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The Role of On-Site Daycare in Helping
Parents Balance Work and Family Responsibilities

Dissertation
submitted to the School of Graduate Studies
of the University of Ottawa
in partial fulfilment of the requirements for
the degree of Doctor of Philosophy
by
Michelle Picard-Lessard
Ottawa, Ontario
1995

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Abstract

The present study focused on employed parents with preschool children attending a licensed daycare centre. There were two purposes to this study: 1) to compare parental functioning in users of on-site and off-site daycare, and 2) to examine the relationship between child care variables and parental functioning.

Sixty six employed parents with preschool children completed the study (48 mothers and 18 fathers). Parents were recruited from nine workplace daycare centres that serviced employees first (on-site group), and then community members (off-site groups). Measures assessing work attitudes, individual, family, and work-family functioning, child care variables, and demographic data were obtained twice over a span of six months. Parents in the on-site group also took part in a semi-structured interview at both assessment times.

Results of multivariate analyses on the questionnaire data yielded no significant differences between users of on-site daycare and users of off-site daycare on any of the dependent variables at either assessment time and no group by time interaction. Content analyses of the interview data indicated that parents believe that on-site daycare helps them balance work and family responsibilities. According to parents, on-site daycare is convenient, it allows them to spend more time with their children, it reduces their travel time and work disruptions, increases their availability at work, and improves
their work environment.

However, data from these interviews also suggested that the quality of child care may be more important in helping parents balance work and family responsibilities than is the location of the centre. Multiple regression analyses on the questionnaire data further underlined the importance of child care in relation to parental functioning. The results indicated that having primary responsibility for child care and the experience of difficulties with child care was related to perceived stress and role overload. High levels of work-child care conflict were negatively related to parental satisfaction, and satisfaction with child care arrangement was positively related to parental satisfaction. Taken together, these findings underscore the importance of considering child care in the context of balancing work and family responsibilities.
The Role of On-Site Daycare in Helping Parents Balance Work and Family Responsibilities

Changes in work force demographics have created challenges for employed parents as they balance work and family responsibilities. One of the most striking aspects of the current work situation is that it is dominated by employees who share at least some responsibility for the care of their family members (Christensen & Staines, 1990). Consequently, an increasing number of families require alternate child care arrangements in order that they may participate in the workforce.

The following literature review will begin with a brief section on changing demographics which will be followed by a discussion of work-family conflict. The child care needs of working parents will then be addressed, as will the relationship between child care and parental functioning. The concept of on-site daycare will then be introduced, and theoretical and empirical considerations in regards to on-site daycare will be presented. The review will conclude with a summary of the existing literature, followed by a description of the purpose, specific research questions, and hypotheses of this study.

Changing Canadian Demographics

The influx of mothers of children under the age of 18 into the labour force has been dramatic, increasing from 45% in 1976 to 61% in 1991 (Statistics Canada, 1992). The increase has been even more striking for mothers of preschool children. Whereas 34.9% of mothers with preschool children were in the workforce in
1976, this number increased to 62.2% in 1988 (Statistics Canada, 1990), and to 68.7% in 1991 (Statistics Canada, 1993). Furthermore, contrary to popular stereotypes of mothers working part-time, 70% of employed mothers of preschoolers work on a full-time basis (Lero, Goelman, Pence, Brockman, & Nuttall, 1992). In light of women's increased participation into the labour force, it is not surprising that the proportion of dual-income families in Canada has increased from 40% in 1972 to 59% in 1987 (Statistics Canada, 1990).

Another important demographic change is the increase in the number of lone parents in the workplace (Ontario Women's Directorate, 1990). In 1992, 49% of female lone parents were employed (Statistics Canada, 1993). Similarly, an increase in the numbers of employed men who are involved in family responsibilities has been noted (Barud, Aschbacher, & McCroskey, 1984; Ontario Women's Directorate, 1990). Evidence of this change includes increased numbers of men taking paternity leaves and increased numbers of single-parent families headed by fathers (Maynard, 1989). Also, Higgins, Duxbury, and Lee (1994) recently concluded that husbands in their sample reported appreciably more child care responsibilities than was reported in the late 1970s. Finally, Almeida, Maggs, and Galambos (1993) found that husbands increased their participation in child care when their wives' employment hours increased.

Thus, the majority of Canadian families no longer fit the traditional mould of a father breadwinner and mother homemaker
On-Site Daycare

(Labour Canada, 1991). According to Oderkirk, Silver, and Prud'homme (1994), only 19% of families fit this pattern. More specifically, in 1990, the traditional family structure fit only 32% of Canadian families with preschool children and only 20% of families with school age children (Lero et al., 1992). Similarly, United States statistics indicate that the traditional family only accounts for 10% percent of the population (Bureau of National Affairs, 1986).

Work-Family Conflict

Changing workplace demographics have generated interest in the challenges faced by both men and women as they balance work and family responsibilities. A great deal of theoretical and empirical attention has been given to the concept of "work-family conflict", which refers to the conflict that occurs when an individual performs multiple roles (e.g., worker, parent, and spouse) that require time, energy, and commitment (Greenhaus & Beutell, 1985).

Work-family conflict is a well documented reality for many working parents. Lero, Brockman, Pence, Goelman, and Johnson (1993) reported that approximately 89% of surveyed parents employed in Canadian workplaces in 1988 experienced at least some tension in juggling work and family responsibilities. Similarly, in a survey of Canadian federal public sector employees, Duxbury, Higgins, Lee, and Mills (1991) concluded that 50% of mothers and 47% of fathers in dual-income families experienced great difficulty finding time to fulfil their work and family roles.
The functioning of employed parents with young children is particularly relevant to this study. It is well documented that employed parents with young children are especially at risk for work-family conflict. For example, Voydanoff and Kelly (1984) found that parents with preschool children reported not having enough time for either work responsibilities or for family responsibilities. Another study found a significant positive relationship between the presence of a preschool child and work-family tension (Kelly & Voydanoff, 1985). More recently, Higgins et al. (1994) found that role overload, an important component of work-family conflict, was highest among employed parents when their children were of preschool age.

Few studies have examined factors that explain the increased levels of work-family conflict in parents with young children. Most research examining contributors to work-family conflict has included samples of working parents with children of a broad range of ages (e.g., Marshall & Barnett, 1993; Voydanoff, 1988). These studies indicate that work-family conflict is influenced by job (e.g., number of work hours, workload pressure) and family factors (e.g., presence of children in the home, family involvement, division of labour for child care).

Although interesting and informative, the conclusions from these studies are not specific to parents with preschool children and therefore may be less helpful in explaining their increased levels of work-family conflict. Few researchers have actually focused their investigations on parents with preschool children.
An early study by Mertensmeyer and Coleman (1987) examined correlates of inter-role conflict in a sample of US rural and urban parents with preschool children. They found that parents' self-esteem was positively related to lower levels of inter-role conflict for both urban and rural individuals. Family cohesion, (the emotional bond between family members), was also negatively related to inter-role conflict for urban individuals. This latter finding suggests that support within the family may play an important role in reducing work-family conflict, or that work family conflict introduces strain into family relations.

Campbell and Moen (1992) examined correlates of role strain in a Canadian sample of single mothers with preschool children. They found that more hours spent working, lower levels of work satisfaction, less control over work schedules, and less positive attitudes toward employment were significantly associated with job-family strain in mothers with preschool children.

Another study (Goldberg, Greenberger, Hamill, & O'Neil, 1992) examined depressed mood and role strain in a sample of single mothers with preschool children. They found that role strain was positively related to the belief that maternal employment has negative consequences for children and negatively related to the receipt of emotional and instrumental support from neighbours. Recency of single parenthood and concerns about the quality of substitute child care were related to significantly higher levels of depressed feelings.
In summary, researchers have begun to examine factors that contribute to work-family conflict experienced by employed parents with preschool children. To date, the importance of attitudes toward maternal employment, adequacy of child care, quality of work, self-esteem, number and age of children, and support have been identified as important. However, research in the area remains scarce and findings must be interpreted with caution as two of the above-mentioned studies only included single parents, and therefore may not apply to two-parent families. As a result, more research examining factors that are specific to employed parents with preschool children is needed to help explain the elevated levels of work-family conflict found within this particular group. One obvious, yet under-researched factor that applies to working parents with preschool children is child care.

Child Care Needs of Working Parents

Theorists have proposed that employed parents with preschool children may be particularly at risk for work-family conflict because of heavy child care responsibilities (Beach Friendly, & Schmidt, 1993; Lero et al., 1992). For example, infants and preschool children require more intensive care by adults than do older, more self-sufficient children (Goldberg et al., 1992). Young children are more dependent on their parents for assistance in daily living activities than are older children.

Also, the fact that young children do not attend school introduces the need for nonparental child care on a regular
basis. Unfortunately, it is well-acknowledged that working parents experience difficulty finding quality, dependable, and affordable child care while they are at work (Kamerman & Hayes, 1982; Kossek, 1990; Scarr, Phillips, & McCartney, 1989; Stipek & McCroskey, 1989).

Data from a recent survey, the Canadian National Child Care Study (CNCCS, Lero et al., 1992), provide a wealth of information on the child care needs of employed parents. Conducted in 1988, the CNCCS found that more than half (55%) of surveyed families were in need of some form of child care to allow parents to remain in the labour force. In another publication from the CNCSS, Lero et al. (1993) reported that 42% of parents with preschoolers reported moderate or severe amounts of tension because of the cost of high quality child care. Almost one-third (32%) of these parents reported moderate or severe tension over the stability and continuity of their current child care arrangements. Similar findings have been reported in the United States, where 56% of participants in a large survey conducted by the Bureau of National Affairs (1988b) reported difficulties in arranging child care.

Child Care and Parental Functioning

There is growing recognition that child care needs to be considered in our attempt to understand work-family challenges. Interestingly, however, the relationship between child care and parental functioning has received little empirical attention (Galinsky, 1992; Mason & Duberstein, 1992).
Most research to date has focused on the relationship between child care and only one aspect of parents' lives, namely their work behaviours. Mize and Freeman (1989) found that both male and female employees reported having experienced work disruptions, absenteeism, tardiness, and early departures from work as a result of child care problems. Also, child care concerns have been found to be related to decreased productivity, lower employee morale, and to decisions not to accept promotions for both mothers and fathers (Bureau of National Affairs, 1986; Fernandez, 1986). Furthermore, a report by Catalyst (1986) indicated that a critical factor for women in being able to return to work after childbirth and to remain employed is the availability of adequate child care.

Researchers have begun to examine the relationship between child care and work-family conflict. Recently, Goff, Mount, and Jamison (1990) found that male and female employees who were more satisfied with the quality of their child's care experienced less work-family conflict than did employees who were less satisfied with the quality of their child's care. In another study, Goff and Mount (1989) reported that the experience of problems with finding and maintaining child care and dissatisfaction with child care arrangement was related to work-family conflict in a group of employed mothers and fathers. Similarly, Goldberg et al. (1989) found that dissatisfaction with child care arrangement was associated with more intense feelings of strain from juggling work and family commitments on the part of both fathers and
mothers in dual-earner families with preschool children.

In one study, researchers also examined the relationship between child care and maternal emotional well-being (Ross & Mirowsky, 1988). Two variables were related to increased levels of depressive symptoms: 1) difficulty in arranging child care while mothers were at work, and 2) husbands' low participation in child care. Goldberg et al. (1992) also found that mothers who expressed more concerns about the quality of their child's substitute care reported significantly more depressive symptoms than did mothers who expressed little concern about the quality of their child's substitute care.

Taken together, these findings suggest that parents are deeply affected by issues related to child care, such as finding quality child care, satisfaction with child care, having primary responsibility for child care, and concerns about and difficulties with child care. Specifically, research to date has identified a link between child care variables and work behaviours, work-family conflict, and emotional well-being.

Research in this area is nevertheless scarce, especially compared to the substantial literature on the ways child care affects children's well-being (Galinsky, 1992). Also, studies to date are limited in two important ways. First, research has focused on how child care issues are related to negative consequences such as work-family conflict and depressive symptoms, and no research has examined the link between child care issues and parental well-being (e.g., life satisfaction,
parental satisfaction). Second, research to date has focused on a single area of parental functioning, and has neglected to consider parental functioning as multidimensional (e.g., work role, family role).

Therefore, many questions remain regarding the relationship between child care and work, family, and individual functioning for working parents. This is particularly important as employers increasingly rely on empirical evidence of work-family connections before investing in family-supportive benefits (Starrels, 1992). These family-supportive benefits are designed to help parents balance work and family responsibilities, and allow them to continue their participation in the labour force.

On-Site Daycare

Given the dramatic changes in workforce demographics, as well as preliminary evidence that child care affects parental functioning, employers have developed a broad range of child care initiatives which are collectively referred to as "employer-sponsored child care". Child care initiatives include information and referral services, financial assistance, and direct care for children (Auerbach, 1990; Barud et al., 1984).

The provision of on-site daycare is the focus of this study. Indeed, of all child care initiatives, on-site daycare has received the most attention during the past ten years (Friedman, 1990; Galinsky, Friedman, & Hernandez, 1991; Schwartz, 1989). This may be explained by the fact that parents consistently express an interest in on-site daycare.
A recent Canadian survey found that although less than 5% of parents of preschoolers stated that they have access to on-site daycare, one quarter reported that the provision of on-site daycare would help them to balance better their work and family responsibilities (Lee, Duxbury, & Higgins, 1992). Consistent with these findings, Lero et al. (1993) found that on-site daycare was the preferred benefit of 32% of parents with preschool children under 6, and of 35% of parents of infants and toddlers. Goldberg et al. (1989) also found that more than 65% of married women, 70% of single women, and 45% of married men reported that they would leave their current firm for a new employer that provided on-or-near-site child care.

In addition to its intuitive appeal, there exists ample anecdotal evidence in support of the effectiveness of on-site daycare in terms of reducing absenteeism and tardiness rates, enhancing recruitment of new employees, decreasing employee turnover, improving productivity and job satisfaction, ameliorating perceptions of organizational climate, and lowering work-family conflict (Barud et al., 1984; Bureau of National Affairs, 1988a; Magid, 1983; Perry, 1982). Despite this, however, the provision of on-site daycare is rarely offered by Canadian employers. In the 1988 National Child Care Survey, only 6% of parents had access to workplace child care facilities (Lero et al., 1993). Similarly, Beach et al. (1993) reported that work-related child care represents an extremely small proportion of licensed daycare spaces in Canada, less than 3%.
Various obstacles to the establishment of on-site daycare include the high cost and space limitations (LaMarre & Thompson, 1984), as well as liability concerns (Smith, 1985). Moreover, concern has been raised that provision of on-site daycare creates inequity in that some employees cannot take advantage of on-site daycare, either because their children are older or because they do not have children (LaMarre & Thompson, 1984).

Lack of scientific evidence for its efficacy has also been cited to explain the reluctance of employers to establish workplace daycare (Galinsky et al., 1991; Miller, 1984). Indeed, despite strongly held convictions that on-site daycare facilitates the task of balancing work and family responsibilities and parents’ keen desire to have this benefit available to them, little empirical work has assessed the association between on-site daycare and employee functioning (Barling, 1990). The few empirical studies that have examined the benefits of on-site daycare will be reviewed at a later point in this document.

It is clear that employers are reluctant to make the substantial financial investment of establishing a workplace daycare centre in the absence of documented evidence of efficacy in alleviating work-family conflict and contributing to enhanced work functioning. To date, research on on-site daycare has been limited in terms of theory and methodology. Theoretical and empirical considerations will now be discussed in turn.
Theoretical Considerations

Most research in the area of on-site daycare has been atheoretical and driven by policy-making concerns (Kingston, 1989). Few studies have been grounded in a solid theoretical framework, and most have addressed pragmatic questions. Nevertheless, there are important theories of work-family conflict which are applicable to the study of on-site daycare. Two different theoretical perspectives are instructive in examining the challenges faced by working parents, namely role theory and the literature on stress and coping. These will be discussed in turn.

Role Theory

The large number of individuals who face the challenge of balancing work and family responsibilities has led to increased concerns regarding individual well-being (Tiedje et al., 1990; Wortman, Biernat, & Lang, 1991). The focus on the consequences of participation in multiple roles is rooted in role theory. Two competing hypotheses have been proposed to explain the relationship between role involvement and well-being, namely, the scarcity hypothesis (Goode, 1960) and the expansion hypothesis (Sieber, 1974).

The scarcity hypothesis states that a person's responsibilities and obligations are proportional to the number of roles he/she occupies (Goode, 1960). This hypothesis also states that individuals have finite resources, and as demands in the work and family roles are placed on them, they become
vulnerable to work-family conflict. For example, work-family conflict is especially salient for employed parents with young children as the demands of family responsibilities (i.e., caring for children) are particularly high at that stage (e.g., Kelly & Voydanoff, 1985).

Two types of strain can result from work-family conflict: role overload and interference. According to Greenhaus and Beutell (1985), role overload occurs when the performance of multiple roles (e.g., employee, parent, and spouse) requires time, energy, and commitment. Gutek, Searle, and Kelpa (1991) conceptualized role interference as having two components: family interference with work and work interference with family. As this study focuses on child care responsibilities, the issue of family interference with work is of most relevance.

Early formulations of the scarcity hypothesis postulated that the more roles an individual occupies, the more conflict he/she experiences. Recently however, research and theory have moved beyond the consideration of role occupancy to the examination of the quality of experience within and across roles (e.g., Baruch & Barnett, 1987; Piechowski, 1992). The qualitative aspects of a role refer to the rewards and concerns associated with a particular role (Barnett & Baruch, 1985; Barnett & Marshall, 1991; Baruch & Barnett, 1987). Consistent with this new formulation, work-family conflict occurs when the concerns and obligations of each role exceed the rewards associated with each role.
A common theme across the different formulations of the scarcity hypothesis is that they all focus on the negative consequences of involvement in multiple roles. There exists considerable evidence to support the contention that work-family conflict is negatively correlated to work functioning (Greenglass, Pantony, & Burke, 1989; Higgins, Duxbury, & Irving, 1992; Lewis & Cooper, 1988), individual functioning (Bamundo & Kopelman, 1980; Barnett & Baruch, 1983; Greenglass et al., 1989), and family functioning (Barling, 1990; Higgins et al., 1992; MacEwen & Barling, 1988).

In contrast to the focus on the negative consequences of multiple role involvement, some researchers have begun to recognize the potential advantages of multiple role involvement. For instance, studies have examined positive spillover from family to work (e.g., Crouter, 1984). This line of investigation examines how positive feelings in one role can generalize to another role, and indicates a shift in focus as researchers consider multiple role involvement in a positive light. The expansion hypothesis exemplifies this position. Proponents of this hypothesis have proposed that multiple role involvement provides several privileges, resources, and rewards which have a positive influence on well-being (Sieber, 1974).

Researchers have provided empirical support for the expansion hypothesis by demonstrating a positive association between the number of roles a person occupies and psychological well-being. Evidence in support of this hypothesis has been
provided for some time now, as Gove and Geerken, in 1977, indicated that the mental health of employed women was better than the mental health of unemployed homemakers. Support for the expansion hypothesis has continued to accumulate for women (e.g., Barnett & Baruch, 1985; Baruch & Barnett, 1987; Barnett & Marshall, 1991) and men alike (Thoits, 1983).

More recently, Marshall and Barnett (1993) presented evidence that indicates that work-family conflict is not inevitable among dual-income couples. Specifically, they found that more than a quarter of males and females who were employed on a full-time basis reported no work-family conflict. Additionally, they also found that the majority of women and men reported that it is fairly true or very true that combining work and family is a positive experience, contributing to feeling more well-rounded and feeling competent at managing responsibilities at work and outside work. Also, the majority of parents reported that their work had a positive impact on their children.

In summary, the empirical literature has provided support for both the scarcity and expansion hypotheses. In reviewing the literature pertaining to these two hypotheses, Thoits (1987) concluded that although there is evidence to support both hypotheses, there is no evidence to support a "purely harmful effect" nor a "purely beneficial effect" of multiple role involvement. The task now remains to reconcile these apparently contradictory findings.
Theorists have recently proposed that the scarcity and expansion hypotheses are not mutually exclusive. That is, individuals can derive both harmful and beneficial effects from their involvement in multiple roles (Tiedje et al. 1990; Waldron & Jacobs, 1989). A recent study by Tiedje et al. (1990) provided support for this hypothesis, as perceptions of conflict and enhancement from multiple roles were only weakly associated. These findings suggest that positive and negative effects of multiple role involvement can occur simultaneously. Similarly, Marshall and Barnett (1993) also provided evidence for the independence of the positive and negative consequences of multiple role involvement, coining the terms work-family gains and work-family strains.

Consequently, it is necessary to identify the conditions under which the benefits of multiple roles outweigh their costs (Thoits, 1987). This is particularly important for working parents with preschool children in light of the fact that their work and family responsibilities are heavier than those of other groups in the labour force (Wortman et al., 1991). Thus, working parents with preschoolers may be in a situation where the challenges of multiple role involvement are greater than are the benefits. Empirical evidence exists to support this contention, at least for women, as Waldron and Jacobs (1989) found that whereas labour force participation and marriage had beneficial effects for some women, the addition of the parent role was harmful in terms of well-being.
In summary, role theory has been a useful framework for understanding the reasons that working parents with preschool children are especially vulnerable to work-family conflict. This framework also underscores the importance of examining functioning in different roles (e.g., worker role, spouse role, parent role). Further, the integration of the scarcity and expansion hypotheses emphasizes the importance of considering both negative and positive aspects of functioning. Despite the usefulness of role theory, however, there have been fewer efforts within this framework to elucidate the processes involved in maximizing the benefits of multiple role involvement.

**Stress and Coping**

Some researchers in the work and family field have drawn on concepts developed in the stress and coping literature in an attempt to examine the process involved in maximizing the benefits of multiple role involvement. Karasek (1979), for example, postulated that harmful effects of multiple role involvement occur in situations where individuals are constrained in terms of the possible mechanisms for coping with the role demands. Specifically, this theorist highlighted the importance of perceived control over one's life situation. Recently, Duxbury, Higgins, and Lee (1994) provided evidence for Karasek's model by finding that individuals who reported low levels of perceived control over their life had significantly higher levels of role overload, interference from work to family, and interference from family to work than did individuals who
reported high levels of perceived control.

Similarly, Greenhaus (1989) contended that the assumptions regarding resources (e.g., social support) in the stress and coping literature are applicable to the area of work and family conflict. Integrating both role theory and the stress and coping literature, it can be hypothesized that support available to working parents can maximize the benefits of multiple role involvement. Indeed, researchers have provided evidence for the important role played by social support in reducing work-family conflict (Greenberger, Goldberg, Hamill, O'Neil, & Payne, 1989; Greenglass et al., 1989; Marshall & Barnett, 1993; Parasuraman, Greenhaus, & Granrose, 1992; Thoits, 1983).

In regards to balancing work and family, Kelly and Voydanoff (1985) suggested that resources can be conceptualized within three domains: organizational, individual, and community. Organizational support is the focus of this study.

Recognizing the important interactions between work and family, organizations have recently begun to reexamine their systems of support for personnel (Galinsky et al., 1991). In an emerging "comprehensive support model" of human resources (Orthner & Pittman, 1986), the organization may provide support in relation to family responsibilities.

Two models of work-family linkages have been proposed that conceptualize family supportive benefits as resources available to employees to help them with their work and family responsibilities. First, Orthner and Pittman (1986) developed a
model of the relationship between family supportive benefits and organizational attitudes. Specifically, they hypothesized that employees with access to family supportive benefits perceive their organization positively and have enhanced job commitment. In support for their hypothesis, Orthner and Pittman (1986) found that job commitment was indeed positively affected by high levels of family support.

Second, Bowen (1988) proposed a model that focuses on the effects of family-oriented benefits, policies, and services on the work and family lives of employees. This model posits that structural features of the work environment, such as organizational support of family issues, are related to an employee's ability to balance work and family responsibilities. This model goes beyond a narrow focus on work functioning only and predicts that workplace factors will affect family lives as well. This is consistent with the recent recognition of the interdependency of work and family lives (e.g., Greenhaus, 1989; Kelly & Voydanoff, 1985; Kline & Cowan, 1989; Stipek & McCroskey, 1989).

Greenberger et al. (1989) provided evidence in support of Bowen's model (1988). In this study, the relationship between social support in the workplace and parents' job-related attitudes and well-being was examined. This study is particularly relevant as the sample was comprised of employed parents with preschool children. They found that formal (family-responsive benefits and policies) and informal (e.g., supervisory
flexibility) supports at work were related to men's and women's level of organizational commitment, job satisfaction, and well-being.

The stress and coping framework has underscored the necessity of examining factors that support parents in their attempts to balance work and family responsibilities. On-site daycare can therefore be viewed as one form of organizational support that may maximize the benefits of multiple role involvement and minimize the stresses of having to balance demands of work and family responsibilities. A daycare centre located at the workplace offers parents the opportunity to reduce their travel time as they do not need to drop the child off at a different location on their way to work, but can go directly to the workplace with the child. Another potential advantage is in terms of the convenience of easy access to the child in the case of an emergency. Furthermore, it is possible that a workplace daycare centre provides opportunities for the parent to spend time with the child during the day. These factors are hypothesized to reduce stress and enhance the positive aspects of combining the worker and parent roles.

**Empirical Considerations**

The amount of public interest that on-site daycare has stimulated far exceeds the amount of empirical attention that it has received (Miller, 1984). Only four empirical studies addressing the impact of on-site daycare on employee functioning have been published in peer-reviewed journals. These studies are
summarized in Table 1.

