

**Factors Affecting Japanese Fathers' and Mothers'  
Availability to Their Children:  
An Extension of Rusbult's Investment Model**

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## Abstract

This study examined how Japanese parents' distress, investments in child-rearing, and comparison level for alternatives that is defined as the quality of the best available alternative relationship between parents and their children influence their availability to their children. According to Rusbult (1980, 1983), an individual's commitment to maintain a relationship is predicted by a combination of factors: the person's satisfaction with the relationship, his or her investment in the relationship, and prospects for alternative relationships. This study applied and extended Rusbult's investment model to examine how these factors influence parents' availability to their children. Four hundred ninety-nine employed fathers and 308 employed mothers whose youngest child was less than thirteen years of age completed questionnaires about work and family. The data (National Family Research Japan, 2003) were analyzed using a structural equation model. Four main conclusions were obtained: (1) parental investment was a significant positive predictor of parental availability; (2) parental distress was a negative predictor of availability; (3) although parental availability was positively related to poor alternatives, parents were likely to believe child-rearing helped their work; and (4) fathers' investments in taking physical care of and playing with their children were significant positive predictors of paternal availability to children, whereas mothers' investments in playing with their children were a significant positive predictor of maternal availability to children.

**Key words:** Rusbult's investment model, Availability to children, Japanese parents, Distress, Prospects for alternatives

## 1. Introduction

The parent-child relationship has been a central topic in many studies on child development. Children's relationships with their parents are extremely important from an early age. According to Bornstein (2002), the interactive and intersubjective aspects of parent and infant activities influence the after-infancy development of the child. Schaffer and Emerson (1964) have suggested that fathers do not play a subsidiary role, but they may assume important positions in the children's lives. Although Tamis-LeMonda, Shannon, Cabrera, & Lamb (2004) found that fathers' and mothers' supportive parenting independently predicted children's development in the U.S., little attention has been paid to paternal commitment to children in Japan. According to Kamo (2001), the quality of Japanese parent-child relationships is affected by the frequency of family dinners, parental depression, and marital satisfaction. Ishii-Kuntz (2003) examined data from interviews and observations of fathers who were actively involved in parenting and housework, and indicated that even when fathers engage in similar childcare activities as

mothers, men provide something unique, and thus a child with an involved father is more likely to be exposed to various stimuli and options than is a child with a noninvolved father. However, the most frequent father-child interaction in Japan is play, not physical care (National Woman Education Center, 2006).

Hrdy (1999) demonstrated that our species may well have evolved to become dependent on maternal care and alloparenting for infants. The term alloparenting was coined to describe the care provided to an infant by biologically related, nonmaternal caregivers.

In addition, emotional exchange allows for expression and reciprocation of parent-child affection and communication. Such positive emotional sharing appears to be indispensable to adequate caregiving and wholesome parent-child functioning. The person who is most available has the best opportunity to provide necessary stimulation for the child. Therefore, in this study, fathers' and mothers' availability to their children is considered an important variable in determining the quality of parent-child relationships.

In Japan, many fathers are physically absent from home due to work demands and long commuting hours, which makes mothers reluctant to discuss their children

with their husbands (Makino, 1982). Cross-cultural studies also show that Japanese fathers spend much less time with their children than do fathers in France, Thailand, the U.S.A, the U.K., South Korea, and Sweden (Makino, 1995, 2006). Shwalb, Kawai, & Tsunetsugu (1997) found that Japanese fathers ranked fatherhood as their most important role, yet very few fathers were reported to be actively involved with their children.

According to Bird (1997), having a child increases a person's exposure to particular stressors, such as economic hardship, and creates new stressors, such as responsibility for childcare and, for employed parents, the need to secure childcare during their working hours. This finding is based on the assumption that men and women react in similar ways to comparable role demands (Goode, 1960).

In other studies, parental investment is seen as stemming from parents' commitment to or responsibility for their children (Hoover-Dempsey & Sandler, 1997, 2005). Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, & Closson (2005) concluded that it was imperative to understand the motivations behind family practices that might strengthen the effectiveness of parental involvement. In fact, it is difficult to determine which comes first.

