







Assessing of Parental Feeding Practice for Childhood in Indonesia: A Rasch Insight

Itsar Bolo Rangka^{1,2} , Nur Hidayah¹ , Fattah Hanurawan¹ , & Nur Eva¹ 

¹Universitas Negeri Malang, Malang, Indonesia

²Universitas Indraprasta PGRI, Jakarta, Indonesia

itsar.bolo.2201119@students.um.ac.id

Abstract. Parental feeding practice is a topic that has developed rapidly over the last three decades because it has a significant impact on the formation of healthy eating habits, optimal nutritional satisfaction, weight control, positive eating patterns, and the development of child's eating skills. Regrettably, there are currently no measuring instruments available to assess parental feeding practices among Indonesians. The purpose of this study is to translate and validate the Child Feeding Questionnaire (CFQ) into Bahasa Indonesia (ID-CFQ) via Rasch analysis. Using the same scale, we also mapped the profile of parental feeding practices in the Indonesian sample group. We analyzed 432 parents, consisting of 165 fathers (mean age = 32.7; S.D = 6.03) and 267 mothers (mean age = 30.4; S.D = 6.36), regarding their attitudes, beliefs, and tendency to use control in feeding their children (age 1–6 years old). The findings of this study indicate that the ID-CFQ has adequate psychometric properties to assess parental feeding practices for children. The mean score of parental feeding practice for children in this study is in the high category. Parents with postgraduate education showed higher parental feeding practice scores compared to those of other educational groups. Meanwhile, a significant difference was found for mothers who had a higher parental feeding practice scores than fathers'. In addition, parents had the most trouble monitoring the high-fat foods their child consumed. The study's findings are discussed in terms of parental feeding practice awareness, knowledge, consistency, and role allocation. The extent of understanding of communication factors, family eating patterns, and children's nutritional requirements has substantial implications for the implementation of parental feeding practices.

Keywords: Child Feeding Questionnaire, Rasch analysis, Parental feeding practices, Psychometric properties, Nutritional behaviors, Indonesia.

1 Introduction

Parental feeding behavior is the act of providing nutritious food, encouraging the child's eating behavior, and creating a pleasant dining environment [1]. There is a growing body of literature that recognizes the importance of parental feeding practice as it relates to children's health, including obesity, eating disorders and healthy eating behaviors. Parental feeding practice is at the heart of our understanding of how well parents

© The Author(s) 2024

Q. Zhang (ed.), *Proceedings of the Pacific-Rim Objective Measurement Symposium (PROMS 2023)*, Atlantis Highlights in Social Sciences, Education and Humanities 23, https://doi.org/10.2991/978-94-6463-494-5_12

control, influence and respond to children's eating patterns with their impact on children's health [2].

Recent study declared that Indonesian toddlers consume fewer micronutrients [3]. In 2013, an estimated 19.6% of children under the age of five in Indonesia were underweight and 37.2% were stunted. Additionally, 11.9% were categorized as overweight or obese [4]. This shows the need for parental involvement to control food and provide adequate education for their children.

To date, only a limited number studies of parental feeding practice for childhood in Indonesia have been identified. Several studies only highlight factors influencing feeding practices in Indonesia including mother's attributes, health services, home environment, and peer environment [5]. On the other hand, a current study conducted by Wanda, et al. [6] confirmed that parental feeding practices in Indonesia are influenced by factors such as economic conditions, culture, and parental knowledge. Parental control affects children's eating patterns, power dynamics affect parent-child relationships in terms of food, and responsiveness to food signals influences children's ability to regulate their appetite. A healthy diet requires striking a balance between a child's mealtime routine, allowing freedom in food selection, and responding appropriately to hunger and satiety signals.

Family members may perceive diverse feeding habits. Mothers and fathers may use various methods, and children may pick up on these distinctions [7]. Apart from that, exposure, variety, and parental styles build good eating habits in early life. Guidelines suggest useful advice for parents to develop responsive feeding behavior [8]. Furthermore, an extensive amount of research has demonstrated the significance of encouraging constructive behaviors in parental feeding behaviors. The development of psychological measures—like The Child Feeding Questionnaire (CFQ), which is widely used to assess parental feeding practices—reinforces this. It has a strong commitment to improving understanding and effective measures in promoting healthy eating practices at the formative stages of development. Regretfully, despite the CFQ's widespread use, Indonesia is not yet able to access it, which indicates that there is a lack of accurate documentation of Indonesian parents' abilities to practice feeding their children.

This article aims to offer the CFQ, which has been translated and validated in the Indonesian version (ID-CFQ), to determine the parents' capacity to practice feeding for their children. In this study, we also seek at parents' educational backgrounds in relation to child-feeding habits, the disparities in women' and fathers' capacity for feeding, and the main difficulties parents have when fed their children.

