[Paper]

Survey on Parental Perceptions of Difficulty in Raising Infants and Toddlers

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Abstract

Background: The concept of "difficulty in raising children" is child-rearing difficulty defined within a framework encompassing four factors: the child, parent, parent-child relationship, and environment. Developmental disabilities in children can sometimes play a causal role in these difficulties (CFA, n.d.).

Aims: This study aims to examine the relationship between child-rearing difficulty and developmental concerns or disabilities and to identify elements directly causing child-rearing difficulty, based on the framework, among items parents perceive as stresses or problems.

Methods: A questionnaire was administered to parents of children aged 0-6, inquiring about their child-rearing difficulty and perceived contributing factors using five-point Likert scales. Multiple regression analysis identified significant items as direct subjective factors of child-rearing difficulty.

Results: Over half of the parents of children with developmental disorders, stunting, or concerns reported difficulties in raising them. Approximately 30% of parents of children without such conditions also reported difficulties. A significant relationship was found between the diagnosis of developmental disabilities and child-rearing difficulty. Among 38 parental stresses or problems, eleven issues were directly related to the difficulty. Additionally, there was a significant interaction between parental difficulty and the child's restlessness and impulsivity in predicting developmental disabilities or concerns.

Conclusion: This study advances the investigation into the relationship between child-rearing difficulty for children aged 0-6 and developmental concerns or disabilities. It also identifies direct factors of child-rearing difficulty perceived by parents. The findings may aid in recognizing signs of problems in parents and children, both with and without disabilities, and clinically approaching these situations in a courteous manner.

Keywords: child-rearing difficulty, developmental disabilities, stunted growth, restlessness, impulsivity

1. Introduction

Japan is confronted with multiple challenges in maternal and child health, such as a declining birth rate, delayed marriages, a decreasing marriage rate, isolation of nuclear families, child poverty, and disparities in maternal and child health (Kim et al., 2018). In response, the national campaign "Healthy Parents and Children 21" was initiated in 2001, embarking on its second phase in 2015, aimed at addressing these issues through three basic tasks and two priority issues (Osawa et al., 2019). A critical priority is support for parents experiencing difficulty raising their children (Osawa et al., 2019). According to Japan's Children and Families Agency (CFA, n.d.), this difficulty is challenges encountered in child-rearing due to various factors affecting children or parents, including aspects related to the parent-child relationship or the environment, such as the support system available. Data from the FY2017 national infant health checkup revealed that 13.0% of parents of 3 to 4-month-old infants, 23.9% of parents of 18-month-old children, and 33.8% of parents of 3-year-old children reported frequently or at least sometimes experiencing difficulties in raising their children (National Institute of Public Health, 2019).

The concept of "difficulty in raising children" is encapsulated within a framework comprising four factors: child, parent, parent-child relationships, and life environment (CFA, n.d.; Koyanagi et al., 2022). Child factors include developmental challenges, health issues, and temperament. Parental factors entail illnesses or disabilities, personality, attitudes, and the parents' upbringing environments. Relationship factors focus on the bonding and attachment between parent and child, including personality compatibility. Life environment factors encompass the broader context, such as community and social support challenges, lack of familial support, economic hardships, and the dynamics within single-parent families.

The terminology surrounding child-rearing challenges has evolved, with terms like "child-rearing difficulty," "child-rearing anxiety," and "child-rearing stress" being used interchangeably (Tagawa et al., 2021). Kawai et al. (1996) identified a core feeling of difficulty in child-rearing through factor analysis. They extracted one factor consisting of four items, highlighting the nuanced nature of maternal child-rearing anxiety. This concept has influenced subsequent understandings of child-rearing anxiety, though definitions have varied and, at times, remained ambiguous (Ueno, 2010). Parenting stress, in particular, is often equated with parenting anxiety in Japan (Miyazaki et al., 2015). The role of social support in mitigating child-rearing anxiety and stress has been increasingly recognized, with sensitive engagement in childcare support facilitating early detection of disabilities and preventing child abuse (Kashiwa and Sato, 2017; Tagawa et al., 2021; Tamaru and Koeda, 2010). The national agency CFA (n.d.) specifies that "difficulty in raising children" encompasses a broad spectrum of challenges.

