mentioned as a major contributing cause in the rise of home-based employment in the United States (Christensen, 1988). Another explanation has been the unstable economy of the 1970's and 1980's, causing a decrease in traditional corporate hiring practices and a resulting increase in alternative forms of employment (Shamir, 1992). Rowe, Stafford, and Owen (1992) studied the length of time home-based workers had been involved in home-based employment and concluded that many had started during the recession of 1980 and 1981. Also mentioned has been the trend of companies looking to decentralizing employees as a method of reducing overhead and thus reducing costs. With workers linked to their office by computers, modems, video screens, and faxes, companies could save on overhead costs of providing central workplaces.

Benefits to society at large have also been mentioned, through a reduction in energy costs, and other costs associated with the daily transportation of employees to and from their place

of work. By eliminating the daily commute to work for a certain percentage of workers, cities could see lower levels of toxic emissions, fewer motor vehicle accidents, and lower costs to maintain roads and highways. Benefits for families have also been mentioned, with the increase in the number of dual-earning households frequently suggested as being the catalyst.

Despite discrepancies in defining and gauging the growth of this segment of the working population, several North American surveys have provided data on the prevalence of home-based employment based on their own unique definitions of it. The most recent surveys include the U.S. 1985 Current Population Survey, the U. S. 1984 Panel Study of Income Dynamics, the LINK Resources Corporation 1991 Survey, the Electronic Services Limited 1987 Survey, the Cooperative Regional Research Project (NE-167), the 1991 Survey of Work Arrangements, and the 1991 Gallup Poll conducted in Canada. When home-based employment is defined broadly as referring to all paid work in the home, including secondary employment and work done at home by employees who have a regular workplace, it is estimated that approximately 15% of the U.S. non-farm workforce work at home (Horvath, 1986; Kelly, 1988; Kraut, 1989). This would involve approximately 17.3 million workers in the U.S., based on the 1985 Current Population Survey (Horvath, 1986). The home-based segment of the population also appears to be increasing faster than the general workforce. In the U.S., home-based employment increased by 20%, as compared to 8.3% for the entire civilian labour force from 1980 to 1985 (Horvath, 1986).

Using the broad definition discussed above, according to the Gallop Poll 23% of the Canadian workforce can be classified as home-based (Orser & Foster, 1992). Using the more conservative definition, which includes those workers who work at least half time from home

either for themselves or for a primary company, the estimates are lower: 10% of Canadian households are considered to have a home-based worker. (Orser & Foster, 1992). These figures appear to be in contrast, however, with the results of a 1992 study of 14,549 Canadian private sector employees (Higgins, Duxbury, & Lee, 1992), in which only .5% of the sample reported regularly working from home. A related study of public and private sector employees (Higgins, Duxbury, Lee, & Mills, 1992) reported that the use of work-at-home arrangements in the private sector was "virtually identical to public sector findings," although interestingly, fewer private than public sector employees reported being attracted to this alternative.

Characteristics of the Home-Based Worker

A number of studies, all originating from an American nine-state project (NE-167) focusing on resource management issues involving "at-home income generation," have examined and described the characteristics of the home-based worker. Masuo, Walker, and Furry (1992) found that 58.1% of the home-based workers in the sample were male, 85% were married, and the average age was 44 years. Most home-based workers (87.3%) were homeowners, and the average household size was 3.4 people. A further distinction was made between business owners and wage earners, in order to compare them on various worker characteristics. Business owners predominated in the sample, and earned an average of $9000.00 per year less than the wage earners. The split between full-time and part-time workers was almost equal. The average number of hours worked per week was 36.9, and the work was generally not seasonal. The average number of years in home-based work was just over nine. Fifty percent of the sample of workers were occupationally categorized as working

in the fields of marketing and sales, contracting, or mechanical and transportation. This finding is in contrast to Horvath (1986), who found that most of his home-based workers were in managerial and professional jobs, followed by jobs in the technical, sales and administrative support fields. Behr and Lazar (1983) identified a list of more than 200 possible occupations or industries that could be performed from a home base, and it is likely that this number has increased over the past twelve years with advances in electronic technology.

Rowe and Bentley (1992) examined the gender distinction of the home-based workers in the NE-167 sample and found that 99.4% of the service-workers were female, 74.8% of the clerical workers were female and 64.1% of the craft-workers were female; this compared with a predominance of males in the contracting (96.5%), mechanical (93.5%), and professional and technical (75.1%) fields. The workers in the NE-167 sample were also more highly educated than those in previous studies (Heck, 1987), having an average of about two years of education beyond high school graduation.

Loker and Scannell (1992) further analyzed the data collected by the nine-state research project, classifying the subjects into nine clusters. They determined that the female home-based workers comprised 41% of the total sample, earned below the mean income of the sample, were predominantly the household manager as well as the home-based worker (90%), and were also dual job holders (91%). They had the highest representation in the service, marketing/sales, and artisans/crafts occupational categories. Two-earner households comprised 20% of the home-working population with male home workers making up 97% of this cluster. A surprising finding of the study was that the technical (12%) and clerical (6%)

occupations were not as highly represented in this study as would be expected given the potential for electronic link-up of home and office.

Lee, Duxbury, Higgins, and Mills, (1992) in their follow-up study of 489 parents employed in the federal public service in the National Capital Region, found that one in ten of these women had jobs in which there was an opportunity to work at home, as opposed to less than 3% of the men interviewed. They further determined that the women who were more likely to be able to work at home were in "career" rather than "earner" positions.

Management of Home-Based Work and Family

According to a recent study (Heck, Saltford, Rowe & Owen, 1992), there has been limited investigation into the relation between home-based employment and the management of child care, despite the widespread belief that a major motivation for women to work at home is that it allows them to care for their children (Beach, 1985; Horvath, 1986). From the few existing studies (Ahrentzen, 1990; Christensen, 1988), however, it has been shown that working at home does not necessarily eliminate the need for child care during working hours. Furthermore, in a recent analysis by Heck et al. (1992), gender was not significantly associated with using outside child care services. Female home-based workers were found to use outside child care as frequently as male home-based workers. Heck et al. also found that the use of child care services was more prevalent in the home-based workers who were younger, had higher incomes, and were parents of toddlers, than it was in those working in more professional occupations.

Heck (1992) found that the presence of children has a significant effect on the number of hours worked by a home-based worker, with a reduction of approximately one day per week

occurring with a child in the household. Results varied, however, between male and female home-based workers, such that the males did not decrease their hours to the same degree. This might be interpreted to mean that women are more inclined than men to spend time with children while they are involved in home-based work.

Most studies are consistent in showing that the population of home-based workers is not homogeneous; rather, there are a variety of family types that engage in home-based work and they do so for a variety of reasons. In the American nine-state research project (NE-167), 61% of the sample lived in full-nest families; that is, families which included two parents and one or more children (Heck, 1992). The effects of home-based work on family functioning in such families was examined in several studies (Rowe & Bentley, 1992; Winter, Puspitawati, Heck, & Stafford, 1993; Owen, Rowe, & Gritzmacher, 1992).

