

## Parental Feeding Styles Of Preschoolers In A Semi-Urban Setting In Kurunegala District

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**Abstract:** Parental feeding style influences the nutritional status, growth, development, health and survival of preschool children. The objective of this study was to describe the parental feeding styles in selected preschools in a semi-urban setting in Sri Lankan context. A descriptive cross-sectional study was conducted among randomly selected 306 parent-preschooler pairs in selected preschools in Ibbagamuwa Divisional Secretariat in Kurunegala district. Validated, interviewer administered, 27-item, Parental Feeding Style Questionnaire (PFSQ) on a five point Likert scale was used to assess four common feeding styles: Encouragement to Eat (EE), Control over Eating (CE), Emotional Feeding (EF) and Instrumental Feeding (IF). Mean scores were calculated for each scale which had a possible range between 1-5 with higher scores indicating a tendency for a particular feeding style. All data were analyzed using SPSS version 25. The mean age of the parents was 34.86 years (SD=4.93). The majority were mothers (N=250, 81.7%) educated up to Ordinary Level (N=117, 38.2%) with an average monthly income between Rs.30, 000-50,000 (N=133, 43.5%). The mean age was 58.06 months (SD=7.62). Majority were girls (N=164, 53.6%) with normal weight for height (50.0%, N=153). Mean scores for each feeding style were EE: 4.25 (SD=0.55), CE: 3.2 (SD=0.61), EF: 2.76 (SD=0.92) and IF: 2.35 (SD=0.78). Prominent parental feeding styles were Encouragement to Eat and Control over Eating. No gender

differences were observed in parental feeding styles.

**Keywords:** Parental feeding styles, Preschool children, Parental Feeding Style Questionnaire (PFSQ)

### Introduction

Feeding is a process that involves interactions between parents and children. It is a key aspect in parenting. Parental feeding practices are specific behavioural strategies that parents use to control what, how much and when their children eat (Gandhi., 2014). Parental feeding practices are mainly categorized into two domains as positive and negative feeding styles. Parental feeding style is a major determinant of child eating behaviours (Nowicka et al., 2020). Future health depends on behaviours adapted during childhood. Preschool period, defined as the age between three to five years (Dias et al., 2020), is regarded as an important stage in the life cycle during which establishment of such behaviours starts. Globally, overweight and obesity among children are on the rise. In addition, those with childhood obesity have an increased risk of diet related non-communicable diseases such as, cardiovascular diseases, cancer and diabetes mellitus during their adult life (Jansen et al., 2012). Sri Lanka is having a very high disease burden due to diet related non-communicable diseases (WHO, 2018). The effect of parental feeding styles on children's eating behaviours is not being adequately explored in the Sri

Lankan context. The objective of the study is to describe the parental feeding styles among preschoolers in Sri Lanka.

### Methodology

A descriptive cross-sectional study was conducted among 306 parent child pairs selected using a multi-stage cluster sampling method from 15 preschools in Ibbagamuwa divisional secretariat in Kurunegala district during September to October in 2019. Children aged 3-5 years in each preschool were included into the study. Exclusion criteria included children who were on long term treatment for chronic diseases (recurrent episodes of bronchial asthma, thalassemia, malignancies), identified with learning difficulties and physical disabilities and 0parents with communication barriers (ie. hearing problems, psychiatric conditions and language barriers). An interviewer-administered questionnaire consisting of both open and closed ended questions was used as the data collection instrument to obtain basic data regarding socio-demographic characteristics and parental feeding styles. Four common parental feeding styles assessed by 27-item, validated Parental Feeding Style Questionnaire (PFSQ) included: Instrumental Feeding (4 items) (feeding children in response to their behaviour, using

Food as a reward, e.g., “I reward my child with something to eat when she is well-behaved”), Emotional

feeding (5 items) (feeding children in response to their emotions, offering food to soothe the child’s negative emotions, e.g., “I give my child something to eat to make him feel better when he is upset”), Encouragement to eat (8 items) (encouraging children to consume a variety of foods, e.g., “I praise my child if she eats what I give her”), and Control over eating (10 items) (controlling the child’s food intake, determining the types and quantities of foods that children should consume, e.g., “I decide how many snacks my

child should have”) (Lipowska et al., 2018). Each item was scored on a five-point Likert scale (1 for Never and 5 for Always). The mean score with SD was calculated for each scale. Five out of ten items in Control over Eating were reverse scored before calculating the mean. The possible range for mean score on each scale was 1-5. Height and weight were measured according to standard operational protocol of National Health and Nutrition Examination Survey (NHANES., 2017). Children were categorized into 3 weight for height Z score categories based on WHO child growth standards (WHO, n.d.)