Developmental disabilities have been identified as a potential causal factor in child-rearing difficulties (CFA, n.d.). Research both within Japan and internationally has explored the relationship between developmental disabilities or concerns and child-rearing anxiety, stress, or difficulty. Previous studies have examined the four-factor framework of child-rearing difficulty as defined in the "Healthy Parents and Children 21 (Phase 2)" campaign, identifying specific factors associated with child-rearing challenges (Fuchigami, 2020; Maeda, 2021). Koyanagi et al. (2022) scored each factor from their supporters' perspective. Sugiyama et al. (2023) showed percentages of parents who find those factors stressful or difficult in raising children of 0-6 years. From the previous research of Sugiyama et al. (2023) about simple proportions, this study extracts only the data for which all the answers against the specific factors to examine are available and reanalyzes pending issues,

which are differences in the difficulty of raising children depending on the presence or absence of disabilities and whether or not each factor with high or low proportion at first glance is actually affecting child-rearing difficulty at the core. Besides, Tagawa et al. (2021) analyzed child health data from local government records, identifying eleven objective factors directly related to child-rearing difficulties. Tamaru and Koeda (2010) noted that findings related to developmental disorders during health checkups do not always lead to timely developmental counselling due to the subjective nature of parental concerns and mental states. Therefore, this study aims to examine factors perceived by parents as contributing to child-rearing stress or problems and yet directly impacting the difficulty experienced in raising children and considers the relationship between subjective direct factors and developmental disabilities or concerns.

2. Method

2.1 Participants and Procedure

The study targeted parents of children aged 0 to 6 years. Data was collected via a Google Forms survey in August and September 2022. Recruitment occurred through two primary methods: (1) distribution of flyers with the survey URL at 48 public and public-private preschools and national kindergartens in Tokyo's Tama area, and (2) sharing the URL with parents connected to the authors via a social networking service (SNS). The survey received 753 responses (Sugiyama et al., 2023), with 409 (54.3%) via the first method and 344 (45.7%) via the second. After excluding duplicates, responses for children older than 7, and responses with missing data for analyzed variables, 616 participants were included in the analysis.

Participant demographics included children aged 0 ($n=56$), 1 ($n=175$), 2 ($n=115$), 3 ($n=79$), 4 ($n=79$), 5 ($n=82$), and 6 ($n=30$). Of these, 449 were firstborns, 115 were second-borns, 21 were third-born or later, and 31 were unspecified. The sample comprised 323 males and 285 females, with eight unreported. Sibling presence was noted as follows: no siblings ($n=353$), one sibling ($n=218$), and two or more siblings ($n=41$), with four unreported. Enrollment status included public or public-private preschools ($n=300$), national university kindergartens ($n=41$), and others/unknown ($n=275$). Thirteen reported developmental conditions were autism spectrum disorder ($n=7$), Down syndrome ($n=2$), ADHD ($n=1$), cerebral palsy ($n=1$), and other developmental disabilities ($n=2$). Stunting ($n=24$) was identified through child health checkups, with Japan reporting a 95% attendance rate for such checkups at critical developmental stages (OECD, 2019; Shioda et al., 2016). Among those with developmental concerns ($n=14$), three children received medical or public care.

Parent demographics indicated ages in the 20s ($n=61$), 30s ($n=415$), 40s ($n=139$), and 50s ($n=1$), with fathers comprising 29 and mothers 585 of the respondents. Family structures included 602 respondents with a spouse or partner, 13 without, and one unreported. The division of parenting roles varied, with primary responsibility reported by 248 respondents, somewhat more by 225, equal division by 109, somewhat less by 11, partner's primary role by 4, and 19 unreported.

2.2 Ethical Considerations

The study's objectives were communicated at the onset of the survey. Participation was voluntary, with assurances of no penalty for non-participation and protection of personal information through data anonymization. The institutional research ethics committee affiliated with the first author approved this study.

2.3 Survey Instrument

The questionnaire measured perceived child-rearing difficulty on a five-point Likert scale ranging from (1) not at all to (5) very much. To assess the four-factor framework of child-rearing difficulty, the survey included 18 items on child factors, 16 on parent and parent-child relationship factors (combined due to anticipated difficulty distinguishing between personal and relational factors), and 12 on environmental factors. Respondents rated their level of stress or problems related to these factors using a similar five-point scale. These questions were based on prior research (Fuchigami, 2020; Maeda, 2021) on child-rearing difficulty for asking supporters of 3-year-olds with developmental disabilities or concerns and modified for parents of 0-6-year-olds with and without disabilities, referencing Akiyama et al. (2017).