Rusbult's investment model, which is derived from interdependence theory (Kelley & Thibaut, 1978) and social exchange theories (Homans, 1961; Blau, 1964; Cook & Emerson, 1978), attempts to predict commitment and stability in relationships. The relative strength of the effects of various social exchange models on commitment has been examined, and commitment has been found to be influenced by three factors: satisfaction with the relationship X, investments in the relationship X, and comparison level for alternatives that is defined as the quality of the best available alternative relationship X.

The purpose of this study is to apply and extend Rusbult's investment model to investigate Japanese fathers' and mothers' availability to their children, and to clarify how Japanese parents' psychological states, investments in child-rearing, and comparison level for alternatives affect their parental availability.

## 2. Literature Review

Many studies on parent-child relationships have focused on children's attachment to their parents (Bowlby, 1969, 1973, 1980; Ainsworth, Blehar, Waters, and Wall, 1978; Behrens, Hesse, & Main, 2007). Emotional availability is a research-based, scientifically driven way of understanding the quality of communication and connection between a parent and child. Understanding of emotional availability is primarily

based on attachment theory, developed by Bowlby in the 1960s, and the emotional perspectives of Mahler, Pine, & Bergman (1975). Mahler et al. (1975) used the term emotional availability to describe a supportive maternal presence in the context of a child's autonomy, while Emde (1980) used the concept to refer to the quality of emotional exchanges between parents and their children. From their observations of mother-child interactions, Egeland and Erickson (1987) later used the term, "psychological unavailability," to describe qualities such as a mother's unresponsiveness to her child's distress or attempts to elicit interaction, passive rejection, detachment, low quantity of interaction, and lack of pleasure during interaction. Psychologically unavailable mothers usually provided for the physical needs of their children, and they were not physically abusive or overtly rejecting, but their overall demeanor was restricted, ranging from flat expressions to depressed state. Biringen and Robinson (1991) emphasized that the nature of a mother's availability depends on the developmental level and needs of her child. They evaluated availability with criteria for both mothers and children, because availability is a complex, dynamic characterization in which the behavior of one partner becomes interdependent with that of the other. As such, they evaluated the availability of mothers according to their sensitivity, structuring, nonintrusiveness, and nonhostility, and that of children according to their responsiveness and involvement of the mother in play. Robinson and Little (1994) showed that maternal reports of empathic and prosocial displays between twins were significantly positively correlated with observed emotional availability, which demonstrated that emotional availability formed an integral part of a child's positive relatedness and empathy with parents, siblings, and unfamiliar adults.

Subsequently, Vogel (1998) investigated the particular expression of emotional availability in father-toddler son relationship. He indicated that more emotionally available fathers promoted relatedness in their interaction with their toddler sons. Therefore, emotional availability has been used to describe the quality of the mother-child and father-child relationships. Bornstein, Gini, Suwalsky, Putnick, & Haynes (2006) showed that emotional availability had a significant short-term stability and continuity in their relationships. Venuti, Falco, Giusti, & Bornstein (2008) indicated that dyadic emotional availability and child's play developments are also associated with the relationship with stability and continuity of the relationship with children with Down syndrome. In addition, Bornstein, Putnick, Heslington, Gini, Suwalsky, Venuti, de Falco, Giusti, & de Galperin (2008) used a cross-cultural study to examine country (Argentina, Italian, and U.S.), region (rural and metropolitan

areas), and gender (daughters and sons) differences in emotional availability. They demonstrated that mothers' emotional availability in the interactions between mothers and twenty months old children is influenced by the difference of country, region and gender.

As these studies make clear, emotional availability is a complex and interdependent construct that enhances our understanding of the family system and parenting. However, it has not been examined how parents' distress, investment in parenting, and valuing of parenting predict emotional availability. Future study might examine how individual differences in emotional availability predict domains of parenting.

