Well-being, involvement in paid work and division of child-care in parents of children with intellectual disabilities in Sweden

M. B. Olsson & C. P. Hwang

Department of Psychology, Göteborg University, Goteborg, Sweden

Abstract

Background  The aim of the study was to compare mothers’ and fathers’ involvement in paid work and child-care in families of children with intellectual disability (ID) and control families and to test if differences in well-being between mothers and fathers of children with ID can be explained by differences in involvement in paid work and child-care.

Methods  Mothers and fathers of 179 children with ID and 196 typically developing children answered mailed surveys on their involvement in paid work, child-care tasks and well-being. Only two-parent families were included.

Results  The results show main effects for gender of the parent and presence of a child with ID on involvement in paid work and well-being. Interaction effects indicate that mothers of children with ID are more affected than fathers in their participation in paid work and well-being. A positive relation between level of participation in paid work and well-being was found for both mothers and fathers. No difference in division of child-care tasks was found between families of children with ID and control families. Differences in involvement in paid work and child-care in families of children with ID only explained 5% of the variance in the difference between mothers’ and fathers’ well-being.

Conclusions  Families with children with ID differ from control families in that the parents are less involved in paid work and have lower levels of well-being. A positive relation between involvement in paid work and well-being was found.

Keywords  ID, parents, well-being, work-and-family conflict

Introduction

Mothers of children with intellectual disability (ID) have been found to have lower levels of well-being, or more depressive symptoms, compared with fathers and control mothers (Blacher & Lopez 1997; Hoare et al. 1998; Veisson 1999; Olsson & Hwang 2001). This difference between mothers and fathers might be explained by the more demanding parenting role, in which they are usually more involved compared with fathers. Compared with mothers, fathers are less restricted by having a child with disabilities, and their lower levels of depression might be a function of them benefiting from continuing to be actively involved in paid work and other roles even after the birth of the child with ID (Bristol et al. 1988; Heller et al. 1997; Olsson & Hwang 2003). Except the possible negative effect of the higher workload in the parenting domain,
a possible explanation for the difference in well-being between mothers and fathers of children with ID could as well be due to gender differences in involvement in paid work and child-care. Role specialization, or restriction, has been documented in so far that Bristol et al. (1988) found that fathers of children with ID participate less in child-care than fathers of children without disabilities. Employment levels of mothers of children with ID have repeatedly been found to be substantially below those of other mothers (Beresford 1995; Shearn 1998; Shearn & Todd 2000; Olsson & Hwang 2003). Mothers who are not involved in paid work cannot profit from the possible buffering effects of multiple roles (being involved in both paid work and child-care) (Barnett & Hyde 2001) such as feeling involved and successful at work, and may therefore run a greater risk of experiencing negative stress reactions. Mothers of children with ID who are employed have been shown to experience fewer of the negative effects associated with caring for a child with disabilities (Kagan et al. 1998; Shearn & Todd 2000), and father involvement in child-care is positively related to maternal and paternal well-being and the quality of the marital relationship (Willoughby & Glidden 1995; Simmerman et al. 2001).

The aim of the present study was to compare mothers’ and fathers’ involvement in paid work and child-care in families of children with ID, to compare them with control families and to test if differences in well-being between mothers and fathers of children with ID can be explained by differences in involvement in paid work and child-care.

The gender role-ideology and practical support available on a societal level for mothers who want to be engaged in paid work, and for fathers who want to be actively involved in child-care, are important for the possibility of being successfully involved in multiple roles (Sundström 1991). Sweden is a unique country with regard to support for parents to combine work and family; parents have, for example, a total of 480 days of paid parental leave (390 days with 80% of usual salary), and they are by law guaranteed highly subsidized child-care, the possibility of working part-time (with reduced pay) until the child is 8 years of age and the right to stay home to care for ill children (with pay) for 60 days per year and child (RFV 2006). Parents of children with ID are also entitled to a monthly cash grant to cover lost income and extra expenses in relation to the child’s disability.

A comparison between the UK and Sweden (OECD 2005) shows, for example, that in Sweden 72% of mothers with children less than 3 years of age are employed compared with 49% in the UK. Sixty-five per cent of Swedish children aged 0–2 years are in day care compared with 26% in the UK; among Swedish children aged 3–5 years, 90% are in day care (Gähler & Rudolphi 2004). Swedish fathers have had the legislated right to take paid parental leave since 1974, and in 1995 1 month of the leave period was reserved for fathers; in 2002 a second ‘father month’ was introduced. Before the introduction of the ‘father month’, less than half of the children had fathers who stayed home to care for them on parental leave; in comparison, 77% of the children born during the first year that the ‘father month’ was established had fathers who stayed home (RFV 2002). Most Swedes support fathers taking parental leave, but in 2003 fathers used only 17.2% of all leave days available (RFV 2004).