2.4 Analysis

2.4.1 General Analytical Approaches

The significance level for all statistical tests was set at $p<.05$. Statistical analyses were conducted using R software, version 4.3.2. The variance inflation factors (VIFs) for the regression models were all below 3, indicating no multicollinearity concerns.

2.4.2 Cross-Tabulation Analysis

Initial analyses included calculating probabilities, as depicted in Figure 1 and Table 1, and their 95% confidence intervals computed by assuming a normal distribution. A case where the probability is close to 0% employed the Wilson (1927) score interval to provide a more accurate estimate.

2.4.3 Multiple Regression Analysis

Multiple regression analysis was applied, with variables measured on five-point Likert scales as predictors and outcomes. Variables with responses from fewer than 200 participants were excluded to ensure robust analysis. Key assumptions were using the Shapiro-Wilk (normality of residuals), Breusch-Pagan (homoscedasticity), Durbin-Watson (independence of residuals), and RESET (linearity of the regression model) tests. Outliers were removed if the normality assumption was violated, and the model was accepted if it subsequently met the $p>.05$ significance threshold. Models failing any other assumption tests were not considered further.

2.4.4 Binomial Logistic Regression Analysis

Binomial logistic regression was conducted on three different models, assessing the predictive significance of independent variables on dichotomous outcomes using the Wald test. The models were assessed for goodness of fit with the Hosmer-Lemeshow test and accepted if they met the $p>.05$ significance threshold. On top of that, this analysis expects ten events per variable to avoid bias (Peduzzi et al., 1996). Therefore, the key model of this study adjusted the number of explanatory variables to satisfy this condition. For models including interaction terms, quantitative predictors were mean-centered to avoid multicollinearity.

3. Results

3.1 Relationship Between Developmental Concerns or Disabilities and Child-Rearing Difficulty

Analysis of parental experiences, as depicted in Figure 1, reveals that 29.6% of parents with typically developing children report difficulties raising them, with a 95% confidence interval (CI) ranging from .258 to .333 ($n=565$). In stark contrast, a significantly higher proportion of parents, 64.7% (95% $CI=.516-.778$, $n=51$), whose children have developmental disorders, stunting, or their concerns (DDSC), experience child-rearing difficulties. Notably, the intensity of these difficulties

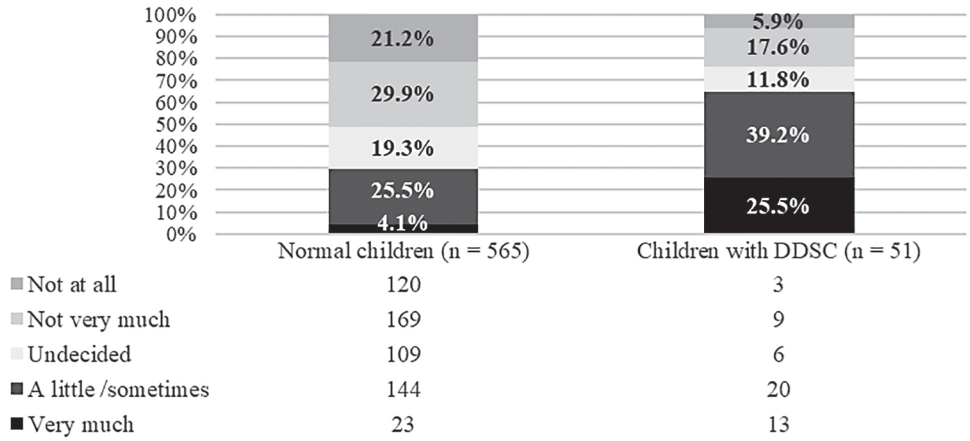


Figure 1 Relationship between child's development and degree feeling child-rearing difficulty

Table 1 Relation between certainty of developmental disabilities and child-rearing difficulty

	Children with DDSC			Normal children
	Disorders	Stunting	Concerns	
Parents having child-rearing difficulty (n = 200)	12 (6.0%)	12 (6.0%)	9 (4.5%)	167 (83.5%)
Parents without the confessed difficulty (n = 416)	1 (0.2%)	12 (2.9%)	5 (1.2%)	398 (95.7%)

significantly varied, with only 4.1% of parents of typically developing children reporting severe challenges, compared to 25.5% of parents of children with DDSC (95% *CI* for normal children = .024 − .057; 95% *CI* for DDSC = .135 − .375). Figure 1 illustrates the relationship between a child's developmental challenges and the degree of difficulty parents experience in child-rearing.