Insert Table 1 about here

Milkovich and Gomez (1976) evaluated the effects of on-site daycare on employee absenteeism, turnover, and performance. They included three groups: employees whose children were in an on-site daycare program, employees whose children were not in an on-site daycare program, and employees who were either non-parents or whose children were not of daycare age. They concluded that lower employee absenteeism and turnover rates were related to on-site daycare; no significant relation to job performance was found.

Youngblood and Chambers-Cook (1984) compared the perceptions of organizational climate, job commitment, job satisfaction, absenteeism, turnover intentions, and actual turnover rates between two groups of employees: one group with on-site daycare and one group for whom the employer did not provide workplace daycare facilities. A static group comparison design (Campbell & Stanley, 1966) compared post-treatment work-related attitudes and behaviours for the on-site daycare and comparison groups. Significantly higher levels of job satisfaction, commitment, climate, and significantly less turnover intentions were obtained for employees with on-site daycare. A within-group pre and post design was used to examine changes in absenteeism and turnover for employees in the on-site daycare group only. There were no
Table 1
Summary of Empirical Studies on On-Site Daycare

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<td>Groups</td>
<td>1) on-site (n = 30)</td>
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<td>1) on-site (n = 62)</td>
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<td>2) off-site (n = 30)</td>
<td>2) off-site (n = 191)</td>
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<td>2) waiting list (n = 44)</td>
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<td>3) no daycare (n = 30)</td>
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<td>Gender composition of sample</td>
<td>84 females; 6 males</td>
<td>344 mothers; 66 fathers</td>
<td>161 mothers; 92 fathers</td>
<td>143 mothers; 12 fathers</td>
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<tr>
<td>Work setting</td>
<td>electronics firm</td>
<td>2 textile companies</td>
<td>electronics and communications firm</td>
<td>2 hospitals</td>
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<td>Design</td>
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<td>Measures</td>
<td>absenteeism, turnover, and job performance</td>
<td>organizational climate, job commitment, job satisfaction, absenteeism, turnover intentions, and actual turnover rates</td>
<td>work-family conflict and absenteeism</td>
<td>supervisor perceptions of performance and absenteeism and employee attitudes</td>
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<td><strong>Results</strong></td>
<td>lower absenteeism and turnover rates for users of on-site daycare; no differences in terms of job performance</td>
<td>higher levels of job satisfaction, commitment, and climate and less turnover intentions for users of on-site daycare; no differences in terms of absenteeism before and after the introduction of on-site daycare</td>
<td>no significant results</td>
<td>more positive attitudes toward managing work and family responsibilities; fewer problems with child care; no relation between the use of on-site daycare and supervisor perceptions of absenteeism and performance</td>
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<td><strong>Limitations</strong></td>
<td>group comparability on daycare-specific variables</td>
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<td>group comparability on demographic variables</td>
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<td>group comparability on demographic variables</td>
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significant differences in absenteeism before and after the introduction of on-site daycare.

Goff et al. (1990) examined the relations among on-site daycare, work-family conflict, and absenteeism. Two groups of employees within the same organization participated in this study: users of on-site daycare and non-users of on-site daycare. No support was found for the hypothesis that use of on-site daycare would reduce the amount of work-family conflict and absenteeism of employed parents.

Finally, Kossek and Nichol (1992) compared supervisor perceptions of performance and absenteeism and employee attitudes of two groups: users of on-site daycare and employees whose children were on a waiting list for the on-site daycare centre. They found no relation between the use of on-site daycare and supervisor perceptions of absenteeism and performance. Differences in terms of employee attitudes were found, however. On-site daycare users were significantly more likely to hold positive attitudes toward managing their work and family responsibilities and were significantly less likely to experience problems with child care than were parents whose children were on the waiting-list.

In summary, research examining the impact of on-site daycare on employees' functioning has yielded equivocal findings. Early studies found a positive impact of on-site daycare on organizational outcomes such as absenteeism, turnover, job satisfaction, commitment, and perceptions of organization
climate. In contrast, however, recent research did not provide support for the benefits of on-site daycare on organizational outcomes. On-site daycare was found, however, to be related to attitudes regarding the balance of work and family responsibilities, as well as to fewer problems with child care.

These discrepant findings can be understood in light of methodological issues. Group comparability, psychometric considerations, representativeness of sample, and the issue of stability are particularly relevant.

**Group Comparability**

An important issue is related to whether differences between users and non-users of on-site daycare are attributable to the location of the daycare centre or whether differences may be accounted for by child care variables such as cost, quality, and parental satisfaction with the child care arrangement. Milkovich and Gomez (1976) and Youngblood and Chambers-Cook (1982) did not establish group comparability on any child care variables, therefore group differences are difficult to interpret. For example, it could be hypothesized that groups differed in terms of the quality and reliability of their child care arrangement, which in turn, may explain differences on organizational outcomes.

In contrast, Goff et al. (1990) and Kossek and Nichol (1992) compared groups on daycare-specific variables. Goff et al. (1990) found that employees who were more satisfied with quality of child care, regardless of location, experienced less work-
family conflict, which in turn, was related to lower absenteeism. Kossek and Nichol (1992) found that users of on-site daycare perceived quality of care to be significantly higher than did employees using other child care arrangements. Goff et al. (1990) concluded that the fact that users of on-site daycare perceived fewer child care difficulties than did non-users of on-site daycare is not related to the location of the daycare but to the higher quality of the workplace daycare.

Group differences may also be attributable to the demographic profile of participants. This point cannot be underestimated in light of past research that has found that demographic backgrounds are related to problems with child care and attitudes regarding the balance of work and child care responsibilities (e.g., Kossek, 1990).

Although all studies have examined group comparability on some demographic variables, there is considerable diversity in the variables considered. For example, Milkovich and Gomez (1976) established group comparability on age of children, number of children, and job tenure, whereas Youngblood and Chambers-Cook (1982) compared their groups in terms of gender, marital status, age of employee, and number of children in the family. Goff et al. (1990) examined education, ethnic origin, marital status, and spousal employment status. Kossek and Nichol (1992) described the demographic profile of their sample in the most comprehensive manner. Their groups were comparable in terms of gender, management status, employment hours, marital status, number of
children, position tenure, organizational tenure, and total months youngest child is in child care arrangement. However, no information was provided in terms of participants' income and education. In summary, although efforts were made in each study to capture some important aspects of participants' demographic profile, each study neglected some important information.

Another important issue pertains to the length of time since the child's entry into the daycare. None of the studies to date have reported this information. As a child's entry into a daycare is a major transition for both child and parents (Vaughn, Deane, & Waters, 1986), it is essential that length of time since enrolment in daycare be equivalent between groups.

**Psychometric Considerations**

Past research has rarely employed psychometrically sound measures. Milkovich and Gomez (1976) relied solely on personnel files and Youngblood and Chambers-Cook (1982) assessed only one construct (organizational commitment) with a psychometrically sound measure. Five other organizational constructs were measured with instruments designed by the researchers, but no reference is made to the psychometric properties of these new measures. This is particularly surprising due to the fact that well-established measures of organizational outcome exist (see Cook, Hepworth, Wall, & Warr, 1981; Price & Mueller, 1986, for reviews of organizational assessment).

Psychometric considerations apply to the more recent studies as well. Goff et al. (1990) adapted a measure of work-family
conflict for their study, and reported adequate reliability for their new measure. They also reported reliability for their measures of satisfaction with child care arrangements and supervisor support. However, no validity information was provided on any measure. All of the measures used by Kossek and Nichol (1992) were either designed for the study or measures were adapted for the study. Reliability information was provided for one measure out of ten, and no mention of validity was made. To summarize, therefore, it is clear that the methodological soundness of past research on on-site daycare has been compromised by reliance on measures of unknown psychometric properties.

Representativeness of Sample

Each study drew from only one (e.g., Goff et al., 1990) or two (e.g., Youngblood & Chambers-Cook, 1984) organizations. It is necessary that studies use samples drawn from different types of workplaces in order that findings may be more easily generalizable. This is important as there is great variability in terms of organizational family-friendliness (Galinsky et al., 1991).

The generalizability of research findings is further limited by the fact that all studies were conducted in the United States. On-site daycare has become more popular in the USA since the decrease of social services during the Reagan years (Friedman, 1990), but remains relatively uncommon in Canada (Friendly, 1994; Labour Canada, 1991). The fact that child care is more regulated
in Canada than in the USA (Phillips, Lande, & Goldberg, 1990) further limits the generalizability of American findings as quality of care may be very different between the two countries. Thus, although results of US studies are thought-provoking, the extent to which they apply to the Canadian context is unclear.

**Issue of Stability**

With the exception of Youngblood and Chambers-Cook (1984) who examined absenteeism and turnover before and after registration in on-site daycare, studies have relied on cross-sectional designs and the stability of observed effects remains to be established. This point is particularly important because information regarding length of time in daycare was missing in all studies. On-site daycare may be beneficial in the short-term (e.g., first six months that the child has been registered in the daycare centre), but its benefits may subside over time. Conversely, it may take time before the benefits of on-site daycare become observable. Thus, it is very important to assess differences between users and non-users of daycare at different points in order to examine the stability of findings.

**Summary**

As a result of changing workplace demographics, the labour force is dominated by employees who are balancing work and family responsibilities. Work-family conflict is particularly salient for parents with preschool children. These employees are challenged by issues related to child care, such as obtaining quality, dependable, and affordable care for their children while
they are at work.

Preliminary research indicates that child care issues such as satisfaction with child care and concerns about and difficulties with child care are related to parent's work behaviours, work-family conflict, and depressive symptoms. However, research examining the relationship between child care and parental functioning remains scarce, has limited its focus to the negative aspects of parental functioning, and has not examined parental functioning within different roles (e.g., work role and family role). There is therefore a clear need for further research examining the relationship between child care and parental functioning.

In light of the preliminary evidence that child care affects parental functioning, organizations are introducing supports that can help parents with challenges to child care. Although a great deal of public attention has been given to on-site daycare, conclusions about its benefits remain tentative given the paucity of sound empirical investigations. More specifically, research that has examined the benefits of on-site daycare has been limited in terms of theory and methodology.

It is proposed here that the benefits of on-site daycare can be understood within role theory and the stress and coping framework. More precisely, on-site daycare may be viewed as a form of organizational support aimed at maximizing the advantages of multiple role involvement for employed parents with preschool children.
Four empirical studies examining the benefits of on-site daycare have yielded equivocal findings. Methodological shortcomings such as group comparability, psychometric quality, representativeness of samples, and stability of observed effects contribute to the difficulties in interpreting the research in this area.

Purpose of the Study

There were two complementary objectives to this study. The primary purpose of the study was to examine the association between on-site daycare and work, individual, family, and work-family functioning. The secondary purpose of the study was to examine the relationship between child care issues and parental functioning.

Primary Purpose

This study was designed to address a number of theoretical and methodological shortcomings of past research on the benefits of on-site daycare. Two groups of employed parents participated in this study. The first group was composed of parents whose children were registered at an on-site daycare centre. The second group was composed of parents whose children were registered at an off-site daycare centre.

Two important theoretical issues were addressed. First, this study was multidimensional in that variables in the work, individual, family, and work-family domains were the focus of the assessment. This is an expansion of past research, which has mostly examined the impact of on-site daycare on work outcomes.
The benefits of on-site daycare may not be restricted to work outcomes, but may extend to employees' individual and family functioning. Second, the focus of this study was on both positive and negative aspects of parental functioning.

This study also addressed four methodological issues. First, the comparability of groups was determined to eliminate the rival hypothesis that group differences are not attributable to on-site daycare but rather due to other important variables. To establish group comparability on child care variables, both on-site and off-site groups were recruited from the same nine daycare centres. Thus, parents in both groups received child care that was comparable in terms of quality, reliability, and cost. Group comparability on demographic variables and on length of time in daycare was assessed statistically.

Second, psychometrically sound measures were used to assess variables in work, individual, family, and work-family domains. In situations where this was not feasible, the psychometric properties of the measures were examined for this sample, and weak measures were excluded from further analyses. When measures were designed for the purposes of this study, the psychometric properties of the new measures were also examined.

Third, the representativeness of the sample was also addressed. Participants in this study were recruited from several daycare centres with different organizational sponsorship. Daycare centres were located in the hospital, university, federal and provincial government workplaces. There
were, however, no daycare centres located at private industry workplaces. Both English-speaking and French-speaking parents were included.

Fourth, the stability of observed effects was addressed by including two waves of data collection. In doing so, it was possible to examine the association between on-site daycare and work attitudes, and individual, family, and work-family functioning over time.

**Design**

The ideal design to examine the association between on-site daycare and parental functioning would be a "true experiment" in which volunteering parents would be randomly assigned to two conditions: an on-site daycare centre and an off-site daycare centre. In practice, this procedure is unacceptable to organizations and their employees. When random assignment is not feasible, then quasi-experimental designs are most suitable (Cronbach, 1982).

A repeated measures design was adopted in which participants were assessed twice over a span of six months to address the issue of stability of the relationship between on-site daycare and work, individual, family, and work-family functioning over time. For instance, it may be that on-site daycare produces positive effects at Time 1 but that these effects are attenuated after six months (Time 2). In contrast, it may be that on-site daycare produces no effects at Time 1, but that positive effects are observed at Time 2. Moreover, it may be that on-site daycare
produces positive effects that are long-lasting, or conversely, produces no positive effects at all.

Variables

The independent variable in this study was daycare centre status: on-site (located at workplace) or off-site (not located at workplace). Variables in the work, individual, family, and work-family domains served as dependent variables. Three work attitudes were assessed: 1) participants' affective response to their job situation (job satisfaction), 2) participants' loyalty to their organization (job commitment), and 3) participants' psychological identification with their job (job involvement). Individual functioning was defined in terms of perceived stress and life satisfaction. Family functioning was defined as marital and parental satisfaction, and work-family functioning was defined as role overload and family interference with work.

Several variables were also included to establish the comparability of the groups. These variables included: gender, marital status, age, partner's age (if applicable), child's age, socioeconomic status (job function, education, income), partner's socioeconomic status (if applicable), number of children, organizational tenure, number of hours spent weekly in paid employment, and length of time in current daycare.

Hypotheses

This study, grounded in both role theory and stress and coping frameworks, tested the general hypothesis that employees can maximize the benefits of multiple role involvement through
their children's attendance at an on-site daycare centre as a form of organizational support. Four specific hypotheses were tested in this study:

1) **Work attitudes hypothesis:** participants in the on-site group will have higher levels of job satisfaction, job commitment, and job involvement than will participants in the off-site group;

2) **Individual functioning hypotheses:** participants in the on-site group will have lower levels of perceived stress and higher levels of life satisfaction than will participants in the off-site group;

3) **Family functioning hypothesis:** participants in the on-site group will have higher levels of parental and marital satisfaction than will participants in the off-site group;

4) **Work-family functioning hypothesis:** participants in the on-site group will have lower levels of role overload and family interference with work than will participants in the off-site group.

Predictions on the basis of time are difficult to make because only one study (Youngblood & Chambers-Cook, 1984) has prospectively examined the benefits of on-site daycare. However, four alternative hypotheses related to time were examined:

1) **Attenuated benefits hypothesis:** on-site daycare will be beneficial at Time 1 but the benefits will diminish at the six month follow-up;
2) **Sleeper benefits hypothesis:** on-site daycare will be beneficial only at the six month follow-up;

3) **Sustained benefits hypothesis:** on-site daycare will be beneficial at Time 1 and at the six month follow-up;

4) **No benefits across time hypothesis:** on-site daycare will have no benefits at either time of assessment.

**Secondary Purpose**

The secondary purpose of this study was to examine the relationship between child care variables and parental functioning. A correlational investigation of child care variables and parental functioning was undertaken by combining the on-site and off-site groups to form one group of employed parents with preschool children. The groups were combined because they differed only in regards to the location of their daycare centre. In keeping with research to date, the following child care variables were examined: satisfaction with child care arrangement, difficulties with child care arrangement, work-childcare conflict, and primary responsibility with child care.

Two issues were considered in selecting the dependent variables. First, it was important to consider different roles fulfilled by working parents. Second, it was also important to consider both negative and positive aspects of functioning. As a result, perceived stress and role overload were examined in terms of parental difficulties, and job satisfaction, life satisfaction, and parental satisfaction were examined in terms of parental satisfactions.
This study was designed to test the general hypothesis that child care variables are related to working parents' difficulties and satisfactions. More specifically, two hypotheses were tested:

1) **Parental difficulties hypothesis**: difficulties with child care, work-child care conflict, responsibility for child care, and dissatisfaction with child care will be positively related to perceived stress and role overload.

2) **Parental satisfactions hypothesis**: difficulties with child care, work-childcare conflict, responsibility for child care, and dissatisfaction with child care will be negatively related to job satisfaction, life satisfaction, parental satisfaction, and marital satisfaction.

These hypotheses were tested at both assessment times. Also, child care variables at the first assessment time were used to predict strains and gains at the six months follow-up.

**Method**

**Participants**

For a parent to be eligible to be included in the study, s/he 1) had to have at least one child under the age of six registered in one of the targeted licensed daycare centres and 2) also had to be employed at least 30 hours a week.

A total of 66 parents took part in the first wave of data collection: 34 employed parents whose children attended a
daycare centre that was sponsored by their workplace (26 females and 8 males) and 32 employed parents whose children attended a daycare centre that was not sponsored by their workplace (22 females and 10 males). Participant characteristics are presented in Tables 3, 4, and 5.

The mean age for participants was 33.5 years (SD = 4.4) and children ranged in age from 6 months to 63 months (M = 28 months, SD = 13.1). Fifty nine participants were married or living with a partner, three participants were divorced, one participant was separated, two participants were never married, and one participant was widowed. The age of partners ranged from 23 years to 48 years (M = 35 years, SD = 5.1). Sixty-two percent of families had one child, 35% of families had two children, and 3% had three children (M = 1.4).

The sample was of high socioeconomic status. Fifty five percent (54.5%) of participants were employed in professional or managerial occupations, 60.6% held university degrees (39.4% held undergraduate degrees and 21.2% held graduate degrees), and 48.4% of participants earned $40,000 a year or more. A high socioeconomic status was also found for partners. Forty nine percent (48.5%) of partners were employed in professional or managerial occupations, 53% held university degrees (32% held undergraduate degrees and 21% held graduate degrees), and 50% of partners earned $40,000 a year or more.

Organizational tenure averaged 6 years, ranging from one month to 20 years (SD = 5.2). Time spent in paid employment
On-Site Daycare

averaged 39 hours, ranging from 31 hours to 65 hours. Length of
time the child had attended the daycare centre ranged from 2
weeks to 34 weeks (M = 11.3 weeks, SD = 8.8). Thirty four
participants completed the study in English (51.5%) and 32
participants completed the study in French (48.5%).

Ninety one eligible parents (those whose children had not
been registered in the daycare for longer than three months) were
asked to participate by the director of the daycare centre. A
total of 66 agreed, yielding a total response rate of 72.5%.
Fifty five participants completed the second wave of data
collection. Of the 11 participants who did not complete the
second wave of data collection, three had changed daycare
centres, two had moved out of the country, and six did not wish
to complete the questionnaire and interview at Time 2 due to time
constraints. This resulted in an overall attrition rate of 17%
(15% for the on-site group and 19% for the off-site group).

Parents were recruited from nine daycare centres: Ontario
(n=3), Québec (n=5), and Nova Scotia (n=1). All centres were
sponsored by an employer and therefore considered to be workplace
daycare centres. Two daycare centres were sponsored by a
hospital, three daycare centres were sponsored by a university,
three daycare centres were sponsored by the Federal Government,
and one daycare centre was sponsored by a Provincial Government.
Table 2 presents the frequencies and percentages of participants
in each daycare centre.
Although all daycare centres gave priority to employees of the sponsoring organization, all daycare centres were also open to families in the community. This allowed the recruitment of participants in the on-site and off-site groups from the same daycare centres. The most common type of organizational sponsorship was the provision of rent-free space for the daycare centre. Other forms of organizational sponsorship included provision of land for the construction of the daycare, interest-free loan for the construction of the daycare centre, free access to the organization's food service, free access to the organization's accounting services, and provision of office furniture, provision of cleaning services.

Three of the centres were licensed for 60 children, three of the centres were licensed for 40 children, and three of the centres were licensed for 49 children. Five daycare centres offered enrolment on a full-time basis only; three daycare centres offered enrolment on both a full-time and a part-time basis; one daycare centre offered enrolment on full-time, part-time, and drop-in basis. The length of time since the establishment of the daycare centres varied. Two daycare centres were established in 1992, one centre was established in 1991, three centres were opened in 1988, one centre was opened in 1984, one centre was opened in 1983, and one centre was opened in 1982.
Table 2

Frequencies (Fq) and Percentages (%) of Participants in Each Daycare Centre

<table>
<thead>
<tr>
<th>Daycare Centre</th>
<th>Total (N = 66)</th>
<th>On-Site Group (n = 34)</th>
<th>Off-Site Group (n = 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fq</td>
<td>%</td>
<td>Fq</td>
</tr>
<tr>
<td>1</td>
<td>13</td>
<td>19.7</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>7.6</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>10.6</td>
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<td>5</td>
<td>7.6</td>
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<td>8</td>
<td>12.1</td>
<td>6</td>
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<td>7.6</td>
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<tr>
<td>9</td>
<td>6</td>
<td>9.1</td>
<td>3</td>
</tr>
</tbody>
</table>

Note. Daycare centres 1, 2, 3 are sponsored by the federal government, daycare centre 4 is sponsored by a provincial government, daycare centres 5, 6, 7, are sponsored by a university, and daycare centres 8 and 9 are sponsored by a hospital.
All of the daycare centres were run by separately incorporated non-profit child care boards. Daycare centres were opened Monday through Friday between 7:00 am and 8:00 am and closed between 5:30 pm to 5:45 pm. Cost of daycare varied from province to province, with Ontario daycare centres being the most expensive. The weekly fees were consistent with those described in a recent survey of Canadian workplace daycare centres (i.e., median weekly fees of $122.50 for infants, $100.00 for toddlers, and $95.00 for preschoolers) (Beach et al., 1993).

Measures

A questionnaire package containing measures of work attitudes, individual, family, and work-family functioning was completed by participants at both times of the assessment. In this questionnaire, child care and demographic variables were also measured. Participants in the on-site group also took part in a telephone interview regarding on-site daycare at both assessment times.

As both English-speaking and French-speaking parents participated in this study, measures were available in both languages. Validity data were available for the French translation of the Satisfaction with Life Scale (Blais, Vallerand, Pelletier, & Brière, 1989).

French versions of the Organizational Commitment Questionnaire, the Perceived Stress Scale, the Role Overload and Family Interference with Work subscales of the Job-Family Role Strain Scale, the Satisfaction with Child Care Scale, and the
item assessing primary responsibility for child care were available from Duxbury et al. (1991). These researchers also provided evidence for the internal consistency of these translated measures.

In addition, it was necessary to translate some measures for this study: the Facet-Free Job Satisfaction Scale, the Kanungo Index of Job Involvement, the Satisfaction with Parent Role Scale, the Kansas Marital Satisfaction Scale, the Child Care Difficulties Scale, and the Work-Child Care Conflict Scale. Following the procedures recommended by Vallerand (1989), a committee process of back-translation was used to ensure the accuracy of the French version.

A bilingual research assistant translated the English versions to French. Subsequently, another bilingual research assistant back translated the preliminary French versions. Subsequently, the accuracy of the French translation was examined by a committee made up of three bilingual assistants and was modified accordingly. The internal consistency of the translated versions was statistically examined and is presented in the following section. Also, t-tests were performed between French and English responses to assess the equivalence of the French and English versions of the measures.

**Questionnaire Data**

**Work Attitudes**

Three work attitudes were assessed: 1) job satisfaction, 2) job commitment, and 3) job involvement.
Job satisfaction

Job satisfaction has traditionally been defined as a positive emotional state reflecting an affective response to the job situation (Locke, 1976). Given that the goal of this study was to assess changes in employees' general affective orientation toward their work, a global measure of job satisfaction (facet-free) was considered more appropriate than a measure that would assess specific areas of satisfaction (facet-specific).

Overall job satisfaction was measured by the Facet-Free Job Satisfaction scale (FFJS; Quinn & Staines, 1979). This measure was developed for the US national "Quality of Employment Survey" carried out in 1977. The FFJS is composed of five items which have three or four response categories. All items are scored from 1 to 5, with a score of 5 representing the most satisfaction and 1 representing the least satisfaction. The index is constructed by summing the scores for the five questions and scores can range from 5 to 25.

Quinn and Staines (1979) cited an overall alpha coefficient of .77. In terms of construct validity, the authors reported a positive correlation between the FFJS and their measure of facet-specific job satisfaction (Quinn & Staines, 1979). Additionally, the FFJS correlated negatively with a measure of role ambiguity and depressed mood at work (Quinn & Staines, 1979).

In this study, an overall Cronbach's alpha coefficient of .75 was found, which is comparable to the internal consistency reported by Quinn and Staines (1979). Alpha coefficients were
the same for the English (.75) and French versions (.75). There were no significant differences between the English and French responses on the FFJS ($t(64) = 0.58$, $p > .05$). Both versions of the FFJS are presented in Appendix A.

**Organizational commitment**

According to Price and Mueller (1986), commitment is loyalty to the organization. It is generally viewed as a broad attitude that reflects the relative strength of an individual's identification with and involvement in a particular organization (Brooke et al., 1986).