Rusbult (1980) defined commitment as the tendency to maintain a relationship and feel psychologically attached to an object. This model accounts for both behavioral intent and psychological attachment. Although Rusbult's commitment scale was initially used to describe romantic relationships, Rusbult emphasized that the model was applicable to a wide range of other social relationships. In line with this, Rusbult's investment model has been used to explain work commitment (Koslowsky, 2001; Karen van Dam, 2005), as well as the conditions under which individuals are likely to remain in abusive relationships (Rusbult and Martz, 1995; Rhatigan and Axsom, 2006). Nakamura (1990) has also applied this model to understand relationships among Japanese students.

Although parents' commitment to their children has not been examined, Rusbult's investment model can clarify the predictive power of parental availability determinants.

Bird (1997) demonstrated that social and economic burdens associated with parenting increase psychological distress for people with children. In addition, Matsuoka (1999) argued that Japanese parental satisfaction and strain are associated with the performance of the parental role. Satisfaction also results from the balance between the rewards and costs associated with a parent-child relationship. Waldron-Hennessey and Sabatelli (1997) argued that in many studies the construct of parental satisfaction is not defined or only partially defined. As a result, measurement error compromises the validity of the scales, which undermines the value of the information generated through the research process. They emphasized that the burdens and costs associated with parenthood, as well as the rewards and gratifications, must be examined, if a broad and theoretically comprehensive perspective on parents' experiences of parenthood is to be obtained. In this endeavor, it is necessary to consider that parents have multiple roles such as spouse, parent, and paid worker. This study, therefore, attempts to show that parental availability is predicted by a combination of

investments in child-rearing, poor prospects for alternatives, and psychological distress. The Application of Rusbult's investment model to parental availability is a meaningful method for investigating the burdens and distress associated with parenthood.

### 3. The Extended Model

My conceptual framework draws from Rusbult's investment model. Commitment represents individuals' psychological state of attachment to their participation or a motivational force for continued involvement. Thus, commitment reflects behavioral intention and should predict actions related to the intention. In general, greater commitment is associated with higher satisfaction, less attractive alternatives, and greater investments. According to the Rusbult conceptualization, commitment in an parenting setting refers to an individuals' feelings of connection to a path to a path of intention to maintain a parental availability.

In this study, Rusbult's investment model has been applied to examine how three concepts affect parental availability: parents' psychological distress, investments in child-rearing, and comparison level for alternatives. In lieu of examining satisfaction, which is typically considered in Rusbult's investment model, I have chosen to examine psychological distress.

### 4. Hypotheses

This research examined how investments in child-rearing, psychological distress, and comparison levels for alternatives influence parental availability. In addition, childcare demands (the number of children, the age of the youngest child, and spousal employment status), and demographic variables (parental age, educational level, income, and work hours) are examined. Figure 1 presents the extended model used to predict parents' availability to their children.

- (1) The demand for parental availability is negatively associated with the number and ages of children and spousal unemployment.
- (2) The amount of time and energy spent in child-rearing positively influences parents' availability to children.
- (3) Higher parental distress is negatively associated with parents' availability to children.
- (4) Poor prospects for alternatives are associated with more availability to children.

### 5. Methods

#### Sampling

The data used in this study were collected in 2003 by the Japan Society of Family Sociology through a