With the same sample, Table 1 elaborates on stages of disability assessment depending on the presence or absence of child-rearing difficulty. 6.0% (95% *CI* = .027 − .093, n = 200) of children whose parents confessed to child-rearing difficulties had developmental disorders, which is significantly higher than 0.2% (Wilson 95% *CI* = .000 − .013, n = 416) in the children without the confession. Besides, children without developmental concerns or disabilities were 83.5% (95% *CI* = .784 − .886, n = 200) in the former, which is significantly lower than 95.7% (95% *CI* = .937 − .976, n = 416) in the latter. The result reinforces the impact of developmental challenges on parenting experiences.

3.2 Direct Subjective Factors Contributing to Child-Rearing Difficulty

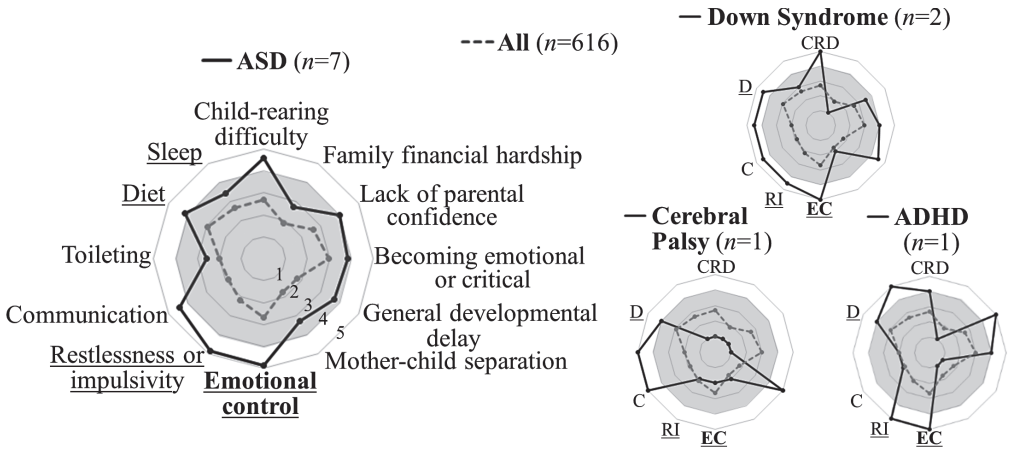
This study employed multiple regression analysis to examine the factors contributing to the difficulty of raising children, utilizing parents' reported stressors and problems as explanatory variables detailed in Table 2. The analysis was anchored on a five-point Likert scale for all variables for a detailed understanding of how different aspects of parenting and environmental conditions relate to perceived child-rearing challenges.

The four models are based on the framework of four factors feeling child-rearing difficulty as stated in Healthy Parents and Children 21 (Phase 2) : child, parent, child-parent relationship, and environment (CFA, n.d.). The Parent/Relation models combine two of the factors. The Total model includes all of the four. The rate is the percentage of parents with child-rearing difficulty a little, sometimes, or very much among all respondents. The child and total models removed outlier data in normality until the Shapiro-Wilk test resulted in over 5%. The gray highlights indicate significant

Table 2 Subjective factors directly/indirectly related to child-rearing difficulty

