

Effects of Birth Order on Self-Reliance of Japanese Preschoolers during Daily Routines

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How to cite this paper: Kojima, Y. (2019). Effects of Birth Order on Self-Reliance of Japanese Preschoolers during Daily Routines. *Psychology*, 10, 1262-1268. <https://doi.org/10.4236/psych.2019.109081>

Received: April 25, 2019

Accepted: July 6, 2019

Published: July 9, 2019

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Abstract

To examine the effect of birth order on the period at which preschool children begin to receive less direct care from adults, a questionnaire was given to 149 Japanese mothers with two children. They answered whether or not each of their children interacted with a parent or another adult during 4 situations in daily life (having a meal, wearing/changing clothes, taking a bath, and falling asleep). Logistic regression analyses revealed that birth-order effects were responsible for the time-point at which children became self-reliant while having a meal, wearing/changing clothes, and falling asleep even after controlling for other family variables including the age of the children, gender combination of the siblings, age-spacing between the siblings, family structure (nuclear family or extended family), and mother's occupation. The findings are discussed with reference to cultural background and differences between older and younger siblings with regard to their social environment.

Keywords

Self-Reliance, Daily Routine, Birth Order, Preschooler, Japan

1. Introduction

Little information is available regarding the time-point at which parents begin to provide less direct care for their children during daily activities such as having a meal, wearing/changing clothes, and bathing. The present study explores the effects of birth order and other family variables on when children begin to be less dependent on their parents in primary daily activities such as eating, wearing/changing clothes, taking a bath, and falling asleep.

It has been suggested that the process by which children begin to take care of

themselves depends on the cultural background in which they are raised. For example, many parents in the United States provide their children with a separate room for sleeping, and let their children sleep there (Valsiner, 2000; Whiting & Edwards, 1988), while parent-child “co-sleeping” is common in Japan, and Japanese parents sleep next to their children throughout infancy and toddlerhood (Caudill & Plath, 1966; Shand, 1981; Takahashi, 1990). Undoubtedly, the period in which children begin to be less dependent on their parents seems to be influenced by social expectations based on the cultural background, although there are certainly also individual differences within each culture. Based on the example of co-sleeping mentioned above, preschool children in Japan may be more dependent than their Western counterparts under different situations, although some Japanese children receive less care from their parents than others quite early in the preschool years. This study focuses particularly on the effects of birth order on when children begin to receive less direct care from their parents.

According to role theory (Biddle & Thomas, 1966), behavioral norms in a social context are implicitly and explicitly prescribed expectations regarding the functions, obligations, and rights associated with a particular role. Parental general expectations for their children are likely to be linked to the birth order of the children. Some researchers have shown that parents expect their firstborns to be more independent at an earlier age and actually encourage the firstborns to be so, while they are more tolerant of the secondborn’s dependency (Ernst & Angst, 1983). However, other data indicate that parents are more likely to be controlling and intrusive with their firstborn children than with their secondborn children at a similar age (Ward, Vaughn, & Robb, 1988). In addition, Belsky and his colleagues found that, compared to the parents of firstborn children, those of latter born children responded to, stimulated, and expressed positive affection less often (Belsky, Gilstrap, & Rovine, 1984; Belsky, Taylor, & Rovine, 1984). Thus, the results of empirical studies appear to differ with regard to parental expectations toward children consistent with birth order, and one interpretation is that a parent’s expectation for their firstborn child to be independent at an earlier age makes the parent’s conduct controlling and intrusive (see also Bornstein, 2002).

Since Adler (1931) pointed out the effects of birth order on a child’s experience while growing up, many other researchers have discussed the development and adjustment of children with regard to birth order. However actually, birth order appeared to be included in a larger study simply because it was easy to do so (Ernst & Angst, 1983). Furman and Lanthier (2002) suggested that we should be cautious regarding the effects of birth order, and should carefully consider other family variables. Therefore, not only birth order but also other factors including the gender combination of siblings, age-spacing between siblings, mother’s occupation, and family structure were included in this study as independent variables that could be expected to influence the development of a

child's self-reliance.

2. Method

The participants in this study were recruited from three kindergartens in Nagoya, Japan. Questionnaires were distributed to the mothers of 3- to 6-yr-old kindergartners by the teachers, and the mothers were asked to answer all of the questions at home and to return the completed questionnaire within about a week. Two-hundred-sixty-five mothers (over 60% of the distributed questionnaires) completed the questionnaires. The participants included 53 only-child, 162 two-children, 43 three-children, 5 four-children, and 2 five-children families. Of the 162 two-children families, this study focused on the 149 families in which the respondents answered all of the questions. One-hundred-twenty-five (83.9%) mothers did not work outside the home, 2 (1.3%) mothers worked full time, 13 (8.7%) worked part time, and 9 (6.0%) were self-employed. The families consisted of 128 (85.9%) nuclear families and 21 (14.1%) extended families. The firstborn children ranged in age from 3.53 - 13.40 years ($M = 7.05$, $SD = 2.18$), and the secondborn children were from 0.26 - 6.41 years ($M = 3.79$, $SD = 1.70$).