Organizational commitment was assessed by using the short version of the Organizational Commitment Questionnaire (OCQ; Mowday, Steers, & Porter, 1979). The long version of the OCQ consists of 15 items, 9 which are positively phrased and 6 which are negatively phrased. Participants rate each item along a 7-point Likert scale. High scores indicate high levels of organizational commitment.

The authors provided strong evidence for the internal consistency of the long version of the OCQ, with alpha coefficients ranging from 0.82 to 0.93 with a median of 0.90 (Mowday et al., 1979). The internal consistency of the OCQ has also been established by other researchers (e.g., Jermier & Berkes, 1979; Kerr & Jermier, 1978). Test-retest reliability coefficients reported by Mowday et al. (1979) are .72 across two months and .62 across three months.
In terms of convergent validity, the OCQ correlated positively ($r = .70$) with the Sources of Organizational Attachment measure (Mowday, Porter, & Dubin, 1974), which assesses the perceived influence of various work aspects of the job, work environment, and organization. In terms of construct validity, Mowday et al. (1979) found significant negative correlations with absenteeism and intention to turnover, and found positive correlations with work-oriented interests, tenure, and job performance.

Support for the predictive validity of the measure was found in a longitudinal study (Mowday et al., 1979) in which scores on the OCQ significantly predicted turnover behaviour. Confirmatory factor analysis of measures of job satisfaction, organizational commitment, and job involvement provided evidence for the OCQ's discriminant validity (Brooke et al., 1988).

Mowday et al. (1979) suggested that the short version (nine items) of the OCQ is an acceptable substitute for the longer scale when questionnaire length is a consideration. As brevity was important for this study, the 9-item version was therefore selected. The psychometric equivalence of the 9-item version to the original 15-item version has been established (Mowday et al., 1979).

In the original version, participants are asked to rate their agreement with the items on a 7-point Likert scale. However, Duxbury et al. (1991) modified this rating scale into a 5-point Likert scale. As the latter study provided norms for
Canadian employees with preschool children, the scale modifications were adopted. These researchers provided strong evidence for the reliability of the modified OCQ (\(\alpha = .90\)). By using a 5-point Likert scale, scores can range from 9 to 45.

In this study, an overall Cronbach's alpha coefficient of .85 was found, which is comparable to the internal consistency reported by Mowday et al. (1979) and Duxbury et al. (1991). Alpha coefficients were comparable for the English (.87) and French versions (.83) of the OCQ. There were no significant differences between the English and French responses on the OCQ (\(\xi(64) = 0.45, p > .05\)). Both versions of the OCQ are presented in Appendix B.

**Job involvement**

Job involvement has been defined as the cognitive belief state of psychological identification with one's job (Locke, 1976). This construct was assessed by using the 10-item Kanungo Index of Job Involvement (KIJI; Kanungo 1982b). Participants were asked to rate their agreement or disagreement on a 5-point Likert scale, with 1 representing "strongly disagree" and 5 representing "strongly agree". Two items were reverse scored. A total score was obtained by summing the responses of each item and scores can range from 10 to 50. High scores indicate high levels of job involvement.

Kanungo (1982b) reported good internal consistency with a Cronbach's alpha of .87. The author also reported a three week test-retest reliability coefficient of .85. Kanungo (1982b) used
the multitrait-multimethod procedure to assess both convergent and discriminant validity, and found results to be in agreement with expectations. Factor analysis yielded a clear interpretable factor of job involvement (Blau, 1985; Kanungo, 1982b).

In terms of construct validity, the KJI was found to be negatively correlated with routinization (the degree to which a job is repetitive) (Brooke et al., 1988). The job involvement index also correlated positively with pay, distributive justice (the degree of fairness with which organization rewards are related to performance inputs), and work involvement (the extent to which the work role occupies a position of centrality in the individual's life) (Brooke et al., 1988). Finally, confirmatory factor analysis of measures of job satisfaction, organizational commitment, and job involvement provided strong evidence for the construct validity of the KJI (Brooke et al., 1988).

In this study, an overall Cronbach's alpha coefficient of .84 was found, which is comparable to the internal consistency reported by Kanungo (1982b). Alpha coefficients were comparable for the English (.86) and French versions (.84) of the KJI. There were no significant differences between the English and French responses on the KJI ($t(64) = -0.57, p>.05$). Both versions of this measure are presented in Appendix C.

**Individual Functioning**

Two aspects of individual functioning were assessed: 1) perceived stress and 2) life satisfaction.
Perceived stress

Participants' general stress levels were assessed using the 10-item version of the Perceived Stress Scale (PSS; Cohen, Kamark, & Mermelstein, 1983). The original PSS includes 14 items that measure the degree to which situations in one's life are appraised as stressful (Cohen et al., 1983). The questions in the PSS inquire about feelings and thoughts during the last month. Individuals answer on a 5-point Likert scale, with 1 indicating "never" and 5 indicating "very often". High scores on this scale indicate high levels of perceived stress.

There is considerable evidence supporting the psychometric adequacy of the original 14-item PSS. Cohen et al. (1983) reported coefficient alpha reliabilities ranging from .84 to .86, and test-retest reliabilities ranging from .55 to .85. In terms of validity, the PSS has been found to be predictive of health outcomes (both physical and mental). Cohen et al. (1983) also reported positive correlations between the PSS-14 and life-event scores, and depressive and physical symptoms. Further evidence for the validity of the PSS derives from studies which used the PSS as an outcome variable, with life events, coping processes, and personality factors predicting changes in perceived stress (e.g., Linville, 1987).

A 10-item version (PSS10) of the scale has also been validated (Cohen & Williamson, 1988). These researchers argued that the PSS10 allows the assessment of perceived stress without any loss of psychometric quality over the longer PSS14.
Moreover, these researchers demonstrated that the PSS10 has a somewhat tighter factor structure and slightly better internal consistency than the PSS14. The correlations between the PSS10 and various outcomes were equivalent to those found with the original 14-item scale. For these reasons, Cohen and Williamson (1988) recommended the use of the 10-item scale. By using the 10-item version of the PSS, scores can range from 10 to 50.

In this study, an overall Cronbach's alpha coefficient of .83 was found, which is comparable to the internal consistency reported by Cohen and Williamson (1988). Alpha coefficients were comparable for the English (.85) and French versions (.84) of the PSS. There were no significant differences between the English and French responses on the PSS ($t(64) = -1.52$, $p > .05$). Both versions of this measure are presented in Appendix D.

**Life satisfaction**

The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) was used to assess participants' life satisfaction. The SWLS is a 5-item Likert scale for which respondents rate their agreement or disagreement with items regarding their life satisfaction. Scores can range from 5 to 25 and higher scores indicate greater levels of life satisfaction.

In terms of internal consistency, Diener et al. (1985) reported a coefficient alpha of .87. Test-retest reliability for a period of two months was .82. In terms of factorial validity, a single factor accounting for 66% of the variance was found, thereby confirming the unidimensional nature of life
satisfaction. This single-factor solution has since been replicated in both English (Pavot, Diener, Colvin, & Standvik, 1991) and French versions (Blais, Vallerand, Pelletier, & Brière, 1989).

In terms of convergent validity, the SWLS correlated positively with other indices of well-being (e.g., Fordyce's percent of time happy question) and ratings of life satisfaction in key life domains. Finally, Diener et al. (1985) found that ratings of life satisfaction were unrelated to social desirability.

In the original version, participants are asked to rate their agreement on a 7-point Likert scale. However, Duxbury et al. (1991) modified this rating scale into a 5-point Likert scale. Given the availability of norms for Canadian employees with preschool children, the scale modifications were adopted for this study. Duxbury et al. (1991) provided strong evidence for the internal consistency of the modified SWLS (α = .88).

In this study, an overall Cronbach's alpha coefficient of .88 was found, which is consistent with Diener al. (1985). Alpha coefficients were comparable for the English (.85) and French versions (.91) of the SWSL. There were no significant differences between the English and French responses on the SWLS (t(64) = -0.54, p>.05). Both versions of the SWLS are presented in Appendix E.
Family Functioning

Two aspects of family functioning were assessed, including 1) parental satisfaction, and 2) marital satisfaction.

Parental satisfaction

In reviewing the existing measures of parent satisfaction, two instruments were considered: the Cleminshaw-Guidubaldi Parent Satisfaction Scale (CGPSS; Guidubaldi & Cleminshaw, 1985) and the revised Satisfaction Scale of the Parenting Sense of Competence Scale (SS-PSOC; Johnston & Mash, 1989). After considering issues such as length, age-appropriateness, and face validity, it was decided that important changes were required to make both of these measures suitable for this study.

A new measure of parental satisfaction, the Satisfaction with Parent Role Scale (SPRS) was developed for this study, drawing from the Spouse Support subscale of the CGPSS (Guidubaldi & Cleminshaw, 1985). Items were modified so that the focus of these questions was no longer on the spouse, but rather on the respondent.

Respondents rate their agreement or disagreement with seven items on a 7-point Likert scale, where 1 indicates "do not agree at all", 3 indicates "moderately agree", and 5 indicates "strongly agree". One item is reverse scored. Scores can range from 7 to 49 and higher scores indicate higher levels of satisfaction with parent role.

Preliminary analyses of the SPRS yielded an overall Cronbach's alpha coefficient of .63, suggesting poor internal
consistency. Examination of the alpha values when each item was deleted from the scale identified item 4 as problematic. Deletion of this item improved the internal consistency of the SPRS (total sample: $\bar{r} = 0.79$; English version, $\bar{r} = 0.80$, French version, $\bar{r} = 0.76$). There were no significant differences between the English and French responses on the SPRS ($t(64) = -0.42$, $p > 0.05$). The 6-item SPRS was used for all subsequent analyses and is presented in Appendix F. In terms of construct validity, the SPRS correlated positively with satisfaction with life ($r = 0.31$, $p < 0.01$) and correlated negatively with perceived stress ($r = -0.27$, $p < 0.05$).

**Marital satisfaction**

The Kansas Marital Satisfaction Scale (KMSS; Schumm et al., 1986) provided a short and direct assessment of marital satisfaction. The scale consists of three items in which respondents are asked how satisfied they are with their partner as a spouse, with their marriage, and with their relationship with their spouse. Participants are asked to rate their satisfaction on a 7-point Likert scale, with a score of 1 representing "extremely dissatisfied" and a score of 7 representing "extremely satisfied". Scores can range from 3 to 21 with high scores indicating high levels of marital satisfaction.

Although the KMSS is a short measure of marital satisfaction, its psychometric properties are impressive. In a series of studies, the scale has performed very reliably with
alphas ranging from .89 to .96 (Jeong, Bollman, & Schumm, 1992; Mitchell, Newell, & Schumm, 1983; Schumm, Nichols, Schectman, & Grigsby, 1983; Schumm, Scanlon, Crow, Green & Bucker, 1983; Schectman, Betsey, Schumm, & Bugaighis, 1985). Test-retest reliability over a 10-week interval was .71 (Mitchell et al., 1983).

Evidence for the validity of the scale is derived from its positive correlations with Norton's (1983) Quality of Marriage Index, and the Dyadic Adjustment Scale (DAS; Spanier, 1976) (Schumm et al., 1986). The KMSS also correlated positively with selected scales of Moos' Family Environment Scale (FES; Moos & Moos, 1976) (Mitchell et al., 1983). Scores on the KMSS discriminated between wives from intact marriages and wives who had recently separated (Schumm et al., 1985). Finally, a recent study has demonstrated that the KMSS is not influenced by social desirability (Jeong et al., 1992).

In this study, an overall Cronbach's alpha coefficient of .99 was found, which suggests excellent internal consistency. Alpha coefficients were comparable for both the English (.98) and French versions (.99). There were no significant differences between the English and French responses on the MSAT (t(57) = -1.21, p>.05). Both versions of the KMSS are presented in Appendix G.

Work-Family Functioning

Two aspects of work-family functioning were assessed: 1) role overload and 2) family interference with work. These
constructs were operationalized by using two subscales (Role Overload and Family Interference with Work) of the Job-Family Role Strain Scale (JFRSS; Bohen & Viveros-Long, 1981). The JFRSS asks respondents to indicate, on a 5-point Likert scale, the extent to which they agree or disagree with five items on the Role Overload subscale and eight items on the Family Interference with Work subscale. Three items on the Family Interference with Work subscale are reverse scored. Higher scores indicate greater role overload (scores ranging from 5 to 25) and family interference with work (scores ranging from 8 to 40).

Bohen and Viveros-Long (1981) reported a Cronbach's alpha of .72 for the total JFRSS. These authors also reported that content validity was assessed by a panel of six judges. Recently, Higgins et al. (1994) provided evidence for the internal consistency of the Role Overload subscale ($\alpha = .85$). In contrast, however, they reported poorer reliability for the Family Interference with Work subscale ($\alpha = .69$).

In this study, an overall Cronbach's alpha coefficient of .85 was found on the Role Overload subscale, which is consistent with Higgins et al. (1994) and suggests good internal consistency. Alpha coefficients were comparable for the English (.87) and French versions (.82) of the Role Overload subscale. There were no significant differences between the English and French responses on the Role Overload subscale ($\chi^2(64) = 1.09$, $p > .05$). Both versions of this measure are presented in Appendix H.
Consistent with Higgins et al. (1994), an overall Cronbach's alpha coefficient of .60 was found on the Family Interference with Work subscale (.55 for the English version; .66 for the French version). Examination of the alpha when items were deleted indicated that the poor internal consistency of this subscale was not due to one particular item. In light of these findings, the family interference with work construct was excluded from further analyses.

**Child Care Variables**

Four constructs were assessed in the child care domain: 1) satisfaction with child care, 2) difficulties with child care, 3) work-child care conflict, and 4) responsibility for child care. The measurement of these constructs will be discussed in turn.

**Satisfaction with child care**

Satisfaction with child care was assessed with the Satisfaction with Child Care Scale (SCCS) designed by Duxbury et al. (1991). Parents indicate on a 7-point Likert scale the extent to which they agree or disagree with six statements regarding the reliability, cost, and flexibility of child care, as well as the extent to which it is favourably viewed by other family members. Scores can range from 6 to 43 and high scores on this scale indicate greater satisfaction with child care.

Duxbury et al. (1991) reported a Cronbach's alpha of .84 but found that the SCCS violated the assumptions of normality because of restricted variability in scores. In an attempt to overcome this issue, the rating scale was modified to a 7-point scale.
where a score of 1 represents "do not agree at all", a score of 4 represents "moderately agree", and a score of 7 represents "strongly agree".

In this study, an overall Cronbach's alpha coefficient of .67 was initially found. Examination of the alpha values when each item was deleted from the scale identified item 2 as problematic. This item was therefore deleted from the scale which resulted in an overall Cronbach's alpha coefficient of .77 (.75 for English; .83 for French). The revised 5-item SCCS was therefore used for subsequent analyses. There were no significant differences between the English and French responses on the SCCS ($t(64) = 0.94, p>.05$). Both English and French versions of the SCCS are presented in Appendix I.

**Child care difficulties**

The Child Care Difficulties Scale (CCDS) was developed using eight items from the National Child Care Survey (Statistics Canada, 1988). Participants were asked to indicate on a 5-point Likert scale the extent to which they experience child care difficulties. A score of 1 represents "never", a score of 3 represents "sometimes", and a score of 5 represents "always". Scores can range from 8 to 40 and higher scores indicate higher child care difficulties.

An overall Cronbach's alpha coefficient of .83 was found, which suggests good internal consistency. Alpha coefficients were comparable for the English (.79) and French versions (.85) of the CCDS. There were no significant differences between the
English and French responses on the CCDS (t(64) = -1.11, p > .05). In terms of construct validity, the CCDS correlated positively with perceived stress (r = .27, p < .05). Both French and English versions of the CCDS are presented in Appendix J.

Work-child care conflict

The Work-Child Care Conflict Scale (WCCCS) was designed for this study as no well-validated alternative measures of work-child care conflict were available. Participants were asked to indicate, on a 7-point Likert scale, their agreement with nine items. A score of 1 indicates "do not agree at all", a score of 3 indicates "moderately agree", and a score of 7 indicates "strongly agree". Scores can range from 9 to 63 and lower scores indicate high levels of work-child care conflict.

An overall Cronbach's alpha coefficient of .81 was found, which suggests good internal consistency. Alpha coefficients were comparable for the English (.78) and French versions (.82) of the WCCCS. There were no significant differences between the English and French responses on the WCCCS (t(64) = 0.30, p > .05). Both French and English versions of the WCCCS are presented in Appendix K.

Responsibility for child care

Primary responsibility for child care was measured using a single item which asked parents to indicate the extent to which responsibility for child care is shared with a spouse/partner. This item was derived from the 1977 Quality of Employment Survey (Quinn & Staines, 1977). A 5-point scale was used, with a
response of 1 indicating sole responsibility, a response of 3 indicating shared responsibility, and a response of 5 indicating complete spouse/partner responsibility. There were no significant differences between the English and French responses to this item ($t(64) = -0.82, p>.05$). The item assessing primary responsibility for child care is presented in Appendix L.

**Demographic information**

Data were collected on gender, marital status, age, job function, education, income, and language. Spouse/partner information was also collected, including age, job function, education, income. Child-related information was recorded, including number of children, age of child in daycare, and length of time in current daycare. Data on organizational tenure and weekly hours in paid employment were also collected.

**Interview Data**

Participants in the on-site group were asked to take part in two audiotaped telephone interviews (Time 1 and Time 2) aimed at gathering information regarding on-site daycare. The goal of these interviews was to supplement participants' responses to standardized measures by open-ended questions.

Semi-structured interviews were developed for the purposes of this study. Participants were asked about the advantages and disadvantages of on-site daycare. This is in keeping with the general trend of this study to examine both negative and positive aspects of participant functioning. Moreover, questions referred not only to participants, but to partners, employers, and
colleagues as well. In doing so, the interview surveyed
different aspects of participants' lives. Given this study's
focus on role theory and support, participants were also asked
whether, and if so how, on-site daycare helped them balance work
and family responsibilities.

Parents were asked if their perceptions of their
organization had changed in light of the fact that it sponsored
on-site daycare. Finally, in an effort to understand the types
of organizational support most desired by parents, participants
were also asked how they would like their organization to invest
money toward becoming family-friendly.

The stability of participants' responses was examined by
asking many of the same questions at the six month follow-up.
Nevertheless, some questions were specific to each assessment
time. For the Time 1 interview, participants were asked to
identify their previous type of child care arrangements and the
factors they considered before changing/opting for their current
child care arrangement. For the Time 2 interview, questions
about unanticipated benefits and disadvantages of on-site daycare
were surveyed. Also, participants were asked how on-site daycare
affected the way they handled medical appointments, emergencies,
travelling time, and overtime, and whether they were able to
spend time with their children during lunch or break time.
Finally, parents were asked what comments or suggestions they
would have for parents who were considering on-site daycare.
The interviews were pilot-tested on a few experts in the area of child care. Modifications were made based on feedback concerning the comprehensibility of questions and the face validity of the content of the interviews. The Time 1 interview is presented in Appendix M and the Time 2 interview is presented in Appendix N.

Coding for Interviews

All interviews were transcribed verbatim. Transcripts of the first 10 interviews were reviewed to generate a coding scheme of responses. The coding scheme consisted of categories of responses for each question which could be rated as present or absent. The preliminary coding scheme was then applied to five interviews by a coder (coding was conducted by three undergraduate research assistants). Ambiguities resulted in modification and/or clarification of the categories of responses. The coding scheme for the Time 1 interview is presented in Appendix O and the coding scheme for the Time 2 interview is presented in Appendix P.

Coders were trained by 1) familiarizing themselves with the interviews and coding schemes, 2) reading previously coded transcripts with reference to the scoring sheet and generating questions regarding decisions rules, 3) participating in training sessions in which decision rules were clarified, and 4) coding previously coded transcripts without access to the scoring sheet.
Only when coders achieved inter-rater reliability in excess of 75 percent were they permitted to code actual transcripts. The coders' progress was monitored through regular meetings and availability to consult on coding questions. Inter-rater reliability was assessed for 20% of the transcribed telephone interviews. As recommended by Bartko and Carpenter (1976), reliabilities for the presence or absence of a response category were calculated using a kappa statistic. For the presence or absence of a response category, kappa = .87 for the Time 1 interviews, ranging from kappa = .78 to kappa = .95. The overall kappa for the Time 2 interviews was .84, ranging from .76 to .92. Disagreements were randomly distributed and were resolved by consensus.

**Procedure**

Data were collected between September 1992 and July 1994. The directors of the daycare centres were asked to distribute the questionnaire packages to parents within three months of the child's registration in the daycare centre.

Although the average time in current daycare for the completion of the Time 1 questionnaire was within the three month period ($\bar{X} = 11.33$ weeks), there was some variability in this respect ($SD = 8.8$ weeks), ranging from two weeks to 34 weeks. Parents whose children had been registered in the daycare for more than three months were included in the study to increase the sample size. The wide range of length of time in current daycare can be explained by three factors.
First, some parents received the questionnaire package within the three month period but took longer to return the completed questionnaire package. Second, the directors of the two daycare centres that had opened in September 1992 distributed the packages after a settling period. This settling period was established at their discretion. Third, directors frequently reported that time pressure made it difficult to assist in the recruitment of participants.

Each questionnaire package contained: 1) a letter describing the study and inviting participation (Appendix Q), a copy of a questionnaire containing all the measures, two copies of a consent form (one to return and one to keep) (Appendix R), and a stamped and self-addressed return envelope. Interested parents were asked to complete the questionnaire and mail it to the university.

Directors were contacted by a research assistant approximately every two weeks to obtain names and telephone numbers of parents who had agreed to look at the questionnaire package. A research assistant made telephone contacts with potential participants to address questions and/or comments. During this telephone conversation, parents were asked whether they intended to participate in the project.

From these telephone contacts, a list of names and telephone numbers of parents who indicated that they would participate in the study was generated. Follow-up telephone calls were made to parents who had not returned the questionnaire package within a
three week period. It was sometimes necessary to telephone parents twice or three times to increase the response rate. Delays were commonly explained by shortage of time.

Upon receipt of the completed questionnaire package, participants were assigned to either on-site or off-site group. Participants who worked for the sponsoring organization were assigned to the on-site group, and participants who did not work for the sponsoring organization were assigned to the off-site group. It was sometimes necessary to telephone participants to clarify their work location. It is important to note that spouses of participants in the on-site group were not included as participants in the off-site group.

Six months after completion of the questionnaire at Time 1, parents were sent another questionnaire package (identical to the one they completed at Time 1). Time 2 questionnaire packages were mailed out 22 weeks after receiving the questionnaire for Time 1. Follow-up telephone calls were made to parents who had not returned the questionnaire package after a three week delay. It was sometimes necessary to make up to three follow-up telephone calls. The average length of time between completion of Time 1 and Time 2 questionnaires was 26.1 weeks, with slight variability (SD = 3.13), ranging from 22 weeks to 36 weeks.

Participants who agreed to take part in the telephone interview (N = 29), as indicated on the consent form, were contacted at both assessment times. The telephone interviews were conducted during the time indicated as most convenient on
the consent form. However, consistent with Lee et al. (1992), an average of six phone calls was required to conduct each interview due to the parent's scheduling difficulties.

Three undergraduate research assistants conducted the interviews. Before proceeding with the interviews, interviewers ensured confidentiality and asked permission to audiotape the conversation. The introductory script is provided in Appendix S. After completion of an interview, the audiotape was given to another research assistant who transcribed the interview verbatim.

Both questionnaire and interview data were entered in the computer by three undergraduate research assistants. SPSS program files were written in order to process the data files and run the analyses. One hundred percent of the data was checked for accuracy of data entry.

Results

All statistical analyses were conducted using the SPSS package. The analyses were conducted in four major steps. First, the comparability of participants in the on-site and off-site groups on demographic variables was examined. Continuous demographic variables were examined using \( t \) statistics with two-tailed tests of significance. Dichotomous demographic variables were analyzed using the chi-square statistic \( (\chi^2) \). Similarly, the comparability of participants who completed the study and those who discontinued after Time 1 and the comparability of
participants who consented to the telephone interviews and those who did not, were also addressed using \( t \) and chi-square statistics \( (\chi^2) \).

Second, hypotheses related to the association between on-site daycare and employee functioning were examined. Differences between participants in the on-site group and participants in the off-site group were assessed using Repeated Measures Analyses of Variance (RM ANOVA) and Repeated Measures Multivariate Analyses of Variance (RM MANOVA). For these analyses, a doubly multivariate design was used where both the between-subject part of the design (daycare group) and the within-subject part of the design (two assessment times) were analyzed multivariately. As suggested by Tabachnik and Fidell (1989), Wilk's Lambda was the criterion used to determine the significance of the overall MANOVA.

Third, descriptive data from telephone interviews on on-site daycare were analyzed. Frequency counts were performed on each response category for each question. Coding categories that applied to less than 10% of the sample are not reported.

Finally, hypotheses related to the relationship between child care variables and parental functioning within each assessment time were examined with standard multiple regression. Hierarchical multiple regression was used to examine the relationship between child care predictors at Time 1 and parental functioning at Time 2. This method of regression was used as
parental functioning at Time 1 was controlled for by entering those variables as a first block in the regression equations.

**Comparability of Groups**

**On-site and off-site groups**

Demographic variables were examined using SPSS programs to determine the accuracy of data entry and to identify missing values. Only three participants failed to provide information regarding their income or their spouse's income. No other missing values were found for demographic variables.