Four models & item's proportion		Child		Parent/Relation		Environment		Total		Rate
Sample size (*n*)		611		616		616		614		616
Statistical symbol		*b*	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*	%
(Intercept/Constant)		.295**	.110	.983**	.165	1.476**	.152	.181	.158	−
Sleep	Child	.110**	.027					.105**	.028	35.1%
Diet	Child	.140**	.027					.124**	.028	44.6%
Toileting	Child	.054†	.031					.063*	.032	17.4%
Health	Child	.005	.034					−.023	.035	12.8%
Hygiene or personal independence	Child	.026	.033					.012	.034	26.9%
Motor development	Child	−.005	.042					.001	.044	7.3%
Language development	Child	−.045	.037					−.045	.038	14.3%
Communication	Child	.081*	.040					.065	.041	15.9%
Obsessiveness or interest bias	Child	.061	.039					.055	.040	14.9%
Intensity of anxiety	Child	−.037	.035					−.052	.036	16.6%
Restlessness and impulsivity	Child	.155**	.031					.127**	.032	22.4%
Emotional control	Child	.275**	.032					.230**	.035	35.4%
Mother-child separation	Child	.091*	.038					.093*	.039	10.1%
General developmental delay	Child	.095*	.039					.097*	.040	12.8%
High anxiety or worry	Parent or Relationship			.081†	.044			.040	.037	39.3%
Becoming emotional or critical	Parent or Relationship			.239**	.038			.093**	.033	44.2%
Desire to do anything for the kid	Parent or Relationship			.013	.046			−.027	.038	16.9%
Strong expectations of the child	Parent or Relationship			.060	.042			.016	.035	24.0%
Inability to love	Parent or Relationship			−.024	.058			−.048	.047	6.2%
Lack of parental confidence	Parent or Relationship			.200**	.041			.071*	.035	33.0%
Sacrifice of careers and privates	Parent or Relationship			.087*	.037			.046	.032	24.0%
Strong sense of parental role	Parent or Relationship			−.005	.039			−.008	.032	29.9%
Keeping her worries to herself	Parent or Relationship			.074†	.040			.032	.036	19.5%
Susceptible to information	Parent or Relationship			−.055	.038			−.055†	.032	24.8%
Disposition to addiction	Parent or Relationship			−.058	.051			−.039	.043	5.8%
Domestic violence	Parent or Relationship			−.003	.069			−.031	.060	3.1%
Own abuse experience	Parent or Relationship			−.026	.048			.004	.042	8.8%
Young or unwanted pregnancy	Parent or Relationship			.018	.121			.045	.102	1.0%
Inability to enroll in preschool	Environment					.41	.036	.001	.028	19.8%
Maladjustment to the preschool	Environment					.126*	.059	.026	.044	4.7%
No relatives or friends to consult	Environment					.096*	.039	.010	.032	23.1%
Family financial hardship	Environment					−.051	.044	−.072*	.033	13.5%
Parent's discord with a grandparent	Environment					.029	.043	−.011	.033	14.6%
Move	Environment					.027	.054	−.059	.041	7.6%
Many children	Environment					.108*	.051	−.009	.040	7.8%
Caring for grandparents	Environment					.013	.070	.056	.052	3.4%
Busyness of both parents	Environment					.161**	.038	.035	.030	37.5%
Marital discord	Environment					.071†	.038	.015	.030	23.7%
Adjusted R^2		.534**		.282**		.120**		.534**		−
Statistics Notes		−		Non-normality		Non-normality		−		−

Note. The gray highlights are valid and significant βs or top 10 rates in the explanatory variables. **$p<.01$, *$p<.05$, †$p<.10$



Note. CRD stands for "Child-rearing difficulty." The other abbreviations mean Diet (D), Communication (C), Emotional control (EC), and Restlessness or impulsivity (RI). The underlined items have the effect sizes of b >.100, and the underlined bold is b >.200 (See Table 2). The scale indicates from the inside, "1. Not at all," "2. Not very much," "3. Undecided," "4. A little or sometimes," and "5. Very much." The translucent gray areas are four or fewer on this 5-point scale, and this outer frame and beyond show items with evident difficulty: four to five points.

Figure 2 Five-point rating of eleven direct factors and difficulty in raising children

explanatory variables in the adopted regression models or the top 10 items in the simple proportion.

In the child model (adj. R^2=.534, p=.000, n=611), eight items significantly explained the difficulty: sleep (b=.110, p=.000), diet (b=.140, p=.000), communication (b=.081, p=.043), restlessness and impulsivity (b=.155, p=.000), emotional control (b=.275, p=.000), mother-child separation (b=.091, p=.016), general developmental delay (b=.095, p=.014), and intercept (b=.295, p=.008). Models of the parent or relationship (adj. R^2=.282) and environment (adj. R^2=.120) excluded outliers but did not satisfy the normality requirement.

In the total model (adj. R^2=.534, p=.000, n=614), the seven child factors, the two parent or relationship factors, and the one environmental factor significantly explained the difficulty. Its child factors were sleep (b=.105, p=.000), diet (b=.124, p=.000), toileting (b=.063, p=.047), restlessness and impulsivity (b=.127, p=.000), emotional control (b=.230, p=.000), mother-child separation (b=.093, p=.017), general developmental delay (b=.097, p=.017). The parent or relationship factors were becoming emotional or critical (b=.093, p=.005) and lack of parental confidence (b=.071, p=.042). The environmental factor was family financial hardship (b= −.072, p=.029). Unlike the child model, the intercept was insignificant (b=.181, p=.251). It supports that comprehensive factors causing child-rearing difficulty include not only the child but also the parent, the relationship, and the environment (CFA, n.d.).