Rowe and Bentley (1992) sought to determine whether blending work and family space is more or less disruptive to the full-nest family. They found that, in these families, male home-based workers were more likely than female to have a distinct work space. In addition, male home-based workers seldom experienced simultaneous activity of work and family responsibilities, and were less likely to have to adapt to family interruptions than their female counterparts. Women, on the other hand, curtailed hours, rescheduled work times, and shared work spaces more. The prime advantages stated by female workers were "care of family," and "flexibility to work in my own way, at my own pace." The male workers also mentioned flexibility as an advantage, but preferred to call it "being my own boss," with "low overhead" and "save on time" as further reasons for working at home. Both male and female workers commented that the major disadvantages were "working too much, can't get away from

work," "can't separate family and work," "frequent interruptions," and "lack of privacy." Married men earned the most money but also spent the most time working. Women home-based workers with full-nest families, on the other hand, worked fewer hours and in lower paying occupations than men. Both male and female home-based workers in the study reported high levels of life satisfaction, except in the case of single-parent families where it was hypothesized that their earnings were likely not adequate to meet their family's needs.

Winter et al. (1993) interviewed the "household manager," who was defined as "the person who takes care of most of the meal preparation, laundry, cleaning, scheduling family activities, and oversees child care," to determine what strategies were used to cope with the demands of home-based work. The most popular strategy was reallocation of personal time, but this varied according to whether the household manager was also the home-based worker. The analysis did not include a breakdown by gender; hence, further comparisons could not be made.

Loker and Scannell (1992) also reported gender differences in the division of labour in two-earner households where one partner works at home. They determined that only 11% of the home-based workers, 97% of whom were male, were also the household manager, or the person most responsible for seeing that the household duties, including child care, were performed. In contrast, 90% of the female home-based workers considered themselves the household manager in the family. This finding, that male home-based workers were rarely also the partner responsible for seeing that household chores are performed, emphasizes the significance of the gendered division of labour.

In Ahrentzen's (1990) study of male and female professional homeworkers, the strategies employed to manage role conflict by managing boundaries were examined. Ahrentzen reported that 69% of her sample had "exclusive" work spaces, and that over half had rules for family members limiting their access to areas of the home while the homeworker was working. Many of the homeworkers rescheduled family and work activities to minimize conflicts; for example, limiting times when the television can be on, using telephone-answering machines, and timing work to suit nap times and school schedules. The behavioural boundaries which homeworkers altered to manage conflict included eliminating various activities such as entertaining, and starting various activities such as outdoor exercise and social contacts outside the home. Another type of behavioural adjustment included the "rituals" which over one half of the sample (57.4%) of the homeworkers enacted to replace what would have been the daily commute between their homes and offices. The most commonly cited activities included going outside, physical exercise, showering, and "dressing up." Although role conflict did not necessarily result from the role overlap reported, many examples of how their domestic responsibilities and work activities conflicted were cited by the homeworkers in the study. These included child-related interruptions and demands from family members and relatives during working hours, being tempted to do other things around the house rather than working, being tempted to work at all hours, and business interruptions during non-work times. Many homeworkers felt they were "doing more around the home now" and expressed a tendency for others to expect more housework done even though they were working. Although household division of labour and gender differences were not specifically examined,

the possibility was mentioned that "many women homeworkers may still bear the brunt of domestic chores."

Summary

Home-based employment is growing in popularity, with studies reporting participation rates as high as 23% of Canadian households involved in some form of home enterprise (Orser & Foster, 1992). Studies have examined various characteristics of the home-based worker. For instance, using the NE-167 data, Masuo et al. (1992) reported that the average age of the home-based worker was 44 years and Rowe and Bentley (1992) reported that the home-based worker in the sample had an average of two years of education beyond high school. The women tended to work less hours than the men in the sample and also earned less income than their counterparts. The benefits of working from home have been emphasized in the popular literature, but no studies to date have looked at this arrangement and the relation between the characteristics of these workers and work-family conflict.

In previous research, attention has been paid to the effects of other "family responsive policies for the workplace," such as flexible schedule (Bohen & Viveros-Long, 1981), but resulting decreases in women's work-family conflict have not been found. Gender-role socialization has been provided as an explanation as to why these strategies do not serve to help those who could benefit most. The inequity in the division of household labour clearly indicates that the traditional roles for men and women continue to influence role-sharing behaviour in working couples. Gender differences in how men and women view their family and work roles are a consistent theme throughout the literature, in traditional working couples and home-based couples. The evidence is not clear, however, as to whether home-based

employment increases or decreases work-family conflict in women in dual-career couples with children.

Throughout the literature, researchers have attempted to link various family and work characteristics and demands to the experience of work-family conflict. Results have been inconclusive and sometimes contradictory. Many studies have used small samples of highly educated or professional couples (Guelzow et al., 1991; Gutek et al., 1991). Other studies have used data from larger samples that were collected in the 1970's (Moen & Dempster-McClain, 1987; Pleck, Staines, & Lang; Voydanoff, 1988). There has been no consensus on the variables which decrease women's work-family conflict. Certain variables are reported to be related more frequently than other variables, but the role of "subjective" forces, such as gender, is also significant.

Chapter 4

Objectives of the Study

The first objective of this study was to examine the characteristics of home-based working women in dual-earner couples with children. Home-based working women may differ from women who work outside the home in certain work, family and demographic characteristics. Work characteristics that may differentiate between the two groups include total number of hours in paid work, work flexibility, and type of occupation. Previous studies have provided some evidence that the amount of time spent in paid work and the work schedule are related to work-family conflict, (Keith & Schafer, 1980; Voydanoff, 1988), presumably because of their effects on women's available energy. The two groups may also differ with respect to their occupational classification, as type of occupation may be related to work characteristics associated with work-family conflict.

Family characteristics that may distinguish between the two groups include age of youngest child, family size, and family income. In previous studies, it has been found that the age of youngest and family size are related to work-family conflict (Keith & Schafer, 1980; Kelly & Voydanoff, 1985), possibly because having a young child and a larger family would lead to energy depletion. Total family income was also considered an important characteristic to examine, as it is generally accepted in the literature that, because higher income is associated with greater levels of general well-being, it may also be associated with lower work-family conflict.

Differences in demographic characteristics were also examined. In several studies (Heck, 1992; Masuo et al, 1992; Rowe & Bentley, 1992), differences were found between

home-based workers and the general population in various demographic characteristics (e.g., age, education) which may be linked to work-family conflict. Thus, home-based dual-earner women with children and their counterparts working outside the home were compared to determine if they differed in age or education.