2 Literature Review

2.1 Parents' Perceptions and Concerns Regarding Child Weight and Nutrition: Exploring Child-Feeding Attitudes and Practices

Keller, et al. [9] shows that parental perceptions and concerns about child weight are best explained by models that account for children's eating behavior and body fat distribution. Parental perceptions and concerns about weight are associated with childhood obesity and influence feeding practices [10, 11]. Parents who have positive perceptions

about their children's weight and nutrition tend to be more careful in feeding their children with balanced and nutritious food. They also tend to limit foods that are high in sugar, fat and calories.

Parents who perceive their children as underweight have lower food restriction scores, while parents who are concerned about their children's weight have higher food restriction and monitoring scores [12]. Investigating child feeding attitudes and practices helps identify factors that influence eating patterns and develop intervention strategies that support healthy eating patterns [13]. This is important for helping parents establish healthy eating habits for their children.

2.2 Parental Control, Power Dynamics, and Responsiveness to Food Signals

The style of parental feeding behavior, such as authoritarian (restrictive, pressuring) versus authoritative (monitoring, prompting), is associated with children's appetitive traits like food responsiveness and satiety responsiveness [14]. The correlation between a parent's feeding habits and their child's weight status indicates that extremely restrictive feeding methods may have an effect on a child's nutritional intake and weight indicators [15]. A crucial factor, on the other hand, is the pressure to eat and the limitation of food in order to maintain a certain weight [16].

Parental control, power dynamics, and responsiveness to food signals are interconnected with parental feeding practices [17]. Low effortful control and instrumental feeding predict emotional overeating [18]. Power dynamics influence the balance of decision-making between parents and children. Food signal sensitivity determines whether feeding practices are responsive or authoritarian [19]. Understanding these connections helps promote healthy feeding practices that consider individual needs and preferences of children.

2.3 Research Questions

1. What feeding practice of parents in Indonesia?
2. How does parental education affect the feeding practices of their children?
3. Are there differences in term of feeding practices between fathers and mothers?
4. What the greatest parents face when feeding their children?

3 Method

3.1 Participants

432 parents (165 fathers and 267 mothers) ages 18 to 60 (mean age = 31.35; SD = 6.32) from 26 Indonesian provinces were recruited for this study. They have a variety of educational backgrounds, with 3.94% having completed a postgraduate degree, 35.65% having earned a bachelor's degree, 54.40% having completed high school, 4.62% having completed junior high school, and 1.38% having earned a base degree. These parents have been together for an average of seven years, and their youngest children range

in age from 1 to 72 months (Mean age = 32.52 months; SD = 16.48). Additionally, 92.36% of parents said they did not restrict the kinds of food their children ate, and only 7.64% did so for medical reasons.

3.2 Instrumentation

The CFQ was modified, and we used it as the primary tool in this study to gauge parental control over child feeding [20]. The CFQ in its original English version consists of 31 items distributed into 7 factors: (1) 3 items for perceived responsibility; (2) 4-items for perceived parent weight; (3) 6-items for perceived child weight; (4) 3-items for concern to child weight; (5) 8-items for restriction; (6) 4-items for pressure to eat, and; (7) 3-items for monitoring. CFQ is translated into Indonesian following the procedure proposed by Gudmundsson [21] and validated via Rasch analysis. Factors relating to perceived parent weight and perceived child weight were excluded from this study due to sample characteristics. In the end, there were only 21 items in the ID-CFQ. A general summary of the ID-CFQ test outcomes using the Rasch analysis shown in Table 1.

Table 1. Summary statistics of person and item of ID-CFQ (I=21, N=432)

	Reliability	Separation index	Model S. E	Cronbach's alpha	Raw variance explained by measures
Person	0.87	2.57	0.29	0.86	43.5%
Item	0.99	13.07	0.06		

There is no indication of misfit in any of the items in the ID-CFQ (0.5 OUTFIT MNSQ > 2.0). The results of the diagnostic rating scale test also demonstrated that the ID-CFQ answer options did not confuse the participants. The relationship between item distribution, item measure, and Outfit MNSQ is presented in Figure 1.

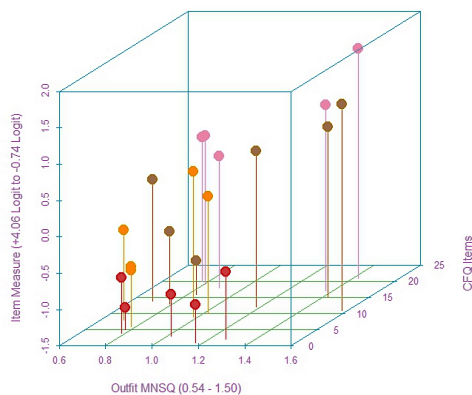


Fig. 1. 3D-Scatterplots connecting ID-CFQ Items, OUTFIT MNSQ, and Item Measure

3.3 Procedures and Data Analysis

The feeding practices of parents were evaluated using a cross-sectional study design. We ask parents to complete the ID-CFQ voluntarily via google form. In addition to the ID-CFQ, we inform parents about the purpose of this study and ensure the confidentiality of all personal data collected. Using WINSTEPS Software version 5.1.5 the procedure and data analysis sections were conducted [22].