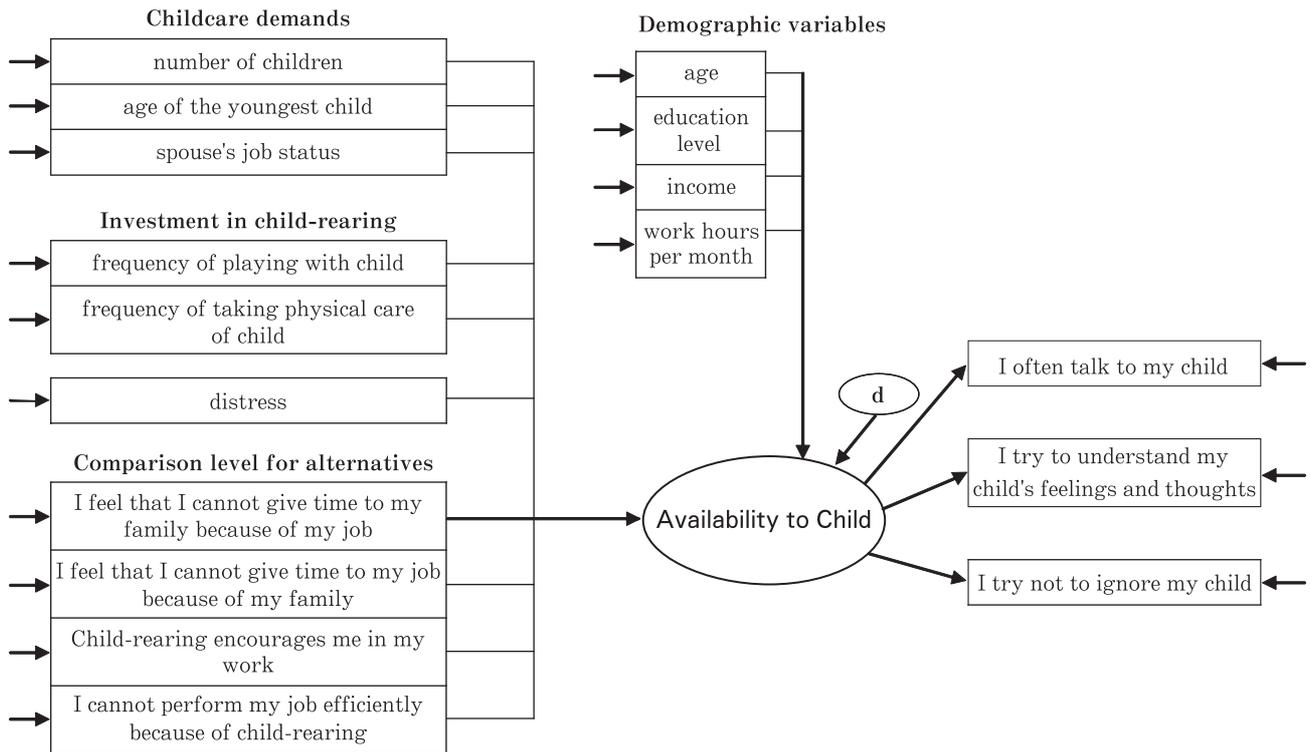


Figure 1. The Extended Model

randomized block design (National Family Research Japan 03; NFRJ 03, see acknowledgement). Four hundred ninety-nine employed fathers and 308 employed mothers with at least one child younger than thirteen years of age, completed questionnaires about work and family, distress, and parent-child relationships.

**Sample characteristics**

About half of fathers (54.55%) and mothers (57.70%) were between the ages of 30 and 39. The youngest children in their families were under 13 years old (36.3% were ≤ 3 years old, 22.3% were 4 to 6 years old, 21.9% were 7 to 9 years old, and 19.4% were 10 to 12 years old). Approximately 51.8% of families had two children, 20.4% had three children, and 25.9% had one child. Only 1.9% of families had more than three children. Fathers reported higher educational achievement than did mothers, with 42.9% having graduated from a four-year university, compared to 14.5% of mothers. The educational level of the sample population was higher than the national average (National Institute of Population and Social Security Research, 2001): 35.3% of men and 12.5% of women have graduated from four-year universities. In the sample, 79.6% of fathers were company employees, 16.0% were self-employed, 3.1% had other jobs, and 1.3% had part-time or temporary jobs, while 27.8% of mothers were company employees, 4.9% were self-employed, 9.2% had other jobs, and 58.3% had part-time or temporary jobs. More than half (52.3%) of men's spouses were not employed at all. These figures are similar to those found in a

representative sample (Makino, 2006).

**Measurements**

Survey questionnaires were distributed to all fathers and mothers of children less than thirteen years old. The response rate was 63%. We used 499 fathers and 308 mothers in our analyses because structural equation modeling with AMOS calculates missing data automatically. The initial analyses of cases without missing values generated similar results, so we used the full sample to avoid exclusion biases.

