# The Relationship between Social Skills, Fathers' Involvement, and Economic Status in Preschool Children 

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#### Abstract

The environment in which children are reared, including the level of parental involvement, significantly affects their social development. Thus, this study examined the association between fathers' involvement, economic status, and preschoolers' social skills. Mothers of 1,341 Japanese children aged four to five years completed a self-report questionnaire regarding their family's financial circumstances and both parents' attitudes toward child-rearing; childcare professionals further evaluated the children's social skills. The results revealed that the fathers' involvement and economic status were positively related to preschoolers' social skills, such as assertion, self-control, and cooperation.


Keywords Social development, Social skills, Fathers' involvement, Fatherless family, Economic status

## 1. Introduction

Previous research from many countries suggests that children from fatherless families are more likely to exhibit school maladjustment than children from two-parent families, as children who live without their fathers tend to experience performance issues related to school such as lower test scores and behavioral problems [1-3]. As a result, these children are more likely to stay away from school and even drop out [2] [4] [5]. The effects of school maladjustment during childhood can further negatively influence future social adjustment. In addition, fatherless families tend to have lower incomes [6] [7], and there is a correlation across generations between school maladjustment and poverty [8] [9]; for example, children who grow up in single-mother households are more likely to have low incomes and rely on income support in later life [10]. These trends are also evident in Japan, where it has been documented that high school children from fatherless families are more likely to drop out of school than children from two-parent families. Furthermore, there is a higher probability that children from fatherless families who have received public assistance will also rely on public assistance as adults compared to children from two-parent families [11]. Thus, the dysfunctional child-rearing environment in fatherless families is often attributed to low-income conditions.
Previous studies suggest that one of the factors pertaining

[^0]to school maladjustment is a child's inability to adjust to social and group norms due to a lack of social skills [12], which may originate during the preschool years [13] [14]. The social skills acquired in early childhood that affect social adaption in later life consist of assertiveness, self-control, and cooperation [15]; furthermore, the environment in which children are raised, including parental involvement during the preschool years, significantly affects the development of these social skills [16].

Many studies suggest that the influence from the father's involvement begins early in a child's life, as paternal involvement is associated with a many aspects of child development, including social, emotional, psychological, and cognitive development, in addition to developmental outcomes, including social, emotional, psychological, and cognitive outcomes [17-19]. In terms of social development, the father's involvement is positively correlated with a child's overall social competence, social initiative, social maturity, and so forth [20-22].

Although previous studies suggest that active paternal involvement has a positive influence on children's social development, there is limited evidence describing how the father's absence influences a child's social development. Various studies have found that children raised in fatherless families perceive themselves as less cognitively and physically competent than their peers from father-present families [23]. In addition, children from fatherless families suffer from increased emotional and psychological problems in later life compared to children from father-present families [24].

Moreover, raising a child in an environment from which the father is absent combined with low-income conditions will likely further compound the effects on a child's social
development. As such, the aim of this study was to clarify how a father's presence (including low father involvement) and economic status influence the development of social skills in preschoolers.

## 2. Methods

## Participants

In 2013, self-report questionnaires were given to mothers of preschool children $(\mathrm{n}=1,845)$ aged four to five years in authorized nursery schools $(\mathrm{n}=21)$ and kindergartens ( $\mathrm{n}=10$ ) in Kyoto Prefecture in Japan. The majority of the mothers ( $\mathrm{n}=1,362$ ) completed the questionnaires. To clarify the association between fathers' involvement and preschoolers' social skills, children who had previously received developmental assessment or came from motherless families were excluded from this study. Childcare professionals and kindergarten teachers then evaluated the children's $(\mathrm{n}=1,341)$ social skills. Ethical approval for this study was obtained from the Kyoto University Ethics Committee.