4 Results

4.1 What feeding practice of parents in Indonesia?

Table 2 provides a summary of descriptions pertaining to the feeding practices of Indonesian parents.

Table 2. Feeding practice abilities of parents in Indonesia via ID-CFQ (I=21, N=432)

	Mean Measure	Max.	Min.	SEM	P. SD	S.SD	Mean of S. E
Person	1.13	4.06	-.74	.04	.80	.80	.04
Item	.00	1.66	-1.20	.18	0.83	.85	.06

In accordance with the data presented in Table 2, it is known that, on average, parents demonstrate adequate feeding skills for their children (1.13 logit). In addition, other findings indicate that, out of a total of 432 parents, 66 (15.27%) exhibited high ability to practice feeding, 305 (70.60%) exhibited moderate ability to practice feeding, and 61 (14.12%) exhibited ability to practice feeding. The lowest one. In this study, Figure 2 provides a visual representation of the distribution of parental feeding practice skills.

4.2 How does parental education affect the feeding practices of their children?

We examined the feeding habits of the parents as well as the parents' educational level using the Rasch analysis. Parents with postgraduate education background showed higher feeding practices (1.20 logit) to their children than groups of parents with other educational levels such as bachelor's degree (1.15 logit), senior high school (1.12 logit), junior high school (1.04 logit), and elementary school (.86 logit). Even though the parents' educational backgrounds were measured in different ways, this difference was not significant (prob .8769 > .05) on the ANOVA test.

4.3 Are there differences of ability on feeding practices between fathers and mothers?

In this study, we discovered that mothers have better feeding ability (1.31 logit) than fathers (.83 logit). In the ANOVA test, the difference in feeding ability between fathers and mothers was significant (Prob .05), reaching - .48 logit. The fact that girls receive

better feeding practices from their parents (1.20 logit) than boys (1.07 logit) is another finding that is still connected to earlier findings. However, the difference in feeding habits preferred by boys and girls is not statistically significant, as indicated by the ANOVA test (prob .0710 > .05)

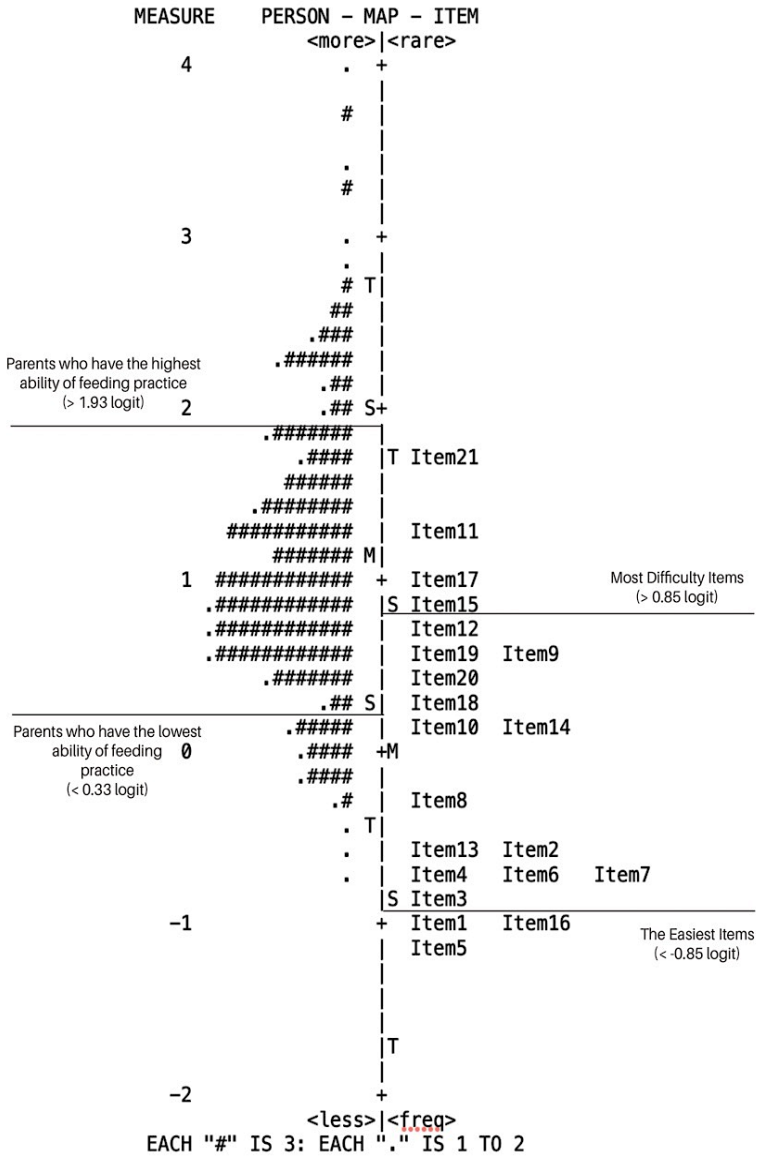


Fig. 2. The Wright-map of parental feeding practice in Indonesia via ID-CFQ (I=21, N=432)