The second objective of this study was to determine whether home-based women as a group would report lower levels of work-family conflict than their counterparts who work outside the home. It appears that, even today, women in dual-earner couples with children are traditional in their gender-role concepts. There is no evidence that home-based women in dual-earner couples are any less traditional. In fact, one of the most frequently reported reasons women have given for working at home has been care of family (Rowe & Bentley, 1992). Therefore, in keeping with the idea of the importance of gender-role identity and socialization, it was hypothesized that working at home would contribute to women's sense of fulfilling their family roles, thereby reducing work-family conflict. This theme has frequently been presented in the literature with respect to men simultaneously fulfilling their work and family roles through working. The hypothesis as it relates to women with young children can be stated as follows: among dual-earner couples with children, perceived work-family conflict will be lower in women who are home-based than in women who work outside the home (Hypothesis 1).

A third objective of the study was to determine whether, in addition to the wife's workplace location, the husband's workplace location would also be related to women's work-family conflict. Women whose husbands do not "go out to work" may find this arrangement more conflictual than those whose husbands have traditional workplace

employment. As in previous studies where men have had flexible schedules (Bohen & Viveros-Long, 1981), it is possible that they maintain their lower participation rates in housework despite being in the home. This, in turn, may cause conflict for their wives arising from a perception of inequity (Guelzow et al., 1991), and increase their wives' work-family conflict. Following from this reasoning, a second hypothesis was that women's perceived work-family conflict would covary with the husband's workplace location. Among dual-earner couples with children, women's perceived work-family conflict should be lower when the husbands work outside the home than when they work at home (Hypothesis 2).

A fourth objective of the study was to determine how well the couple's workplace location would predict the work-family conflict of women in dual-earner couples with children. As suggested above, a number of work and family characteristics are related to work-family conflict and may be closely associated with workplace location. In order to determine the unique contribution of workplace location, the degree to which this variable adds to the prediction of work-family conflict was assessed over and above the variance accounted for by certain work and family characteristics related to role overload. Specifically, it was postulated that among dual-earner couples with children, women's perceived work-family conflict would be significantly predicted by the workplace location of the husband and wife even after accounting for the variance due to total usual hours worked per week, work flexibility, age of youngest child, family size, and total family income (Hypothesis 3).

The hypotheses were tested using data collected for the 1988 National Child Care Study, a cooperative research project of the National Day Care Research Network, Statistics Canada, and Health and Welfare Canada. The household survey component, known as the 1988

National Child Care Survey, was conducted in September and October of 1988 as a supplement to the September 1988 monthly Labour Force Survey.

Chapter 5

Method

Sample

The September 1988 monthly Labour Force Survey (LFS) selected households for inclusion by means of a stratified, multi-stage cluster sampling technique. This technique involves selecting six rotation groups of 9000 dwellings each, one of which rotates out of the active sample each month and is replaced by a new group. For the purposes of the National Child Care Study (NCCS), which focused on families with children, five of the six active rotation groups were used and an additional eight rotation groups that had previously rotated out were added to the sample, as only 30% of Canadian households have a child under 13 years of age. A member of each of the selected households was then contacted to identify families with at least one child younger than 13 years of age. Then, the Labour Force Survey was administered and the NCCS interview was done with the parent who was identified as most responsible for arranging child care for the family. The response rate was 84.3% of the selected households. Approximately 90% of the respondents were interviewed over the telephone; the remainder were interviewed in person. The length of the average interview was approximately three quarters of an hour.

The sample at the stage of the LFS and NCCS interview consisted of 24,155 families with a total of 42,231 children under the age of 13 years. The majority of families were drawn from urban areas of 100,000 or more. Approximately 85% of the families could be considered two-parent families; on average, they had one or two children. The Interviewed Parent (IP) was almost always female (95.5%). The mean age of the IP was 33.2 and the

mean age of the partner was 35.8. Only 34% of the IPs were unemployed and not looking for work, and almost all the partners of the IPs were employed full-time. Among all families in the study with at least one child under the age of 13 years, the most common employment pattern was the dual-earner family (49.2%).

The Canadian National Child Care Study was designed to provide descriptive information on the nature of current child care needs, child care use patterns, cost of care, and parental preferences among child care alternatives. It was also designed to provide information about the ways in which family, child care, and employment variables are interrelated (Lero, Pence, Shields, Brockman, & Goelman, 1992). The respondents who worked at home were classified as such if they answered "none, works at home" to the question, "What is the approximate distance from your home to your (main) place of work?" The respondents with spouses who worked at home answered "none, works at home" to the question "What is the approximate distance from your home to his/her place of work?" According to Lero, Brockman, Pence, Goelman, and Johnson (1992), 9.1% of the employed parents with primary child care responsibilities surveyed were home-based (2,198 respondents); of these, 5.8% were self-employed and 3.3% were paid workers. Self-employed individuals were owners and operators of small businesses, professionals in private practice, and various free-lance artists, tradespeople, private nurses, home care providers, and service workers. Paid workers were employed within the private sector or by governments.

As noted above, there were 24,155 families in the NCCS, i.e., households with a child under 13 years of age. To be included in the present sample, however, the respondent had to be in a dual-earner couple in which both partners were reported as working full time (at least

30 hours per week), and for whom there were data regarding the respondent's level of work-family conflict. A total of 4,743 women met these criteria; of these, 199 indicated that they were home-based (9% of the total number of home-based respondents in the NCCS), and 4544 indicated that their workplace was away from their home. When the workplace of both the respondent and her husband was considered, the sample was further broken down into four groups according to the couple's workplace location. The largest proportion of the women were in a non home-based couple (93%, $\underline{n}$ = 4,405); the remainder were either in a home-based couple (2%, $\underline{n}$ = 95), a couple in which the woman was home-based and her husband was non home-based (2%, $\underline{n}$ = 104), or a couple in which the woman was non home-based and her husband was home-based (3%, $\underline{n}$ = 139).

Measure of Work-Family Conflict

Work-family conflict, or "work/family/child care tension" as it was referred to in the NCCS, was measured by the IP's self-report response to the question: "While things vary from day to day, overall, how much tension do you feel in juggling work, family and child care responsibilities?" (Question P4 of the NCCS). Responses were rated on a 10-point scale ranging from "no tension" (1) to "a great deal of tension" (10). Higher scores reflected greater work-family conflict. There was no direct evidence of the reliability of the measure. There was, however, some evidence of the measure's concurrent validity; specifically, it was strongly related to the NCCS respondents' preference to change their work schedule from full-time to part-time, which is considered an indirect measure of work-family conflict (D. Lero, personal communication March 24, 1995).

It should be noted that only those respondents who responded "yes" to the question, "Does anyone other than you or your spouse look after any of your children (your child) while you are working?", were required to answer the question concerning work-family conflict. Thus, by virtue of the staging of the questions, women in dual-earner couples with children who were cared for exclusively by a parent or parents were not represented in the sample.