The aim of the present study was to explore parents’ involvement in paid work and child-care in families of children with ID compared with control families in Sweden.

The following hypotheses were tested:

1 The gender of the parent as well as if there is a child with ID in the family or not is related to parental participation in paid work.
2 Mothers of children with ID are responsible for more of the child-care tasks than mothers in control families.
3 The gender of the parent as well as if there is a child with ID in the family or not is related to parental well-being.
4 Differences in well-being between mothers and fathers of children with ID can be explained by differences in involvement in paid work and child-care.

Method

Procedures

Families of children with ID, ranging from the newly born to 16 years of age, living in urban and rural communities in the south-west of Sweden, were recruited from community-based programmes providing services to families of disabled children. Children and families are protected by professional confidentiality and could not be contacted in person.
for research purposes. Therefore, a total of 691 introductory letters were mailed out to all families enrolled in the programmes in the selected area that had children with a primary diagnosis of ID and/or autism. After two reminders, the second together with a new survey, 203 families returned surveys in prepaid envelopes.

The control group was composed of families of 496 randomly selected children, living in the same geographical area and having the same age and gender distribution as the study group. The randomization was carried out at the National Office of Statistics. Surveys were mailed to parents together with introductory letters explaining the selection procedure and the purpose of the study. After two reminders, the second together with a new survey, 214 families (212 mothers and 192 fathers) returned surveys in prepaid envelopes.

Three differently coloured booklets were mailed to the families, in the same envelope. One concerned family characteristics and was filled in by either one of the parents or both together. The other two concerned the parents’ individual well-being; one was directed to the mother and one was directed to the father. Parents were instructed to respond to the questions regarding their well-being independently of each other. Completion of the survey took between 30 and 45 min.

### Participants

The children in the ID group had many different kinds of IDs, such as Down syndrome, cerebral palsy and ID of unknown etiology. Several of the children had other conditions too, such as sight, hearing and physical limitations or autism. The degree of disability varied from severe to mild, but a majority of the children needed extra help and care during most of the day.

As the focus of this study was on gender differences in involvement in paid work and child-care, single-parent families were excluded (24 in the ID group and 16 in the control group), leaving 179 ID families and 196 control families in the study. The groups had similar demographic characteristics (see Table 1), but there were slightly more parents in the ID group with a maximum of 9 years of education. The two groups did not, however, differ in income or in socio-economic status, measured by gross monthly income and the Hollingshead Four Factor Index of Social Position (Hollingshead 1975).

Data were analysed with chi-square, two-way analysis of variance, two-way analysis of covariance, independent samples t-test and standard multiple regression analysis, using the SPSS for Windows, release 11.0.

### Table 1 Child, parent and family characteristics in the two groups of families

<table>
<thead>
<tr>
<th></th>
<th>Control group n = 196 M (SD)</th>
<th>ID group n = 179 M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>8.2 (4.4)</td>
<td>8.1 (4.3)</td>
</tr>
<tr>
<td>Gender (% boys)</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td><strong>Parent and family variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of children in the family</td>
<td>2.4 (87)</td>
<td>2.4 (84)</td>
</tr>
<tr>
<td>Mothers with maximum 9 years of schooling (%)</td>
<td>13.3</td>
<td>22$</td>
</tr>
<tr>
<td>Fathers with maximum 9 years of schooling (%)</td>
<td>16.1</td>
<td>26.7$</td>
</tr>
<tr>
<td>Family socio-economic status</td>
<td>37.5 (11.7)</td>
<td>36.3 (13.5)</td>
</tr>
<tr>
<td>Father's age</td>
<td>42.0 (6.9)</td>
<td>43.0 (6.3)</td>
</tr>
<tr>
<td>Mother's age</td>
<td>39.3 (5.7)</td>
<td>39.8 (6.2)</td>
</tr>
</tbody>
</table>

\$\chi^2 (3, n = 372) = 8.4, P < 0.05.

\$\chi^2 (3, n = 369) = 8.5, P < 0.05.