4.4 What the greatest parents face when feeding their children?

Table 3 presents the data based on the Rasch analysis, in which the ID-CFQ items are ordered from most difficult to least difficult. This aims to describe the greatest challenges parents face when it comes to feeding their children.

Table 3. Item Measure of ID-CFQ (I=21, N=432)

No.	Factors	Items	JMLE Measure	PT. MEASURE CORR.	Categories
21	Monitoring (MN)	I keep track of the high-fat foods my kid consumes. (<i>Saya mencatat makanan berlemak tinggi yang dimakan anak saya</i>)	1.66	.49	Difficult
11	Restriction (RST)	I offer candy (ice cream, cake, cookies) to my child as a reward for good behavior. (<i>Saya menawarkan permen (es krim, kue, kue kering) kepada anak saya sebagai hadiah atas perilaku yang baik.</i>)	1.34	.22	Difficult
17	Pressure to eat (PE)	Even if my children claim he/she is not hungry, I continue to encourage him/her to eat. (<i>Jika anak saya mengatakan bahwa dia tidak lapar, saya tetap berusaha membuatnya makan.</i>)	1.06	.30	Difficult
15	Pressure to eat (PE)	My child is obliged to finish all the food on his/her plate. (<i>Anak saya wajib menghabiskan semua makanan yang ada di piringnya.</i>)	.85	.27	Difficult
12	Restriction (RST)	I reward my child with his favorite food after every appropriate ac-	.65	.35	Moderate

No.	Factors	Items	JMLE Measure	PT. MEASURE CORR.	Categories
		tion. <i>(Saya menawarkan anak saya makanan kesukaannya sebagai imbalan atas setiap perilakunya yang baik)</i>			
19	Monitoring (MN)	I monitor how much sugary food my child consumes (candy, ice cream, pie, etc.). <i>(Saya melacak berapa jumlah makanan manis (permen, es krim, kue pai, dll) yang dimakan anak saya).</i>	.55	.59	Moderate
9	Restriction (RST)	I have to watch out that my kid doesn't consume excessive amounts of his favorite foods. <i>(Saya harus memastikan bahwa anak saya tidak terlalu banyak makan makanan kesukaannya).</i>	.50	.52	Moderate
20	Monitoring (MN)	I keep track of how much my kids eat snack. <i>(Saya melacak berapa banyak anak saya makan makanan ringan).</i>	.48	.62	Moderate
18	Pressure to eat (PE)	If I do not regulate my child's eating, he/she will consume significantly less food than he should. <i>(Jika saya tidak mengatur makan anak saya, dia akan makan jauh lebih sedikit dari yang seharusnya).</i>	.31	.53	Moderate
14	Restriction (RST)	If I do not regulate or guide my child's eating,	.17	.58	Moderate

No.	Factors	Items	JMLE Measure	PT. MEASURE CORR.	Categories
		he will consume an excessive amount of his favorite foods. <i>(Jika saya tidak membimbing atau mengatur makan anak saya, dia akan makan terlalu banyak makanan kesukaannya).</i>			
10	Restriction (RST)	I intentionally keep certain foods out of my child's reach. <i>(Saya sengaja menjauhkan beberapa jenis makanan dari jangkauan anak saya).</i>	.11	.54	Moderate
8	Restriction (RST)	I must ensure that my child does not consume an excessive amount of high-fat foods. <i>(Saya perlu memastikan bahwa anak saya tidak terlalu banyak makan makanan yang berlemak tinggi).</i>	-.26	.65	Moderate
13	Restriction (RST)	I plan my children's meals so that they do not consume an excessive amount of low-nutrient, unhealthy food (junk food). <i>(Saya mengatur makanan anak saya agar mereka tidak terlalu banyak makan makanan tidak sehat yang memiliki kandungan gizi rendah (junk food)).</i>	-.50	.59	Moderate
2	Perceived Responsibility (PR)	How responsible are you for determining your child's meal size?	-.57	.59	Moderate