Measures of Work and Family Characteristics

The NCCS included measures of several work and family characteristics, some of which, as reported earlier, have been linked to women's role overload and role conflict (e.g., Keith & Schafer, 1980; Voydanoff, 1988): total usual hours worked per week, work flexibility, occupational classification, family size, age of youngest child, and family income. Total usual hours worked per week was computed using a question from the LFS in which respondents were asked "how many hours per week do you usually work at your main job?" The responses were coded from 1 to 50 hours, where 50 included 50 hours and over. Work flexibility was measured on the basis of the respondents' answers to the question, "Can you be flexible in the hours you work?" The response options were "yes," "no," or "don't know." Occupational classification was measured using information from the LFS which asked the respondent to describe his or her main job or business. Responses were classified into one of seven categories defined by Statistics Canada in the Standard Occupational Classification (1980): "managerial and other professional;" "clerical;" "sales;" "service;" "primary" occupations; "processing, machining and fabricating;" and "construction, transportation, equipment, material handling and other crafts." Age of youngest child was computed using the date of birth of the youngest family member from the Household Record Docket of the

LFS, listing all household members in the selected dwelling. The responses ranged from 0 to 12 years. Family size was measured by a count of the respondent, the spouse and the number of children under 16 years. Family income was measured by asking respondents to estimate their own and their spouse's 1987 total income from wages and salaries before taxes or deductions, or net income from self-employment. The estimates were then combined and classified into the following six categories: 1 = $0 - $10,000, 2 = $10,001 - $20,000, 3 = $20,001 - $30,000, 4 = $30,001 - $40,000, 5 = $40,001 - $50,000, 6 = $50,001 and over.

Demographic Variables

The following demographic characteristics were assessed: age of respondent and level of education. Age of respondent was computed using the respondent's date of birth from the Household Record Docket of the LFS, listing all household members in the selected dwelling. It was measured according to five categories, as follows: 15-19 years, 20-24 years, 25-34 years, 35-44 years, and over 45 years. Education of respondent was classified according to five categories, as follows: none or elementary, high school (some or all), some post-secondary, post-secondary diploma, and university degree.

Chapter 6

Results

Differences Between Home-Based and Non Home-Based Women

The first objective of the study was to examine the characteristics of the home-based women in the sample and compare them to the characteristics of their non home-based counterparts. The two groups of dual-earner women with children were examined with respect to a number of work and family characteristics, and several demographic characteristics.

Work Characteristics. A breakdown of the sample with respect to respondents' work characteristics, as a function of workplace location, is given in Table 1. The work characteristic of total usual hours worked per week was examined to determine if there was any significant difference between the home-based and non home-based women in time spent working. As noted earlier, the sample was restricted to those women who generally worked 30 or more hours per week. However, there was a small group of individuals in the sample who, while they worked less than 30 hours at their main job, considered themselves employed full time. This meant that the variable, total usual hour worked per week, was skewed and could not be analyzed parametrically. Instead, the variable was grouped into five categories, and a chi-square test was computed in order to compare the home-based and non home-based women with respect to hours spent working. As shown in Table 1, the home-based women were much less likely to work a standard 35 - 40 hour work week than the non home-based women, with the greatest proportion of home-based women being in the 45- 50+ category (38.69%), $\underline{X}^2$ (4, $\underline{N}$ = 4,743) = 281.42, $\underline{p}$ < .001.

Table 1

Work Characteristics of Home-Based and Non Home-Based Women

	Home-Based Women		Non Home-Based Women	
	n	%	n	%
Total Usual Hours Worked				
< 30	19	9.6	79	1.7
30 - 34	36	18.1	521	11.5
35 - 39	17	8.5	1,668	36.7
40 - 44	50	25.1	1,866	41.1
45 - 50+	77	38.7	410	9.0
Occupational Category				
Managerial and other Professional	23	11.6	1,706	37.5
Clerical	37	18.6	1,441	31.7
Sales	17	8.5	319	7.0
Service	41	20.6	447	9.8
Primary Occupations	75	37.7	117	2.6
Processing, Machining and Fabricating	4	2.0	355	7.8
Construction, Transportation Equipment Operating, Material Handling, Other Crafts	2	1.0	159	3.5
Type of Family				
Farm	84	42.2	141	3.1
Non Farm	115	57.8	4,403	96.9

Next the occupational classification of home-based and non home-based women was examined to determine whether there were any significant differences between the two groups. To determine if there were any significant differences between the two groups of women, a chi-square analysis was computed. This analysis indicated that the two groups were composed of significantly different types of workers, X^2 (6, N = 4,743) = 660.61, $p < .001$. A combined 58.3% of the home-based women were in occupations classified in the "service" or the "primary occupations" categories, while 69.2% of the non home-based women were in occupations classified in either the "managerial and other professional" or the "clerical" categories.

Because 37.7% of the home-based women were classified as being involved in a primary occupation (farming, fishing, hunting, forestry, or mining), a further comparison of the two groups was done to determine whether more home-based than non home-based women were members of a farm family. For purposes of the survey, a farm family was one that lived in a rural area, in which either the respondent or the spouse was self-employed, and in which the occupation of either the respondent or the spouse was classified as farming or related to farming. The comparison of home-based and non home-based women living in a farm family is shown in Table 1. Significantly more home-based than non home-based women (42.2% vs. 3.1%, respectively) were living in a farm family, X^2 (1, N = 4,743) = 645.28, $p <$ .001. A further breakdown of the respondents who were classified as working in the primary occupations revealed that 88% of the home-based women in this category lived on a farm. Only 12% of the home-based women working in a primary occupation did not live on a farm.

Thus, the majority of the women classified as working in primary occupations were likely involved in a farm-related occupation.

The work characteristic, work flexibility, could not be analyzed. As a result of interviewer error, none of the home-based women in the sample had answered the work flexibility question. Consequently, it was not possible to compare the home-based and non home-based women on work flexibility.

Family Characteristics. Home-based and non home-based women were compared to determine whether they differed in the age of youngest child. For purposes of this analysis, mothers were divided into four groups on the basis of the age of their youngest child: 2 years or less, 3-5 years, 6-9 years, and 10-12 years. A breakdown of the sample with respect to this variable is presented in Table 2. To determine if there was a significant difference between the home-based and non home-based women in age of youngest child, a chi-square analysis was computed. There was no significant difference between the two groups. In both groups, the youngest child was 5 years or younger in the majority of families in the study.