The significant 11 variables of child or total factor models were regarded as direct child-rearing difficulty factors. The gray highlights of the rate column show the top 10 factors parents find at least a little or more stressful or problematic in childcare. Five items overlapped with the eleven direct subjective factors. Although parent or parent-child relationship (P/R) factors comprised half the top worries, the child's (C) factors were more directly related to child-rearing difficulty. On the simple proportions, parents evaluated the diet (44.6%: 95% CI=.407 − .486, b=.124: 95% CI=.070 − .178) and becoming emotional or critical (44.2%: 95% CI=.402 − .481, b=.093: 95% CI=.028-.159) as the most common factors of stress or difficulty. However, emotional control, which had a lower percentage

than those two items, explained child-rearing difficulty more strikingly (35.4%: 95% *CI* = .316 − .392, *b* = .230: 95% *CI* = .162 − .298). The mother-child separation (10.1%: 95% *CI* = .077-.124, *b* = .093: 95% *CI* = .017 − .169) and general developmental delay (12.8%: 95% *CI* = .102 − .155, *b* = .097: 95% *CI* = .018 − .176) significantly explained child-rearing difficulty but not many parents mentioned their problems. The greater family financial hardship related significantly to lower difficulty in raising children (13.5%: 95% *CI* = .108-.162, *b* = − .072: 95% *CI* [− .138, − .007]).

Figure 2 shows the five-case method scores for the eleven respondents whose diagnosed names of disabilities are reported. ADHD and Cerebral palsy are raw data. The others are each mean. Parents of children with ASD, ADHD, and Down syndrome felt child-rearing difficulty, but a parent of a child with cerebral palsy did not. Regarding direct factors, parents felt stress or difficulty in five items for the ASD children (*n* = 7), six for the ADHD child (*n* = 1), seven for the Down syndrome children (*n* = 2), and four for the cerebral palsy child (*n* = 1) against 2.84 items in an overall average (*SD* = 2.39, *n* = 616). Diet (D) was difficult or stressful for all four disabilities. Emotional control (EC), restlessness or impulsivity (RI), and communication (C) were so for three of the disabilities.

3.3 Relationship Between Direct Subjective Factors and Developmental Disorders, Stunting, or Concerns

The analysis exploring the relationship between direct subjective factors and developmental disorders, stunting, or concerns via binomial logistic regression provided an insight. This examination was structured around three distinct parental perspectives: those experiencing child-rearing difficulties, those without acknowledged problems, and a comprehensive view encompassing all participating parents.

For parents identifying child-rearing challenges (Nagelkerke R^2 = .41, *n* = 200; DDSC *n* = 33), significant predictors of DDSC included communication (*OR* = 2.33, *p* = .006), restlessness and impulsivity (*OR* = 1.88, *p* = .037), and general developmental delay (*OR* = 1.84, *p* = .027). Conversely, among parents not reporting significant child-rearing difficulties (Nagelkerke R^2 = .20, *n* = 416; DDSC *n* = 18), the predictive strength was primarily observed in communication abilities of the child (*OR* = 2.16, *p* = .002), with restlessness and impulsivity not presenting a significant correlation (*OR* = .98). This indicates that while communication issues are a consistent concern across groups, the relationship between DDSC and restlessness/impulsivity varies based on the presence of child-rearing difficulty.