The results of t-tests indicated that groups were comparable in terms of participant age ($t(64) = 0.83$, $p > 0.05$), partner age ($t(59) = 1.44$, $p > 0.05$), number of children ($t(64) = 0.93$, $p > 0.05$), child age ($t(64) = 1.40$, $p > 0.05$), length of time in current daycare ($t(64) = 0.55$, $p > 0.05$), weekly hours in paid employment ($t(64) = 0.83$, $p > 0.05$), and organizational tenure ($t(64) = 0.31$, $p > 0.05$). Means and standard deviations are presented in Table 3.

__________

Insert Table 3 about here

__________

The results of chi-square analyses indicated that groups were comparable in terms of participant gender ($\chi^2(1, N = 66) = 0.50$, $p > 0.05$), marital status ($\chi^2(1, N = 66) = 1.24$, $p > 0.05$), job function ($\chi^2(4, N = 66) = 3.58$, $p > 0.05$), education ($\chi^2(6, N = 66) = 1.45$, $p > 0.05$), and participant income ($\chi^2(2, N = 63) = 3.1$, $p > 0.05$). Frequencies and percentages are presented in Table 4.
### Table 3

Means and Standard Deviations of Demographic Variables

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Total (N = 66)</th>
<th>On-site group (n = 34)</th>
<th>Off-site group (n = 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Participant age (in years)</td>
<td>33.5</td>
<td>4.4</td>
<td>34.0</td>
</tr>
<tr>
<td>Partner age (in years)</td>
<td>34.7</td>
<td>5.1</td>
<td>35.7</td>
</tr>
<tr>
<td>Number of children</td>
<td>1.4</td>
<td>0.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Child age (in months)</td>
<td>28.2</td>
<td>13.1</td>
<td>30.4</td>
</tr>
<tr>
<td>Length of time in current daycare (in weeks)</td>
<td>11.3</td>
<td>8.8</td>
<td>11.9</td>
</tr>
<tr>
<td>Weekly hours in paid employment</td>
<td>38.6</td>
<td>4.8</td>
<td>39.0</td>
</tr>
<tr>
<td>Organizational tenure (in years)</td>
<td>6.1</td>
<td>5.3</td>
<td>6.3</td>
</tr>
</tbody>
</table>
Groups were also comparable in terms of partner job function \( (\chi^2(4, N = 61) = 3.65, p > .05) \), partner education \( (\chi^2(5, N = 61) = 6.67, p > .05) \), and partner income \( (\chi^2(2, N = 58) = 0.14, p > .05) \). Frequencies and percentages are presented in Table 5.

In summary, participants in the on-site group and participants in the off-site group were comparable in terms of all demographic variables.

**Comparability of participants who completed the study and of participants who did not complete the study**

As described in the Method section, 11 participants did not complete the second wave of data collection. This resulted in an overall dropout rate of 17%. Participants who completed the study and participants who did not complete the study were compared on all demographic variables.

The results of *t*-tests indicated that the groups were comparable in terms of participant age \( (t(64) = -0.28, p > .05) \), partner age \( (t(59) = 1.01, p > .05) \), number of children \( (t(64) = -0.89, p > .05) \), child age \( (t(64) = 1.49, p > .05) \), length of time in current daycare \( (t(64) = -0.76, p > .05) \), time spent in paid
Table 4

Frequencies (Fg) and Percentages (%) of Demographic Variables for Participants

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Total (N = 66)</th>
<th>On-site group (n = 34)</th>
<th>Off-site group (n = 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fg</td>
<td>%</td>
<td>Fg</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>18</td>
<td>27.3</td>
<td>8</td>
</tr>
<tr>
<td>Female</td>
<td>48</td>
<td>72.7</td>
<td>26</td>
</tr>
<tr>
<td>Marital status</td>
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<td></td>
</tr>
<tr>
<td>Married</td>
<td>59</td>
<td>89.4</td>
<td>29</td>
</tr>
<tr>
<td>Not married</td>
<td>7</td>
<td>10.6</td>
<td>5</td>
</tr>
<tr>
<td>Participant job function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial</td>
<td>9</td>
<td>13.6</td>
<td>3</td>
</tr>
<tr>
<td>Professional</td>
<td>27</td>
<td>40.9</td>
<td>16</td>
</tr>
<tr>
<td>Technical</td>
<td>7</td>
<td>10.6</td>
<td>5</td>
</tr>
<tr>
<td>Administrative</td>
<td>11</td>
<td>16.7</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>18.2</td>
<td>5</td>
</tr>
<tr>
<td>Participant education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or less</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some community college</td>
<td>5</td>
<td>7.6</td>
<td>3</td>
</tr>
<tr>
<td>Community college</td>
<td>6</td>
<td>9.1</td>
<td>2</td>
</tr>
<tr>
<td>Some university</td>
<td>7</td>
<td>10.6</td>
<td>4</td>
</tr>
<tr>
<td>University degree</td>
<td>8</td>
<td>12.1</td>
<td>5</td>
</tr>
<tr>
<td>Post graduate degree</td>
<td>26</td>
<td>39.4</td>
<td>13</td>
</tr>
<tr>
<td>degree</td>
<td>14</td>
<td>21.2</td>
<td>7</td>
</tr>
<tr>
<td>Participant income*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$12,000-$19,999</td>
<td>3</td>
<td>4.8</td>
<td>3</td>
</tr>
<tr>
<td>$20,000-$59,999</td>
<td>55</td>
<td>87.3</td>
<td>27</td>
</tr>
<tr>
<td>$60,000-$100,000</td>
<td>5</td>
<td>7.9</td>
<td>3</td>
</tr>
</tbody>
</table>

* N = 63 (3 missing values).
Table 5

Frequencies (Fq) and Percentages (%) of Demographic Variables for Partners

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Total (N = 61)</th>
<th>On-site group (n = 30)</th>
<th>Off-site group (n = 31)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fq</td>
<td>%</td>
<td>Fq</td>
</tr>
<tr>
<td>Partner job function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial</td>
<td>8</td>
<td>13.1</td>
<td>4</td>
</tr>
<tr>
<td>Professional</td>
<td>24</td>
<td>39.3</td>
<td>12</td>
</tr>
<tr>
<td>Technical</td>
<td>6</td>
<td>9.8</td>
<td>3</td>
</tr>
<tr>
<td>Administrative</td>
<td>8</td>
<td>13.1</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>24.6</td>
<td>5</td>
</tr>
<tr>
<td>Partner education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or less</td>
<td>4</td>
<td>6.6</td>
<td>3</td>
</tr>
<tr>
<td>Some community college</td>
<td>4</td>
<td>6.6</td>
<td>3</td>
</tr>
<tr>
<td>Community college</td>
<td>13</td>
<td>21.3</td>
<td>3</td>
</tr>
<tr>
<td>Some university</td>
<td>5</td>
<td>8.2</td>
<td>3</td>
</tr>
<tr>
<td>University degree</td>
<td>21</td>
<td>34.4</td>
<td>12</td>
</tr>
<tr>
<td>Post-graduate degree</td>
<td>14</td>
<td>23.0</td>
<td>6</td>
</tr>
<tr>
<td>Partner income(^b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-$19,999</td>
<td>8</td>
<td>13.7</td>
<td>4</td>
</tr>
<tr>
<td>$20,000-$59,999</td>
<td>41</td>
<td>70.7</td>
<td>20</td>
</tr>
<tr>
<td>$60,000-+$100,000</td>
<td>9</td>
<td>15.5</td>
<td>5</td>
</tr>
</tbody>
</table>

\(^a\) Although 59 participants were married or living with a partner, information on ex-spouses was provided by two participants, thereby explaining the N = 61. \(^b\)N = 58 (3 missing values).
employment a week ($t(64) = 0.91, \ p > .05$), and organizational tenure ($t(64) = 0.22, \ p > .05$).

The results of chi-square analyses indicated that the groups were comparable in terms of participant gender ($\chi^2(1, \ N = 66) = 0.55, \ p > .05$), marital status ($\chi^2(1, \ N = 66) = 0.03, \ p > .05$), job function ($\chi^2(4, \ N = 66) = 4.74, \ p > .05$), education ($\chi^2(5, \ N = 66) = 6.41, \ p > .05$), and participant income ($\chi^2(2, \ N = 63) = 0.68, \ p > .05$). Groups were also comparable in terms of partner job function ($\chi^2(4, \ N = 61) = 7.98, \ p > .05$), partner education ($\chi^2(5, \ N = 61) = 1.47, \ p > .05$), and partner income ($\chi^2(2, \ N = 58) = 0.58, \ p > .05$).

The comparability of the groups was also examined in terms of the dependent variables. The results of $t$-tests indicated that groups were comparable in terms of job satisfaction ($t(64) = 1.96, \ p > .05$), job commitment ($t(64) = 1.10, \ p > .05$), job involvement ($t(64) = -1.76, \ p > .05$), perceived stress ($t(64) = 0.85, \ p > .05$), life satisfaction ($t(64) = 0.53, \ p > .05$), marital satisfaction ($t(64) = 0.83, \ p > .05$), parental satisfaction ($t(64) = -0.18, \ p > .05$), and role overload ($t(64) = 0.25, \ p > .05$).

In summary, participants who completed the study and those who did not complete the study were comparable in terms of all demographic variables. Groups were also comparable in terms of all dependent variables.
Comparability of participants who consented to the interview and of participants who did not consent to the interview

As described in the Method section, 5 participants did not agree to take part in a telephone interview. This resulted in an overall refusal rate of 14.7%.

The results of t-tests indicated that the groups were comparable in terms of participant age ($t(64) = 0.13, p>.05$), partner age ($t(59) = .34, p>.05$), number of children ($t(64) = 1.28, p>.05$), child age ($t(64) = -0.55, p>.05$), length of time in current daycare ($t(64) = -0.31, p>.05$), time spent in paid employment a week ($t(64) = 0.08, p>.05$), and organizational tenure ($t(64) = -0.45, p>.05$).

The results of chi-square analyses indicated that the groups were comparable in terms of participants gender ($\chi^2(1, N = 66) = 0.11, p>.05$), marital status ($\chi^2(1, N = 66) = 0.93, p>.05$), job function ($\chi^2(4, N = 66) = 1.40, p>.05$), education ($\chi^2(5, N = 66) = 4.11, p>.05$), and participant income ($\chi^2(2, N = 63) = 4.09, p>.05$). Groups were also comparable in terms of partner work ($\chi^2(4, N = 61) = 5.76, p>.05$), partner education ($\chi^2(5, N = 61) = 7.49, p>.05$), and partner income ($\chi^2(2, N = 58) = 1.37, p>.05$).

In summary, participants who consented to take part in the telephone interviews and those who did not consent were comparable in terms of all demographic variables.
Hypotheses Related to the Association Between On-Site Daycare and Parental Functioning

The primary objective of this study was to examine the association between on-site daycare and parental functioning. Specifically, four hypotheses were examined: 1) work attitudes hypothesis, 2) individual functioning hypothesis, 3) family functioning hypothesis, and 4) work-family functioning hypothesis. With respect to time, four hypotheses were also examined: 1) attenuated benefits hypothesis, 2) sleeper benefits hypothesis, 3) sustained benefits hypothesis, and 4) no benefits across time hypothesis.

To test these hypotheses, the three work attitudes, the two variables in the individual functioning domain, the two variables in family functioning domain were grouped and three 2 X 2 (group X time) RM MANOVAs were conducted. Bartlett's test of sphericity indicated that the dependent variables within each RM MANOVA were not independent (work attitudes, \( \chi^2(3, N = 55) = 35.13, p < .01 \), individual functioning, \( \chi^2(3, N = 55) = 32.32, p < .01 \), and family functioning, \( \chi^2(1, N = 55) = 5.00, p < .05 \), thereby confirming the importance of using multivariate analyses of variance for each area of functioning and the conceptual grouping of the variables. In terms of work-family functioning, group differences in terms of role overload were assessed by performing a 2 X 2 (group X time) RM ANOVA.
Data Screening

Variables were first examined through various SPSS programs for accuracy of data entry, missing values, and fit between their distribution and the assumptions of multivariate analysis. As RM MANOVA and RM ANOVA pertain to grouped data, dependent variables were examined separately for the on-site group and the off-site group.

Missing data

For Time 1 data, missing values were found on one scale item for job satisfaction (n = 1 in off-site group), one scale item for job commitment (n = 1 in on-site group), and one scale item for role overload (n = 1 in off-site group). For Time 2 data, missing values were found on two scale items for job commitment (n = 1 in on-site group; n = 1 in off-site group), one scale item for job involvement (n = 1 in off-site group), two scale items for perceived stress (n = 1 in on-site group; n = 1 in off-site group), and one scale item for role overload (n = 1 on-site group). As recommended by Tabachnik and Fidell (1989), group means for the items were substituted for these randomly missing values.

Outliers

Casewise residuals were examined to identify univariate outliers (residual in excess of z = 3.00; Tabachnik & Fidell, 1989). For Time 1 data, one outlier was found on job commitment (on-site group) and one outlier was found on parental satisfaction (off-site group). For Time 2 data, one univariate
outlier was found on job commitment (on-site group). Following Tabachnik and Fidell (1989), univariate outliers were recoded one unit larger or smaller than the next most extreme case to preserve differences of scores without influencing the correlations.

Multivariate outliers were examined for each RM MANOVA. With the use of Mahalanobis distance, no within-cell multivariate outliers were identified at $p < .001$.

**Univariate normality**

For Time 1 data, skewness and kurtosis values were significant for role overload in the on-site group ($z = -2.86, p < .05$ for skewness, $z = 3.33, p < .05$ for kurtosis). Marital and parental satisfaction were significantly skewed in the off-site group ($z = -2.19, p < .05, z = -2.33, p < .05$, respectively. For Time 2 data, parental satisfaction, marital satisfaction, and role overload were significantly skewed in the on-site group ($z = -2.35, p < .05, z = -2.17, p < .05), z = -2.65, p < .05$, respectively). To normalize the distributions of these variables, square root transformations were applied at both times of assessment.

**Homogeneity of variance-covariance matrices**

Analysis of Box's M test of multivariate homogeneity of variance indicated no violation of this assumption for the RM MANOVA in the areas of work attitudes, $\chi^2(21, N = 55) = 21.67, p > .001$, individual functioning, $\chi^2(10, N = 55) = 5.20, p > .001$, and family functioning, $\chi^2(10, N = 55) = 8.60, p > .001$. 
Multivariate linearity, normality, and homoscedasticity

Although robustness to multivariate normality is ensured when there are more than 20 cases in each group (Tabachnik & Fidell, 1989), within-cell scatterplots between the dependent variables (for each RM MANOVA) were nevertheless examined and revealed that linearity, normality, and homoscedasticity were satisfactory. This was accomplished after the transformation of marital satisfaction and parental satisfaction data.

Multicollinearity and singularity

Pearson correlations between variables were examined to detect multicollinearity and singularity. All correlations were well below the suggested \( r = .90 \) value (Tabachnick & Fidell, 1989), suggesting that neither multicollinearity nor singularity was a problem.

Primary analyses

Work attitudes

To determine whether parents in the on-site and off-site groups differed in terms of work attitudes, a 2 X 2 between-subjects (daycare group X time) RM MANOVA was performed on three dependent variables: job satisfaction, job commitment, and job involvement. There was no significant main effect of daycare group for the combined dependent variables, multivariate \( F(3,51) = 1.57, p > .05 \), no significant interaction between daycare group and time, \( F(3,51) = 0.55, p > .05 \), and no significant main effect for time, \( F(3,51) = 1.28, p > .05 \). Table 6 presents means and standard deviations on job satisfaction, job commitment, and job
involvement for both groups at both assessments.

Insert Table 6 about here

_\text{T}-tests were calculated to determine whether the sample means for the three work attitudes were comparable to the means derived from normative data. There were no significant differences in terms of job satisfaction (Quinn & Staines, 1979; (t(2313) = 0.6, p>.05), job commitment (Duxbury et al., 1991; t(20886) = 1.8, p>.05, and job involvement (Kanungo, 1982b; t(767) = 0.34, p>.05 ).  

Individual functioning

To determine whether parents in the on-site and off-site groups differed in terms of individual functioning, a 2 X 2 between-subjects (daycare group X time) RM MANOVA was performed on two dependent variables: perceived stress and life satisfaction. There was no significant main effect of daycare group for the combined dependent variables, multivariate F(2,52) = 0.85, p>.05 and no significant interaction between daycare group and time, F(2,52) = 1.38, p>.05.  

There was, however, a significant main effect for time, F(2,52) = 6.76, p<.01. Univariate analysis indicates that both groups had significantly lower scores on perceived stress at the six month follow up, univariate F(1,53) = 6.08, p<.05. Table 7 presents means and standard deviations on perceived stress and life satisfaction for both groups at both assessment times.
Table 6

Means and Standard Deviations for Work Outcomes at Times 1 and 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>On-site group (n = 29)</th>
<th>Off-site group (n = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>19.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Job commitment</td>
<td>32.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Job involvement</td>
<td>25.6</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
T-tests were calculated to determine whether the sample means for perceived stress and life satisfaction were comparable to the means derived from normative data. There were no significant differences in terms of perceived stress (Duxbury et al., 1991; $t(20822) = 1.8$, $p > .05$). In contrast, however, participants in this study obtained significantly higher levels of life satisfaction than did participants in the Duxbury et al. (1991) study ($t(20759) = 1.97$, $p < .05$).

**Family functioning**

A 2 X 2 between-subjects (daycare group X time) RM MANOVA was performed on two dependent variables: square root transformation of parental satisfaction and square root transformation of marital satisfaction. There was no significant main effect of daycare group for the combined dependent variables, multivariate $F(2,44) = 1.55$, $p > .05$, no significant interaction between daycare grouping and time, $F(2,44) = 1.38$, $p > .05$, and no significant main effect of time ($F(2,44) = 1.02$, $p > .05$). Table 8 presents means and standard deviations on marital satisfaction and parental satisfaction for both groups at both times.

---

Insert Table 7 about here

---

Insert Table 8 about here
Table 7

Means and Standard Deviations for Individual Outcomes at Times 1 and 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>On-site group (n = 29)</th>
<th>Off-site group (n = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Perceived stress</td>
<td>28.0</td>
<td>6.4</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>18.2</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Table 8

Means and Standard Deviations for Family Outcomes at Times 1 and 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>On-site group (n = 23)</th>
<th>Off-site group (n = 24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>Parental satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>2.6 0.9</td>
<td>2.4 0.9</td>
<td>2.6 0.8</td>
</tr>
<tr>
<td>Marital satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>2.1 0.7</td>
<td>2.2 0.8</td>
<td>1.8 0.7</td>
</tr>
</tbody>
</table>

Note. Square root transformation of parental satisfaction and marital satisfaction.
A t-test was conducted to determine whether the sample mean for marital satisfaction was comparable to the mean derived from normative data. There were no significant differences between participants in this study and participants in the Schumm et al. (1986) study, $t(118) = 1.26$, $p > .05$. Given that the Satisfaction with Parent Role Scale was designed for the present study, normative data were not available for the parental satisfaction variable.

**Work-family functioning**

A 2 X 2 between-subjects (daycare group X time) RM ANOVA was performed on the square root transformation of role overload. There was no significant main effect of daycare group for the square root transformation of role overload, univariate $F(1,53) = 1.52$, $p > .05$, no significant interaction between daycare grouping and time, $F(1,53) = .56$, $p > .05$, and no significant main effect of time ($F(1,53) = .26$, $p > .05$). Table 9 presents means and standard deviations on role overload for both groups at both assessments.

---

Insert Table 9 about here

---

A t-test was performed to determine whether the sample mean for role overload was comparable to the mean derived from normative data. There were no significant differences between participants in this study and participants in the Higgins et al. (1994) study, $t(948) = 1.9$, $p > .05$.
Table 9
Means and Standard Deviations for Role Overload at Times 1 and 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>On-site group (n = 29)</th>
<th>Off-site group (n = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
</tr>
<tr>
<td>Role overload</td>
<td>2.3</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>2.6</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Note. Square root transformation of role overload.
Summary of Results

In summary, participants in the on-site and off-site groups did not differ significantly on any of the variables within the work, individual, family, and work-family domains. As a result, no support was provided for the work attitudes, individual functioning, family functioning, or work-family functioning hypotheses.

In addition to finding no main effect for daycare group, no interaction between group and time was found. As a result, support was provided for the "no benefits across time" hypothesis. A main effect for time was found only for perceived stress, indicating that both groups scored significantly lower at the six month follow-up.

Nonrejection of the null hypotheses inevitably leads to a discussion on statistical power, which refers to the probability that a statistical test will yield statistically significant results (Cohen, 1988). Power was calculated to be above .80 for all of the above-mentioned analyses ($p = .86$ for work attitudes RM-MANOVA; $p = .91$ for individual functioning RM-MANOVA; $p = .85$ for family functioning RM-MANOVA, and $p = .81$ for RM-ANOVA with role overload). Consequently, the nonrejection of the null hypothesis can be interpreted with confidence.

Findings from the Telephone Interviews

Five participants did not agree to take part in the telephone interviews. As a result, interview data at Time 1 were available for 29 participants, and interview data at Time 2 were
available for 25 participants. Missing data are indicated for each question.

Previous child care arrangement

Parents were asked about their previous child care arrangement during the Time 1 interview. Eighteen participants (62%) reported that their child had previously been cared for in a family daycare setting. Three participants (10.3%) reported previously using a licensed daycare setting, another three participants (10.3%) reported that their previous child care arrangement was with a nanny, and three more participants (10.3%) reported that their child was previously in the care of a family member in their own home. Two participants reported having no previous child care arrangement. These results indicate that the majority of participants in this study changed from having their child cared for in a caregiver's home to having their child cared for in a licensed daycare centre.

Factors considered before choosing current child care arrangement

The question "What factors did you consider before choosing your current child care arrangement?" was asked during the Time 1 interview. Responses were grouped to form three conceptual categories: 1) quality of care (i.e., overall quality of daycare, qualified personnel), 2) quality of service to parents (i.e., cost, hours of operation), and 3) location (i.e., convenience of location, distance between daycare centre and home). The results indicate that the majority of parents considered factors related to quality of care ($n = 18; 62\%$).
Nine parents (31%) considered factors related to the quality of service they were receiving. Factors related to the location of the daycare were mentioned by nine participants as well (n = 9; 31%).

Advantages of on-site daycare

Self

Responses to the question "What are the advantages of having on-site daycare for yourself?" indicate that, at Time 1, the perceived advantages of on-site daycare are mostly related to the location of the centre: convenience of location (n = 25; 86.2%), increased involvement with child during the day (n = 13; 44.8%), and closeness and accessibility to child (n = 12; 41.4%). A little less than half (n = 12; 41.4%) of participants also reported that the quality the care their child received was an advantage of having on-site daycare. Finally, only five participants (17.2%) reported that reduction of stress was an advantage of having on-site daycare.

Data for the Time 2 interview also indicate that the perceived advantages of on-site daycare are mostly related to the location of the centre. However, the frequency with which these factors were reported decreased at Time 2. For instance, convenience of location dropped by 14% to 72% (n = 18) and the number of participants who mentioned increased involvement with child during the day dropped by 16% to 28% (n = 7). Interestingly, a substantial proportion of participants (n = 10; 40.0%) mentioned that having on-site daycare reduced travel time,
although this was rarely mentioned at Time 1. Although mentioned less frequently at the Time 2 interview, a third of participants (n = 8) still reported that the quality of the care their child received was an advantage of having on-site daycare.

**Spouse/Partner**

For Time 1 data, the question "What are the advantages of on-site daycare for your spouse/partner?" was applicable to 26 participants and two participants provided answers that were not codable. Responses to this question can be grouped according to advantages related to location and those related to the quality of care. In terms of location-specific advantages, 10 participants (41.7%) mentioned convenience of location and five participants (18.2%) mentioned sense of closeness and accessibility to the child. Seven participants (29.2%) reported that quality of care was an advantage of having on-site daycare for their spouse/partner. Finally, four participants (16.7%) reported that there were no advantages for their spouse/partner because the daycare centre was not at their spouse's/partner's workplace.

Time 2 data for this question were applicable to 23 participants. Consistent with the Time 1 interview, the most frequently reported advantage of having on-site daycare for spouses/partners was convenience of location (n = 9; 39%). Interestingly, however, participants also indicated that reduction in travel time (n = 7; 30%) was an advantage of having on-site daycare for their spouses/partners. This advantage was
On-Site Daycare

not commonly reported at the Time 1 interview. Fewer parents at
Time 2 mentioned that sense of closeness and accessibility to the
child was an advantage of having on-site daycare.

Consistent with Time 1, five participants (21.7%) also
reported that quality of care was an advantage of having on-site
daycare for their spouse/partner. Finally, four participants
(17.4%) reported that there were no advantages for their
spouse/partner because their child was not at a daycare centre at
the spouse's/partner's workplace.

Employer

Time 1 data for the question "What are the advantages of
having on-site daycare for your employer?" were available for 28
participants. The most commonly reported advantage was reduction
in work disruptions (n = 15; 53.6%), followed by improved job
morale (n = 5; 17.9%), increased job productivity (n = 4; 14.3%),
and reduction in employee stress (n = 4; 14.3%). Three
participants (10.7%) reported on-site daycare increased their
time spent at work. Finally, three participants (10.7%) reported
that the presence of children at work contributed to a friendly
work environment. Five participants (17.9%) reported that there
were no advantages of having on-site daycare for their employer.