The two groups of women were also compared with respect to the characteristic of family size. As the distribution was skewed, the variable was divided into four categories: 3-4 members, 5-6 members, 7-8 members, and 9-11 members. A breakdown of the sample into number of family members, according to workplace location, is shown in Table 2. To determine if there was a significant difference between the home-based and non home-based women, a chi-square analysis was computed. The analysis indicated that there was a significant difference between the two groups in family size, $X^2(2, N = 4743) = 17.79$, $p < .001$. Although both groups tended to have small families (3-4 members), the home-based

Table 2

Family Characteristics of Home-Based and Non Home-Based Women

	Home-Based Women		Non Home-Based Women	
	n	%	n	%
Age of Youngest Child				
0-2 years	71	35.7	1,561	34.4
3-5 years	61	37.2	1,246	34.3
6-9 years	44	22.1	1,157	25.5
10-12 years	23	11.6	580	12.8
Family Size				
3-4 members	140	70.4	3,702	81.5
5-6 members	56	28.1	822	18.1
7-8 members	3	1.5	18	0.4
9-11 members	0	0	2	0.04
Family Income				
$0-$10,000	19	9.6	67	1.5
$10,001-$20,000	29	14.6	823	5.2
$20,001-$30,000	48	24.1	592	13.0
$30,001-$40,000	34	17.1	902	19.9
$40,001-$50,000	27	13.6	939	20.7
$50,001 and over	42	21.1	1,806	39.7

group had a larger percentage of women in families of five members or more (29.6%) than did the non home-based group (18.5%).

The total family income of the two groups of women was compared to determine whether there were any differences between the home-based and the non home-based women in this characteristic. A breakdown of the sample into the six income categories according to workplace location is shown in Table 2. To determine if there was a significant difference in family income between the two groups, a chi-square analysis was computed. The analysis indicated that the two groups were significantly different with respect to family income, X^2 (5, $N = 4,743$) = 137.88, $p < .001$). The families of the home-based women tended to be concentrated in the lower income categories. Almost half of the home-based women (48.3%) were in families where the total family income did not exceed $30,000; by contrast, approximately 20% of the non home-based women were in this income category.

Demographic Characteristics. The age of the respondent was examined to determine whether there was a significant age difference between the home-based and the non home-based groups. As age was represented by categorical data, a chi-square analysis was done to compare the two groups of women. As shown in Table 3, there was a significant difference in age between the home-based and non home-based women, X^2 (4, $N = 4743$) = 11.64, $p < .02$. The home-based women were significantly older than the non home-based women; there was a higher percentage of home-based (45.7%) than non home-based (36.1%) women in the two older age categories.

Finally, the home-based and the non home-based women were compared to determine whether they differed in the level of education attained. A breakdown of the sample with

Table 3

Demographic Characteristics of Home-Based and Non Home-Based Women

	Home-Based Women		Non Home-Based Women	
	n	%	n	%
Age of Respondent				
15-19 years	1	0.5	8	0.2
20-24 years	5	2.5	260	5.7
25-34 years	102	51.3	2,637	58.0
35-44 years	88	44.2	1,557	34.3
45 years and over	3	1.5	82	1.8
Education of Respondent				
None or Elementary	4	2.0	170	3.7
High School (some or all)	98	49.3	2,228	49.0
Some Post-Secondary	26	13.1	400	8.8
Post-Secondary Diploma	49	24.6	1,012	22.3
University Degree	22	11.1	734	16.2

respect to education of the respondent, as a function of workplace location, is presented in Table 3. To determine if the two groups differed in the level of education attained, a chi-square analysis was computed. The analysis showed that the two groups were not significantly different; the sample was distributed in a similar manner over the five education levels, with approximately half of each group possessing at least some post-secondary education.

Effect of Workplace Location on Work-Family Conflict

Hypothesis 1 was that, among dual-earner couples with children, perceived work-family conflict would be lower in women who are home-based than in women who work outside the home. Hypothesis 2 was that, among dual-earner couples with children, perceived work-family conflict would be lower in women whose husbands work outside the home than those whose husbands are home-based.

Descriptive statistics for the variable of work-family conflict, as a function of wife's and husband's workplace location, are shown in Table 4. The mean level of work-family conflict for the sample as a whole (n = 4,743) was 4.23. The standard deviation was 2.25; the scores ranged from 1 to 10. The distributions of work-family conflict in the four groups were somewhat skewed (skewness ranged from .44 to .90), however, the F test is robust against violations of normality. The heterogeneity of variance between the four groups was assessed using Bartlett's test for equality of variances; this test does not require that the sample sizes be equal (Mason, Gunst, & Hess, 1989). The test indicated that the variances were homogeneous, B = 4.88, p = .18.

Table 4

Descriptive Statistics of Work-Family Conflict as a Function of Workplace Location

	Wife's Work Location					
	Home-Based			Non Home-Based		
Husband's Work Location	n	M	SD	n	M	SD
Home-Based	95	4.17	2.4	139	4.32	2.0
Non Home-Based	104	3.90	2.4	4,405	4.24	2.2

Mean work-family conflict is shown in Table 4 as a function of wife's and husband's workplace location. While the hypotheses called for a two-way factorial analysis of variance, with the two independent variables being wife's workplace location (home vs. non home) and husband's workplace location (home vs. non home), the design was disproportionately unbalanced. By far the largest proportion of the women were in a non home-based couple (93%). A major problem in the analysis of such unbalanced data is that differences between the factor means are contaminated by effects of other factors. As a result, methods of partitioning the total sums of squares into the sums of squares for the different effects do not yield identical results, the sums of squares are not necessarily independent of one another, and the F ratios are not distributed exactly according to the F distribution. As well, the power of the analysis is reduced, such that it is quite possible to find a nonsignificant effect when an effect does exist.

One solution to the problem is to adjust the means to remove the contaminating effects. Various methods have been proposed, each of which is appropriate to particular situations. For models containing main effects and interactions, Yates's (1934) weighted squares of means analysis (sometimes referred to as Type III sums of squares) is often recommended (e.g., Milliken & Johnson, 1984; Searle, 1987). In this method, each effect is adjusted for all other effects; that is, for each factor the sums of squares is the estimate that would be obtained from a model in which that factor appeared last. However, when the imbalance is severe, as in the present case, the problem may still remain (e.g., Shaw & Mitchell-Olds, 1993). An alternate solution is to impose balance on the data by discarding subjects from the larger cells.

In order to compare the results obtained by these two different methods, two analyses were done: 1) a weighted squares of means analysis of variance using all the data, and 2) an analysis of variance on a balanced subset of the data obtained by drawing a random sample of each of the three larger subgroups of the sample, such that all cell sizes were 95.

The results of these analyses, shown in Table 5, were quite similar. In both analyses, there were no significant main effects of wife's or husband's workplace location, and no significant interaction. Neither hypothesis was supported. It should be noted, however, that women's workplace location did approach significance.

The Predictive Power of Workplace Location

Hypothesis 3 was that, among dual-earner couples with children, the work location of the couple would be a significant predictor of women's perceived work-family conflict even after accounting for the variance due to other work and family characteristics believed to be related to work-family conflict (total usual hours worked per week, age of youngest child, family size and total family income). To test this hypothesis, a hierarchical multiple regression analysis was performed in two steps. The following variables were entered in the first step of the equation: total usual hours worked, age of youngest child, family size, and total family income. Husband's work location and wife's work location were entered in the second step.