## Measures

## Social Skills Scale (SSS)

The Social Skills Scale (SSS) is a 24 -item scale to evaluate children's social competence in "cooperation," "self-control," and "assertiveness" [25]; these factors are known to affect social adaption later in life [15]. In this study, childcare professionals and kindergarten teachers evaluated the children's social skills using this scale. The measure is composed of three subscales: cooperation with 8 items (e.g., "Brings cheer to friends who look lonely" and "Helps friends when asked"), self-control with 8 items (e.g., "Postpones gratification when requested" and "Waits for his/her turn"), and assertion with 8 items (i.e., "Expresses appropriate greetings to others" and "Evidences happiness when someone does something for him/her"). These three factors are also positively correlated with the child development scale [25], which is based on the Social Skills Rating System (SSRS) [15]. Items for the SSS are rated on a 3-point Likert scale that ranges from 0 (not at all) to 2 (often), and total scores for assertiveness, self-control, and cooperation are calculated with higher scores indicating higher social skills. A previous study reported adequate internal consistency and construct validity for the measure with internal consistency of subscales ranging from $\alpha=.91$ to .93 [25]. In this study, internal consistency ranged from $\alpha=.83$ to .93 .

## Attribute variables and frequency of parental involvement

The children's mothers filled out self-report questionnaires, and variables relating to the following attributes were assessed: sex of the child, age group, family structure (nuclear versus extended), presence of father (no versus yes), existence of siblings (no versus yes), institution to which the child belongs (nursery school versus kindergarten), the family's subjective economic status (poor,
not poor, or rich), the relative frequency of the father's interactions in childrearing and playing with his children (almost never, 1-2 days/week, 3-4 days/week, or almost every day), and the mother's interactions such as playing with her children (almost never, 1-2 days/week, 3-4 days/week, or almost every day).

## Statistical analysis

First, relationships between attribute variables and children's social skills were analyzed by $t$-test and one-way ANOVA. Second, children's social skills served as the dependent variables, and the mean difference analysis indicated which attribute variables were significant; Sex, age group, family structure, the existence of siblings, and institution served as control variables for the multiple regression analysis, in which the independent variablesexistence of a father and economic status-were entered. Third, the social skills of children from two-parent families then served as the dependent variables, and the mean difference analysis indicated which attribute variables were significant, and mothers' involvement served as a control variable for the multiple regression analysis. The independent variables used here were the frequency of fathers' involvement and economic status. The IBM SPSS Statistics Version 20.0 for Windows was used for all statistical analyses.

## 3. Findings

## Sample characteristics and parental involvement

Sample characteristics are shown in Table 1. This sample included 692 boys ( $51.6 \%$ ) and 649 girls ( $48.4 \%$ ). In terms of age, 680 ( $50.7 \%$ ) were 4 -year-olds, while 661 (49.3\%) were 5 -year-olds. In terms of family composition, 173 ( $12.9 \%$ ) were from extended families, while 1,168 ( $87.1 \%$ ) were from nuclear families. In terms of father's influence, 1,221 children ( $91.1 \%$ ) were from two-parent families, while $120(8.9 \%)$ were from fatherless families. In terms of presence of siblings, 300 ( $22.4 \%$ ) had no siblings while 1,041 (77.6\%) had siblings. In terms of institution, 624 ( $46.5 \%$ ) attended nursery school and 717 (53.5\%) attended kindergarten. In terms of economic status, 298 (22.2\%) classified themselves as poor, 860 (64.2\%) as not poor, and 183 (13.6\%) as rich.

The relative frequency of parental involvement is shown in Table 2. In two-parent families, the frequency of fathers' involvement can be summarized as follows: 200 (14.9\%) were almost never involved, 281 (21.0\%) were involved 1-2 days/week, 374 (27.9\%) were involved 3-4 days/week, and 486 (36.2\%) were involved almost every day. The mothers' involvement can be summarized as follows: 25 (1.9\%) were almost never involved, 200 (14.9\%) were involved 1-2 days/week, 265 (19.8\%) were involved 3-4 days/week, and 851 ( $63.4 \%$ ) were involved almost every day.