Time 2 data for this question were available for 24
participants. Although reduction in work disruptions remained
the most frequently reported advantage for employers (n = 15;
62.5%), the number of parents who mentioned this advantage
increased by 9%. There was also a 6.5% increase in the
proportion of parents who mentioned job productivity (n = 5; 20.8%) and a 5.9% increase in the proportion of parents who mentioned increased time spent at work (n = 4; 16.6%). The proportion of parents who mentioned reduction in employee stress remained comparable to Time 1 data (n = 4; 16.6%).

Although not commonly reported at Time 1, four participants (16.6%) indicated that on-site daycare contributed to an image of family-friendliness. In contrast to Time 1, very few parents reported that the presence of children at work contributed to a friendly work environment. Finally, there was a 4.7% drop in the proportion of participants who reported that there were no advantages of having on-site daycare for their employer (n = 3; 12.5%).

Taken together, these findings indicate that the majority of participants believe that reduction of work disruption is an advantage of on-site daycare for their employer. Although some participants mentioned advantages which have been previously reported in the literature (e.g., Barud et al., 1984), the frequency of these responses was much lower.

Colleagues

Time 1 data for the question "What are the advantages of having on-site daycare for your colleagues?" were available for 27 participants. Eleven participants (40.7%) reported that having on-site daycare increased their availability for their colleagues. Also, seven participants (25.9%) reported that on-site daycare contributed to a more positive work environment, and
5 participants (18.5%) reported that on-site daycare contributed to a less stressful work environment. Eleven percent of participants (n = 3) reported that on-site daycare increased their job productivity. Seven participants (25.9%) reported that there were no advantages of having on-site daycare for their colleagues.

Time 2 data for this question were available for 21 participants. Increased availability for colleagues remained the most frequently reported advantage (n = 7; 33.3%), despite a 7.7% drop in the proportion of parents who reported this. Also, five participants (23.8%) indicated that on-site daycare contributed to a more positive work environment. In contrast to Time 1, less stressful work environment and increased job productivity were not commonly mentioned. Finally, there was a 16.9% increase in the proportion of parents who reported that there were no advantages of having on-site daycare for their colleagues (n = 9; 42.8%).

Taken together, these findings suggest that perceived advantages of on-site daycare for colleagues are related to two main areas: 1) increased availability of employees and productivity, and 2) improved working environment.

**Unanticipated advantages of on-site daycare**

During the Time 2 interview, parents were asked whether they perceived any unanticipated advantages of having on-site daycare. Nine participants (37.5%) reported that the increased involvement with their child during the day was an unanticipated advantage of
having on-site daycare. Four parents (24%) reported that the quality of care their child received was also an unanticipated advantage of having on-site daycare. Ten participants (40.0%) indicated that there were no unanticipated advantages of having on-site daycare.

Disadvantages of on-site daycare

**Self**

For the Time 1 interview data, there were three missing values for the question "What are the disadvantages of having on-site daycare for yourself?". This resulted in an N = 26. The majority (n = 15; 57.7%) of participants reported that there were no disadvantages to having daycare located at their workplace. However, some parents mentioned that on-site daycare was inconvenient when they are not at work and still have to bring their child to the daycare centre (n = 4; 15.4%). Parents also reported that on-site daycare was inconvenient because it lacked flexibility in terms of its hours of operation and its criteria regarding child illness (n = 4; 15.4%).

Time 2 data for this question were available for 21 participants. Consistent with the findings from the Time 1 interview, the majority (n = 15; 71.4%) of participants reported that there were no disadvantages to having daycare located at their workplace. However, it is important to note that there was a 13.7% increase in the proportion of parents who reported this. Three participants (14.3%) reported that on-site daycare was inconvenient because it lacked flexibility in terms of its hours.
of operation and its criteria regarding child illness.

**Spouse/partner**

For the Time 1 interview, the question "What are the disadvantages of on-site daycare for your spouse/partner?" was applicable to 26 participants. Sixteen participants (61.5%) reported that there were no disadvantages for their spouse/partner. However, five parents (19.2%) mentioned that on-site daycare was inconvenient for their spouse/partner in terms of travel.

For the Time 2 interview, this question was applicable to 22 participants. There was an 11.2% increase in the proportion of participants who reported that there were no disadvantages for their spouse/partner ($n = 16; 72.7$%). Three participants reported that it was inconvenient for their spouse/partner in terms of travel.

**Employer**

In response to the question "What are the disadvantages of having on-site daycare for your employer", the majority ($n = 23; 79.3$%) of participants at the Time 1 interview reported that there were no disadvantages. Five participants (17.2%) mentioned that on-site daycare was an expensive benefit.

There were 2 missing values for this question for the Time 2 interview ($N = 23$). Despite the fact that there was a 10% drop in proportion of parents who mentioned this, the majority of participants ($n = 16; 9.3$%) reported that there were no disadvantages. Four participants (17.4%) mentioned that on-site
daycare contributed to increased work disruptions.

**Colleagues**

Time 1 data for the question "What are the disadvantages of having on-site daycare for your colleagues" were available for 25 participants. Nineteen participants (76%) reported that there were no disadvantages. Four participants (16%) mentioned that on-site daycare contributed to increased work disruptions.

Time 2 data for this question were available for 23 participants. There was a 7% increase in the proportion of participants who reported that there were no disadvantages ($n = 19; 82.6$). Four participants (17.4%) identified work disruptions as being a disadvantage of having on-site daycare for their colleagues.

Taken together, these findings indicate that the majority of participants did not perceive disadvantages of having on-site daycare for themselves, their spouses/partners, their employers, or their colleagues. These findings were consistent for Time 1 and Time 2 data.

**Unanticipated disadvantages of on-site daycare**

During the Time 2 interview, parents were asked whether they perceived any unanticipated disadvantages of having on-site daycare. Data for this question were available for 23 participants. The majority of parents ($n = 17; 73.9$) reported that there were no unanticipated disadvantages of having on-site daycare.
The role of on-site daycare in balancing of work and family responsibilities

In response to the question on whether on-site daycare helped participants balance work and family responsibilities, 17 participants (58.6%) answered "yes", six participants (20.7%) answered "a little bit", and another six participants (20.7%) answered "no" at the Time 1 interview. Of parents who answered "yes" or "a little bit" (n = 23), 13 parents (58%) reported that on-site daycare helped them balance work and family responsibilities because of the convenience of having their child at their workplace. Five participants (21.7%) reported that on-site daycare helped them balance work and family responsibilities because of the increased quality of time and involvement with child during the day.

At the Time 2 interview, a greater number of parents indicated that on-site daycare helped them balance work and family responsibilities. Indeed, 21 participants (88.4%) answered "yes", and three participants (12.5%) answered "a little bit". Only one parent reported that on-site daycare did not help him/her balance work and family responsibilities.

Of parents who answered "yes" or "a little bit" (n = 24), 20 parents (83.3%) reported that on-site daycare helped them balance work and family responsibilities because of the convenience of having their child at the workplace. This proportion is substantially higher than it was for Time 1. Twenty-five percent of participants (n = 6) reported that on-site daycare helped them
balance work and family responsibilities because of the increased quality of time and involvement with their child during the day. Finally, four parents (16.7%) indicated that on-site daycare helped them balance work and family because it contributed to a reduction in stress. Reduction of stress was not commonly reported at Time 1.

Taken together, these findings indicate that parents perceive on-site daycare as being helpful in their attempts to balance work and family responsibilities. Although this was evident at the Time 1 interview, more parents at the Time 2 interview mentioned this. On-site daycare was perceived to be convenient at both interview times; however, a larger proportion of parents reported this at Time 2. On-site daycare was also perceived to increase the quality of time and invovlerent parents have with their children.

The role of on-site daycare in dealing with specific challenges

During the Time 2 interview, parents were asked whether on-site daycare, as compared to their previous child care arrangement, helped them deal with challenges that arise as they are balancing work and family responsibilities. The majority of participants reported that having on-site daycare made it easier (n = 11; 44%) or a little bit easier (n = 3; 12%) to handle medical appointments. Another 10 parents (40%) indicated that there were no change in their ability to handle medical appointments because of having on-site daycare.
The majority of participants reported that having on-site daycare made it easier \( (n = 14; \, 56\%) \) or a little bit easier \( (n = 4; \, 16\%) \) to handle emergencies. In relation to travel time, the majority of participants mentioned that having on-site daycare made it easier \( (n = 16; \, 64\%) \) or a little bit easier \( (n = 2; \, 8\%) \). However, four participants \( (16\%) \) reported that on-site daycare did not change their travel time, and two participants \( (12\%) \) reported that on-site daycare made their travel time more difficult. Finally, eight participants \( (32\%) \) indicated that on-site daycare made it easier for them to work overtime. However, four parents \( (16\%) \) indicated that on-site daycare did not affect their ability to deal with working overtime, and seven participants \( (28\%) \) reported that it was more difficult to work overtime because of having on-site daycare.

**The role of on-site daycare in increasing parents' involvement with their child during the day**

Increased involvement with child during the day was reported as being an advantage of having on-site daycare. Interestingly, however, when parents were asked during the Time 2 interview whether they had been able to spend more time with their child during the day, the majority \( (n = 15; \, 60\%) \) indicated that they had not. Almost half of participants \( (n = 12; \, 48\%) \) reported that they had not spent more time with their child because it would be too difficult when they left the child to return to work. Another 20\% of participants \( (n = 3) \) indicated that it would disrupt their child's schedule if they increased their
involvement with her/him during the day.

**Changes in perceptions of organization**

Parents were asked if their perceptions of their organization had changed in light of the fact that it sponsored on-site daycare. One response was not codable and this question was not asked to one participant, resulting in an N = 27 for this question. Of these, 12 participants (44.4%) responded that it had changed their perceptions, six participants (22.2%) responded that it had not changed their perceptions, and nine participants (33.3%) responded that their perceptions had somewhat changed.

Of the participants who replied that their perceptions had changed or had somewhat changed (N = 21), 57.1% of participants (n = 12) reported that they perceived their organization as being supportive of their family responsibilities. Of the participants who reported that it had not changed their perception of their organization (N = 6), two participants reported that their employer invested in on-site daycare because of pressures to do so, two participants replied that the daycare centre was too inflexible (e.g., hours of operation), and two replied that the daycare centre accommodated too few children.

Time 2 data for this question were available for 24 participants. More parents at Time 2 indicated that there was a change in the way they perceived their organization. Indeed, 13 participants (54%) indicated that their perception had changed, eight participants (33.3%) indicated that their perceptions of their employer had not changed, and three participants (12.5%)
indicated that their perceptions had somewhat changed. Of the participants who indicated that their perceptions had changed or somewhat changed (n = 16), 62.5% (n = 10) reported that they perceived their organization as being supportive of their family responsibilities.

Of the participants who reported that it had not changed their perception of their organization (N = 8), three participants reported that on-site daycare was just a beginning but employers needed to become more involved with employees' family responsibilities, two participants reported that their employer invested in on-site daycare because of pressures to do so, and four participants replied that the daycare centre was too inflexible (e.g., hours of operation).

**Organizational investment toward becoming family-friendly**

Parents were asked how they would like their organizations to invest money towards becoming family-friendly. Data for the Time 1 interview were available for 28 participants. Twelve participants (42.9%) reported that they would like their employer to contribute toward the affordability of daycare. Six participants (21.4%) of participants reported that their employer could invest money in order to have more flexible work arrangements. A further six participants (21.4%) reported that their employer could invest money in the existing daycare centre for supplies and personnel salaries. Part-time work/reduction of work hours was reported by five participants (17.9%).
Time 2 data (N = 23) are consistent with the above-mentioned responses. However, there was a 12.5% drop in the proportion of participants who reported that they would like their employer to contribute toward the affordability of daycare (n = 7; 30.4%), and a 9% increase in the proportion of parents who reported that their employer could invest money in the existing daycare centre for supplies and personnel salaries (n = 7; 30.4%). Although uncommonly mentioned at Time 1, five participants (21.7%) reported that they would like their employer to invest in part-time work/reduction of work hours, and a further five participants (21.7%) indicated that they would like their employer to invest in telecommuting. There was a 8.4% drop in the proportion of parents who mentioned flexible work arrangements (n = 3; 13%). Three participants (13%) reported that they would like their employer to invest in daycare for infants.

In summary, these findings indicate that parents want their employer to invest in daycare-related issues, most importantly, toward the affordability of daycare. Moreover, parents want flexible work arrangements and reduction in work hours. The desirability of telecommuting was evident at the six month follow-up interview.

Comments or suggestions for parents considering on-site daycare

After having been involved with an on-site daycare program for at least six months (Time 2 interview), parents were asked
what comments or suggestions they would make for parents considering on-site daycare. Almost half of the participants (n = 12; 48%) indicated that quality of care was the most important consideration. Thirty six percent of participants (n = 9) mentioned that they would recommend on-site daycare. Three comments were made by four participants (16%): 1) on-site daycare provides a sense of security because the parent is aware of what is going on at the daycare centre, 2) on-site daycare is an overall good thing, and 3) on-site daycare is convenient.

Hypotheses Related to the Relationship Between Child Care Variables and Parental Functioning

The secondary purpose of this study was to examine the relationship between child care variables and parental functioning within each assessment time and between child care variables at Time 1 and parental functioning at Time 2. Specifically, two hypotheses were formulated: 1) the parental difficulties hypothesis, and 2) the parental satisfaction hypothesis.

Inspection of the correlation matrix between parental functioning at Time 1 and parental functioning at Time 2 revealed significant correlations between these variables (all at p<.001). These results are presented in Table 10. This pattern of findings suggests that there was stability in parental functioning across times. These findings are also consistent with the results from the RM MANOVAs indicating no main effect for time in terms of job satisfaction, life satisfaction,
parental satisfaction, and role overload. Parents did however obtain significantly lower scores on perceived stress at Time 2. Nevertheless, the correlation between perceived stress at Time 1 and perceived stress at Time 2 is statistically significant.

As there were no changes in parental functioning, the prediction of parental functioning at Time 2 from child care variables at Time 1 would be redundant in light of the standard multiple regression within the Time 1 assessment. Consequently, hierarchical multiple regression was not performed.

Moreover, the stability in parental functioning suggests that the patterns of results from multiple regression at Time 2 would be consistent with the results from multiple regression at Time 1. This is further supported by the fact that child care variables were also stable across times. Examination of child care variables at Time 1 and child care variables at Time 2 resulted in significant correlations between these variables. These results are presented in Table 11. Consequently, the performance of multiple regression within Time 2 would also be redundant. As a result, multiple regression within Time 2 were not performed. This decision was also influenced by the fact that more participants were available at Time 1 (N = 66 vs. N = 55), which increased the statistical power of the regression analyses.
Table 10

Pearson Correlations between Parental Functioning at Time 1 and Parental Functioning at Time 2

<table>
<thead>
<tr>
<th></th>
<th>Perceived Stress</th>
<th>Role Overload</th>
<th>Job Satisfaction</th>
<th>Life Satisfaction</th>
<th>Parental Satisfaction</th>
</tr>
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<tbody>
<tr>
<td>Perceived stress</td>
<td>.49***</td>
<td></td>
<td></td>
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<tr>
<td>Role overload</td>
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<td>.62***</td>
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<tr>
<td>Job satisfaction</td>
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<td>.59***</td>
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<tr>
<td>Life satisfaction</td>
<td></td>
<td></td>
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<td>.48***</td>
<td></td>
</tr>
<tr>
<td>Parental satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.72***</td>
</tr>
</tbody>
</table>

***p<.001.
Data Screening

Participants in the on-site and off-site groups were combined to form one group of employed parents with preschool children attending a licensed daycare centre (N = 66). Variables were examined through various SPSS programs for accuracy of data entry, missing values, and fit between their distribution and the assumptions of multivariate analysis. As standard multiple regression pertains to ungrouped data, variables were screened using the total sample.

Missing data

Information regarding missing cases for outcome variables can be found in the section on hypotheses related to group differences (p.74). For Time 1 child care data, missing values were found on one item for satisfaction with child care, on four items for difficulties with child care, and on two items for work-child care conflict. As recommended by Tabachnik and Fidell (1989), means were substituted for these randomly missing values.

Five cases had missing values for satisfaction with child care because the item that referred to spouse's perception of the child care arrangement was non-applicable (given the marital status of these participants). No other missing values were recorded for these cases. In light of the small sample size, deletion of the cases on all other analyses was not an attractive
Table 11

Pearson Correlations between Child Care Variables at Time 1 and Child Care Variables at Time 2

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction with child care</th>
<th>Difficulties with child care</th>
<th>Work-child care conflict</th>
<th>Responsibility for child care</th>
</tr>
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<tbody>
<tr>
<td>Satisfaction with child care</td>
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<td></td>
</tr>
<tr>
<td>Difficulties with child care</td>
<td>.50***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-child care conflict</td>
<td></td>
<td>.31*</td>
<td></td>
<td>.66***</td>
</tr>
<tr>
<td>Responsibility for child care</td>
<td></td>
<td></td>
<td>.77***</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05.  **p<.001.
option. The mean value for this particular item was therefore substituted.

**Outliers**

Univariate extremeness with respect to all outcome measures and each independent variable was examined using casewise residuals (residuals in excess of $z = 3.0$, Tabachnick & Fidell, 1989). One outlier was found on child care difficulties, which was assigned one unit larger than the next most extreme case (Tabachnick & Fidell, 1989).

Multivariate outliers were examined by combining the four independent variables. With the use of Mahalanobis distance, one multivariate outlier was identified ($\chi^2(4, N = 66) = 19.36, p<.001$). This case was deleted from subsequent analyses, resulting in a total sample size of $N = 65$.

**Normality, linearity, and homoscedasticity**

The examination of skewness and kurtosis indicated that parental satisfaction was significantly skewed ($z = -2.67, p<.05$, $z = -3.11, p<.05$, respectively). Skewness and kurtosis values were significant for role overload ($z = -2.96, p<.05$ for skewness, $z = 2.25, p<.05$ for kurtosis), satisfaction with child care ($z = -4.08, p<.05$ for skewness, $z = 2.38, p<.05$ for kurtosis), and difficulties with child care ($z = 4.07, p<.05$ for skewness, $z = 2.22, p<.05$ for kurtosis). Square root transformations were used on parental satisfaction, role overload, and satisfaction with child care and a logarithmic
transformation was used on difficulties with child care.

Following the transformation of these variables, residual scatterplots were examined for each of the predictor variables against all outcome measures. All distributions met assumptions of normality, linearity, and homoscedasticity of variance.

**Multicollinearity and singularity**

Pearson correlations between variables were examined to detect multicollinearity and singularity. All correlations were well below the suggested $r = .90$ value (Tabachnick & Fidell, 1989). In addition, examination of squared multiple correlations among independent variables further suggested that there was no problem with multicollinearity or singularity.

**Primary Analyses**

Table 12 presents the correlations between child care variables. Correlations and corresponding significance levels between child care variables and outcome measures are presented in Table 13.

Insert Tables 12 and 13 about here

Results are presented in two sections: 1) difficulties and 2) satisfactions. Tables presenting results of significant standard multiple regression analyses display the unstandardized regression coefficients ($B$) and intercept, the standardized regression coefficients (Beta), the semipartial correlations
Table 12

Pearson Correlations between Child Care Variables

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction with child care</th>
<th>Difficulties with child care</th>
<th>Work-child care conflict</th>
<th>Responsibility for child care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with child care</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties with child care</td>
<td>-.13</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-child care conflict</td>
<td>.42&quot;</td>
<td>-.07</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Responsibility for child care</td>
<td>-.10</td>
<td>-.19</td>
<td>-.09</td>
<td>1.00</td>
</tr>
</tbody>
</table>

"Higher scores indicate less work-childcare conflict. "Higher scores indicate less responsibility for child care.
"p<.01."
Table 13

Pearson Correlations between Child Care Variables and Outcome

<table>
<thead>
<tr>
<th>Variables</th>
<th>Satisfaction with child care</th>
<th>Difficulties with child care</th>
<th>Work-child care conflict</th>
<th>Responsibility for child care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived stress</td>
<td>.08</td>
<td>.24'</td>
<td>-.12</td>
<td>-.41***</td>
</tr>
<tr>
<td>Role overload</td>
<td>.04</td>
<td>.29'</td>
<td>-.17</td>
<td>-.42***</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>.01</td>
<td>-.06</td>
<td>-.05</td>
<td>.04</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>-.16</td>
<td>-.16</td>
<td>.31&quot;</td>
<td>.22</td>
</tr>
<tr>
<td>Parental satisfaction</td>
<td>.38&quot;</td>
<td>.09</td>
<td>.37&quot;</td>
<td>-.02</td>
</tr>
</tbody>
</table>

*Higher scores indicate less work-childcare conflict.  †Higher scores indicate less responsibility for child care.

*p<.05.  **p<.01.  ***p<.001.
(sr²) and R (multiple correlation), R² (squared multiple correlation), and adjusted R².

**Difficulties**

To test the hypothesis that child care variables would be related to difficulties within each assessment time, standard multiple regression analyses were conducted for perceived stress and role overload.

**perceived stress.** R for regression was significantly different from zero for perceived stress, F(4,59) = 3.68, p<.01. Responsibility for child care (sr² = .13) contributed significantly to prediction of perceived stress, such that more responsibility for child care was related to higher levels of perceived stress. The four independent variables in combination contributed another .07 in shared variability. Altogether, 20% (15% adjusted) of the variability in perceived stress was predicted by knowing scores on the four independent variables.

Insert Table 14 about here

**role overload.**

For Time 1 data, R for regression was significantly different from zero for role overload, F(4,59) = 4.37, p<.01. Two of the independent variables contributed to prediction of role overload: child care difficulties (sr² = .05) and responsibility for child care (sr² = .13). More responsibilities
Table 14

Standard Multiple Regression of Child Care Variables on Perceived Stress

<table>
<thead>
<tr>
<th>Child care variables</th>
<th>B</th>
<th>β</th>
<th>sr² (unique)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with child care</td>
<td>.92</td>
<td>.10</td>
<td>.00</td>
</tr>
<tr>
<td>Difficulties with child care</td>
<td>6.70</td>
<td>.17</td>
<td>.03</td>
</tr>
<tr>
<td>Work-child care conflict</td>
<td>-.03</td>
<td>-.05</td>
<td>.00</td>
</tr>
<tr>
<td>Responsibility for child care</td>
<td>-1.85**</td>
<td>-.37</td>
<td>.13</td>
</tr>
</tbody>
</table>

Intercept = 23.81

R² = .20
Adjusted R² = .15
R = .45**

**p < .01.
for child care and higher levels of difficulties with child care were related to higher role overload. The four independent variables in combination contributed another .05 in shared variability. Altogether, 23% (18% adjusted) of the variability in role overload was predicted by knowing scores on the four independent variables.

Insert Table 15 about here

Satisfaction

To test the hypothesis that child care variables would be related to satisfactions within each assessment time, standard multiple regression analyses were conducted for job satisfaction, life satisfaction, and parental satisfaction.

job satisfaction.

For Time 1 data, R for regression was not significant for job satisfaction, $F(4,59) = 0.04$, $p>.05$.

life satisfaction.

For Time 1 data, R for regression was significantly different from zero for life satisfaction, $F(4,59) = 2.48$, $p<.05$. Work-child care conflict ($sr^2 = .06$) contributed significantly to prediction of life satisfaction, such that lower levels of work-child care conflict was related to higher life satisfaction. The four independent variables in combination contributed another .08 in shared variability. Altogether, 14% (9% adjusted) of the
Table 15

Standard Multiple Regression of Child Care Variables on Role

<table>
<thead>
<tr>
<th>Child care variables</th>
<th>$b$</th>
<th>$\beta$</th>
<th>$r^2$ (unique)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with child care</td>
<td>-.05</td>
<td>-.04</td>
<td>.00</td>
</tr>
<tr>
<td>Difficulties with child care</td>
<td>-1.37*</td>
<td>-.24</td>
<td>.05</td>
</tr>
<tr>
<td>Work-child care conflict</td>
<td>.00</td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>Responsibility for child care</td>
<td>.27**</td>
<td>.37</td>
<td>.13</td>
</tr>
</tbody>
</table>

Intercept = 3.21

$R^2 = .23$

Adjusted $R^2 = .18$

$R = .48**$

*p<.05.  **p<.01.
variability in life satisfaction was predicted by knowing scores on the four independent variables.

____________________________

Insert Table 16 about here

____________________________

parental satisfaction.

For Time 1 data, R for regression was significantly different from zero for parental satisfaction, F(4, 59) = 3.79, p<.01. Satisfaction with child care \( (r^2 = .10) \) contributed significantly to prediction of parental satisfaction, such that higher levels of satisfaction with child care was related to parental satisfaction. The four independent variables in combination contributed another .10 in shared variability. Altogether, 20% (15% adjusted) of the variability in parental satisfaction was predicted by knowing scores on the four independent variables.