The results of this analysis are summarized in Table 6. Only 2% of the variance in work-family conflict was explained by the entire model, F (4,743) = 0.95, ns. Couple's work location added nothing to the prediction of work-family conflict. Several work and family characteristics, however, were found to be significantly predictive of work-family conflict;

Table 5

Analyses of Variance for Work-Family Conflict

Source of Variation	df	MS	F	p
Weighted Squares of Means Analysis (n = 4,743)				
Wife's Work Location (W)	1	8.71	1.73	0.35
Husband's Work Location (H)	1	4.44	0.88	0.19
W x H	1	1.17	0.23	0.63
Within-group error	4,739	5.04	--	--
Total	4,742	--	--	--
Balanced Analysis of Variance (n = 380)				
Wife's Work Location (W)	1	14.80	2.69	0.10
Husband's Work Location (H)	1	0	0	0.98
W x H	1	7.39	1.34	0.25
Within-group error	376	5.50	--	--
Total	379	--	--	--

Table 6

Summary of Hierarchical Regression Analysis for Variables Predicting Work-Family Conflict (N = 4,743)

Variable	B	SE B	β
Step 1			
Total Hours Worked	0.02	0.01	0.04*
Age of Youngest Child	0.09	0.01	0.13*
Family Size	0.03	0.04	0.01
Total Family Income	0.10	0.02	0.06*
Step 2			
Husband's Work Location	0.25	0.19	0.02
Wife's Work Location	0.20	0.19	0.02

Note. R^2 = .0215 for Step 1; ΔR^2 = .00 for Step 2 (ns).

*$p < .05$.

namely, the total usual hours worked, the age of the youngest child in the family, and total family income. Specifically, work-family conflict was associated with working long hours, the presence of young children in the home, and higher family income.

Selected Work, Family, and Demographic Characteristics and Work-Family Conflict

Because significant differences were revealed between the home-based and the non home-based women in various work, family, and demographic characteristics (occupational classification, type of family, hours of work, family size, family income, and age of respondent), further analyses were carried out to determine if specific subgroups of home-based and non home-based women differ in their levels of work-family conflict. Separate t-tests were computed, using a Bonferroni t procedure in order to reduce the probability of making a Type I error while performing numerous tests (Rosenthal & Rosnow, 1985). The error rate for these tests was set at .002 (.05/ 28 tests).

Work Characteristics. Comparisons between home-based and non home-based women with respect to work characteristics are shown in Table 7. Fourteen t-tests were done to compare the two groups of women according to their occupational classification, type of family (farm vs. non farm), and total usual hours worked per week. By the Bonferroni criterion, none of the comparisons were significant. The only differences to even aproach significance were in the categories of "clerical," "service," and the "primary occupations." In both the "service" ($t = -2.37$, $p < .02$) and the "clerical" ($t = -2.56$, $p < .01$) categories, women reported less work-family conflict when they were home-based than when they were not home-based. In the "primary occupations" category ($t = 2.68$, $p < .008$), women reported more work-family conflict when they were home-based than when they were not home-based.

Table 7

Mean (and Standard Deviation) of Work-Family Conflict as a Function of Selected Work Characteristics and Wife's Work Location

Work Characteristic	Wife's Work Location	
	Home-Based	Non Home-Based
Total Usual Hours Worked		
< 30	3.84 (2.5)	3.83 (1.8)
30 - 34	3.86 (2.3)	4.02 (2.2)
35 - 39	4.12 (3.1)	4.32 (2.2)
40 - 44	3.52 (1.9)	4.26 (2.3)
45 - 50+	4.47 (2.6)	4.20 (2.3)
Occupational Classification		
Managerial and other Professional	4.83 (2.6)	4.44 (2.2)
Clerical Occupation	3.24 (2.2)	4.19 (2.2)
Sales	3.70 (1.8)	4.12 (2.2)
Service Occupation	3.21 (1.9)	4.00 (2.2)
Primary Occupation	4.65 (2.6)	3.68 (2.1)
Processing, Machining and Fabricating	4.50 (1.9)	4.10 (2.3)
Construction, Transportation Equipment Operating, Material Handling, Other Crafts	6.00 (1.4)	4.21 (2.5)
Type of Family		
Farm	4.24 (2.4)	4.29 (2.2)
Non Farm	3.88 (2.4)	4.24 (2.2)

Note. Values in parentheses are standard deviations.

As well, women who worked 40 - 44 hours per week reported less work-family conflict when they were home-based than when they worked outside the home ($t = -2.28$, $p < .02$).

Family Characteristics. Because significant differences were revealed between the home-based and the non home-based women in family size and family income, nine t-tests were computed to determine if, in different types of families, home-based and non home-based women differed in levels of work-family conflict. As shown in Table 8, the t-tests revealed no significant differences in work-family conflict between the home-based and non home-based women.

Demographic Characteristics. Because significant differences were found between the home-based and the non home-based women with respect to age of the respondent, five t-tests were computed to determine if, in different age groups, home-based and non home-based women differed with respect to levels of work-family conflict. As shown in Table 9, no significant differences in work-family conflict between the home-based and the non home-based women were found.

Table 8

Mean (and Standard Deviation) of Work-Family Conflict as a Function of Selected Family Characteristics and Wife's Work Location

	Wife's Work Location	
Family Characteristic	Home-Based	Non Home-Based
Family Size		
3-4 members	4.11 (2.5)	4.27 (2.2)
5-6 members	3.71 (2.1)	4.12 (2.2)
7-8 members	6.33 (3.8)	4.65 (2.6)
Family Income		
$0-$10,000	4.63 (2.8)	4.22 (2.3)
$10,001-$20,000	3.21 (1.7)	4.09 (2.2)
$20,001-$30,000	3.92 (2.3)	4.00 (2.1)
$30,001-$40,000	3.62 (2.4)	4.24 (2.3)
$40,001-$50,000	4.44 (2.1)	4.22 (2.2)
$50,001 and over	4.52 (2.9)	4.36 (2.3)

Table 9

Mean (and Standard Deviation) of Work-Family Conflict as a Function of a Selected Demographic Characteristic and Wife's Work Location

Demographic Characteristic	Wife's Work Location	
	Home-Based	Non Home-Based
Age of Respondent		
15-19 years	5.00 (2.5)	6.00 (2.6)
20-24 years	4.00 (2.2)	4.28 (2.2)
25-34 years	4.00 (2.4)	4.38 (2.2)
35-44 years	4.03 (2.5)	4.00 (2.2)
45 years and over	5.00 (3.0)	4.02 (2.5)

Chapter 7

Discussion

The purpose of this study was to examine the effect of home-based employment on the work-family conflict of women in dual-earner couples with children. First, home-based and non home-based women were compared with respect to various work, family, and demographic characteristics thought to be related to work-family conflict. Next, the two groups of women were compared to determine if they differed in their levels of work-family conflict. On the basis of evidence indicating that traditional gender-role ideology continues to influence the way in which men and women fulfil their work and family roles, it was predicted that home-based women would report lower levels of work-family conflict than non home-based women because they would feel less in opposition to the traditional stereotype of wife and mother by physically being in the home. On the basis of the same reasoning, it was predicted that women whose husbands go out to work would experience less work-family conflict than those whose husbands are home-based, as the "husband going out to work" is the traditionally accepted work arrangement. It was further postulated that the work location of the husband and wife would account for some of the variance in women's perceptions of work-family conflict, over and above that which could be attributed to "objective" variables associated with work-family conflict (total number of hours in paid work, age of youngest child, family size, and total family income).