The questionnaire consisted of a cover sheet and items on parental (or other adult) involvement in child-care activities. The cover sheet included chronological data for the family members, mother's occupation, family structure, and gender composition of the siblings. The child-care activities included 4 dimensions: providing care during mealtime, helping to wear/change clothes, bathing, and lying down with children until they fell asleep. The mothers were asked who usually performed these child-care activities for their child who went to kindergarten and their other child (older or younger, 0 - 10 years) on a 9-point scale: 1) always the mother, 2) usually the mother, 3) most often the mother, 4) the mother and the father equally, 5) most often the father, 6) usually the father, 7) always the father, 8) an adult other than the parents, or 9) nobody. In the analyses, all of the categories except for category 9) were labeled "someone involved (SI)". Category number (9) was labeled "nobody involved (NI)". Of the 298 children for whom mothers evaluated the patterns of parental involvement, data on 173 children from 3 to 7 years old were analyzed. Seventy-two (41.6%) children were older siblings, and 101 (58.4%) were younger siblings. There were 45 males with male siblings, 40 males with female siblings, 52 females with male siblings, and 36 females with female siblings.

3. Results

Overall, preliminary analyses showed that the mothers rather than the fathers were the primary caregivers for their children in all of the 4 activities considered in this study regardless of the birth order of the children, which is consistent with previous findings in Japan. **Table 1** shows the number of children grouped into SI and NI with regard to each of the 4 measures evaluated, according to birth order and age. The effects of birth order in SI and NI were compared for each age. In 3- and 4-yr-old children, birth order did not appear to have an effect

in any of these 4 measures, whereas in 5-yr-old children the secondborn children were more likely than the firstborn children to receive less interaction with an adult while wearing/changing clothes and falling asleep (Fisher's exact test, wearing/changing clothes: $p = 0.05$; falling asleep: $p = 0.03$). Again, no birth order effects were found in 6-yr-old children for any of the 4 activities.

Logistic regression analyses were performed to explore whether birth order effects could be seen even after controlling for the effects of other possible factors. The adult's involvement with the child in each situation was entered as a dependent variable, and the sibling gender composition, age-spacing between the siblings, his/her own age, family structure, and mother's occupation as well as the birth order were entered as independent variables. Data on bathing were not analyzed since almost all of the children (169/173, see also **Table 1**) received care from an adult.

Analyses revealed that in all 3 measures the age of the children was the most powerful factor in determining whether the children received care from adults (**Table 2**). Interestingly, the effects of birth order remained significant at a level of 0.05, which shows that birth order was an important factor in predicting the time-point at which children began to receive less direct care, even after controlling for the effects of other possible factors.

Table 1. Number of children who received care from an adult during daily routines partitioned according to age and birth order.

Measures	3-yr-old		4-yr-old		5-yr-old		6-yr-old									
	Older	Younger	Older	Younger	Older	Younger	Older	Younger								
Help during mealtime	7	0	21	0	23	1	32	4	24	2	27	7	14	1	7	3
Help dressing/changing clothes	7	0	20	1	22	2	32	4	22	4	21	13	11	4	5	5
Bathing	7	0	21	0	24	0	35	0	26	0	30	4	15	0	10	0
Lying beside until the child falls asleep	6	1	20	1	23	1	32	4	25	1	25	9	13	2	8	2

SI: someone involved (parent or other adult) in the activity; NI: nobody involved in the activity.

Table 2. Logistic regression model predict preschooler's independency during daily routines.