____________________________

Insert Table 17 about here

____________________________

Summary of Results

The parental difficulties hypothesis received support as the regression analyses for both perceived stress and role overload were significant. More specifically, responsibility for child care explained 13% of the variance in perceived stress and in role overload. Also, difficulties with child care explained 5%
Table 16

Standard Multiple Regression of Child Care Variables on Life

Satisfaction

<table>
<thead>
<tr>
<th>Child care variables</th>
<th>$R$</th>
<th>$\beta$</th>
<th>$sr^2$ (unique)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with child care</td>
<td>-.26</td>
<td>-.04</td>
<td>.00</td>
</tr>
<tr>
<td>Difficulties with child care</td>
<td>-1.35</td>
<td>-.06</td>
<td>.00</td>
</tr>
<tr>
<td>Work-child care conflict</td>
<td>.12*</td>
<td>.29</td>
<td>.06</td>
</tr>
<tr>
<td>Responsibility for child care</td>
<td>.73</td>
<td>.23</td>
<td>.05</td>
</tr>
</tbody>
</table>

Intercept = 13.0

$R^2 = .14$

Adjusted $R^2 = .09$

$R = .38^*$

*p<.05.
Table 17

Standard Multiple Regression of Child Care Variables on Parental Satisfaction

<table>
<thead>
<tr>
<th>Child care variables</th>
<th>β</th>
<th>β</th>
<th>σr² (unique)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with child care</td>
<td>.43&quot;</td>
<td>.37</td>
<td>.10</td>
</tr>
<tr>
<td>Difficulties with child care</td>
<td>.05</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Work-child care conflict</td>
<td>-.01</td>
<td>-.13</td>
<td>.01</td>
</tr>
<tr>
<td>Responsibility for child care</td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
</tr>
</tbody>
</table>

Intercept = 2.0

R² = .20
Adjusted R² = .15
R = .45"

"p<.01."
of the variance in role overload.

The parental satisfactions hypothesis also received support as the regression analyses for both life satisfaction and parental satisfaction were significant. More specifically, work-child care conflict explained 6% of the variance in life satisfaction, and satisfaction with child care explained 10% of the variance in parental satisfaction. In contrast, however, the regression analysis for job satisfaction was not significant.

Discussion

The current workforce is composed of employees who shoulder both work and family responsibilities. This study addressed the issue of child care for employed parents with preschool children. The objectives of this study were twofold. The primary purpose was to compare parental functioning in users of on-site and off-site daycare. The secondary purpose was to examine the relationship between child care variables and parental functioning.

This study was designed to overcome theoretical and methodological shortcomings of past research in the area of on-site daycare. In terms of conceptual advances over previous work, this study examined both positive and negative aspects of parental functioning, and focused on the many roles working parents fulfil: worker, individual, parent, and spouse.

This study is innovative in its use of an off-site comparison group recruited from the same daycare centres to control for daycare-specific variables (e.g., quality,
reliability), in its establishment of the comparability of the two groups on several important variables, and in controlling the length of time child is in current daycare centre.

Moreover, it was possible to consider the stability of observed effects by including two waves of data collection. Data were collected using sound measures which were supplemented by semi-structured interviews. The sample included daycare sites within hospital, university, and government workplaces and recruited both English-speaking and French-Speaking Canadian working parents. The heterogeneity of the sample therefore increased the generalizability of the findings. Finally, participants appeared to be highly committed to this study as a high response rate was obtained and attrition between Time 1 and Time 2 was low.

Based on anecdotal reports, intuitive and theoretical appeal, and empirical evidence to date, it was hypothesized that on-site daycare would be beneficial for employed parents with preschool children. Specifically, it was predicted that users of on-site daycare would have better work, individual, family, and work-family functioning than would users of off-site daycare.

Participants in the on-site and off-site groups did not differ on any of the dependent variables, and therefore no support was provided for the work attitudes, individual functioning, family functioning, and work-family functioning hypotheses. Moreover, as no group differences were found at either time of the assessment, support was provided for the "no
group differences across time" hypothesis.

These results differ from the Youngblood and Chambers-Cook (1984) study, which concluded that on-site daycare was beneficial in terms of job satisfaction and job commitment. The findings from this study are however consistent with the conclusions of the more recent work done in the area of on-site daycare (Goff et al. 1990; Kossek & Nichol, 1992). These studies concluded that workplace daycare does not directly influence organizational outcomes. The consistent findings between the present study and these two recent studies may be explained by methodological refinements over the earlier studies. For example, group comparability on daycare-specific variables was considered in these two studies and not in the earlier study by Youngblood and Chambers-Cook (1984).

The present findings cannot be compared to the findings of Milkovich and Gomez (1976), as their constructs of absenteeism, turnover, and job performance were not examined in the present study. However, it is important to note that the organizational constructs in this study (job satisfaction, job commitment, and job involvement) have been found to be correlates of work behaviours such as absenteeism and turnover (see Jewell & Siegall (1990) for review). Therefore, it can be hypothesized that the participants in the on-site and off-site groups would not differ in terms of work behaviours, which would therefore contradict Milkovich and Gomez's (1976) findings.
The fact that on-site daycare was not beneficial in terms of role overload is also consistent with the work by Goff et al. (1990). These researchers found no support for the hypothesis that use of on-site daycare would reduce the amount of work-family conflict of employed parents.

This study also went beyond the previous work in the area and assessed employee's individual and family functioning. This study found no benefits associated with on-site daycare in these two areas. As this study was the first to include individual and family functioning as constructs of interest, these findings cannot be compared with other work in the area.

Taken together, the findings from this study do not provide evidence in support for the benefits of on-site daycare. This conclusion is consistent across the work, individual, and family roles of employed parents with preschool children. Power calculations indicated that the sample size was sufficient to detect medium to large effect sizes. Having used sound measures in an adequately large sample that was matched on important variables, these results can be interpreted with confidence.

Although group differences were not found, data from the telephone interviews nevertheless indicate that parents perceive benefits associated with on-site daycare. More specifically, the majority of participants reported that on-site daycare helped them balance work and family responsibilities because of its convenience and because of the fact that they could increase the quality of time and involvement they had with their child during
the day.

The most frequently reported advantages of having on-site daycare were related to the location of the daycare centre. Indeed, parents reported that on-site daycare was convenient, allowed them to increase their involvement with their child, and reduced travel time. These factors were also reported to be advantages for spouses/partners of employees who have on-site daycare. Also, parents indicated that on-site daycare helps them cope with medical appointments, emergencies, and travel time.

Participants in this study also perceived organizational advantages of having on-site daycare. A number of parents believe that on-site daycare reduces their work disruptions, increases their availability at work and their productivity, and improves their work environment. The majority of parents also indicated that they perceived their organization as being supportive of their family responsibilities as a result of having on-site daycare.

The discrepancy between the questionnaire data and the interview data may be explained by several factors. Measurement issues may have precluded any group differences from being detected. For example, the restricted variability in some measures may have attenuated group differences. Another possibility may be related to power. It may be that there are only small differences between users of on-site daycare and users of off-site daycare. This study had power only to detect medium to large effect sizes.
Another important point is that the majority of users of on-site daycare were in transition from home daycare to licensed daycare and their favourable ratings may refer to having licensed daycare. Furthermore, interviews were not conducted with parents with off-site daycare. It is possible that parents in the off-site group would also have stated that their daycare arrangement reduced work disruptions and increased their productivity.

Although interview data substantiate some of the claims regarding the benefits of on-site daycare, interview data may also explain the lack of differences between users of on-site daycare and users of off-site daycare. The most frequently reported factor considered before parents opted for their on-site daycare arrangement was overall quality of care. Therefore, factors such as the physical environment of the daycare centre, the opportunities for social interaction between the children, the amount of structure provided to children, the type of food children receive, and the qualification of the caregivers are factors that parents first consider before choosing their child care arrangement.

In describing advantages of having on-site daycare for themselves and their spouses, participants also commonly reported that the quality of care their child received was important. Finally, when asked what comments they would make to parents who were considering on-site daycare, almost half of participants indicated that they would explain that quality of care was the most important consideration.
These findings suggest that a greater number of parents is concerned with the quality of their child's care while they are at work than is the number of parents who are attracted by the location of the daycare centre. The findings from the regression analyses further confirm the importance of child care issues for working parents with preschool children.

It was predicted that satisfaction with child care arrangement, difficulties with child care arrangement, work-child care conflict, and primary responsibility for child care would be related to parental functioning. The parental difficulties hypothesis predicted that child care variables would be related to perceived stress and role overload; the parental satisfaction hypothesis predicted that child care variables would be related to job satisfaction, life satisfaction, and parent satisfaction.

The parental difficulties hypothesis received support as the regression analyses were significant for both perceived stress and role overload. Based on Cohen's (1988) definition of effect sizes, it can be further concluded that the correlation coefficients were meaningful and translated into medium to large effect sizes. Indeed, 20% of the variance (15% adjusted) in perceived stress and 23% of the variance (18% adjusted) in role overload was accounted for by combining satisfaction with child, difficulties with child care, work-child care conflict, and responsibility for child care. More specifically, the findings indicate that having primary responsibility for child care is related to high levels of perceived stress and role overload. In
addition, the experience of difficulties with child care is related to high levels of role overload.

The parental satisfaction hypothesis also received some support as the regression analyses were significant for life satisfaction and parent satisfaction. Based on Cohen's (1988) definition of effect sizes, it can be further concluded that the correlation coefficients were meaningful and translated into medium to large effect sizes. Indeed, 14% of the variance (9% adjusted) in life satisfaction and 20% of the variance (15% adjusted) in parent satisfaction was accounted for by combining satisfaction with child, difficulties with child care, work-child care conflict, and responsibility for child. More specifically, the findings indicate that high levels of work-child care conflict are related to lower levels of life satisfaction. Also, high levels of satisfaction with child care are related to high levels of parent satisfaction.

To summarize, having primary responsibility for child care and the experience of difficulties with child care is negatively related to parental functioning. Moreover, high levels of work-child care conflict are negatively related to parental satisfaction and satisfaction with child care arrangement is positively related to parental satisfaction. It can therefore be concluded that child care variables are related to both positive and negative aspects of parents' functioning. Child care variables are also related to individual, family, and work-family roles, thereby underlining the importance of considering the
different roles working parents must fulfil.

These findings are consistent with past research that has highlighted the importance of child care variables in understanding parental functioning. For example, Goff et al. (1990) found that employees who were more satisfied with the quality of their child's care experienced less work-family conflict than did employees who were less satisfied with the quality of their child's care. Similarly, Goldberg et al. (1989) found that dissatisfaction with child care arrangement was associated with more intense feelings of strain from juggling work and family commitments on the part of both fathers and mothers in dual-earner families with preschool children. However, in contrast to these studies, satisfaction with child care was not significantly related to parental functioning.

The findings related to perceived stress and life satisfaction are consistent with the work of Ross and Mirowski (1988) regarding the relationship between child care and parental emotional well-being. These researchers found that difficulties with child care and primary responsibility for child care was related to higher depressive symptoms. Consistent with this, in the present study, having primary responsibility for child care was related to perceived stress, and work-child care conflict was related to life satisfaction.

This study did not find a relationship between child care variables and job satisfaction. As no other study has examined the relationship between these two variables, these findings
cannot be compared to previous work. Past research has, however, found that child care affects the amount of parents' work disruptions (e.g., Bureau of National Affairs, 1989; Mize & Freeman, 1989).

Interview data and the findings from regression analyses of the questionnaire data highlight the importance of a number of variables for working parents. These include: quality, convenience, satisfaction, responsibility, and reliability of child care for working parents with preschool children.

The two groups of parents assessed in this study received equivalent quality of care because the children attended the same daycare centres. All daycare centres in this study were licensed under their provincial legislation (e.g., Daycare Care Act in Nova Scotia, Child Day Care Act in Québec, and Day Nurseries Act in Ontario). Although Canadian licensing requirements vary from province to province, daycare centres must conform to provincial guidelines regarding caregiver training, physical space, group size, health and safety regulations, and child/staff ratios (Friendly, 1994). These are the criteria that are usually referred to as quality of daycare (Andre & Neave, 1992). Thus, by this definition, the participants in this study received high quality care for their children while they are at work. Consequently, there was very little variability in terms of quality of care between users of on-site and off-site daycare. This is further substantiated by the fact that group differences were not found on any of the child care variables at either
assessment time.

Theoretical Considerations

Taken together, the findings from this study may suggest that it may be quality of care, rather than location, that provides parents with valuable support as they balance work and family responsibilities. This conclusion is consistent with the finding that participants in this study showed no evidence of poor functioning. More precisely, based on normative data, participants were within the average range in terms of job satisfaction (Quinn & Staines, 1977), organizational commitment (Duxbury et al., 1991), job involvement (Kanungo, 1982b), perceived stress (Duxbury et al., 1991), and role overload (Higgins et al., 1994). Furthermore, participants obtained significantly higher scores in terms of life satisfaction than did participants in the study by Duxbury et al. (1991). Although normative data were not available for parent satisfaction, results indicate that the average parent satisfaction score was high (5.9 on a scale from 1 to 7).

The finding that parents did not report extreme difficulties in any areas of their lives is remarkable in light of the many responsibilities they have to cope with. According to Lero et al.'s (1993) criteria, participants in this study had high child care responsibilities. Parents were also employed an average of 39 hours a week and the majority of participants were employed in professional and managerial occupations. This work profile suggests that participants in this study also had heavy work
responsibilities.

The fact that parents showed no difficulties despite their heavy involvement in work and family roles suggests that they were optimizing the benefits of multiple role involvement. This finding contributes to the growing body of literature that supports the expansion hypothesis (e.g., Barnett & Marshall, 1991). These results are also consistent with Marshall and Barnett's (1993) findings that work-family strains are not inevitable among full-time employed individuals.

However, as discussed in the introduction, it is not enough to know that the benefits of multiple role involvement are maximized; it is necessary to identify factors that contribute to this. In this study, no support was provided for the general hypothesis that parents whose children attend on-site daycare, one form of organizational support, balance work and family responsibilities better than do parents whose children attend off-site licensed daycare centre.

In light of the findings of this study, it is proposed that having high quality care is an important source of support for working parents with preschool children. In other words, the availability of quality child care while parents are at work may contribute to the benefits of multiple role involvement. This conclusion is supported by the fact that not only were all parents using licensed daycare, parents were highly satisfied with their child care arrangement, experienced, on average, few difficulties with child care and low levels of work-child care
Practical implications

The present findings underscore the importance of considering child care factors in understanding work and family challenges. However, many employers hesitate to become involved with child care issues due to the belief that child care falls within the domain of parental responsibility (Scarr et al., 1989). As a result, parents experience difficulties in balancing their work and family lives. For some parents, also, the challenges related to child care may also contribute to their exiting from the workplace (Symons & McLeod, 1993).

The present findings clearly indicate that child care has an impact on employees' lives and therefore should not be overlooked by organizations as they consider ways to support their employees. Unfortunately, the recognition that child care issues are related to parental functioning has not readily been acknowledged in the workplace. Few organizations currently understand the importance of child care. A survey of 276 companies indicated that the strongest opposition to family supportive programs was to child care (McNeely & Fogarty, 1988). In this survey, over 80% said they would not consider offering child care support. Also, the majority of companies (54.7%) believed that the child care needs of their employees were minimal or nonexistent.

Working parents are challenged by the lack of organizational investment in child care. Lero et al. (1993) found that 33% of
parents with preschool children reported moderate to severe
tension due to the extent to which employer/work situation is
inflexible or uncaring about their role as a parent.

Although stressing the importance of child care in
understanding parental functioning, the findings from this study
imply that employers have other options in terms of how they can
support the child care responsibilities of their employed
parents. Friedman (1993) explained that typically, rather than
considering all options, most companies consider child care
benefits solely in terms of on-site daycare centre.

On-site daycare is helpful because it makes licensed daycare
spaces accessible to working parents. Therefore, by offering on-
site daycare, employers are helping parents find quality care.
Also, some situations may be particularly suitable for the
provision of on-site daycare, i.e. in areas where there are few
licensed daycare centres close to the workplace (Goff et al.,
1990; Miller, 1984).

The findings of this study, however, also indicate that
employers also have options in terms of helping the child care
needs of their employees. Lero et al. (1993) explained that
Canadian parents generally lack access to a variety of family
supportive benefits and work arrangements that might help them
balance work and family responsibilities. Data from the
telephone interviews indicated that parents want their employer
to contribute toward the affordability of daycare. This is not
surprising in light of the fact that regulated child care is not
affordable to most Canadian families (Beach et al., 1993; Friendly, 1994). Organizations should perhaps contribute less resources in terms of space, rent, and utilities, and contribute more resources directly in helping parents access quality care.

Also, employers may wish to provide a variety of child care initiatives. As Kossek (1990) explained, there is a diversity of child care-related problems and preferences. As a result, organizations might ideally be encouraged to offer a variety of child care provisions (e.g., information and referral services, direct contribution to daycare of choice) that would respond to given mixes of employee needs. This is important in light of Lero et al.'s (1992) finding that almost 44% of Canadian working parents do not work a standard work week. Also, Folk and Yi (1994) found that a significant proportion of families with preschool children made use of multiple child care arrangements to meet work and family responsibilities.

In addition to supporting their employees with their child care needs, employers could also offer more flexibility in work arrangements. In this study, parents also mentioned flexibility in work arrangement and reduction of work hours as ways that they would like their employer to invest money toward become family-friendly. This is also consistent with Lero et al.'s (1993) finding that employed parents with children under age 3 were least likely to prefer full-time employment, and therefore require flexibility in terms of work hours. Moreover,
participants also indicated that telecommuting could assist them in balancing their work and family responsibilities.

Given the importance of child-care related benefits and of flexibility in work arrangements, organizations who wish to respond to their employees' family needs may wish to consider offering cafeteria-style family-supportive benefits. This would be in line with Lero et al.'s (1993) conclusion that no single benefit or work arrangement will meet the needs of all working parents, thereby stressing the need for a variety of approaches in the workplace.

Limitations of study

Although this study was designed to overcome methodological shortcomings of past research, the present findings need to be interpreted with caution in light of the study's limitations. First, the sample's representativeness needs to be considered. The participants in this study were from a relatively high socioeconomic background. This point cannot be underestimated in light of past research that has demonstrated that demographic backgrounds are related to problems with child care and attitudes regarding the balance of work and child care responsibilities (e.g., Kossek, 1990). Also, the fact that parents did not report significant difficulties may also be related to their high socioeconomic status. Thus, despite the high response rate and low attrition in this study, the generalizability of the present findings might be limited to parents with high socioeconomic background and to parents with licensed daycare.
On-Site Daycare
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In considering the generalizability of the present findings, it is also important to consider the workplaces that were represented in this study. Although hospital, university, and government workplaces were included, the private sector was not represented in this study. Therefore, the findings from this study may not be generalizable to all organizations and the private sector.

The final comment regarding the issue of generalizability pertains to the fact that the alternate child care arrangement of all parents in this study was licensed daycare. In contrast, in their study, Lero et al. (1993) found that a licensed daycare centre was used for only 3.2% of children between the ages of 0 to 17 months, for only 9.6% of children between the ages of 18 and 35 months, and for only 10.8% of children between 3 and 5 years of age. Therefore, the findings in this study apply to a very small percentage of Canadian working parents with preschool children.

Second, the findings are based on a relatively small sample size. Although power was calculated to be sufficient to detect medium to large effect sizes, power was insufficient to detect small effect sizes. Moreover, small sample sizes are associated with problems related to external validity. This is particularly important in light of the high socioeconomic background of participants.

In addition to threats to external validity, certain types of comparisons were not performed because of the small sample
size. For example, it remains unclear whether on-site daycare has a different impact on mothers and fathers. Similarly, it would have been interesting to examine differences between parents with infants and parents with toddlers. Also, the hypothesis that on-site daycare is more beneficial for employees who work shifts in a hospital setting than it is for employees working regular daytime hours in a centrally located government office cannot be examined because of the sample size. Finally, comparisons between married parents and single parents may have yielded important differences.

Third, although prospective research is helpful in clarifying the issue of stability, there was considerable variability in terms of the first time of assessment. The fact that some parents had been settled into the daycare centre for a longer time may have contributed to the fact that there were no within-participant changes across time. This is particularly important because the majority of participants were in transition from a family daycare to a licensed daycare centre. Also, because pre-daycare data were not collected, it is impossible to assess pre-daycare and post-daycare changes in each group. This may have helped clarify the importance of accessing quality daycare.

Fourth, although the dependent variables were assessed using psychometrically sound measures, it is important to keep in mind that measures used to assess the child care variables and parent satisfaction were either designed for this study or have received
only preliminary validation. Future research will need to examine the psychometric properties of these measures and determine their quality and usefulness for future use.

It is also important to note, in keeping with the issue of measurement, that the scales for the different constructs were either bipolar (e.g., 5-point Likert scale with 3 indicating neutral) or unipolar (e.g., 7-point continuous scale). A disadvantage of using bipolar scales is that they limit responses to three points: agree, neutral, and disagree. As a result, the amount of variance in scores may be restricted, which in turn, could attenuate group differences.

Given the psychometric weaknesses of past research in the area of on-site daycare, it was important to select measures for which the psychometric properties were well established. This, however, resulted in a selection of measures for which there were bipolar and unipolar scales. In order to minimize the problems associated with restricted variance, all data were carefully screened in order to ensure that the underlying assumptions of the statistical analyses were met. Having said this, however, the issue of restricted variance remains important to consider in interpreting the findings of this study. It is important that future validation studies be conducted on already reliable and valid measures for which scales have been converted to unipolar scales.

Moreover, this study did not include an employee job performance output measure or supervisor ratings of job
performance. It is recognized that these constructs would have assessed the direct impact of having on-site daycare on employees' performance at work. Unfortunately, job performance output measures and performance appraisals would have required the involvement of supervisors. In turn, this may have increased the level of intrusiveness in this study and significantly reduced the response rate. Also, given the diversity of occupations represented in this study (e.g., university professor, federal government employee, and hairdresser), it would have been very difficult to select a measure of job performance. It is also well-recognized that performance appraisals are plagued by reliability and validity problems. Having said this, however, the importance of a "bottom line" type of measure is recognized and future research should pursue this possibility.

Finally, as the findings related to child care variables and parental functioning are based on correlational analysis, it is important to interpret them cautiously. It is clear that issue of causality cannot be assumed (Campbell & Stanley, 1966). For example, it may be possible that low levels of life satisfaction lead to higher reports of work-child care conflict, or that higher levels of role overload are related to parents' perceptions of difficulties with child care.

Future directions

Given the limitations of this study, the findings from the present research will need to be replicated with another sample.
For example, a well-designed research project including parents employed in the private sector and parents with a more varied socioeconomic background is needed. Moreover, the same study with a larger sample size will be helpful in examining issues related to gender, age of children, marital status, and type of organizational sponsorship. Furthermore, in assessing the issue of stability, a pre-post on-site daycare design will enable a better understanding of parental functioning before on-site daycare and after on-site daycare. Also, alternative control groups should be included such as a group of parents who are on the waiting for on-site daycare, a group of non-parents, and a group of parents with non-licensed daycare.

More research examining factors that support parents as they balance their work and family responsibilities should also be encouraged. Indeed, much work is done in the way of confirming that working parents are at risk of experiencing work-family conflict, but fewer studies have examined the factors that help parents cope with their challenges.

Based on the findings of this study, it is hypothesized that quality child care can support parents in balancing their work and family responsibilities. Future research should examine this hypothesis by comparing parents who have high quality child care with parents who have lower quality child care. Unfortunately, in this study, there was little variability in the quality of care parents received for their children. This precluded further investigation of the impact of high quality care vs low quality
care on working parents. This latter point further underscores the importance of including a group of parents with non-licensed daycare as a comparison group.

In addition, more work should be done in terms of the operationalization of quality of care. More specifically, the definition of quality care needs to be expanded to other types of child care arrangement. In addition, the definition of quality of care needs to be expanded. For example, although parents may be aware that a daycare centre is staffed by qualified personnel, the parent may not necessarily be convinced that the daycare personnel is providing a stimulating and warm environment for the children.

Similarly, more research should be directed in examining child care factors that can be considered as quality of service to parents, such as hours of operation, reliability, and availability of space. An interesting line of investigation would be to examine whether quality of service, in addition to quality of care, helps parents balance work and family responsibilities.

Once the term "quality care" has been clarified and expanded to other types of child care arrangement, it will be important to assess whether quality of care, irrespective of the type of child care arrangement, is the crucial factor in helping parents balance work and family responsibilities. This empirical investigation, in turn, should serve as an impetus for organizations to invest in their employees' child care needs.
In summary, the findings from this study underscore the importance of considering child care in the context of balancing work and family responsibilities. Organizations need to support their employees in acquiring high quality and affordable child care.
References


Behavior, 24, 385-396.


Lexington Books.


research, and applications (pp. 23-44). Beverly Hills, CA: Sage.


Hillsdale, New Jersey: Lawrence Erlbaum Associates.


spatially separated work units. *Organizational Behavior and Human Performance, 12*, 231-248.


Bureau, U. S. Department of Labor.


174-187.


Appendix A

Facet-Free Job Satisfaction Scale
1. All in all, how satisfied would you say you are with your job?
   
   ___ very satisfied
   ___ somewhat satisfied
   ___ not too satisfied
   ___ not satisfied at all

   If a good friend of yours told you he/she was interested in working in a job like yours for your employer, what would you tell him/her?

   ___ strongly recommend it
   ___ have doubts about recommending it
   ___ advise him/her against it

   Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide?

   ___ decide without hesitation to take the same job
   ___ have some second thoughts
   ___ decide definitely not to take the job

   If you were free to go into any type of job you wanted, what would your choice be?

   ___ would you want the job you have now?
   ___ would you want to retire and not work at all?
   ___ would you prefer some other job to the job you have now?

   In general, how well would you say your job measures up to the sort of job you wanted when you took it?

   ___ very much like the job you wanted
   ___ somewhat like the job you wanted
   ___ not very much like the job you wanted
1. En tout et partout, dans quelle mesure êtes-vous satisfait(e) de votre emploi?