Contrary to the prediction, there was no significant difference between the home-based women as a group and the non home-based women as a group in their levels of work-family conflict. The two groups did differ, however, on a number of work, family, and demographic

characteristics. Specifically, there were significant differences between the two groups in occupational classification, total usual number of hours worked, family size, family income, and age of the respondent. Post hoc analyses of selected characteristics indicated that two of these characteristics, occupational classification and total usual hours worked, were linked to differences in work-family conflict which approached significance. Of the work and family variables included in the analysis of predictive relations, several were found to contribute to the prediction of work-family conflict; namely, total hours worked, age of youngest child and total family income. Nevertheless, the overall model explained very little of the variance in work-family conflict. Moreover, couple's workplace location did not contribute anything to the prediction. This chapter summarizes the findings of the study as they relate to the objectives of the study.

Comparison of the Home-Based and Non Home-Based Women

The first objective of this study was to examine the characteristics of the women in dual-earner couples with children who are home-based, and to determine whether they differ from women who work outside the home. Among the characteristics examined were occupational classification, type of family (farm or non farm), family income, total usual hours worked, work flexibility, age of youngest child, family size, total family income, age, and education of respondent. There were significant differences between the home-based and non home-based women with respect to occupational classification, type of family (farm or non farm), family income, age, family size, and total usual hours worked. There were no significant differences between the two groups with respect to age of youngest child or respondent's education.

Women who were home-based and those who worked outside the home were involved in significantly different occupations. The home-based sample was largely from farm families (42.2%), and worked in "primary" occupations (37.7%) or "service" occupations (20.6%). The non home-based women were more likely to work in occupations classified as "managerial or professional" (37.5%) or "clerical" (31.7%). Thus, the majority of home-based working women were in occupations that would typically be considered "blue collar," while the non home-based women were in occupations that would typically be considered "white collar."

The finding that home-based women differed from other workers in their occupational classification is consistent with the findings of several American studies from the 1980's, which indicated that the majority of home-based workers are not the telecommuters depicted in the popular press; that is, paid workers linked to central offices by computers and telecommunications equipment (Shamir, 1992). Masuo et al. (1992), reporting results from 1988 data, indicated that the home-based worker was more frequently an older male maintenance contractor, truck driver or office cleaner. Whether this finding would be the case in 1995 can only be speculated upon. It is likely, however, that a greater percentage of telecommuters would make up the home-based workers of the 1990's, as a result of advances in technology and the introduction of family-responsive employment practices in the workplace.

The finding that a large proportion of the home-based women were in farm families is also somewhat consistent with earlier studies of home-based workers. Stafford et al. (1992) found that 7% of their nine-state home-based sample lived on farms, even though "ordinary" farmers

who grew crops or raised livestock for processing were excluded from the sample. Similarly, Kraut (1988), who used 1980 census data that excluded farmers in the definition of home-based work, reported that living in a more rural environment increased the odds of working at home. Whether this association would be found today depends on how much of the growth in the home-based sector has been in the telecommuting segment.

The home-based women in the present study had lower family incomes than the women in the non home-based group. This is consistent with Kraut's (1988) finding that full-time home-based workers earn 76% of the income earned by conventional workers. It might also have been that a larger proportion of the home-based women were self-employed rather than paid workers. Lero et al. (1993) reported that there were almost twice as many home-based self-employed workers in the sample as there were home-based paid workers (5.8 % vs. 3.3%). Stafford et al. (1992) reported that the self-employed home-based worker contributed significantly less to the total family income than did the home-based worker who was a wage-earner.

The finding that home-based women in the present study were significantly older than women who work outside the home is also consistent with the results of previous studies (Kraut, 1988; Masuo et al., 1988) which found that home-based workers were generally older than 35 years. It could also be that many younger home-based women were eliminated from the present sample because they did not report that their children were cared for by someone other than the couple. Heck et al. (1992) reported that fewer child care services were needed in home-based business situations, as women in these situations had more control over the flow of their work, which allowed for a balancing of their work and child care roles.

The Effect of Workplace Location on Work-Family Conflict

The second objective of this study was to determine whether home-based women as a group would report lower levels of work-family conflict than their counterparts who work outside the home, and whether husband's workplace location would also have an effect. It was predicted that, among dual-earner couples with children, perceived work-family conflict would be lower in women who are home-based than in women who work outside the home (Hypothesis 1) and lower in women whose husbands work outside the home than in women whose husbands work at home (Hypothesis 2). Although work-family conflict was lower in the home-based sample, the difference was not statistically significant. Husband's workplace location had a nonsignificant effect on women's work-family conflict.

There may be several reasons for these nonsignificant effects. One may be that workplace location has no effect on work-family conflict. Perhaps, as the rational view suggests, work and family characteristics are the important factors in work-family conflict. Indeed, the results of the regression analysis in the present study suggested that number of hours worked, the presence of a young child in the family, and family income play a more important role in work-family conflict than workplace location. It may be, for example, that the amount of time spent working may be a more significant source of stress for women than the conflict experienced in having to work outside the home.

Another possibility is that the influence of workplace location is evident in some subgroups of women but not others. Although the effect of workplace location on women's work-family conflict was nonsignificant when the two groups of home-based and non home-based women were compared as a whole, several near-significant differences were

found in several occupational subgroups of the sample. While nonsignificant by the Bonferroni criterion, there were differences in work-family conflict between the home-based and non home-based women in three occupational classifications; namely, "clerical workers" (e.g., typists, bookkeepers, file clerks), "service workers" (e.g., workers involved in protective services, food and beverage preparation, lodging and accommodation, and other personal services), and workers in "primary occupations" (e.g., labouring occupations related to farming, animal husbandry, horticulture, fishing, forestry, mining). Home-based clerical and service workers reported less work-family conflict than their non home-based counterparts. It has been reported in the literature that the problems of integrating work and family life may be even more difficult for women in blue-collar jobs, whose jobs are often less desirable, less flexible, and less lucrative than other occupations (Bromet, Dew & Parkinson, 1990). These occupations are frequently characterized by rigid working conditions, environmental stresses, and repetitive work patterns, especially when they are industry-based rather than home-based. This may help to explain the significantly lower work-family conflict in the home-based women in the clerical and service occupations, who may be better able to control some of these occupational stressors by working in the home.