**Dependent Variable: Parental availability**

A parent who is available to his/her child is defined as emotionally available. Such a parent must display sensitivity and warmth, as well as provide a supportive and nonintrusive presence. When parents are emotionally reachable and are able to 'read' the emotional signals of their children, their children are expected to perform better in a wide variety of situations.

Parents were asked to indicate the extent of their availability with the activities shown in Figure 1. Availability was measured using three variables: (1) I often talk to my child; (2) I try to understand the feelings and thoughts of my child; and (3) I try not to ignore my child. Four-point response categories were used to measure these items: (1) never, (2) once in a while, (3) sometimes, and (4) often.

**Independent Variables: Childcare demands**

The number of children, the age of the youngest child, and the spouse's job status were included as indicators of childcare demands placed on parents. Pleck

(1985) found that the number and age of children are associated with husbands' involvement in childcare. These may be uniquely associated with Japanese parents' involvement in childcare (Ishii-Kuntz, Makino, Kato, & Tsuchiya, 2004).

**Investment size of parenting**

Investment size of parenting was measured using two variables: frequency of playing with child and taking physical care of child. Five-point response categories were used for these variables : (1) rarely, (2) about once a week, (3) two or three times a week, (4) four or five times a week, and (5) almost every day.

**Psychological distress**

Psychological distress was measured using the CES-D scale (Radloff, 1977). Parents were asked to indicate the extent of their psychological depressive state in ordinary life with eleven items of the CES-D: Cronbach's reliability of eleven scores for both fathers and mothers was obtained (alpha = 0.80).

**Comparison level for alternatives**

Comparison levels for alternatives were measured using four items: (1) I feel that I cannot take time for family because of my job, (2) I feel that I cannot take time for my job because of family, (3) child-rearing encourages me in my work, and (4) I cannot do my job sufficiently because of child-rearing. Four-point response categories were used for these items : (1) never, (2) rarely, (3) sometimes, and (4) often.

**Demographic variables**

Parental age, educational level, income, and amount of work (the number of work hours per day, multiplied by the number of work days per month) were examined.

**Analyses**

Analyses were conducted using structural equation modeling, which yielded maximum likelihood estimates of the model parameters. I estimated extended models in which all key paths were constrained in order to examine for significant differences in path coefficients between men and women. First, means and standard deviations of key variables were calculated. Second, the data were analyzed using a variation of a covariance structure model in which the independent measures were observed variables, and the dependent measure was selected from three items. This technique was chosen for its strong ability to simultaneously specify a measurement model linking a latent variable (availability to children) to indicators, and a structural equation model stating the relationships between observed independent variables and latent dependent variable.

**5. Findings**

The means and standard deviations of all variables are shown in Table 1.

The educational level of men was higher than that of

**Table 1.** Means and Standard Deviations of Variables

		N = 499		N = 308		
		Fathers' Means	Standard Deviation	Mothers' Mean	Standard Deviation	Significance
Childcare demands	number of children	1.92	0.72	2.10	0.76	***
	age of the youngest child	4.76	3.68	6.80	3.54	***
	spouse's job status *1	2.11	1.10	1.02	0.17	***
Demographic variables	age	37.88	5.09	37.46	4.61	N.S.
	educational level *2	3.52	1.50	3.13	1.16	***
	income *3	8.05	2.31	3.41	2.16	***
	work hours per month	222.65	52.65	127.56	65.71	***
Investment in child-rearing	frequency of playing with child	3.10	1.28	3.83	1.39	***
	frequency of taking physical care of child	2.42	1.40	4.85	0.62	***
	distress	1.48	0.41	1.60	0.47	***
Comparison level for alternatives	I feel that I cannot take time for my family because of my job	2.29	1.12	1.93	1.05	***
	I feel that I cannot take time for my job because of my family	1.35	0.71	1.49	0.85	*
	Child-rearing encourages me in my work	3.55	0.69	3.38	0.79	**
	I cannot do my job efficiently because of child-rearing	1.72	0.81	2.63	0.91	***
	I often talk to my child	3.67	0.61	3.87	0.39	***
Availability to child	I try to understand my child's feelings and thoughts	3.33	0.77	3.44	0.66	*
	I try not to ignore my child	3.63	0.58	3.44	0.65	***

\*\*\* : p < .001, \*\* : p < .01, \* : p < .05,

\*1 1): holds a job, 2): is under leave of absence, 3): has had a job in the past, 4): has never had a job.