No.	Factors	Items	JMLE Measure	PT. MEASURE CORR.	Categories
		<i>(Seberapa bertanggung jawab anda untuk menentukan ukuran (porsi) makan anak Anda?).</i>			
6	Concern about Child Weight (CN)	Worried that my child is overweight. <i>(Mengkhawatikan anak saya kelebihan berat badan).</i>	-.68	.61	Moderate
4	Concern about Child Weight (CN)	Worried that my child will overeat when I'm not around. <i>(Mengkhawatirkan anak saya makan terlalu banyak saat saya tidak berada di dekatnya).</i>	-.74	.59	Moderate
7	Restriction (RST)	I must ensure that my child does not consume an excessive amount of sweets (candy, ice cream, cake or pastries). <i>(Saya perlu memastikan bahwa anak saya tidak terlalu banyak makan yang manis-manis (permen, es krim, cake, atau kue kering)).</i>	-.77	.59	Moderate
3	Perceived Responsibility (PR)	How responsible are you for ensuring that your child consumes healthy foods? <i>(Seberapa bertanggung jawab anda untuk memutuskan apakah anak Anda telah makan makanan yang tepat?).</i>	-.93	.56	Easy
1	Perceived Responsibility (PR)	When your child is at home, to what extent are you responsible for	-.98	.49	Easy

No.	Factors	Items	JMLE Measure	PT. MEASURE CORR.	Categories
		feeding him? (<i>Saat anak Anda di rumah, seberapa bertanggung jawab anda untuk memberinya makan?</i>).			
16	Pressure to eat (PE)	I am obliged to ensure that my child is well fed. (<i>Saya wajib untuk memastikan bahwa anak saya cukup makan</i>).	-1.04	.47	Easy
5	Concern about Child Weight (CN)	Considering my child's nutrition so that he/she achieves a healthy weight. (<i>Memperhatikan pola makan anak saya agar anak saya mendapatkan berat badan yang ideal</i>).	-1.20	.58	Easy

Item 21 is the most challenging topic (1.66 logit) for the average parents when it comes to feeding their children. In contrast, Item No. 5 is not difficult for parents to accomplish when feeding their children. Table 4 provides a summary of the difficulty level of the items in relation to the factors used to evaluate the feeding difficulties faced by parents. According to Table 4, pressure to eat (PE17 & PE15), restriction (RST11), and monitoring (MN21) are the predominant factors that present significant challenges to parents in their feeding practices for their children.

Table 4. Item Calibration of ID-CFQ (I=21, N=432)

Factors	Difficulty Levels		
	Easy	Moderate	Difficult
Perceived Responsibility (PR)	PR1, PR3	PR2	-
Concern about Child Weight (CN)	CN5	CN6, CN4	-
Restriction (RST)	-	RST12, RST9, RST14, RST10, RST8, RST13, RST7	RST11
Pressure to eat (PE)	PE16	PE18	PE17, PE15
Monitoring (MN)	-	MN19, MN20	MN21
Total of Items	4 Items	13 Items	4 Items

5 Discussion

While helping to advance the understanding of Indonesian parental feeding practices, this study also the first time the ID-CFQ has been translated and validated. Our findings support the notion that, on the whole, parents provide their children with adequate feeding practice. Parents' feeding skills have a big effect on how well they get along with their children, how well their children learn self-control and regular eating habits [23, 24]; and how well their children form positive relationships with food, which can affect their eating habits for the rest of their lives [25]. We also discuss about of some issues related to parental education, the different skills that fathers and mothers have, and the biggest problems that parents face in feeding practice for their children.

Parents have a profound impact on their children's eating habits through a variety of mechanisms, including direct feeding practices, modeling of dietary behaviors, and the establishment of food-related routines and attitudes [26, 27]. Apart from that, several studies highlight that high-fat food consumption is not directly associated with childhood obesity, others indicate that dietary quality and energy intake are affected by the consumption of high-fat foods [28-30]. The findings of this study also include the presentation of three significant notes that are pretty intriguing and serve to increase comprehension regarding this topic.

First, despite the empirical finding that there is no significant difference in the ability to practice feeding based on parental educational background, numerous studies emphasize the importance of parental education in establishing healthy and positive feeding practices in children [31, 32]. Parents frequently utilize feeding strategies such as restriction to manage weight and health, which are associated with worries about child obesity and are more prevalent among parents with lower levels of education [33, 34]. Parental education increases the knowledge, attitudes, and skills necessary to ensure that children receive adequate nutrition and grow up with healthy diets [35, 36].

Second, our study confirms that there are significant differences in feeding practices between fathers and mothers. Considering these findings, it is comprehensible that gender differences in traditional roles and responsibilities within the family influence the distribution of feeding-related tasks. In terms of feeding practices, the mother is typically thought to have more experience and knowledge. Studies conducted by Harrison, et al. [37] show that the preschool feeding experience and all aspects of food availability associated with children's food intake are most influenced by mothers. In addition, it cannot be ruled out that cultural background, previous family influences, personal experiences, and food preferences can affect each parent's approach to feeding practice [38, 39]. Furthermore, the father's participation and active role in feeding may vary based on variables such as social support, knowledge of child nutrition, and personal beliefs and values regarding the father's role as a parent [40]. The involvement of extended family members, particularly grandmothers, also plays a crucial role in supporting parents and influencing feeding practices [41].

