

Factors influencing maternal feeding styles in preschool-aged children in Ireland

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Introduction

Maternal feeding styles play a key role in shaping children’s early eating behaviours and long-term nutritional health. ^{1,2} Research suggests that sociodemographic factors, health-related behaviours, and attitudes toward healthy eating influence the feeding styles adopted by mothers and the mealtime environments experienced by children. ^{3,4,5}

Preschool years are a critical developmental period for establishing eating habits, food preferences, and dietary patterns that persist into later life. ⁶ Limited research in Ireland has examined the combined influence of these factors on maternal feeding styles.

Aim: To investigate how sociodemographic, health-related behavioural and attitudinal factors collectively influence feeding styles adopted by mothers.

Methods

Study design - Cross-sectional secondary data analysis of IUNA NPNS I database

Sample - 457 mothers-child dyads (children 1-4 years), fathers excluded to examine maternal influence only

Data preparation – Caregivers Feeding Style Questionnaire used as a guide to derive “Responsiveness” and “Demandingness” dimensions.

Table 1: Demandingness vs Responsiveness score median splits

Dimension	Median	“Low” category	“High” category
Demandingness score	3.54	<3.54	>3.54
Responsiveness score	4.00	<4.00	>4.00

NPNS I variables divided into two dimensions + median splits calculated

Table 2: Four feeding style categories derived from the dimension scores

	High Demandingness	Low Demandingness
Low Responsiveness	Authoritarian (1:0)	Uninvolved (0:0)
High Responsiveness	Authoritative (1:1)	Indulgent (0:1)

*1=High (Demandingness/Responsiveness), 0=Low (Demandingness/Responsiveness)

Variables categorised into 4 feeding styles based on degree of “control” vs “warmth”⁷

Each feeding style category converted into binary variable

Data Analysis – using IBM SPSS statistics, significance level determined at $p<0.05$

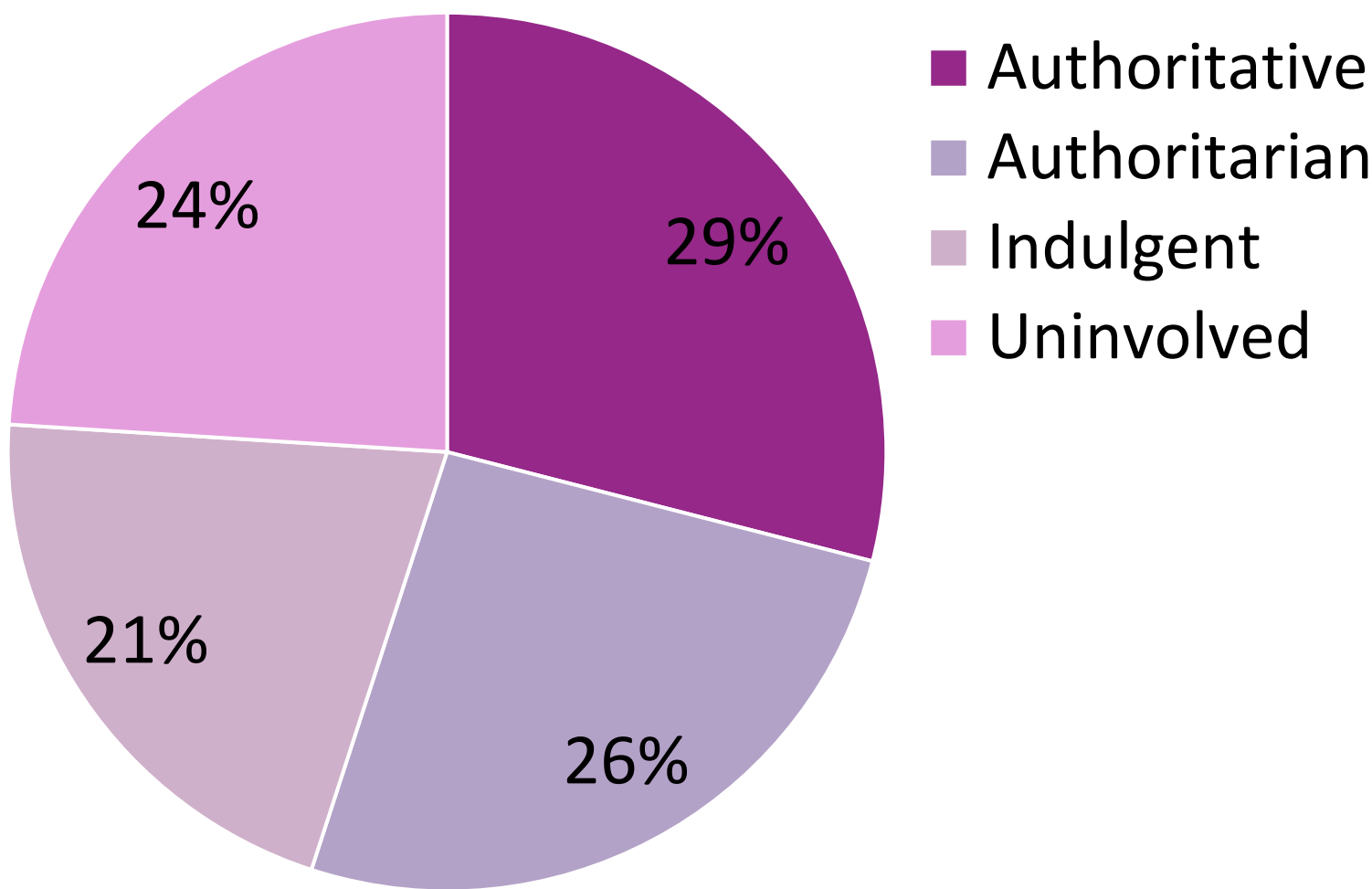
- Descriptive analysis – Associations between feeding styles and sociodemographic, behavioural and attitudinal factors were determined using the Chi-squared test and cross tabulations
- Significant variables entered into binary logistic regression models (reported using odds ratio, 95% confidence interval and model fit statistics)