## Relationships between attribute variables and children's social skills

The relationships between attribute variables and children's social skills are shown in Table 1. Certain differences can be noted from these variables: girls had higher scores for social skills than boys (assertion: $t(1339)=$ 4.16, $p<.001$; self-control: $t(1339)=10.13, p<.001$; cooperation: $t(1339)=6.88, p<.001)$; older children had higher scores for social skills (assertion: $t(1339)=4.70$, $p<.001$; self-control: $t(1339)=7.78, p<.001$; cooperation: $t(1339)=9.10, p<.001)$; children from nuclear families had higher scores for cooperation than children from extended families (assertion: $t(1339)=1.12, p=.26$; self-control: $t(1339)=0.81, p=.42$; cooperation: $t(1339)=2.04, p<.05)$; children from two-parent families had significantly higher scores for self-control and cooperation compared with their counterparts from fatherless families (assertion: $t(1339)=$ $1.54, p=.12$; self-control: $t(1339)=3.70, p<.001$; cooperation: $t(1339)=3.14, p<.01)$; children with siblings had significantly higher scores for self-control and cooperation compared with their counterparts with no siblings (assertion: $t(1339)=0.96, p=.34$; self-control: $t(1339)=3.41, p<.01$; cooperation: $t(1339)=3.16, p<.01)$; children in kindergarten had significantly higher scores for self-control and cooperation compared to their counterparts from nursery school (assertion: $t(1339)=1.01, p=.32$; self-control: $t(1339)=2.58, p<.05$; cooperation: $t(1339)=$ $3.62, p<.001$ ); and children from relatively poor families
had significantly lower scores for all social skills compared to their counterparts from higher economic status families (assertion: $F(2,1338)=3.90, p<.05$; self-control: $F(2,1338)$ $=3.13, p<.05$; cooperation: $F(2,1338)=3.03, p<.05)$.

## Multiple regression analysis of the relationship between father's presence and child's social skills

The results of the multivariate analysis are shown in Table 3. The father's presence was associated with higher scores for self-control (beta $=0.08, p<.01$ ) and cooperation (beta $=$ $0.07, p<.05$ ). Additionally, economic status was associated with higher scores for assertion (beta $=0.10, p<.001$ ), self-control (beta $=0.08, p<.01$ ), and cooperation $($ beta $=$ $0.06, p<.05)$.

## Multiple regression analysis of the relationship between frequency of father's participation in childcare and child's social skills in two-parent families

The results of the multivariate analysis regarding children from two-parent families are shown in Table 4. A higher frequency of fathers' participation in childcare was associated with higher scores for assertion (beta $=0.06$, $p<.05$ ), self-control (beta $=0.08, p<.01$ ), and cooperation (beta $=0.06, p<.05$ ). Additionally, higher economic status was associated with higher scores for assertion (beta $=0.10$, $p<.001$ ), self-control (beta $=0.08, p<.01$ ), and cooperation (beta $=0.07, p<.01)$.

Table 1. Sample characteristics and relationships between social skills and attribute variables ( $N=1,341$ )