Yet another possibility is that the influence of workplace location is evident only in women with highly traditional gender-role concepts. Interestingly, the finding of lower work-family conflict in the home-based clerical workers is consistent with the findings of Gerson and Kraut's (1985) study of 297 women in home-based and office-based clerical work. Gerson and Kraut found that women working at home reported greater job satisfaction and less role conflict and overload than office workers, even though the homeworkers did more housework

and child care. They also found that the homeworkers and office workers in their sample differed in their attitudes regarding gender-roles. Office workers were more likely than home-based workers to agree with statements supporting shared division of household labour, equal employment opportunities for men and women, and egalitarianism between men and women. In short, it appeared that the home-based women were more traditional in their gender-role ideology than the office-based women.

Thus, it may be that a difference in gender-role ideology accounts for the lower work-family conflict in the clerical and service workers in the present study. Perhaps these workers were more traditional in their values than women in other occupations, and hence, felt less in opposition to their belief systems when they were working at home. No information was available in the present study, however, regarding women's gender-role concepts. Such information is needed in order to directly assess this explanation.

Predictive Power of Work Location

The fourth objective of the study was to determine the unique contribution of workplace location to the prediction of work-family conflict. It was postulated that among dual-earner couples with children, women's perceived work-family conflict would be significantly predicted by the work location of the couple even after accounting for the variance due to other work and family characteristics related to work-family conflict. Support for this hypothesis was not found. Certain characteristics, however, were found to be associated with work-family conflict: total usual hours worked, age of youngest child, and total family income.

The finding that total hours worked predicted women's work-family conflict supports previous findings in the literature (Guelzow et al., 1991; Gutek et al., 1991; Voydanoff, 1988) indicating that working longer hours is associated with higher levels of work-family conflict. Having younger children in the home was also a strong predictor of work-family conflict. This finding is also consistent with previous studies (Friedman, 1988; Kelly & Voydanoff, 1985). Although having younger children could involve more work for the family, especially for the mother, all the respondents in this study had to have someone look after their children while they were working in order to be included in the sample. Thus, an alternative explanation for the relation between age of youngest child and work-family conflict could be that women with young children perceive greater work-family conflict because the feeling of being in opposition to traditional gender-roles is particularly strong at this stage of the life cycle. Having a larger family (more children under the age of 13 years), on the other hand, did not predict women's work-family conflict. This could mean that women develop, with time, cognitive coping strategies to effectively deal with their dual roles. It may also be that, as the family grows, older siblings become available to help with family responsibilities, and this helps to reduce work-family conflict. Clearly, research is needed to examine changes in work-family conflict over the family life cycle. Gender-role concepts may play the most important role in the early stages when women are first faced with major identity dilemmas regarding their social roles (Rapoport & Rapoport, 1985).

Total family income was the third significant predictor of work-family conflict identified in the regression analysis. The direction of the relation was unexpected, however, as previous research has linked higher family income with higher levels of well-being and, consequently,

lower levels of work-family conflict. In the present study, higher family income was associated with higher work-family conflict. An explanation for this finding might be that higher family income is associated with greater work effort and responsibility, and longer hours, which may result in increased opportunity for role strain and role conflict. It may also be that higher family income reflects the husband's greater work effort and his decreased involvement in family responsibilities which may, in turn, result in the wife's perception of marital inequity (Guelzow et al., 1991). Studies have shown that husbands who have demanding jobs and work long hours feel less compelled to help with the family work (Sekaran, 1988). In order to further understand how women's home-based employment affects their experience of work-family conflict, it is important to examine the effect that workplace location has on the division of domestic labour in the home and perceptions of marital equity.

Limitations of the Study

The results of the present study should be evaluated in the light of limitations with the data and the limitations imposed by the secondary nature of the study design. In addition to those limitations already noted, it was not anticipated that farm families would make up a sizeable percentage of the home-based group. Although the data were collected in 1988, it was expected that the results would include a more varied group of home-based workers. Thus, if the data were collected today, it could be expected that the group would be considerably more diverse. Home-based employment has become a more accepted employment alternative, as evidenced by the number of home-based worker networks, newsletters, and products geared toward the home-based worker.

There were also limitations imposed by the staging of the questions, which affected the composition of the sample. Those home-based workers who chose to look after their children while working and those couples who alternate shifts ("off-shift") were excluded from this sample because, due to the design of the questionnaire, they were not asked about their work-family conflict. The findings, therefore, cannot be generalized to such families. Similarly, none of the home-based respondents had the opportunity to answer the question about work flexibility. As a result, there were no data with which to address the question of whether work flexibility reduces women's work-family conflict in dual-earner couples. In future research, detailed information about all aspects of the work environment should be collected, including the respondent's satisfaction with the job, and amount of support received from management and co-workers, in order to assess the specific contribution of the work environment in the work-family conflict equation.

The study also relied entirely on self-reports of the respondents with regard to the constructs measured in this research. A recognized work-family conflict scale with several items would have been preferable as a measure of this construct. Objective reports of respondents' work environments and behavioural indices of respondents' stress also would have increased the quality of the study.

Recommendations for Future Research

The present study provides only a glimpse of the way in which home-based employment impacts on the dual-earner couple with children. Much research has yet to be done to assess how this alternative to traditional workforce participation affects families, and whether it does help to ease the day-to-day juggling of a couple's work and family responsibilities. It would

be valuable to know to what extent women use home-based work as a strategy for coping with work-family conflict. A woman's shift to home-based work may occur either out of choice or because of external forces. Longitudinal research in which work-family conflict is measured "before" and "after" the shift to home-based work, would help to shed light on this process.

Historically, gender-role socialization has been provided as an explanation of why men's and women's roles differ within work and the family, and why many "family-responsive" strategies do not always serve to help those who could benefit most. With the physical merging of the two spheres of work and family, as in home-based employment, the role of gender and gender differences needs to be addressed. Studies should be directed at determining how men and women cope with working at home, whether couples with traditional values cope differently with this arrangement than do those with egalitarian values, and whether couples' values change in response to this arrangement. More information is also needed with respect to the perception of work-family conflict, and the influence of the "objective conditions" associated with role overload relative to the "subjective" influences of gender.

The 1990's offer new and expanding roles for women and men in work and the family. An appreciation of how the family will deal with these new realities requires a fuller understanding of the dynamics of the changing labour force and the fundamental changes that will have to take place in societal attitudes regarding the roles of men and women.

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