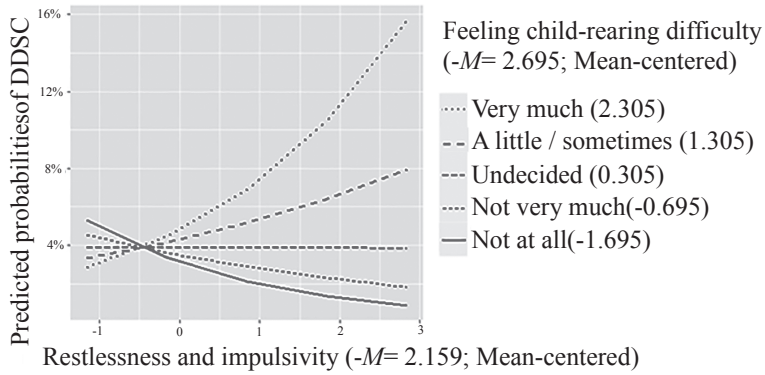


Figure 3 Simple slopes of the interaction

The aggregated analysis of all parents (Nagelkerke $R^2 = .31$, $n = 616$; DDSC $n = 51$) confirmed the significant interaction. This analysis employed the following five factors to prevent bias due to insufficient events per explanatory variable (Peduzzi et al., 1996). The factors were child-rearing difficulty (adj. $OR = 1.12$, 95% $CI = 0.77$–1.62, $p = .569$), its interaction with restlessness and impulsivity (adj. $OR = 1.26$, 95% $CI = 1.01 - 1.57$, $p = .038$), and the previous significant variables: communication (adj. $OR = 1.82$, 95% $CI = 1.39 - 2.40$, $p < .001$), restlessness and impulsivity (adj. $OR = 0.93$, 95% $CI = 0.65 - 1.33$, $p = .686$), general developmental delay (adj. $OR = 1.48$, 95% $CI = 1.14 - 1.92$, $p = .003$). Figure 3 visualizes the interactions between restlessness/impulsivity and child-rearing difficulty in predicting DDSC.

4. Discussion

4.1 Relationship between Developmental Concerns or Disabilities and Child-Rearing Difficulty

This study revealed that over half of the parents of children aged 0–6 years with developmental disorders, stunting, or concerns experience significant difficulty in raising their children. Severe difficulties were seen more with them than with parents of normal children. On the flip side, having a child with developmental issues does not universally lead to severe child-rearing challenges. Additionally, approximately 30% of parents of children without identified developmental concerns also reported difficulties, underscoring the universality of child-rearing challenges across different parental experiences.

A significant association was identified between the presence of developmental disabilities and child-rearing difficulty. However, this association does not clarify whether children of parents reporting higher levels of difficulty are more likely to have a disability or if such difficulties merely increase the likelihood of detecting an existing disability. Childcare support professionals, while focused on identifying and assisting children with disabilities, should also be attuned to the struggles of all parents, irrespective of their children's developmental status. This broader focus on parental difficulties, as explored in this study by examining subjective factors impacting child-rearing directly, is crucial for comprehensive support systems.

4.2 Direct Subjective Factors Contributing to Child-Rearing Difficulties

This study reanalyzed simple proportions of Sugiyama et al. (2023), performing multiple regression analysis with child-rearing difficulty as the objective variable. The simple proportions of child factors indicated greater stress on things closely related to daily life, such as eating, sleeping, and personal care. However, the greatest impact on child-rearing difficulty was on the neurodevelopmental disorder-like character of poor emotional control and restlessness or impulsivity. The latter result supports previous studies from the supporters' point of view (Fuchigami, 2020; Koyanagi et al., 2022; Maeda, 2021). Removing the parents' subjective bias might cause the difference. On the other hand, the problem of mother-child separation was not often pointed out by parents as well as supporters but directly related to difficulty in raising the children (Fuchigami, 2020; Koyanagi et al., 2022; Maeda, 2021; Sugiyama et al., 2023).

Previous research by Tagawa et al. (2021) highlighted objective factors influencing child-rearing difficulties, utilizing data collected by local governments. In contrast, our investigation centers on the subjective experiences of parents, revealing 11 primary stressors and challenges directly linked to child-rearing difficulties. Despite parents identifying similar number of challenges within parental or parent-child relational factors, the child factors predominantly contributed

Table 3 Translation of question items for the eleven direct factors

Factors	Question items	(*b*)
Child	Sleep (e. g., difficulty falling asleep, waking up during the night)	+
	Diet (e. g., significant picky eating, unbalanced appetite)	+
	Toileting (e. g., difficulty removing diapers, toileting independence is hard to achieve)	+
	Communication (e. g., no interest in adults/friends, talking one-sidedly and not stopping)	+
	Restlessness or impulsiveness (e. g., going away alone when you take your eyes off, not being able to wait quietly)	+
	Emotional control (e. g., no sooner don't things go their way than angering, crying violently)	+
	Mother-child separation (e. g., crying a lot when a parent tries to leave the child)	+
	General developmental delay	+
Parent/	I tend to be emotional about and critical of my children.	+
Relationship	I have no confidence in parenting appropriately and no idea what to do with my child.	+
Environment	Family financial hardship	−

Note. Column (*b*) refers to the sign of the partial regression coefficient.

to the perceived child-rearing difficulty. The findings underscore the importance of childcare support workers being vigilant for signs of parenting challenges, facilitating the timely detection of developmental issues (CFA, n.d.; Tamaru and Koeda, 2010). In doing so, support systems can be more effectively tailored to meet the nuanced needs of families, enhancing child welfare and parental well-being.