Thirdly, parents have the most difficulty monitoring the high-fat foods that their children consume. Frequently, parents struggle to restrict their children's consumption of fatty foods [42]. Several factors contribute to this difficulty, including uncontrolled eating environments outside the home, promotion of unhealthy foods, availability of

unhealthy foods in the home, and difficulties in modifying eating habits [43]. Some parents may use food as a consolation or reward for their children [44]. This can lead to children developing an emotional attachment to certain foods, especially those high in fat, and eating them even when they are not hungry. The second greatest challenge in feeding practice is encouraging children to continue eating even when they say they are not hungry and requiring them to finish all the food on their plate.

6 Study Limitation

This is the first study to translate and validate the original version of the CFQ into ID-CFQ with empirical results regarding adequate psychometric properties. However, it should be noted that this study began with the process of translating the CFQ into Bahasa Indonesia, where studies for the translation and back translation processes were not carried out.

This study also primarily focuses on examining parents' thoughts on feeding their children. We recognize that parents utilize feeding practices for various reasons and variables. Ideas on children's health and psychological conditions that can influence parental eating patterns must be considered as important study topics. In addition, the difference in feeding ability between fathers and mothers is not absolute. We believe that many families have attained equality and the active participation of both parents in child feeding. Gender roles significantly shape the division of feeding responsibilities within families, with traditional norms often assigning distinct roles to mothers and fathers. These roles can be renegotiated, particularly in urban settings or under certain socioeconomic conditions, allowing for more equitable sharing of caregiving tasks. Future studies are also expected to investigate how patterns of communication, task division, and mutual understanding between fathers and mothers or family members help overcome these inequalities and support optimal child feeding habits.

7 Conclusions

This study utilizing the ID-CFQ and confirms that parents in Indonesia are able to feed their children adequately. However, there are still differences between fathers and mothers in terms of their feeding practices for their children in terms of their functions, roles, and abilities. In addition to the difficulty of addressing the issue of controlling their children's high-fat diets, parents face the challenge of encouraging their children to eat voraciously.

Acknowledgements. We would like to acknowledge and thank the (1) Balai Pembiayaan Pendidikan Tinggi (BPPT), The Ministry of Education, Culture, Research, and Technology, Republic of Indonesia, and; (2) Lembaga Pengelola Dana Pendidikan (LPDP), Ministry of Finance Indonesia for granting a scholarship to the first author to complete his study (Registration Number: B3172022010731234625 and BPI Number: 202209091383).

Disclosure of Interests. The authors have no financial or proprietary interests in any material discussed in this article.