   — très satisfait(e)
   — assez satisfait(e)
   — pas très satisfait(e)
   — pas satisfait(e) du tout

Si un(e) bon(ne) ami(e) vous disait qu'il/elle est intéressé(e) à faire un travail semblable au vôtre pour votre employeur, que lui diriez-vous?

   — je lui recommanderais fortement de le faire
   — j'hésiterais à recommander de le faire
   — je lui recommanderais de ne pas le faire

Sachant ce que vous savez maintenant, si vous aviez à rechoisir l'emploi que vous avez actuellement, le referiez-vous?

   — je rechoisirais sans hésitation le même emploi
   — j'y penserais deux fois
   — je ne rechoisirais définitivement pas cet emploi

Si vous pouviez choisir n'importe quel genre d'emploi, que choisiriez-vous?

   — voudriez-vous l'emploi que vous occupez actuellement?
   — voudriez-vous prendre votre retraite et ne plus travailler du tout?
   — préféreriez-vous un emploi autre que celui que vous occupez actuellement?

En général, dans quelle mesure diriez-vous que votre emploi correspond au genre de travail que vous vouliez lorsque vous l'avez choisi?

   — très semblable au travail que vous vouliez
   — assez semblable au travail que vous vouliez
   — pas très semblable au travail que vous vouliez
Appendix B

Organizational Commitment Questionnaire
**English Version**

Please indicate the extent to which you agree or disagree with each of the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**I am willing to put in a great deal of effort beyond that normally expected in order to help this department be successful.**

1 2 3 4 5

**I talk up this department to my friends as a great department to work for.**

1 2 3 4 5

**I would accept almost any type of job assignment in order to keep working for this department.**

1 2 3 4 5

**I find that my values and the department's values are very similar.**

1 2 3 4 5

**I am proud to tell others that I am part of this department.**

1 2 3 4 5

**This department really inspires the very best in me in the way of job performance.**

1 2 3 4 5

**I am extremely glad that I chose this department to work for over others I was considering at the time I joined.**

1 2 3 4 5

**I really care about the fate of this department.**

1 2 3 4 5

**For me this is the best of all possible departments for which to work.**

1 2 3 4 5
Veuillez indiquer dans quelle mesure vous êtes en accord ou en désaccord avec chacun des énoncés suivants.

<table>
<thead>
<tr>
<th>Énoncé</th>
<th>Fortement en désaccord</th>
<th>Neutre</th>
<th>Fortement en accord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Je suis prêt(e) à faire beaucoup plus d'effort qu'on attend normalement de moi pour aider au succès de ce département.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je dis à mes amis qu'il fait bon de travailler pour ce département.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J'accepterais presque n'importe quel genre de travail pour garder mon emploi dans ce département.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je trouve que mes valeurs et celles du département sont semblables.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je suis fier(e) de dire aux autres que je fais partie de ce département.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ce département m'inspire à donner le meilleur de moi-même quant à mon rendement au travail.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je suis extrêmement content(e) d'avoir choisi ce département parmi les autres que je considérais au moment de mon embauche ici.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je m'intéresse vraiment au sort de ce département.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pour moi, c'est le meilleur département possible dans lequel travailler.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Index of Job Involvement
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The most important things that happen to me involve my present job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>To me, my job is only a small part of who I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I am very much involved personally in my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I live, eat, and breathe my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Most of my interests are centered around my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I have very strong ties with my present job which would be very difficult to break.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Usually I feel detached from my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Most of my personal life goals are job oriented.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I consider my job to be very central to my existence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I like to be absorbed in my job most of the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
**French Version**

Veuillez indiquer la mesure dans laquelle vous êtes en accord ou en désaccord avec les énoncés suivants.

<table>
<thead>
<tr>
<th>Énoncé</th>
<th>Fortement en accord</th>
<th>Neutre</th>
<th>Fortement en désaccord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Les choses les plus importantes qui m'arrivent concernent mon travail actuel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pour moi, mon travail représente qu'une petite partie de qui je suis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je suis personnellement très impliqué(e) dans mon travail.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je vis, mange, et respire mon travail.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La plupart de mes intérêts sont centrés autour de mon travail.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J'ai des liens très solides avec mon travail qu'il me serait très difficile de briser.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je me sens habituellement détaché(e) de mon travail.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La plupart de mes buts personnels sont liés à mon travail.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je considère que mon emploi est très central à mon existence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La plupart du temps, j'aime m'absorber dans mon travail.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Perceived Stress Scale
### English Version

How often in the last month have you:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Been upset because of something that happened unexpectedly?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Felt that you were unable to control the important things in your life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Felt nervous and &quot;stressed&quot;?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Felt confident about your ability to handle your personal problems?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Felt that things were going your way?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Found that you could not cope with all the things that you had to do?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Been able to control irritations in your life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Felt that you were on top of things?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Been angered because of things that happened that were outside of your control?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Felt that difficulties were piling up so high that you could not overcome them?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Dans le dernier mois, combien de fois:

<table>
<thead>
<tr>
<th>Question</th>
<th>Jamais</th>
<th>Parfois</th>
<th>Toujours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avez-vous été troublé(e) parce que quelque chose d'imprévu s'était produit?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avez-vous senti que vous étiez incapable de contrôler des choses importantes dans votre vie?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Vous êtes-vous senti(e) nerveux(se) ou &quot;stressé(e)&quot;?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Vous êtes-vous senti(e) confiant(e) quant à votre habileté à vous occuper de vos problèmes personnels?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avez-vous senti que les choses allaient à votre goût?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avez-vous trouvé que vous ne pouviez pas vous adapter?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avez-vous été capable de contrôler des sources d'irritations dans votre vie?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avez-vous senti que vous étiez au-dessus de vos affaires?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avez-vous été fâché(e) à cause de choses qui se sont produites qui étaient hors de votre contrôle?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Vous êtes-vous retrouvé(e) à penser à des choses que vous aviez à accomplir?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix E

Satisfaction with Life Scale
**English Version**

Below are five statements with which you may agree or disagree. Please indicate your agreement with each item by circling the appropriate number.

<table>
<thead>
<tr>
<th>In most ways my life is close to my ideal.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The conditions of my life are excellent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am satisfied with my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>So far I have got the important things I want in life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>If I could live my life over, I would change almost nothing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**French Version**

Vous trouverez ci-dessous cinq énoncés avec lesquels vous êtes en accord ou en désaccord. En utilisant l'échelle de 1 à 5, veuillez encercler le chiffre approprié.

<table>
<thead>
<tr>
<th>En général, ma vie correspond de près à mes idéaux.</th>
<th>Fortement en désaccord</th>
<th>Neutre</th>
<th>Fortement en accord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mes conditions de vie sont excellentes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Je suis satisfait(e) de ma vie.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Jusqu’à maintenant, j’ai obtenu les choses importantes que je voulais de la vie.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Si je pouvais recommencer ma vie, je n’y changerais presque rien.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix F

Satisfaction with Parent Role Scale
**English Version**

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

<table>
<thead>
<tr>
<th>Do not agree at all</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel good about the amount of involvement I have with my children.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I am pleased with the amount of responsibility I take for raising my children.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my child-rearing skills.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I wish I could do a better job parenting.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the amount of time I give to my children.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I think parenthood is an important and valuable part of life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>I am comfortable in my role as a parent.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
**French Version**

Dans quelle mesure étes-vous en accord ou en désaccord avec ce qui suit?

<table>
<thead>
<tr>
<th></th>
<th>Pas du tout en accord</th>
<th>Partiellement en accord</th>
<th>Tout à fait en accord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Je suis content(e) de l’implication que j’ai dans la vie de mes enfants.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Je suis content(e) de l’étendue des responsabilités que j’assume pour élever mes enfants.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Je suis satisfait(e) de la manière dont j’éleve mes enfants.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Je souhaiterais être un meilleur parent.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Je considère consacrer assez de temps à mes enfants.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Je crois qu’être parent fait partie des choses importantes et précieuses de la vie.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Je suis à l’aise dans mon rôle de parent.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
</tbody>
</table>
Appendix G

Kansas Marital Satisfaction Scale
English Version

Please indicate how satisfied you are with:

<table>
<thead>
<tr>
<th></th>
<th>Extremely Dissatisfied</th>
<th>Mixed</th>
<th>Extremely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your marriage?</td>
<td>1</td>
<td>2</td>
<td>3 4 5</td>
</tr>
<tr>
<td>Your wife/husband as a spouse?</td>
<td>1 2</td>
<td>3</td>
<td>4 5 6 7</td>
</tr>
<tr>
<td>Your relationship with your husband/wife</td>
<td>1 2</td>
<td>3</td>
<td>4 5 6 7</td>
</tr>
</tbody>
</table>
Dans quelle mesure êtes-vous satisfait(e) de :

<table>
<thead>
<tr>
<th></th>
<th>Extrêmement insatisfait(e)</th>
<th>Partagé(e)</th>
<th>Extrêmement satisfait(e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Votre mariage?</td>
<td>1</td>
<td>2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Votre femme/mari en tant que conjoint(e)?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Votre relation avec votre époux(se)?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

Role Overload Subscale of the Job-Family Role Strain Scale
Please indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I have more to do than I can comfortably handle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel physically drained when I get home from work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel emotionally drained when I get home from work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel I have to rush to get everything done each day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel I don’t have enough time for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
French Version

Veuillez indiquer dans quelle mesure vous êtes en accord ou en désaccord avec les énoncés suivants en encerclant la réponse la plus appropriée.

<table>
<thead>
<tr>
<th>J'ai l'impression d'en avoir plus à faire que je ne le peux.</th>
<th>Fortement en désaccord</th>
<th>Neutre</th>
<th>Fortement en accord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Je suis physiquement épuisé(e) lorsque je rentre à la maison après le travail.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je suis émotionnellement épuisé(e) lorsque je rentre à la maison après le travail.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J'ai l'impression d'être toujours à la course pour accomplir tout ce que j'ai à faire dans une journée.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J'ai l'impression de ne pas avoir assez de temps pour moi-même.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix I

Satisfaction with Child Care Scale
**English Version**

Please indicate your agreement with the following statements regarding your child care arrangement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree at all</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is reliable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is reasonably priced.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is viewed positively by my children.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is viewed positively by my spouse/partner.</td>
<td>1 2 3 4 5 6 7 N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is located conveniently.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It provides worry-free substitute child care.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**French Version**

En relation avec votre arrangement pour la garde des enfants, dans quelle mesure êtes-vous en accord avec ce qui suit?

<table>
<thead>
<tr>
<th></th>
<th>Pas du tout en accord</th>
<th>Partiellement en accord</th>
<th>Tout à fait en accord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Il est fiable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Le coût est raisonnable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon\mes enfant(s) le perçoit(vent) d'une façon positive.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mon époux(se)\partenaire le perçoit d'une façon positive.</td>
<td>1 2 3 4 5 6 7 N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L'endroit est bien situé.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Je n'ai aucun souci au sujet de cet arrangement.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix J

Child Care Difficulties Scale
**English Version**

How often in the last six months did you experience the following child care difficulties?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining good quality care?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Having unexpected breakdowns in care arrangement because the caregiver was unreliable?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Worrying about your child's safety and well-being?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Finding care you could afford?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Arranging for back-up care when arrangement(s) broke down?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Finding consistent care for your child to cover evening or weekend work hours?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Finding consistent care for your child that would be flexible enough to meet your needs and schedule?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Arranging for child care for your child during peak work periods?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
### French Version

Au cours des six derniers mois, combien de fois avez-vous été aux prises avec les difficultés suivantes relativement aux services de garderie?

<table>
<thead>
<tr>
<th></th>
<th>Jamais</th>
<th>Parfois</th>
<th>Toujours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenir des services de bonne qualité?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Avoir des problèmes inattendus avec les arrangements de garde parce que le pourvoyeur des services n'était pas fiable?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Vous êtes inquieté(e) de la sécurité et du bien-être de votre enfant?</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Trouver des services de garderie que vous pouviez vous permettre?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Faire d'autres arrangements lorsque les arrangements initiaux n'ont pas fonctionné?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Trouver des services de garderie réguliers pour les heures de travail du soir ou du week-end?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Trouver des services de garderie assez souples pour satisfaire vos besoins et votre horaire?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Faire des arrangements pour des services de garderie durant les périodes de travail intense?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix K

Work-Child Care Conflict Scale
**English Version**

Please circle the extent to which you agree or disagree with the following statements:

**MY DAYCARE ARRANGEMENT:**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Do not agree at all</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes it easier to arrive on time.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes it easier to stay for unscheduled meetings.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduces interruptions in my work that arise due to child care difficulties.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduces the amount of time I have to take off work due to child care problems.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allows me to focus my energies on my work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives me more time for my work than other child care arrangements.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduces my worries about my child when I am at work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives me more energy for work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allows me to concentrate on my work when I am at work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Veuillez encercler en quelle mesure vous êtes en accord ou en désaccord avec les énoncés suivants :

**MON ARRANGEMENT DE GARDE**

<table>
<thead>
<tr>
<th></th>
<th>Pas du tout en accord</th>
<th>Partiellement en accord</th>
<th>Tout à fait en accord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me permet plus facilement d'arriver à l'heure.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Me permet de participer plus facilement à des réunions imprévues.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Réduit les interruptions au travail qui ont trait aux difficultés liées aux services de garderie.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Réduit les périodes où je dois m'absenter du travail pour des raisons liées aux services de garderie.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Me permet de consacrer toutes mes énergies à mon travail.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Me permet de consacrer plus de temps à mon travail que d'autres arrangements de garderie.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Réduit les inquiétudes que j'ai par rapport à mon enfant lorsque je suis au travail.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Me permet d'avoir plus d'énergie pour mon travail.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
<tr>
<td>Me permet de me concentrer sur mon travail lorsque je suis au travail.</td>
<td>1 2</td>
<td>3 4 5</td>
<td>6 7</td>
</tr>
</tbody>
</table>
Appendix L

Primary Responsibility for Child Care
English Version

In your family, who has the main responsibility for the day to day arrangement for the care of the children?

<table>
<thead>
<tr>
<th>I have</th>
<th>Share Equally</th>
<th>Spouse has</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**French Version**

Dans votre famille, qui a la plus grande responsabilité pour les arrangements de tous les jours pour la garde de vos enfant(s) ?

<table>
<thead>
<tr>
<th>Moi</th>
<th>Partagée également</th>
<th>Epoux(se)/ partenaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 4 5</td>
</tr>
</tbody>
</table>
Appendix M

Telephone Interview - Time 1
English Version

1. Have you had experience with any other type of child care arrangement?
   
   If yes: With what type of child care arrangement have you had experience with?

2. What factors did you need to consider before choosing your current child care arrangement?

3. Can you now tell me what you expect will be the advantages of having on-site daycare?
   
   a) For yourself?
   b) For your partner?
   c) For your employer?
   d) For your colleagues?

4. Can you now tell me what you expect will be the disadvantages of having on-site daycare?
   
   a) For yourself?
   b) For your partner?
   c) For your employer?
   d) For your colleagues?

5. Do you think that having on-site daycare facilitates the task of balancing work and family responsibilities?
   
   If yes: How?

6. On-site daycare is intended to be a family-supportive benefit. Knowing that your organization has opted for this benefit, will it change the way you perceive your organization?
   
   If yes: How?

7. If your employer was to allocate some money toward becoming family-friendly, how would you best like your organization to invest that money?
Finally, I would like to ask you if there is anything that we have not mentioned that you think is important in regards to on-site daycare?

These are all the questions that I wanted to ask you. Do you have any questions that you wanted to ask me?

Well, I'd like to thank you for taking the time to answer my questions and for your openness in discussing these issues with me. It's only when people like you are willing to give up their time and share their ideas that we can learn more about how people balance work and family.

Once again, thank you. We very much appreciate your help!
French Version

1. Avez-vous préalablement eu une expérience avec un autre type d’arrangement de garde?
   
   Si oui: Avec quel type d’arrangement de garde avez eu une expérience?

2. Quels sont les facteurs que vous avez eu à considérer avant de choisir votre arrangement de garde présent?

3. Pourriez-vous m’indiquer ce que sont vos attentes quant aux avantages reliés au fait d’avoir une garderie en milieu de travail?
   
   a) Pour vous-même?
   b) Pour votre conjoint(e)/partenaire?
   c) Pour votre employeur?
   d) Pour vos collègues?

4. Pourriez-vous maintenant m’indiquer ce que sont vos attentes quant aux désavantages reliés au fait d’avoir une garderie en milieu de travail?
   
   a) Pour vous-même?
   b) Pour votre conjoint(e)/partenaire?
   c) Pour votre employeur?
   d) Pour vos collègues?

5. Pensez-vous que le fait d’avoir une garderie en milieu de travail facilite la tâche d’équilibrer vos responsabilités de travail et de famille?
   
   Si oui: De quelle façon?

6. La garderie en milieu de travail a comme but d’être un bénéfice en vue de supporter la famille. Sachant que l’organisation pour laquelle vous travaillez a opté pour ce bénéfice, cela change-t-il votre perception à son égard?
   
   Si oui: De quelle façon?
7. Si votre employeur allouait une certaine somme d’argent au bénéfice de la famille de ses employés, de quelle façon préféreriez-vous qu’on investisse cet argent?

Finalement, j’aimerais vous demander si il y a quelque chose que nous n’avons pas mentionné et qui vous paraît important à dire au sujet d’une garderie en milieu de travail?

Voici donc toutes les questions que je voulais vous poser. Auriez-vous des questions à me poser?

J’aimerais vous remercier d’avoir pris le temps de répondre à mes questions et d’avoir bien voulu discuter de ces points avec moi. C’est seulement quand les gens comme vous sont prêts à donner de leur temps et à partager leurs idées que nous allons être capables de comprendre comment les gens parviennent à équilibrer leurs exigences du travail et de la famille.

Une fois encore merci.
Appendix N

Telephone Interview - Time 2
English Version

When we first spoke in (month), (child’s name) had been in (name of daycare) for (number of months). I’d like to ask you some questions about your daycare now.

1. What do you see now as the advantages of having on-site daycare?
   a) For yourself?
   b) For your partner?
   c) For your employer?
   d) For your colleagues?

2. What do you see now as the disadvantages of having on-site daycare?
   a) For yourself?
   b) For your partner?
   c) For your employer?
   d) For your colleagues?

3. What are the unanticipated advantages of having on-site daycare?

4. What are the unanticipated disadvantages of having on-site daycare?

5. Do you think that having on-site daycare facilitates the task of balancing work and family responsibilities?
   If yes: How?

6. I’d like to ask you about some challenges that working parents face. Compared to your previous child care arrangement, how has on-site daycare affected the way you handle:
   Medical appointments? easier, the same, or more difficult
   Emergencies? easier, the same, or more difficult
Your travelling time? easier, the same, or more difficult

Working overtime? easier, the same, or more difficult

7. Have you been able to spend more time with your child during the day (i.e., lunch time, break time)?

8. On-site daycare is intended to be a family-supportive benefit. Knowing that your organization has opted for this benefit, will it change the way you perceive your organization?

   If yes: How?

9. If your employer was to allocate some money toward becoming family-friendly, how would you best like your organization to invest that money?

10. What comments or suggestions would you have for parents who are considering on-site daycare?

Finally, I would like to ask you if there is anything that we have not mentioned that you think is important in regards to on-site daycare?

These are all the questions that I wanted to ask you. Do you have any questions that you wanted to ask me?

Well, I’d like to thank you for taking the time to answer my questions and for your openness is discussing these issues with me. It’s only when people like you are willing to give up their time and share their ideas that we can learn more about how people balance work and family.

Once again, thank you. We very much appreciate your help!
French Version

Lors de notre première conversation, au mois ______, (nom de l’enfant) était inscrit à la garderie ______ depuis (nombre de mois). J’aimerais vous poser quelques questions au sujet de votre arrangement de garde maintenant.

1. Que percevez-vous comme étant maintenant les avantages d’avoir une garderie en milieu de travail?
   a) Pour vous-même?
   b) Pour votre conjoint(e)/partenaire?
   c) Pour votre employeur?
   d) Pour vos collègues?

2. Que percevez-vous comme étant maintenant les désavantages d’avoir une garderie en milieu de travail?
   a) Pour vous-même?
   b) Pour votre conjoint(e)/partenaire?
   c) Pour votre employeur?
   d) Pour vos collègues?

3. Quels sont les avantages d’avoir une garderie en milieu de travail que vous n’aviez pas anticipés?

4. Quels sont les désavantages d’avoir une garderie en milieu de travail que vous n’aviez pas anticipés?

5. Pensez-vous que le fait d’avoir une garderie en milieu de travail facilite la tâche d’équilibrer vos responsabilités de travail et de famille?
   Si oui: De quelle façon?

6. J’aimerais vous questionner au sujet de certains défis dont les parents qui travaillent doivent envisager. Comparativement à votre arrangement de garde antérieur, comment la garderie en milieu de travail a-t-elle affecté:
   Rendez-vous médicaux? plus facile, la même chose, ou plus difficile
   Les urgences? plus facile, la même chose, ou plus difficile
Votre temps de déplacement?

plus facile, la même chose, ou plus difficile

Vos heures de travail supplémentaires?

plus facile, la même chose, ou plus difficile

7. Avez-vous eu la chance de passer plus de temps avec votre enfant au courant de la journée (i.e., heure du dîner, pause-café)?

8. La garderie en milieu de travail a comme but d’être un bénéfice en vue de supporter la famille. Sachant que l’organisation pour laquelle vous travaillez a opté pour ce bénéfice, cela change-t-il votre perception à son égard?

Si oui: De quelle façon?

9. Si votre employeur allouait une certaine somme d’argent au bénéfice de la famille de ses employés, de quelle façon préféerez-vous qu’on investisse cet argent?

Finalement, j’aimerais vous demander si il y a quelque chose que nous n’avons pas mentionné et qui vous paraît important à dire au sujet d’une garderie en milieu de travail?

Voici donc toutes les questions que je voulais vous poser. Auriez-vous des questions à me poser?

J’aimerais vous remercier d’avoir pris le temps de répondre à mes questions et d’avoir bien voulu à discuter de ces points avec moi. C’est seulement quand les gens comme vous sont prêts à donner de leur temps et à partager leurs idées que nous allons être capables de comprendre comment les gens parviennent à équilibrer leurs exigences du travail et de la famille.

Une fois encore merci.
Appendix O

Coding Scheme - Interview Time 1
1. PREVIOUS EXPERIENCE WITH CHILD CARE ARRANGEMENT

A) 1 no previous experience with other types of child care arrangements
2 daycare centre
3 family daycare (e.g., private caregiver)
4 nanny
5 family member in child’s home
6 at family member’s home
7 answer not codable
8 question not asked

Other:

2. FACTORS CONSIDERED IN CHOOSING/CHANGING CHILD CARE ARRANGEMENT

Child Specific

1 ease of transition to new child care arrangement/child’s adjustment to new child care arrangement
2 child’s age and developmental needs

Quality of Care

3 overall quality of care
4 physical environment-e.g., equipment, size
5 social environment-opportunity to interact with other children
6 learning environment-opportunity to learn new things
7 structured environment-planned program, more formal
8 provision of nutritionally-balanced diet
9 trained staff

Factors related to daycare

10 cost
11 subsidies
12 parking/proximity of parking/affordability of parking
13 availability of space
14 hours of operation

Location Specific

15 convenience of location
16 travel with child (e.g., can child handle the time in the car travelling to daycare)
17 distance from home
18 distance from work
19 answer not codable
20 question not asked
On-Site Daycare
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21 question not applicable

Other:______________________________________________________________

3. ADVANTAGES OF ON-SITE DAYCARE

A) For yourself?

Location specific

1 convenience (e.g., accessible for emergencies, medical appointments)
2 increased involvement with child during day
   (e.g., during breaks, lunch time, travelling)
3 decreased risk of arriving late to pick up the child because of decreased travel time
4 reduction of travel time
5 reduction of transit cost
6 reduction of work disruptions
7 caregiver’s accountability because work for same employer

Psychological factors

8 decreased stress
9 decreased guilt
10 security due to sense of closeness and accessibility
11 feeling child integrated in life
12 more energy for work
13 security due to quality of care
14 positive feeling because employer seems family-friendly

Quality of care

15 reliability (e.g., year round service)
16 flexibility of hours
17 cost
18 qualified personnel
19 opportunity to become involved in child’s care (e.g., through Board of Directors, etc.)
20 easier to communicate with child care workers because they are professionals

Other

21 answer not codable
22 question not asked
23 question not applicable

Other:______________________________________________________________
On-Site Daycare

B) For your partner? (If participant replies that the advantages are the same, circle all that applied for question 3a.)

1  no partner
2  no impact on partner as child is at participant’s workplace

Location specific

3  convenience for spouse (e.g., accessible for emergencies, medical appointments)
4  increased involvement with child during day (e.g., during breaks, lunch time, travelling)
5  decreased risk of arriving late to pick up the child because of decreased travel time
6  reduction of travel time
7  reduction of transit cost
8  reduction of work disruptions
9  caregiver’s accountability because work for same employer

Psychological factors

10 decreased stress
11 decrease guilt
12 security due to sense of closeness
13 feeling child integrated in life
14 more energy for work
15 security due to quality of care
16 positive feeling because employer seems family-friendly
17 sense of security knowing that child is close to spouse
18 does not have to worry about bringing child to daycare
19 better division of child care responsibilities (spouse takes care of other child)

Quality of care

20 reliability (e.g., year round care)
21 flexibility in hours
22 cost
23 qualified personnel
24 opportunity to become involved in child’s care (e.g., through Board of Directors, etc.)
25 easier to communicate with child care workers because they are professionals

Other

26 answer not codable
27 question not asked
28 question not applicable

Other:
C) For your employer?