\*2 The value between various vocational schools, a junior college, and a technical college.

\*3 men's mean: 5 million - 5,990,000 yen, women's mean: between one million - 1,290,000 yen and 1,300,000 - 1,990,000 yen.

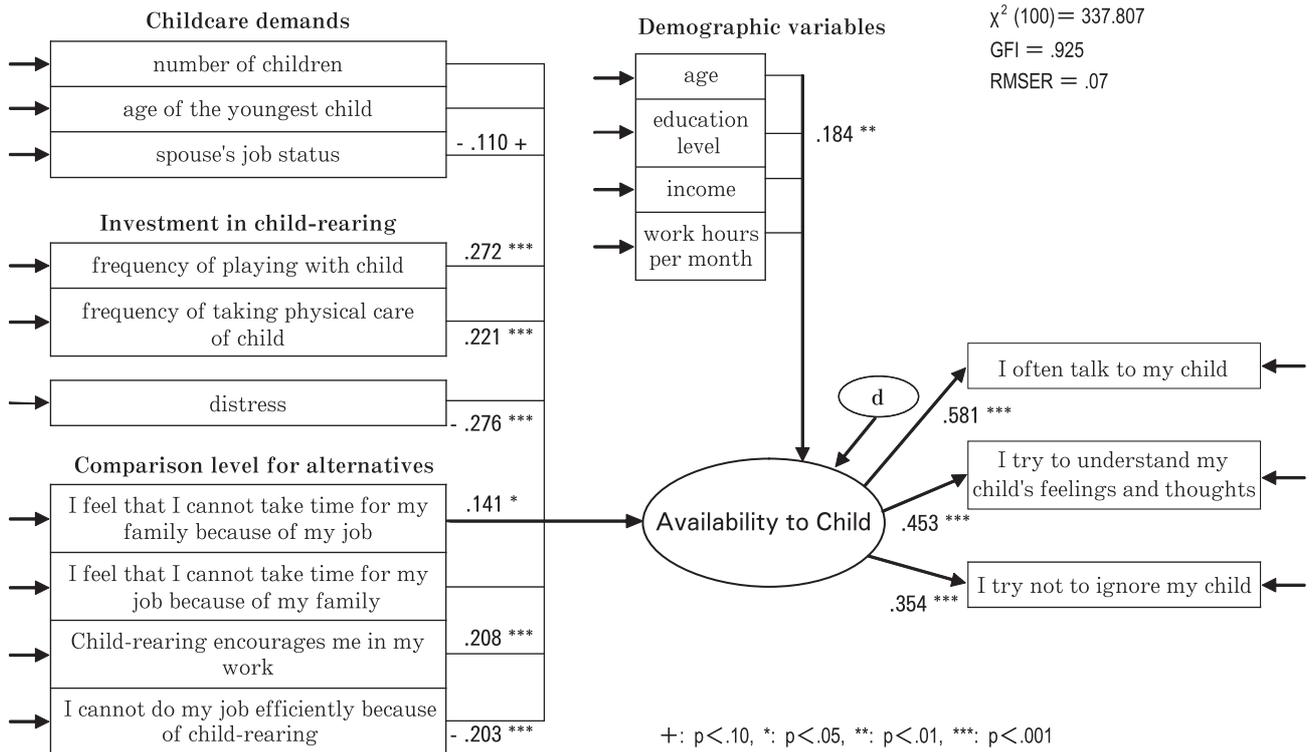


Figure 2. Coefficients and Significant Levels for The Model : Father (N = 499)  
All coefficients are estimated by Maximum likelihood estimation method with AMOS.