References

1. D. E. Orem, S. G. Taylor, and K. M. Renpenning, "Nursing: Concepts of practice," 1995.
2. S. Soraya, D. Hastuti, and I. R. Johan, "The influence of parents feeding practices, eating knowledge, and attitude on eating behavior among senior high school students in South Tangerang, Indonesia," *Open Access Macedonian Journal of Medical Sciences*, vol. 9, no. E, pp. 913-918, 2021.
3. A. N. Putri, D. N. Chandra, L. A. A. Wiradnyani, A. R. Putri, and F. S. Birahmatika, "Parental Feeding Practice and Micronutrient Intake of Children in North Jakarta, Indonesia," *Malaysian Journal of Medicine & Health Sciences*, vol. 19, 2023.
4. National Institute for Health Research and Development, *Basic Health Research 2013*. Jakarta: Ministry of Health, Republic of Indonesia, 2013.
5. S. Blaney, J. Februhartanty, and S. Sukotjo, "Feeding practices among Indonesian children above six months of age: a literature review on their potential determinants (part 2)," *Asia Pacific Journal of Clinical Nutrition*, vol. 24, no. 1, pp. 28-37, 2015.
6. D. Wanda, A. Astuti, A. R. Utami, and B. F. F. Lita, "El estilo de vida de la comunidad influye en las prácticas de alimentación de los bebés y niños pequeños de Indonesia," *Enfermería Clínica*, vol. 32, pp. S46-S53, 2022/05/01/ 2022, doi: <https://doi.org/10.1016/j.enfcli.2021.09.013>.
7. C. Pulley, A. T. Galloway, R. M. Webb, and L. O. Payne, "Parental child feeding practices: how do perceptions of mother, father, sibling, and self vary?," *Appetite*, vol. 80, pp. 96-102, 2014.
8. C. Schwartz, P. A. Scholtens, A. Lalanne, H. Weenen, and S. Nicklaus, "Development of healthy eating habits early in life. Review of recent evidence and selected guidelines," *Appetite*, vol. 57, no. 3, pp. 796-807, 2011.
9. K. L. Keller, A. Olsen, L. Kuilema, K. Meyer mann, and C. v. Belle, "Predictors of parental perceptions and concerns about child weight," *Appetite*, vol. 62, pp. 96-102, 2013/03/01/ 2013, doi: <https://doi.org/10.1016/j.appet.2012.11.016>.
10. P. Ayine, V. Selvaraju, C. M. K. Venkatapoorna, and T. Geetha, "Parental Feeding Practices in Relation to Maternal Education and Childhood Obesity," *Nutrients*, vol. 12, no. 4, doi: 10.3390/nu12041033.
11. C. Xiang *et al.*, "Association between Parents' Perceptions of Preschool Children's Weight, Feeding Practices and Children's Dietary Patterns: A Cross-Sectional Study in China," *Nutrients*, vol. 13, no. 11, p. 3767, 2021. [Online]. Available: <https://www.mdpi.com/2072-6643/13/11/3767>
12. K. A. Loth, N. Mohamed, A. Trofholz, A. Tate, and J. M. Berge, "Associations between parental perception of- and concern about-child weight and use of specific food-related parenting practices," *Appetite*, vol. 160, p. 105068, 2021/05/01/ 2021, doi: <https://doi.org/10.1016/j.appet.2020.105068>.
13. H. Rakotomanana, D. Hildebrand, G. E. Gates, D. G. Thomas, F. Fawbush, and B. J. Stoecker, "Maternal Knowledge, Attitudes, and Practices of Complementary Feeding and Child Undernutrition in the Vakinankaratra Region of Madagascar: A Mixed-Methods Study," *Current Developments in Nutrition*, vol. 4, no. 11, p. nzaa162, 2020/11/01/ 2020, doi: <https://doi.org/10.1093/cdn/nzaa162>.

14. S. Carnell, L. Benson, E. Driggin, and L. Kolbe, "Parent feeding behavior and child appetite: associations depend on feeding style," *International Journal of Eating Disorders*, vol. 47, no. 7, pp. 705-709, 2014.
15. O. Bjørklund, J. Belsky, L. Wichstrøm, and S. Steinsbekk, "Predictors of eating behavior in middle childhood: A hybrid fixed effects model," *Developmental psychology*, vol. 54, no. 6, p. 1099, 2018.
16. N. P. P. Carozzo and J. H. A. de Oliveira, "Comportamento alimentar: um estudo da relação entre IMC de crianças e sua percepção sobre as práticas alimentares parentais," *Estudos Interdisciplinares em Psicologia*, vol. 6, no. 1, pp. 21-35, 2015.
17. Lynne A. Daniels, "Feeding Practices and Parenting: A Pathway to Child Health and Family Happiness," *Annals of Nutrition and Metabolism*, vol. 74, no. Suppl. 2, pp. 29-42, 2019, doi: 10.1159/000499145.
18. O. K. Bjørklund, "Predictors of children's eating behaviors: a prospective study," 2014.
19. L. L. Birch, L. McPhee, B. Shoba, L. Steinberg, and R. Krehbiel, "'Clean up your plate': effects of child feeding practices on the conditioning of meal size," *Learning and motivation*, vol. 18, no. 3, pp. 301-317, 1987.
20. L. L. Birch, J. O. Fisher, K. Grimm-Thomas, C. N. Markey, R. Sawyer, and S. L. Johnson, "Confirmatory factor analysis of the Child Feeding Questionnaire: a measure of parental attitudes, beliefs and practices about child feeding and obesity proneness," *Appetite*, vol. 36, no. 3, pp. 201-210, 2001/06/01/ 2001, doi: <https://doi.org/10.1006/appe.2001.0398>.
21. E. Gudmundsson, "Guidelines for translating and adapting psychological instruments," *Nordic Psychology*, vol. 61, no. 2, pp. 29-45, 2009/01/01 2009, doi: 10.1027/1901-2276.61.2.29.
22. *A User's Guide to WINSTEPS MINISTEP Rasch-Model Computer Programs*. (2022). winsteps.com, USA.
23. M. Golan and S. Crow, "Parents are key players in the prevention and treatment of weight-related problems," *Nutrition reviews*, vol. 62, no. 1, pp. 39-50, 2004.
24. A. C. Lindsay, K. M. Sussner, J. Kim, and S. Gortmaker, "The role of parents in preventing childhood obesity," *The Future of children*, pp. 169-186, 2006.
25. A. Z. Yee, M. O. Lwin, and S. S. Ho, "The influence of parental practices on child promotive and preventive food consumption behaviors: a systematic review and meta-analysis," *International Journal of Behavioral Nutrition and Physical Activity*, vol. 14, no. 1, pp. 1-14, 2017.
26. L. Mahmood, P. Flores-Barrantes, L. A. Moreno, Y. Manios, and E. M. Gonzalez-Gil, "The influence of parental dietary behaviors and practices on children's eating habits," *Nutrients*, vol. 13, no. 4, p. 1138, 2021.
27. L. Rylatt and T. Cartwright, "Parental feeding behaviour and motivations regarding pre-school age children: A thematic synthesis of qualitative studies," *Appetite*, vol. 99, pp. 285-297, 2016.
28. A. Kanellopoulou *et al.*, "Parental consumption of ultra-processed, high-fat products has no association with childhood overweight/obesity: an epidemiological study among 10–12-years-old children in Greece," *Family Practice*, vol. 38, no. 1, pp. 49-55, 2021.
29. A. H. Lichtenstein, E. Kennedy, P. Barrier, and D. Danford, "Dietary fat consumption and health/discussion," *Nutrition reviews*, vol. 56, no. 5, p. S3, 1998.
30. S. A. Bowman, S. L. Gortmaker, C. B. Ebbeling, M. A. Pereira, and D. S. Ludwig, "Effects of fast-food consumption on energy intake and diet quality among children in a national household survey," *Pediatrics*, vol. 113, no. 1, pp. 112-118, 2004.
31. L. A. Mais, S. Warkentin, M. d. R. D. d. O. Latorre, S. Carnell, and J. A. A. D. C. Taddei, "Parental feeding practices among Brazilian school-aged children: Associations with parent and child characteristics," *Frontiers in nutrition*, vol. 4, p. 6, 2017.