\$Hollingshead Four Factor Index of Social Position (Hollingshead 1975; Broberg 1992, unpublished material).
Measures

Well-being

The Swedish version of Beck’s Depression Inventory (BDI) (Beck & Steer 1996) was used to measure well-being. Well-being was defined as low scores on BDI (few depressive symptoms). The BDI consists of 21 symptoms or attitudes commonly seen in patients suffering from depression (e.g. sadness, negative self-concept, sleep and appetite disturbances), rated from 0 to 3 in intensity. In large samples the mean BDI score usually falls between 4 and 6, with women usually scoring two points higher than men (Kendall et al. 1987; Beck et al. 1988). Cronbach’s alpha for internal consistency in the present study was 0.90 for mothers of children with ID, 0.89 for control mothers, 0.87 for fathers of children with ID and 0.84 for control fathers.

Division of child-care tasks

One of the parents or both parents together answered who did which of 15 child-care tasks; no independent answers from mothers and fathers were obtained. Parents indicated on a 5-point scale whether the mother did the task most of the time, the mother did it a little more often, the parents shared the task equally, the father did it a little more often or the father did the task most of the time or that the task was not applicable because of, for example, the child’s age. Examples of questions were: Who drops off the child at day care/school? Who buys clothes for the child? Who bathes the child? Who cooks? Who soothes the child? Who helps the child with homework? Who puts the child to bed? Who has the primary responsibility for the child’s care and upbringing? As the ages of children ranged from 0 to 16 years, the applicability of tasks varied greatly according to the age of the child and to disability status; therefore, a mean score, rather than a sum score, was calculated by adding the scores for each applicable tasks in the family and dividing the total by the number of applicable tasks; the total score could vary from 1 to 5. Cronbach’s alpha for internal reliability was 0.74.

Involvement in paid work

Parents indicated their level of involvement in paid work as either (1) < 20 h/week (less than half time); (2) 20–33 h/week (part-time); and (3) > 33 h/week (full-time).

Results

The first hypothesis, that the gender of the parent as well as if there is a child with ID in the family or not is related to parental involvement in paid work, was tested with chi-square and two-way ANOVA (controlling for the difference in level of education between the ID group and the control group) and was supported (see Table 2). Mothers of children with ID more often work < 20 h/week than control mothers, \( \chi^2(2, n = 352) = 25.5 (P < 0.05) \). Fathers of children with ID more often work < 20 h/week than control fathers, \( \chi^2(2, n = 361) = 6.05 (P = 0.05) \). There were main effects for both gender of the parent (\( F_{1,710} = 259, P < 0.05 \)) and presence of a child with ID (\( F_{1,710} = 26, P < 0.05 \)), indicating that mothers worked fewer hours than fathers, and parents of children with ID worked fewer hours compared with control parents. An interaction effect for gender and presence of a child with ID was found (\( F_{1,710} = 7.8, P < 0.05 \)), indicating that mothers’ involvement in paid work were more affected when there was a child with ID in the family than were fathers’.

The second hypothesis, that mothers of children with ID are responsible for more of the child-care tasks than mothers in control families, was not supported when tested with independent samples t-test (see Table 2). The mean number of applicable tasks in families of children with ID was 13 (of 15), and in the control families, 10 (of 15) (\( t_{715} = -8.0, P > 0.05 \)). The number of tasks applicable in families was related to the child’s age in both groups, but more so in control families (\( r = -0.57, P < 0.05 \)) than in families with children with ID (\( r = -0.30, P < 0.05 \)).

The third hypothesis, that the gender of the parent and the presence of a child with ID in the family is related to parental well-being, was tested with two-way ANOVA and was supported (see Table 2). There were main effects for both gender of the parent (\( F_{1,710} = 33.8, P \leq 0.05 \)) and presence of a child with ID (\( F_{1,710} = 35.8, P \leq 0.05 \)). Mothers reported more depressive symptoms than fathers, and parents of children with ID reported more depressive symptoms than control parents. An interaction effect for gender and presence of a child with ID was found.
Main effect for involvement in paid work on level of well-being (§)

Higher scores indicate more depressive symptoms. Main effects for gender of the parent (‡)

Mothers of children with ID more often work

<table>
<thead>
<tr>
<th>Participation in paid work</th>
<th>Control families (n = 196)</th>
<th>ID families (n = 179)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mothers</td>
<td>Fathers</td>
</tr>
<tr>
<td>&lt;20 h/week n (%)</td>
<td>28 (15.1)</td>
<td>9 (4.8)</td>
</tr>
<tr>
<td>Part time (20–33 h/week) n (%)</td>
<td>94 (50.8)</td>
<td>16 (8.5)</td>
</tr>
<tr>
<td>Full time (&gt;33 h/week) n (%)</td>
<td>63 (34)</td>
<td>164 (86.8)</td>
</tr>
<tr>
<td>Division of child-care tasks M (SD)</td>
<td>2.3 (0.54)</td>
<td>2.2 (0.59)</td>
</tr>
<tr>
<td>Well-being (BDI) M (SD)</td>
<td>5.3 (6.1)</td>
<td>4.1 (4.8)</td>
</tr>
</tbody>
</table>