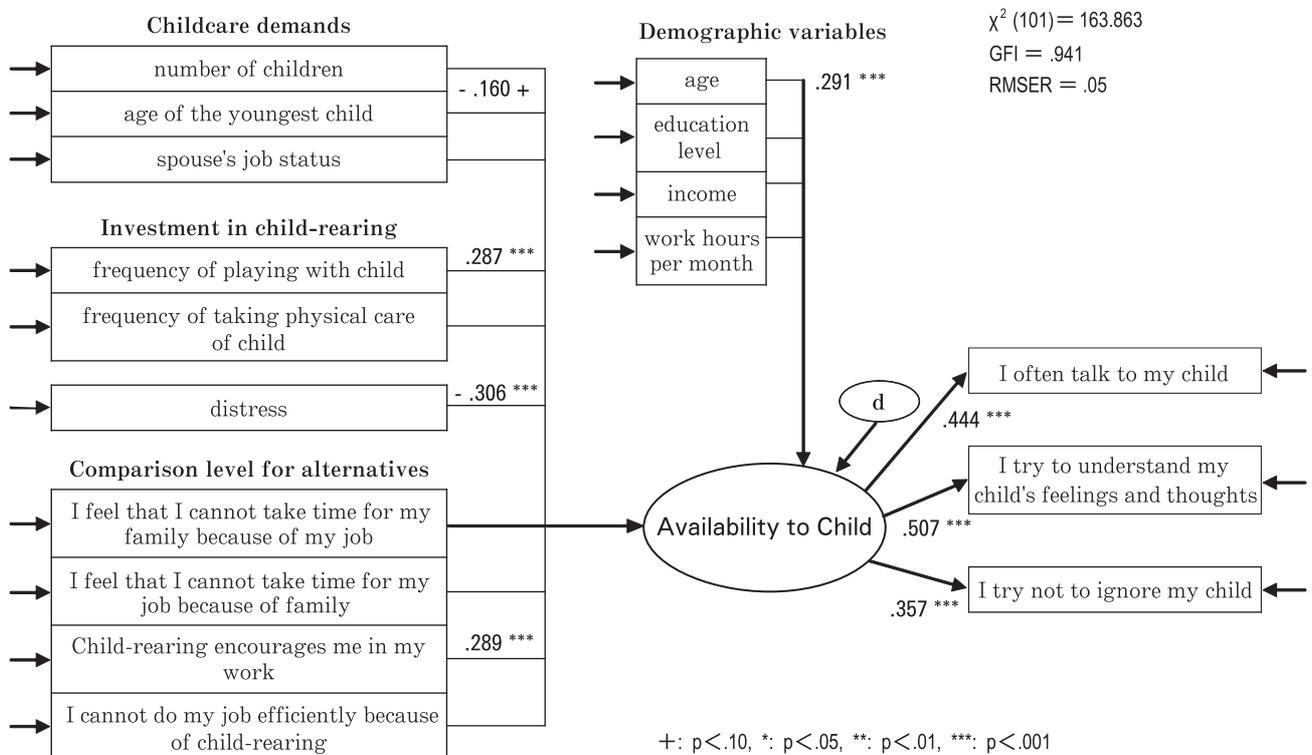


Figure 3. Coefficients and Significant Levels for the Model: Mother (N = 308)  
All coefficients are estimated by Maximum likelihood estimation method with AMOS.

women. Additionally, men's incomes were 8.05, which means that, on average, men's incomes were higher than those of women. On average, men in my sample spent 222.65 hours per month at work, while women spent 127.56 hours per month at work. Also, men's working hours were longer than those of women. The average frequency of paternal investment was less than maternal investment. Umberson (1989) argued that women's relationships with their children are richer and more complex than men's and that women experience both more strain and more reward from their parental role. Bolger, DeLongis, Kessler, & Wethington (1989) also demonstrated that women's scores were higher than men's on measures of parental distress. My results agreed with this.