32. F. N. Vik, E. Grasaas, M. E. Polspoel, M. Røed, E. R. Hillesund, and N. C. Øverby, "Parental phone use during mealtimes with toddlers and the associations with feeding practices and shared family meals: a cross-sectional study," *BMC public health*, vol. 21, pp. 1-8, 2021.
33. J. Wardle and S. Carnell, "Parental feeding practices and children's weight," *Acta Paediatrica*, vol. 96, pp. 5-11, 2007.
34. S. Warkentin, L. A. Mais, M. d. R. D. d. O. Latorre, S. Carnell, and J. A. de Aguiar CarrazedoTaddei, "Relationships between parent feeding behaviors and parent and child characteristics in Brazilian preschoolers: A cross-sectional study," *BMC Public Health*, vol. 18, pp. 1-11, 2018.
35. E. National Academies of Sciences and Medicine, "Parenting matters: Supporting parents of children ages 0-8," 2016.
36. C. Pérez-Rodrigo and J. Aranceta, "School-based nutrition education: lessons learned and new perspectives," *Public health nutrition*, vol. 4, no. 1a, pp. 131-139, 2001.
37. K. Harrison *et al.*, "Toward a Developmental Conceptualization of Contributors to Overweight and Obesity in Childhood: The Six-Cs Model," *Child Development Perspectives*, vol. 5, no. 1, pp. 50-58, 2011, doi: <https://doi.org/10.1111/j.1750-8606.2010.00150.x>.
38. E. L. Adams, L. J. Caccavale, D. Smith, and M. K. Bean, "Food insecurity, the home food environment, and parent feeding practices in the era of COVID-19," *Obesity*, vol. 28, no. 11, pp. 2056-2063, 2020.
39. K. A. Loth, R. F. MacLehose, J. A. Fulkerson, S. Crow, and D. Neumark-Sztainer, "Eat this, not that! Parental demographic correlates of food-related parenting practices," *Appetite*, vol. 60, pp. 140-147, 2013.
40. N. Khandpur, R. E. Blaine, J. O. Fisher, and K. K. Davison, "Fathers' child feeding practices: A review of the evidence," *Appetite*, vol. 78, pp. 110-121, 2014.
41. N. Neuman, K. Eli, and P. Nowicka, "Feeding the extended family: gender, generation, and socioeconomic disadvantage in food provision to children," *Food, Culture & Society*, vol. 22, no. 1, pp. 45-62, 2019.
42. M. B. Schwartz and R. Puhl, "Childhood obesity: a societal problem to solve," *Obesity reviews*, vol. 4, no. 1, pp. 57-71, 2003.
43. A. J. Hill, "Developmental issues in attitudes to food and diet," *Proceedings of the Nutrition Society*, vol. 61, no. 2, pp. 259-266, 2002.
44. L. Birch, J. S. Savage, and A. Ventura, "Influences on the development of children's eating behaviours: from infancy to adolescence," *Canadian journal of dietetic practice and research: a publication of Dietitians of Canada=Revue canadienne de la pratique et de la recherche en dietetique: une publication des Dietetistes du Canada*, vol. 68, no. 1, p. s1, 2007.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