| Items | N | Social skills ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assertion |  |  | Self-control |  |  | Cooperation |  |  |
|  |  | Mean | (SD) |  | Mean | (SD) |  | Mean | (SD) |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Boys | 692 | 13.2 | 3.1 | *** | 11.7 | 3.7 | *** | 9.1 | 4.5 | *** |
| Girls | 649 | 13.8 | 2.8 |  | 13.6 | 2.9 |  | 10.8 | 4.5 |  |
| Age group |  |  |  |  |  |  |  |  |  |  |
| 4-year-olds | 680 | 13.1 | 3.2 | *** | 11.9 | 3.6 | *** | 8.9 | 4.4 | *** |
| 5-year-olds | 661 | 13.9 | 2.7 |  | 13.4 | 3.2 |  | 11.1 | 4.5 |  |
| Family composition |  |  |  |  |  |  |  |  |  |  |
| Extended family | 173 | 13.3 | 3.1 | ns | 12.4 | 3.7 | ns | 9.3 | 4.7 | * |
| Nuclear family | 1,168 | 13.5 | 3.0 |  | 12.7 | 3.4 |  | 10.0 | 4.5 |  |
| Presence of father No | 120 | 13.1 | 3.2 | ns | 11.5 | 3.6 | *** | 8.7 | 4.6 | ** |
| Yes | 1,221 | 13.5 | 3.0 |  | 12.7 | 3.4 |  | 10.1 | 4.5 |  |
| Existence of siblings No | 300 | 13.3 | 3.1 | ns | 12.0 | 3.8 | ** | 9.2 | 4.6 | ** |
| Yes | 1,041 | 13.5 | 2.9 |  | 12.8 | 3.4 |  | 10.2 | 4.5 |  |
| Institution |  |  |  |  |  |  |  |  |  |  |
| Nursery school <br> Kindergarten | 624 | 13.4 | 3.0 | ns | 12.4 | 3.5 | * | 9.5 | 4.4 | *** |
|  | 717 | 13.6 | 3.0 |  | 12.9 | 3.5 |  | 10.4 | 4.7 |  |
| Economic status |  |  |  |  |  |  |  |  |  |  |
| Poor | 298 | 13.1 | 3.1 | $]_{*}^{*}$ | 12.3 | 3.7 <br> 3.4 <br> 3.3 | ** | 9.4 | 4.7 | * |
| Not poor | 860 | 13.6 |  |  | 12.7 |  |  | 10.0 |  |  |
| Rich | 183 | 13.8 | 3.0 |  | 13.1 |  |  | 10.2 | 4.3 |  |

Note: ${ }^{\text {a }}$ Assessed with Social Skills Scale. Relations between attribute variables (sex, age group, family composition, and institution) and social skills were analyzed by t-test. Relations between economic status and social skills were analyzed by one-way ANOVA (Tukey's multiple comparison test). ${ }^{*} p<.05,{ }^{* *} p<.01,{ }^{* * *} p<.001$, ns $=$ not significant

Table 2. Frequency of parental involvement in two-parent families ( $N=1,221$ )

|  | N | $\%$ |
| :---: | :---: | :---: |
| Fathers' involvement |  |  |
| Almost never | 200 | 14.9 |
| $1-2$ days/week | 281 | 21.0 |
| 3-4 days/week | 374 | 27.9 |
| Almost every day | 486 | 36.2 |
| Mother's involvement |  |  |
| Almost never | 25 | 1.9 |
| 1-2 days/week | 200 | 14.9 |
| 3-4 days/week | 265 | 19.8 |
| Almost every day | 851 | 63.4 |

Table 3. Multiple regression analysis of the relationship between father's presence and child's social skills ( $N=1,341$ )

|  | Social skills |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assertion |  |  | Self-control |  |  | Cooperation |  |  |
|  | B | SE | $\beta$ | B | SE | $\beta$ | B | SE | $\beta$ |
| Presence of father | . 27 | . 35 | . 02 | 1.17 | . 41 | .08** | 1.31 | . 54 | .07* |
| Economic status | . 30 | . 08 | .10*** | . 28 | . 10 | .08** | . 31 | . 13 | .06* |
| $R^{2}$ |  | . 10 |  |  | . 15 |  |  | . 13 |  |

Note: Controlled for sex, age group, family structure, existence of siblings, and institution.
${ }^{*} p<.05,{ }^{* *} p<.01,{ }^{* * *} p<.001$
Table 4. Multiple regression analysis of the relationship between frequency of father's involvement and child's social skills in two-parent families ( $N=1,221$ )

|  | Social skills |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assertion |  |  | Self-control |  |  | Cooperation |  |  |
|  | B | SE | $\beta$ | B | SE | $\beta$ | B | SE | $\beta$ |
| Frequency of a father's involvement | . 40 | . 19 | .06* | . 73 | . 23 | .08** | . 68 | . 30 | .06* |
| Economic status | . 30 | . 08 | .10*** | . 30 | . 10 | .08** | . 32 | . 12 | . $07 * *$ |
| $R^{2}$ |  | . 11 |  |  | . 15 |  |  | . 13 |  |