Prior to commencement of the study, approval was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura and from Divisional Secretariat of Ibbagamuwa and relevant preschool teachers. All data were analyzed using SPSS version 25. Descriptive statistics like frequencies, proportions, mean (SD) and box and whiskers plots were used to describe the findings of the study.

### Results and Discussion

There were 306 parents and child pairs. Majority of the parents were mothers (N=250, 81.7%). The mean age of the parents was 34.86 (SD + 4.938) and most of them were Sinhalese (N=302, 98.7%), studied up to Ordinary Level (N=117, 38.2%) with an average monthly income between Rs.30, 000-50,000 (N=133, 43.5). The mean age of the preschool children was 58.06 months (SD =7.619). Most of the preschoolers were girls (N=164, 53.6%). Fifty percent of the preschoolers (N = 153) belonged to healthy weight for height. Nearly half (49.0%, N = 150) of the children were in < -2SD.

Distribution of PFSQ mean scores according to the parental feeding style is shown in Table 1. Parental feeding style which recorded the highest score was Encouragement to Eat (M = 4.25, SD=0.554). Based on the PFSQ mean scores, most parents reported a comparatively

high level of Encouragement to Eat (M = 4.25, SD=0.554) and Control over Eating (M = 3.20, SD=0.611), with low levels of Emotional Feeding (M = 2.76, SD=0.915) and Instrumental Feeding (M = 2.35, SD=0.782). Our study findings are compatible with the literature on caregiver feeding practices in Sri Lanka reporting unsatisfactory knowledge, attitudes and practices on responsive feeding (Pallewaththa et al., 2019)

Table 1: Distribution of PFSQ mean scores according to the parental feeding style

Feeding scale*	Number of Items	Mean (SD)
Encouragement to Eat (EE)	8	4.25 (0.55)
Control over Eating (CE)	10	3.20 (0.61)
Emotional Feeding (EF)	5	2.76 (0.92)
Instrumental Feeding (IF)	4	2.35 (0.78)

\*The possible minimum and maximum mean score for each scale is 1-5

Similar to our study findings, two studies conducted among Hong Kong preschoolers using PFSQ revealed that parents were more likely to exercise Control over Eating and Encouragement to Eat compared to other two feeding styles considered in our study (Tam et al., 2014; Lo et al., 2015). Another study carried out among young children in Netherlands had reported comparable results (Inhulsen et al., 2017). However, in contrast to findings of our study where the highest score was reported by Encouragement to Eat, other studies have reported highest score in Control over Eating (Tam et al., 2014; Lo et al., 2015; Inhulsen et al., 2017). Our study showed Instrumental Feeding as the least common parental feeding style in par with the findings of Tam et al (2014). According to the findings of Lo et al (2015) and Inhulsen et al (2017)

Emotional Feeding had the lowest tendency to be implemented.

Distribution of PFSQ scores by parental gender is shown in Figure 1. Accordingly, no remarkable differences in feeding styles could be observed based on gender of the parent.

Figure 2 displays the distribution of PFSQ scores by gender of the preschoolers. Visually obvious differences in parental feeding styles based on gender of the child could not be detected.

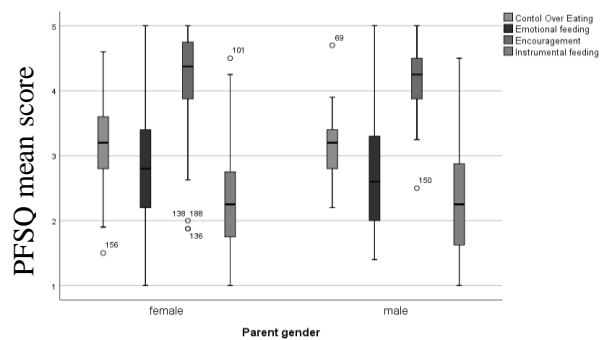


Figure 1: Distribution of PFSQ scores by parental gender

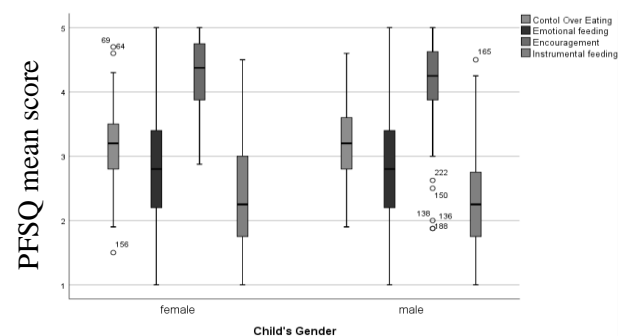


Figure 2: Distribution of PFSQ scores by gender of the preschoolers

## Conclusion

This study findings revealed existence of comparatively high level of Control over Eating and Encouragement to Eat parental feeding styles among preschool children in Sri Lanka. Gender-based differences in parental feeding styles could not be detected.

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