1 no advantage
2 improved job morale (e.g., employees are happier)
3 increase in job productivity/quality of work
4 reduction in work disruptions
5 increases in time spent at work
6 reduction of employee stress
7 image of family-supportiveness
8 friendly work environment due to the presence of children
9 less pressure from employees who wanted on-site daycare
10 answer not codable
11 question not asked
12 question not applicable

Other: __________________________

D) For your colleagues?

1 no advantage
2 less stressful work environment (because I'm less stressed)
3 more positive work environment/better mood
4 increase job performance/productivity
5 perceive the advantages for me
6 increased availability of colleagues with on-site daycare
   (e.g., I can stay at work a little longer)
7 can provide information regarding on-site daycare
8 nice having children at work
9 answer not codable
10 question not asked
11 question not applicable

Other: __________________________

4. DISADVANTAGES OF ON-SITE DAYCARE

A) For yourself?

1 none
2 cost
3 daycare inflexibility because of hours of operation
4 daycare inflexibility because of same price for 4-day week
5 daycare inflexibility because of strict criteria related to
c            child sickness
6 inconvenience during days off
7 inconvenience when employee is sick
8 pressure to become involved because daycare is so close
   (however, there is lack of time)
9 new daycare; therefore some concerns about stability and
   future
10 answer not codable
11 question not asked
12 question not applicable

Other: ____________________________________________

B) For your partner? (If participant replies that the advantages are the same, circle all that applied for question 4a.)

1 no partner
2 none
3 cost
4 daycare inflexibility because of hours of operation
5 daycare inflexibility because of same price for 4-day week
6 daycare inflexibility because of strict criteria related to child sickness
7 inconvenience during days off
8 pressure to become involved because daycare is so close (however, there is lack of time)
9 new daycare; therefore some concerns about stability and future
10 spouse is on the board of governors; takes up considerable time
11 inconvenience for spouse in terms of travel (e.g., longer to travel during emergencies)
12 answer not codable
13 question not asked
14 question not applicable

Other: ____________________________________________

C) For your employer?

1 none
2 cost
3 financial liability
4 work disruptions (e.g., when parents visit their children)
5 early departures from work (parents leave early to pick up their children
6 increases in absenteeism (due to daycare inflexibility--sick children)
7 negative employee reaction in the event of daycare closure
8 answer not codable
9 question not asked
10 question not applicable

Other: ____________________________________________

D) For your colleagues?

1 none
2 should daycare close, will have to tolerate parents' complaints
3 work disruption (e.g., when parents leave to see their
child)
4 answer not codable
5 question not asked
6 question not applicable
Other:

5. DO YOU THINK ON-SITE DAYCARE FACILITATES THE TASK OF
BALANCING WORK AND FAMILY?

A) 1 yes
    2 no
    3 a little bit
    4 answer not codable
    5 question not asked
    6 question not applicable

B) Positive

1 sense of closeness or convenience of having child at the
workplace
2 reliability (e.g., 5-days a week, year round)
3 increased quality time/involvement with child during day
   (e.g., travel time, lunch hour)
4 accessibility to child care (employees have priority in
terms of spaces)
5 less travelling time
6 demonstrates to the employer the impact of family
7 reduction of stress
8 reduction of worries about travel
9 less arranging and planning

Negative

10 have another child who is not in workplace daycare
11 daycare was not chosen because it was on-site
12 increase child care responsibility for partner who has the
   workplace daycare
13 answer not codable
14 question not asked
15 question not applicable

Other:

6. KNOWING THAT YOUR ORGANIZATION HAS OPTED FOR THIS BENEFIT,
   WILL IT CHANGE THE WAY YOU PERCEIVE YOUR ORGANIZATION?

A) 1 yes
    2 no
    3 somewhat
    4 answer not codable
On-Site Daycare

5 question not asked
6 question not applicable

B) Positive

1 perception of family-friendliness
2 supportiveness of women in the workplace

Negative

3 employers are obliged to respond to their employees’ needs; they don’t necessarily do it because they want to
4 cost of childcare (too expensive)
5 inflexibility of daycare (e.g., hours of operation)
6 limited daycare spaces (waiting list)
7 workplace daycare is just the beginning—there is lots more to be done
8 it’s their obligation
9 answer not codable
10 question not asked
11 question not applicable

Other: ________________________________

7. ALLOCATION OF MONEY TOWARD BECOMING FAMILY-FRIENDLY

Contribution toward on-site daycare:

1 give more money to daycare in order to support 4-day week
2 contribute toward affordability of daycare (e.g., daycare subsidies)
3 financial contribution to daycare centre in terms of personnel salaries
4 financial contribution to daycare centre in terms of supplies (e.g., nicer rooms, more spaces, more toys, etc.)

Contribution toward child care:

5 financial contribution toward child care arrangement (permit parents to decide their arrangement of choice)
6 after-school care
7 child care information

Other family-friendly benefits:

8 parental leave (maternity, paternity, adoption)
9 family responsibility leave
10 elder care information
11 part-time work/reduction of work hours
12 flexible work arrangements
13 educate managers/supervisors toward family-friendliness
14 counselling for working parents

Other

15 answer not codable
16 question not asked
17 question not applicable
Other: ________________________________
Appendix P

Coding Scheme - Interview Time 2
On-Site Daycare

1. ADVANTAGES OF ON-SITE DAYCARE

A) For yourself?

Location specific

1. convenience (e.g., accessible for emergencies, medical appointments)
2. increased involvement with child during day (e.g., during breaks, lunch time, travelling)
3. decreased risk of arriving late to pick up the child because of decreased travel time
4. reduction of travel time
5. reduction of transit cost
6. reduction of work disruptions
7. caregiver’s accountability because work for same employer

Psychological factors

8. decreased stress
9. decrease guilt
10. security due to sense of closeness and accessibility
11. feeling child integrated in life
12. more energy for work
13. security due to quality of care
14. positive feeling because employer seems family-friendly

Quality of care

15. reliability (e.g., year round service)
16. flexibility of hours
17. cost
18. qualified personnel
19. opportunity to become involved in child’s care (e.g., through Board of Directors, etc.)
20. easier to communicate with child care workers because they are professionals

Other

21. answer not codable
22. question not asked
23. question not applicable

Other: ____________________________________________
B) For your partner? (If participant replies that the advantages are the same, circle all that applied for question 1a.)

1 no partner
2 no impact on partner as child is at participant’s workplace

Location specific

3 convenience for spouse (e.g., accessible for emergencies, medical appointments)
4 increased involvement with child during day (e.g., during breaks, lunch time, travelling)
5 decreased risk of arriving late to pick up the child because of decreased travel time
6 reduction of travel time
7 reduction of transit cost
8 reduction of work disruptions
9 caregiver’s accountability because work for same employer

Psychological factors

10 decreased stress
11 decrease guilt
12 security due to sense of closeness
13 feeling child integrated in life
14 more energy for work
15 security due to quality of care
16 positive feeling because employer seems family-friendly
17 sense of security knowing that child is close to spouse
18 does not have to worry about bringing child to daycare
19 better division of child care responsibilities (spouse takes care of other child)

Quality of care

20 reliability (e.g., year round care)
21 flexibility in hours
22 cost
23 qualified personnel
24 opportunity to become involved in child’s care (e.g., through Board of Directors, etc.)
25 easier to communicate with child care workers because they are professionals

Other

26 answer not codable
27 question not asked
28 question not applicable
C) For your employer?

1. no advantage
2. improved job morale (e.g., employees are happier)
3. increase in job productivity/quality of work
4. reduction in work disruptions
5. increases in time spent at work
6. reduction of employee stress
7. image of family-supportiveness
8. friendly work environment due to the presence of children
9. less pressure from employees who wanted on-site daycare
10. retain good employees
11. answer not codable
12. question not asked
13. question not applicable

D) For your colleagues?

1. no advantage
2. less stressful work environment (because I'm less stressed)
3. more positive work environment/better mood
4. increase job performance/productivity
5. perceive the advantages for me
6. increased availability of colleagues with on-site daycare
   (e.g., I can stay at work a little longer)
7. can provide information regarding on-site daycare
8. nice having children at work
9. answer not codable
10. question not asked
11. question not applicable

2. DISADVANTAGES OF ON-SITE DAYCARE

A) For yourself?

1. none
2. cost
3. daycare inflexibility because of hours of operation
4. daycare inflexibility because of same price for 4-day week
5. daycare inflexibility because of strict criteria related to child sickness
6. inconvenience during days off
7. inconvenience when employee is sick
8. pressure to become involved because daycare is so close (however, there is lack of time)
9 new daycare; therefore some concerns about stability and future
10 answer not codable
11 question not asked
12 question not applicable

Other: ________________________________

B) For your partner? (If participant replies that the advantages are the same, circle all that applied for question 2a.)

1 no partner
2 none
3 cost
daycare inflexibility because of hours of operation
daycare inflexibility because of same price for 4-day week
daycare inflexibility because of strict criteria related to child sickness
7 inconvenience during days off
8 pressure to become involved because daycare is so close (however, there is lack of time)
9 new daycare; therefore some concerns about stability and future
10 spouse is on the board of governors; takes up considerable time
11 inconvenience for spouse in terms of travel (e.g., longer to travel during emergencies)
12 answer not codable
13 question not asked
14 question not applicable

Other: ________________________________

C) For your employer?

1 none
2 cost
3 financial liability
4 work disruptions (e.g., when parents visit their children)
5 early departures from work (parents leave early to pick up their children
6 increases in absenteeism (due to daycare inflexibility--sick children)
7 negative employee reaction in the event of daycare closure
8 answer not codable
9 question not asked
10 question not applicable

Other: ________________________________
D) For your colleagues?

1. none
2. should daycare close, will have to tolerate parents’ complaints
3. work disruption (e.g., when parents leave to see their child)
4. answer not codable
5. question not asked
6. question not applicable

Other: ________________________________

3. UNANTICIPATED BENEFITS

1. none
2. flexibility (e.g., can work extra hours)
3. increased involvement with child
4. quality of care
5. sense of security because of quality of care
6. sense of security because increased involvement with child
7. better division of responsibility
8. answer not codable
9. question not asked
10. question not applicable

4. UNANTICIPATED DISADVANTAGES

1. none
2. concerns regarding closure of daycare
3. concerns regarding quality of care
4. during sick days or holidays, parents still has to go to the workplace for daycare
5. child becomes upset when he/she sees parent
6. "emotional tug" for parent watching the child being there while the parent is at work
7. answer not codable
8. question not asked
9. question not applicable

5. DO YOU THINK ON-SITE DAYCARE FACILITATES THE TASK OF BALANCING WORK AND FAMILY?

1. yes
2. no
3. a little bit
4. answer not codable
5. question not asked
6. question not applicable
6. HANDLING OF MEDICAL APPOINTMENTS

1    easier
2    a little bit easier
3    no change
4    more difficult

7. HANDLING OF EMERGENCIES

1    easier
2    a little bit easier
3    no change
4    more difficult
5    no emergency

8. AFFECT TRAVEL TIME

1    easier
2    a little bit easier
3    no change
4    more difficult

9. WORKING OVERTIME

1    easier
2    a little bit easier
3    no change
4    more difficult
5    don’t work overtime

10. KNOWING THAT YOUR ORGANIZATION HAS OPTED FOR THIS BENEFIT, WILL IT CHANGE THE WAY YOU PERCEIVE YOUR ORGANIZATION?

A)  1    yes
    2    no
    3    somewhat
    4    answer not codable
    5    question not asked
    6    question not applicable

B) Positive

1 perception of family-friendliness; recognition of family needs
2 supportiveness of women in the workplace
On-Site Daycare

Negative

3 employers are obliged to respond to their employees' needs; they don't necessarily do it because they want to
4 cost of child care (too expensive)
5 inflexibility of daycare (e.g., hours of operation)
6 limited daycare spaces (waiting list)
7 workplace daycare is just the beginning—there is lots more to be done
8 it's their obligation
9 answer not codable
10 question not asked
11 question not applicable

Other: ________________________________________________________________

12. SPEND MORE TIME WITH CHILD DURING DAY

A) 1 yes
   2 no
   3 a little bit

B) IF NO, WHY NOT?
   1 upsets child's routine/disruptive
   2 parent needs some time for self
   3 difficult when parent leaves again
   4 parent does not take a break

13. ALLOCATION OF MONEY TOWARD BECOMING FAMILY-FRIENDLY

Contribution toward on-site daycare:

1 give more money to daycare in order to support 4-day week
2 contribute toward affordability of daycare (e.g., daycare subsidies)
3 financial contribution to daycare centre in terms of personnel salaries
4 financial contribution to daycare centre in terms of supplies (e.g., nicer rooms, more spaces, more toys, etc.)
5 extend child care for infants

Contribution toward child care:

6 financial contribution toward child care arrangement (permit parents to decide their arrangement of choice)
7 after-school care
8 child care information
Other family-friendly benefits:

9 parental leave (maternity, paternity, adoption)
10 family responsibility leave
11 elder care information
12 part-time work/reduction of work hours
13 flexible work arrangements
14 educate managers/supervisors toward family-friendliness
15 counselling for working parents
16 work at home/telecommuting

Other

17 answer not codable
18 question not asked
19 question not applicable

Other: _______________________________________________________________________

14. COMMENTS OR SUGGESTIONS FOR PARENTS CONSIDERING ON-SITE DAYCARE

1 on-site daycare is an overall good thing
2 on-site daycare is convenient
3 the staff in an on-site daycare is better/more qualified than a family-care environment
4 quality care is better than family-care; quality care is better at an on-site daycare centre
5 quality of child care is the most important element
6 comforting/sense of security because parent knows what is going on
7 care must follow the rules/regulations of daycare
8 to talk to people and check out the facilities before deciding
9 well worth the money if you can afford it
10 strongly recommend on-site daycare
11 expensive
Appendix Q

Contact Letter for Participants
English Version

Dear Parent,

We are writing to you about a University of Ottawa project on child care and working parents that is funded by the Treasury Board of Canada. As your child is attending "__________" daycare, we would like to invite you to participate in our project.

Balancing work and family responsibilities can be challenging. We are interested in the ways different child care arrangements can help families cope with the demands of work and family. If you were to take part in the project, we would invite you to complete the enclosed questionnaire about your work, yourself, and your family. Completion of this questionnaire should take approximately 30 minutes. We would also ask you to sign the two enclosed consent forms, and return one copy with your completed questionnaire. The second copy of the consent form is for you to keep. We have enclosed a stamped addressed envelope for your convenience.

We know that the challenges working parents face often change over time. With this in mind, we'd like to invite you to also fill out the same questionnaire approximately six months from now. At this time, we would mail a questionnaire package out to you and you would return it to us by mail.

We would also like to talk to parents on the phone about their experiences with on-site daycare. This interview should take approximately 20 minutes. We would very much appreciate it if you would agree to take part in 2 interviews. The first interview would be around the time you first complete the questionnaire; the second interview would be around the time you complete the questionnaire six months later. The interviews would be scheduled at a time that is most convenient for you. If you agree to participate in this interview, please sign the consent form and let us know a time that is most convenient for you, and give us your phone number. If you decided not to take part in the interview, we would still very much appreciate it if you completed the questionnaire.

We know that on-site daycare will be used both by single parent families and by families in which a child lives in the same residence with a mother/step-mother and father/step-father. If there are two parents in your home, we would like to invite the other resident parent to participate as well. As you can see, we have enclosed two questionnaire packages: one for yourself and one for your partner. If your partner agreed to participate, you could give him/her a questionnaire package. He/she would be invited to complete the same questionnaire you would, sign two consent forms, and return the package to us in a stamped addressed envelope. If your partner does not wish to participate, or, if you are a single parent, we ask you to return the uncompleted questionnaire package with yours.
We would like to assure you that all information is kept strictly confidential. Also, we would be more than happy to share the general findings of this project with you. If you would like to ask us some questions about this project, please give us a call at 613-564-9260. If you leave your name and telephone number we will telephone you as soon as possible.

Thank you for taking the time to read this letter.

Sincerely,

Catherine Lee, Ph.D.
Associate Professor

Michelle Picard-Lessard
Doctoral Student
Cher parent,

La présente lettre a trait à un projet portant sur les arrangements de garde et les parents qui travaillent. Ce projet est mené à l'Université d'Ottawa et est subventionné par le Conseil du Trésor. Etant donné que votre enfant est gardé à la garderie __________, nous aimerions vous inviter à prendre part à notre projet.

Maintenir un équilibre entre les responsabilités liées au travail et à la famille peut présenter tout un défi. Nous sommes intéressés à savoir comment les différents types d'arrangements de garde peuvent aider les familles à mieux rencontrer les exigences de la famille et du travail. Si vous voulez bien participer à notre projet, nous vous demanderions de remplir le questionnaire ci-joint qui porte sur votre travail, vous-même, et votre famille. Vous auriez besoin d'environ trente minutes pour remplir ce questionnaire. Nous vous prions aussi de bien vouloir signer les deux copies du formulaire de consentement ci-jointes, et de nous remettre l'une des deux copies avec votre questionnaire rempli. Vous pourrez garder la deuxième copie. Pour vous faciliter la tâche, nous avons inclus une enveloppe pré-adressée et affranchie.

Nous savons que les défis auxquels les parents qui travaillent font face changent souvent avec le temps. C'est pourquoi nous aimerions vous inviter à remplir le même questionnaire dans environ six mois. Nous vous enverrons alors un questionnaire par la poste, et vous nous le retourneriez de la même façon.

Nous aimerions aussi discuter avec vous de votre expérience avec votre arrangement de garde. Ainsi, nous apprécierions beaucoup que vous acceptiez de participer à deux entrevues téléphoniques (d'une durée de 20 minutes environ). La première entrevue aurait lieu à peu près au même moment où vous rempliriez le questionnaire pour la première fois. La deuxième entrevue aurait lieu environ six mois plus tard. Si vous acceptez de participer à l'entrevue, veuillez signer le formulaire de consentement, nous indiquer l'heure et la date qui vous conviennent le mieux et inscrire votre numéro de téléphone. Si vous décidez de ne pas prendre part à l'entrevue, nous apprécierions quand même que vous remplissiez le questionnaire.

Nous savons que les arrangements de garde sont utilisés par des familles monoparentales et par des familles où un enfant vit dans la même résidence qu'une mère/belle-mère et un père/beau-père. S'il y a deux parents dans votre foyer, nous voudrions inviter l'autre parent à participer à l'étude. Comme vous pouvez le constater, nous avons joint deux trousse-questionnaires: une pour vous et une pour votre partenaire. Si votre partenaire accepte de participer, vous pourrez lui remettre une trousse-questionnaire. Nous lui demanderions alors de remplir le questionnaire, de signer les deux formulaires de consentement, et de nous retourner le tout dans l'enveloppe pré-adressée et affranchie.
Si votre partenaire ne désire pas prendre part à l'étude ou si vous êtes à la tête d'une famille monoparentale, nous vous demanderions de retourner la trousse-questionnaire non complétée avec la vôtre.

Nous tenons à vous assurer que tout renseignement demeurera strictement confidentiel. Il nous fera aussi plaisir de partager avec vous les conclusions générales de notre étude.

Si vous aimez nous poser des questions sur le projet, n'hésitez pas à communiquer avec nous au (613) 564-9260. Veuillez laisser votre nom et votre numéro de téléphone, et nous vous rappellerons le plus tôt possible.

Nous vous remercions d'avoir pris le temps de lire notre lettre, et nous vous prions d'agrément l'expression de nos sentiments les meilleurs.

Catherine Lee, Ph.D.  
Professeure Agrégée  

Michelle Picard-Lessard  
Candidate au Doctorat
Appendix R

Consent Form
English Version

Researchers from the University of Ottawa, Dr. Catherine Lee and Michelle Picard-Lessard, are conducting a study to better understand how different child care arrangements can help parents balance work and family responsibilities. If I agree to take part in this project, my participation will consist of completing a questionnaire twice, now and in approximately six months. The questionnaire asks questions about my work, myself, and my family and takes approximately 30 minutes to complete.

I will also be invited to take part in a telephone interview about workplace daycare. The interview will be recorded, with the understanding that the contents will only be used for research purposes and that the information will be kept confidential. I understand that the tapes will be coded for purposes of analysis and will then be erased.

My participation in this project will not involve any risk or discomfort. I am free to withdraw from the project at any moment and discontinue participation in this study at any time. If I am uncomfortable with any particular question, I may refuse to answer. I receive assurance from the researchers that the information will remain strictly confidential. All information will be identified with a code number and therefore I cannot be identified in any way.

There are two copies of the consent form, one which I may keep. If I have any questions I can call Dr. Lee or Michelle Picard-Lessard at (613) 564-9260.

I, __________________________, agree to participate in the questionnaire study on child care and working parents conducted by Dr. Catherine Lee and Michelle Picard-Lessard from the University of Ottawa.

I, __________________________, also agree to take part in the telephone interview about workplace daycare. The most convenient time for me to conduct this interview is _______ ___________________________ and my phone number is _________________.

PARTICIPANT'S SIGNATURE:

PARTICIPANT'S ADDRESS:

DATE:

I wish to receive a summary of the findings of this study upon completion: YES NO
French Version

Des chercheurs de l'Université d'Ottawa, Dr. Catherine Lee et Michelle Picard-Lessard, mènent une étude afin de mieux comprendre comment différents types d'arrangements de garde peuvent aider à équilibrer les exigences du travail et de la famille. Si j'accepte de prendre part à l'étude, ma participation consistera à remplir un questionnaire deux fois, c'est-à-dire maintenant et dans environ six mois. Le questionnaire porte sur mon travail, sur moi-même, et sur ma famille, et il faut environ trente minutes pour le remplir.

Je serai aussi invité(e) à participer à une entrevue téléphonique qui portera sur mon arrangement de garde. L'entrevue téléphonique sera enregistrée, et il est entendu que le contenu de l'entrevue ne servira qu'à des fins de recherche et demeurera strictement confidentiel. Il est aussi entendu que les enregistrements seront codifiés à des fins d'analyse, puisqu'ils seront ensuite effacés.

Ma participation au projet ne présentera pour moi aucun risque ou inconfort. Je suis libre de me retirer du projet à tout moment et de mettre fin à ma participation à l'étude en tout temps. Si une question me met mal à l'aise, je peux refuser d'y répondre. J'ai reçu l'assurance des chercheurs que toute information que je communiquerai demeurerait strictement confidentielle. Toute information que je fournirai sera attribuée à un numéro de code, et il sera donc impossible de m'identifier. Il y a deux copies du formulaire de consentement, et je peux en garder une. Si j'ai des questions, il m'est possible de les adresser au Dr. Lee au (613) 564-9260.

Je, soussigné(e) ________________, consens à répondre au questionnaire de l'étude sur les arrangements de garde et les parents qui travaillent que mènent le Dr. Catherine Lee et Michelle Picard-Lessard de l'Université d'Ottawa.

Je, soussigné(e) ________________, consens à participer à une entrevue téléphonique qui aura pour but l'obtention de renseignements spécifiques sur les services de garderie. Voici l'heure et la date qui me conviendrait le mieux: ________________

______________. Mon numéro de téléphone est le ________________.

SIGNATURE DU PARTICIPANT/DE LA PARTICIPANTE:

ADRESSE:

DATE:

J'aimerais recevoir une copie des conclusions générales de cette étude: OUI NON
Appendix S

Introductory Script for Interviews
English Version

May I speak to ______? This is ________, I'm working with Dr. Catherine Lee on the research project from the University of Ottawa. You completed a questionnaire about work, family, and your child care arrangement. We'd like to thank you for the time you took to fill out the questionnaire.

You may recall that you also gave us permission to contact you for a telephone interview about your child care arrangements. That's why I'm calling you today.

Is this a good time to talk? (If no then: When would be a good time for me to call back?)

We find that answering these questions usually takes approximately 20 minutes. I'd like to remind you that all your answers will be kept confidential. We'll assign a code number to your responses and you'll only be identified by your first name.

We'd like to have your permission to tape our conversation in order to proceed more quickly as I don't have to take notes as I go along. I'm not taping right now and will only start recording if you give me your permission.

(Once/if permission is given)--> The machine is taping now, let's start the interview.
French Version

Puis-je parler à ____________? Bonjour, je suis ____________ et je travaille avec le Dr. Catherine Lee sur le projet de recherche de l'Université d'Ottawa. Vous avez complété un questionnaire portant sur le travail, la famille, et votre arrangement de garde. Nous aimerions vous remercier d'avoir pris le temps d'y répondre.

Vous nous avez aussi donné de votre arrangement de garde. Voici pourquoi je vous téléphone aujourd'hui.

Est-ce un bon temps pour parler? (Si non: Quand puis-je vous rappeler?)

L'entrevue demandera environ 20 minutes de votre temps. J'aimerais vous rappeler que vos réponses seront traitées en toute confidentialité. Nous assignerons un code à vos réponses et seulement votre premier nom vous identifiera.

Nous aimerions aussi avoir votre permission pour enregistrer la conversation afin qu'il ne soit pas nécessaire de prendre note de vos réponses. Je n'enregistre pas présentement et le ferai seulement après que votre permission soit accordée.

(Si la permission est accordée)-->L'enregistreuse est en marche maintenant, commençons l'entrevue.