Variables	Supporting during a mealtime			Helping to wear/change clothes			Lying down till falling asleep		
	Odds ratio	95% CI	p -level	Odds ratio	95% CI	p -level	Odds ratio	95% CI	p -level
Birth order	4.25	(1.23, 14.77)	0.023	3.77	(1.47, 9.68)	0.006	3.91	(1.24, 12.34)	0.020
Children's sex \times sibling's sex	0.92	(0.28, 3.02)	0.885	0.72	(0.28, 1.89)	0.509	1.00	(0.33, 3.03)	0.998
Children's age	0.44	(0.24, 0.81)	0.009	0.30	(0.18, 0.52)	0.000	0.47	(0.27, 0.83)	0.009
Age spacing between the sibling	1.41	(0.89, 2.25)	0.143	1.14	(0.82, 1.58)	0.446	1.36	(0.89, 2.07)	0.159
Family structure	0.53	(0.10, 2.72)	0.447	0.58	(0.16, 2.10)	0.410	1.14	(0.32, 4.10)	0.845
Mother's occupation	0.92	(0.24, 3.45)	0.897	3.97	(0.98, 16.02)	0.053	0.86	(0.26, 2.87)	0.803

Independent variables entered were labeled in logistic regression analyses as follows: older siblings were labeled as "1" and younger sibling as "2"; male children were labeled as "1" and female children as "2"; children in nuclear families were labeled as "1" and those in extended families as "2"; children who had working mothers were labeled as "1" and those who had non-working mothers as "2". The age of the children and the age spacing of the siblings were dealt with as variable data.

4. Discussion

Undoubtedly, the process by which children become independent of their parents in various situations involves the interrelation between the conflict between the child's dependence and self-reliance on adults and that between parental intervention and withdrawal from their children. Compared to American parents, who tend to encourage their children to be independent at an earlier age during the preschool years, Japanese parents appear to be overprotective and intrusive toward their children, even in early childhood (Lanham & Garrick, 1996). The present findings revealed that younger siblings were less likely than older siblings at a similar age to be dependent on adults during daily activities, such as having a meal, wearing/changing clothes, and falling asleep, although surprisingly, over half of the secondborn children who participated in this study received care from an adult through the preschool years.

One possible interpretation of these findings involves the adult's child-rearing experience. Parents, especially mothers, are less controlling, demanding, and intrusive with their latterborn children (Ernst & Angst, 1983; Ward et al., 1988). Thus, first-time parents may simply be more involved with their children. These findings may also be influenced by Japanese women's perspectives of their lives and demographic trends. According to recent reports, Japanese couples married less than 5 years can be expected to have a total of 2.04 children (National Institute of Population and Social Security Research, 2015). In addition, another study revealed that many women stop working with their first pregnancy or delivery, but returned to work after all of their children could manage to perform their daily routines by themselves (Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, 2002; National Institute of Population and Social Security Research, 2015). Considering these trends regarding Japanese women, the self-reliance of secondborns may suggest the release of mothers from child-rearing activity. This psychosocial background might explain why secondborn children tended to receive less direct care at an earlier age than firstborn children. Future studies need to include data on the number of children couples plan to have and on the mother's intention to return to work.

Secondborn children may actually require less support in daily routines at an earlier age than firstborn children. Social learning theory (Bandura, 1989) emphasizes the effect of observing another's acts on social development, both positively and negatively. For example, in the setting of a meal, it is natural to expect that secondborn children will be more likely than firstborn children to handle utensils such as a spoon, fork, or pair of chopsticks in a culturally appropriate fashion and to master how to skillfully use both hands, for example holding a dish with one hand and putting its contents into the mouth with the other hand, at a given age.

Finally, it may be reasonable to suppose that parents become less involved with their secondborn children by encouraging the firstborn children to care for

the secondborn children. In Japan, this interpretation seems to be true for bed-time, since many siblings share a room while sleeping. The presence of firstborn children may make it easier for parents to stop lulling their secondborns. These are some of the possible explanations for why secondborn children receive less direct care from adults at an earlier age than firstborn children. However, the strongest determining factors may depend on the nature of the daily routine. In this study, data were collected concerning only 4 settings in daily routines in families with preschool children. Future studies should address in which settings and why mothers become less involved with their children and how the birth-order effect emerges using a larger sample. A multicultural comparison is also needed to disentangle these complicated relations among birth order and other factors. Multimethodological approaches including natural observation and interviews, as well as questionnaires, should be helpful for understanding the mechanism through which birth-order effects emerge. Furthermore, longitudinal studies on the processes by which both firstborn and secondborn children gain self-reliance during daily routines should be conducted to help elucidate the effects of birth order.

5. Conclusion

Little information is available regarding when parents become less involved in daily care activities with their children. This study explored the effects of birth order and other family variables on when children begin to be less dependent on their parents with particular focus on 4 primary daily activities (eating, wearing/changing clothes, bathing, and falling asleep) in Japanese families with 2 preschool children. The findings revealed that younger siblings were less likely than older siblings at a similar age to be dependent on adults during some settings of daily activities, even when controlling for other family variables.

Acknowledgements

This research was supported by Grant-in-Aid for Scientific Research (No. 14710081) of The Ministry of Education, Culture, Sports, Science, and Technology, Japan.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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