The parameter estimates for the measurement model of availability and for the structural equation model are presented in Figures 2 and 3. The measurement model assumes that there are no correlations of the unique components (measurement errors) with each other, with equation residuals, or with other indicators. As shown, all the estimated values of factor loadings for the latent construct, parental availability, were significant at  $p < .001$ . Cronbach's alpha for this scale was .808. Although this alpha value is acceptable, I used the measurement model in the overall covariance structure analysis in which parental availability is perceived as a theoretical construct with three observed indicators. This decision was based on similar results obtained from a linear regression model, with the summed scale of the three parental availability items as the dependent variable. Further, linear regressions conducted with the same categories as those used in this study yielded similar results.

The extended model for fathers yielded  $\chi^2 = 337.81$ ,  $df = 100$ . The GFI of 0.93 shows that my hypothesized model fits the data reasonably well. As Figure 2 shows, seven variables significantly predicted parental availability to children: fathers' frequency in playing with and taking care of children, parental distress, management of time between family and work, encouragement toward work, difficulties in balancing work and child-rearing, and educational level. However, the number of children and the age of the youngest child had little association with paternal availability to children.

The extended model for women yielded  $\chi^2 = 163.86$ ,  $df = 101$ . The GFI of 0.94 shows that my hypothesized model fits the data reasonably well. As Figure 3 shows, mothers' frequency in playing with children, maternal distress, encouragement toward work, and age are significantly predicted parental availability. The number of children was not significant for mothers, but it was suggestive ( $p < .10$ ). Mothers' availability to children was moderately associated with fewer numbers of children. Finally, the age of their youngest child and their

spouse's job status had little association with maternal availability to children.

To sum up, even though several associations were not as strong as I had expected, the extended model provided a reasonably good fit to the data. This study tested hypotheses about parental availability to children. Hypothesis 1, 2, and 3 were supported in this study. However, hypothesis 4 was not supported. That is, poor prospects for alternatives are not associated with higher parental availability to children. "Child-rearing encourages father's/mother's work," however, had a positive influence on parental availability to children. That is, as indicated in Sieber's role accumulation (1974), parents are seeking a wider role repertoire to increase their resources and parental availability to children. The hypothesis that child-rearing could enhance the moderate job commitment of parents was thus supported.

## 6. Discussion

This study contributes to the understanding of how parents' investment in child-rearing, distress, and comparison levels for alternatives influence their availability to their children. First, it is clear that parents' investment in child-rearing was a significantly more positive predictor of parental availability to children than the other factors. Second, I found that parents' distress was a significantly negative predictor of availability to children. Third, parents who consider child-rearing to promote their work were more emotionally available to their children. In addition, fathers who have difficulty managing time between work and family were predicted to be more emotionally available to their children. These results show that having children increases parents' exposure to particular stressors and creates new stressors (Bird, 1997).

However, parents appear to have higher levels of emotional-social support, an additional coping resource that decreases psychological distress. If this is the case, then the structural burdens of parenting potentially could be reduced, thereby improving parents' psychological well-being. These findings suggest that Rusbult's extended model can contribute to a better understanding of how parents balance work and family.

There are several limitations in this study. First, the sample mainly consists of intact families in Japan. Japan and the United States maintain reasonably similar levels of modernity and living standards and both are child-centered, but the two countries have different child-rearing goals: (1) Japanese mothers expect early mastery of emotional maturity, self-control, and social courtesy, and (2) U.S. mothers expect early mastery of verbal competence and self-actualization (Bornstein et al, 1990). These findings, therefore, can be generalized

only to nuclear families. Additionally, this study used rather imprecise measures, such as the single-item measures for comparison levels for alternatives. My findings need to be carefully interpreted with these limitations in mind. Future research on parental availability to children in Japan will need to include multiple-item measures and in-depth measures of comparison levels for alternatives.

Despite these data limitations, my findings advance work and family scholarship in Japan, about which little is yet known. My framework considers, a combination of three components that promote men's and women's emotional availability to their children.

According to Ishii-Kuntz (2003), structural changes in the workplace, such as the obligation to take child care leave, are advocated. This includes providing financial support for companies that allow employees on child-care leave to return to pre-leave positions, and compensating these companies for the cost of hiring temporary replacements.

My findings suggest that the idea of taking child care leave for a specific child-related purpose fits with good fatherhood that is based on a strong relationship between father and child.

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