Table 2: Involvement in paid work, division of child-care tasks and well-being in control families and families of children with ID

1 Mothers of children with ID more often work <20 h/week than control mothers $\chi^2(1, n = 352) = 25.5$, $P < 0.05$. Fathers of children with ID more often work <20 h/week than control fathers $\chi^2(1, n = 361) = 6.05$, $P = 0.05$.

2 $\chi^2$ indicates more depressive symptoms. Main effects for gender of the parent ($F_{1,316} = 33.8$, $P = 0.05$) and presence of a child with ID ($F_{1,316} = 35.8$, $P = 0.05$). Interaction effect for gender and presence of a child with ID ($F_{1,316} = 10.8$, $P < 0.05$).

3 Main effect for involvement in paid work on level of well-being ($F_{3,676} = 19.8$, $P < 0.05$). Interaction effect between gender of the parent and level of involvement in paid work ($F_{3,676} = 3.2$, $P < 0.05$).

($F_{1,210} = 10.8$, $P < 0.05$), indicating that mothers of children with ID were more affected in their well-being than fathers when there was a child with ID in the family. The correlation between mothers’ and fathers’ BDI scores were $r = 0.29$, $P < 0.05$ in control families and $r = 0.40$, $P < 0.05$ in ID families.

The fourth hypothesis, that differences in well-being between mothers and fathers of children with ID can be explained by differences in involvement in paid work and child-care, was tested with standard multiple regression analysis. The difference in BDI scores between mothers and fathers were used as the dependent variable and division of child-care tasks and the difference between mothers’ and fathers’ level of involvement in paid work were entered as predictors. The model only explained 5% (SE 7.5) of the variance in well-being. The difference in level of participation in paid work made a unique significant contribution to the variance in well-being (unstandardized $\beta = 1.8$, SE 0.67, standardized $\beta = 0.24$, $P < 0.05$), but division of child-care tasks did not. To further explore the relations between gender, presence of a child with ID, involvement in paid work and well-being, a three-way ANOVA was conducted (see Table 2). In addition to the previously described main effect for gender and presence of a child with ID, a main effect for involvement in paid work ($F_{3,676} = 19.8$, $P < 0.05$) and an interaction effect for gender and level of involvement in paid work ($F_{3,676} = 3.2$, $P < 0.05$) were found. Mothers and fathers who were involved less than 20 h per week in paid work had lower well-being than parents who were more involved in paid work. For fathers, well-being increased with higher involvement in paid work, while for mothers levels of well-being between those who worked part-time and those who worked full-time did not differ.

Discussion

Overall, the results reflect a situation previously described in Sweden, i.e. mothers more often work part-time and take more responsibility for child-care tasks than do fathers (Bygren et al., 2004), and we found this pattern to be more pronounced in families of children with ID. This is probably in part due to the fact that families with children with ID get a cashgrant that gives the economic possibility to work less and spend more time at home and many mothers...
choose to do so. According to our results, fathers of children with ID also work less than control fathers, most of this difference is due to the relatively large group of fathers of children with ID who work less than 20 h a week and who also has the lowest level of well-being. One explanation of this could be low level of education another that some parents of children with ID find it difficult to get successfully involved in paid work because of overload or poor well-being. That mothers of children with ID had lower well-being than control mothers and fathers of children with ID was expected from previous research (e.g. Blacher & Lopez 2001). The results indicate a positive relation between involvement in paid work and well-being for both mothers and fathers. From these cross-sectional data, it could not be determined if poor well-being was the reason for low work involvement or if high work involvement has positive effect on well-being. In any case mothers who work full-time did not have better well-being than mothers who worked part-time. It would be of interest to further explore the relation between involvement in paid work and childcare with a measure of well-being that allow for differentiation on the positive end of the well-being continuum.

In conclusion, the study found that families with children with ID differ from control families in that the parents are less involved in paid work and have lower levels of well-being. Further research is needed in order to understand the direction of the positive relation between involvement in paid work and well-being.

Acknowledgement

We wish to thank Professor Linda Haas, Department of Sociology, Indiana University-Indianapolis, USA for valuable comments on earlier versions of this manuscript.

Reference


Accepted 5 September 2006