Note: Controlled for sex, age group, family structure, existence of siblings, institution, and mother's involvement. ${ }^{*} p<.05,{ }^{* *} p<.01,{ }^{* * *} p<.001$

## 4. Discussion

This study examined the association between fathers' involvement, economic status, and preschoolers' social skills. Children from two-parent families achieved higher scores for self-control and cooperation than did children from fatherless families. In addition, children from two-parent families in which fathers participated in childcare more frequently had higher scores in assertion, self-control, and cooperation. Moreover, economic status correlated with scores for assertion, self-control, and cooperation regardless of fathers' presence or how often they participated in childcare.

The results demonstrating the relationship between a father's involvement and his child's social skills confirm that no or low involvement strongly correlates with poor development of social skills in children. Several reasons can be proposed to explain this significant relationship.

First, a father's involvement often involves physical play, in which the child experiences adventure and learns how to relate to others and society. In addition, fathers encourage
children to follow the rules and boundaries of the game being played [26] [27], which provides training in important social skills such as self-control, cooperation, and the ability to solve problems. Furthermore, the role of fathers in teaching children social skills using physical play such as sports is stereotypically greater than that of mothers.

Second, fathers may often use more abstract words and technical language when talking to children than mothers; on the other hand, mothers may frequently use more words to express their feelings and provide encouragement [28] [29] [30]. In this language-rich and diverse environment, both parents promote the development of social skills such as assertiveness.

Third, a child whose father is involved in childrearing is more likely to observe negotiations between father and mother during decision-making processes [31] [32], which helps the child learn to communicate more effectively and efficiently.

Accordingly, fathers not only have a role in providing economically for childcare but also in contributing positively to the childcare environment in many ways. These factors
might contribute to the differences in development of children from fatherless and two-parent families, resulting in relatively lower social skills of children from fatherless families or families with uninvolved fathers.

The correlation between economic status and social skills suggests that a low income is also related to poor development of social skills in children. This result is similar to that found in previous social development studies [33] [34] and suggests that economic status influences the social skills of assertiveness, self-control, and cooperation. There are several reasons that could account for this significant relationship between economic status and preschoolers' social skills.
First, a child from a family with lower economic status is more likely to be exposed to physical and psychosocial stress from domestic disorder, such as disputes and violence [35] [36], and the accumulation of chronic stress disrupts the self-control processes that help children cope with external demands [37] [38].

Second, a child from a family with a lower economic status is more likely to be exposed to a language environment in which harsher and less responsive interactions are common [33]; this environment is not conducive to building social skills such as assertiveness and cooperation.
Third, lower economic status generally reduces investments in childrearing [39], and fewer investments result in fewer opportunities for children to receive cognitive stimuli such as playing with toys, exposure to age-appropriate learning materials, and variety of experiences.

Thus, this study demonstrated that absent fathers and low-income family status could negatively influence the development of social skills in preschoolers, which suggests that the negative cycle pertaining to social maladjustment in fatherless families begins in infancy. In Japan, fatherless families are increasing in number and have become a common family unit; moreover, the relative poverty rate of children in fatherless families is also increasing. These trends are also evident in many other developed countries [40]. This study confirms the importance of supporting children from fatherless and low-income families in order to break the succession of negative social impacts from one generation to the next.

## 5. Limitations

This study had several limitations. First, only the mothers completed the questionnaire. To evaluate the involvement of both parents in childrearing more precisely, the fathers' reports also need to be included. Second, only a small fraction of the sample came from fatherless families; thus, a greater sample size is needed in order to evaluate the association between the father's presence and child development more reliably. Third, the study consisted of a cross-sectional design; thus, more longitudinal research is needed in order to examine the effects of fathers' early
involvement on later development of preschoolers. Fourth, the sample was drawn from a limited area in an urban metropolis; therefore, the reproducibility of the current results should be confirmed using data from other regions in a variety of settings. Finally, only the quantitative dimensions of parenting were used in this study. Future studies need to examine in greater detail how different types of paternal involvement influence children's social skills.

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