An intriguing finding in this model was the association between perceived financial hardship and child-rearing difficulty. Higher subjective financial hardship was linked to lower reported difficulty in raising children, a counterintuitive result that reflects the complex relationship described by Fang et al. (2022). They noted an inconsistent relationship between lower income and parenting stress, suggesting the influence of environmental factors and coping resources. The integrity of the data and the model's validity in this study were thoroughly assessed through checks for multicollinearity, normality, homoscedasticity, independence, and linearity, all of which supported the robustness of the findings. Therefore, the significant negative impact of family financial hardship on child-rearing difficulty might indicate the presence of an extraneous variable not captured in the analysis or reflect nuances in the data collection phase. For example, at least nearly half of the children in this study were in public or prefectural licensed preschools where their daycare fees varied depending on household income. Such preferential social services may reduce child-rearing difficulty, assuming that other explanatory variables remain constant.

4.3 Relationship between Direct Subjective Factors and Developmental Concerns or Disabilities

Among parents experiencing difficulties in child-rearing, the analysis highlighted higher restlessness or impulsivity in children increases the likelihood of identifying developmental disorders, stunting, or concerns. This tendency was not observed among parents who did not report child-rearing difficulty, suggesting that the context of child-rearing challenges significantly influences the perception and identification of potential developmental issues. This finding underscores the importance of considering the nuances of parental experience in assessing child behavior, indicating that difficulties in child-rearing may either amplify the identification of developmental concerns or

reflect the inherent challenges in distinguishing between typical child temperament and symptoms of a disability.

In the case of cerebral palsy, unlike ASD, ADHD, or Down Syndrome, he was the only developmentally disabled child without child-rearing difficulty. The causation could be because he did not have many of the direct factors, including the neurodevelopmental disorder-like character of emotional control difficulty and restlessness or impulsivity with the highest impacts on child-rearing difficulty. According to DSM-5 of the American Psychiatric Association (APA, 2013), ADHD is not only characterized by restlessness and impulsivity but also by "emotional dysregulation." Children with ASD widely have "hyperactivity" like ADHD, and their hyper-reactivity to sensory input or difficulty against environmental changes can cause excessive emotional responses (APA, 2013). Down syndrome is a genetic disorder, not a neurodevelopmental disorder, but brings, in most cases, various levels of intellectual disability categorized as the latter disorder. The intellectual disability can co-occur with emotional or behavioral disorders or "mood dysregulation" (APA, 2013). DSM-5 indicates that there are cases causing aggressive behavior in ADHD, ASD, and intellectual disorders. Children with Down Syndrome were often stereotyped as being highly sociable, but recent studies have reported that they show more emotional or behavioral problems than their typically developing peers (Helma et al., 2011; Næss et al., 2017). Cerebral palsy is a physical disability with impaired motor function as a symptom and brings intellectual disability at a high rate, but lower than in Down syndrome: both Down syndrome and cerebral palsy children can co-occur with ASD or ADHD at some rates (Ekstein et al., 2011; Oxelgren et al., 2017; Påhlman et al., 2021). Our eleven cases are thought to represent the above characteristics of each disorder to some extent because the diagnostic names are clear. And then, the parent of the child with cerebral palsy did not report co-occurrences of intellectual developmental disorder, ASD, or ADHD and such neurodevelopmental disorder-like characteristics. Because communication difficulty explains our DDSC cases well, it might be regarded as a neurodevelopmental-like character. However, its impact on child-rearing difficulty is the smallest among the eleven direct factors. In addition, social communication problems of ASD and physical or perceptual communication problems, which are the symptoms of children with cerebral palsy, can have different effects on child-rearing difficulty.

4.4 From the Individual Model to the Social Model

This study's identification of 11 direct subjective factors contributing to child-rearing difficulty revealed a predominance of non-environmental factors, with only one factor explicitly related to environmental conditions. However, embracing the perspective of the social model — contrary to the individual model, which locates the issue within the individual due to functional limitations — allows for reevaluating these factors as environmental. The social model, emerging from the disability rights movement in the 1970s, challenges societal structures that fail to accommodate individuals with disabilities, positing that the real issue lies in society's inability to meet diverse needs (Shakespeare, 2013; Oliver, 1996).

Adopting this model suggests that problems traditionally viewed as individual or relational, such as challenges with children's sleep or parental confidence, may reflect broader societal failures, such as inadequate family support or insufficient parenting counseling. This shift in perspective emphasizes the societal obligation to provide robust support to families facing child-rearing difficulties, advocating for a more inclusive approach that addresses both direct challenges and the underlying societal conditions contributing to these difficulties.

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