Results

Maternal demographic Characteristics

- 70% 31-40 years old
- 75% tertiary education
- 30% overweight
- 17% Obese
- 94% married/living with partner
- 60% employed
- Predominantly “Higher” Social class

Feeding style distribution (n=457)



1. Sociodemographic factors

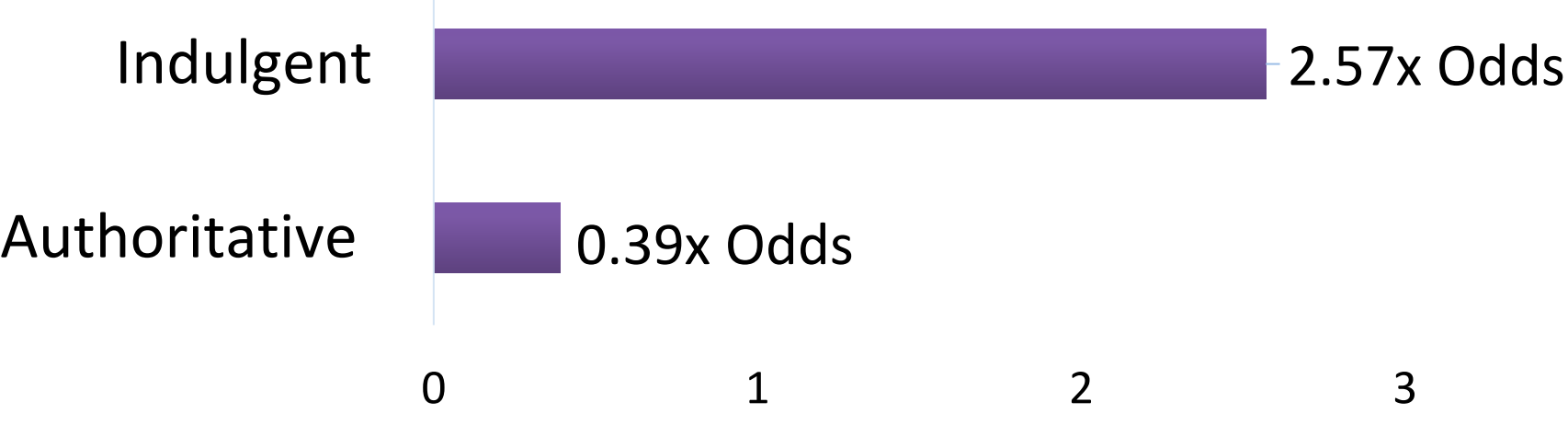


Figure 1: Maternal obesity status (n=74)

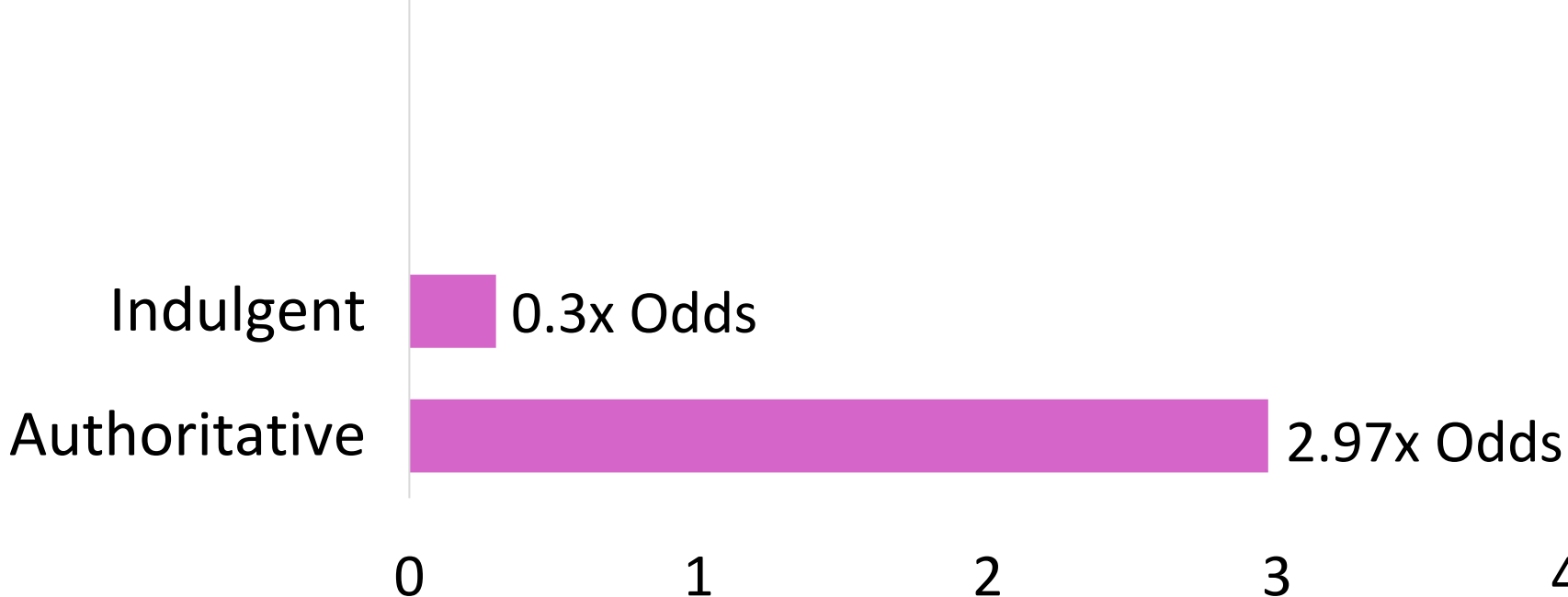


Figure 2: Mothers 41+ years (n=71)

Obese mothers 2x more likely to use indulgent feeding vs much lower odds in authoritative

Mothers 41+ years have greater odds of adopting an authoritative feeding style

2. Health-related behavioural factors

Screen time exposure

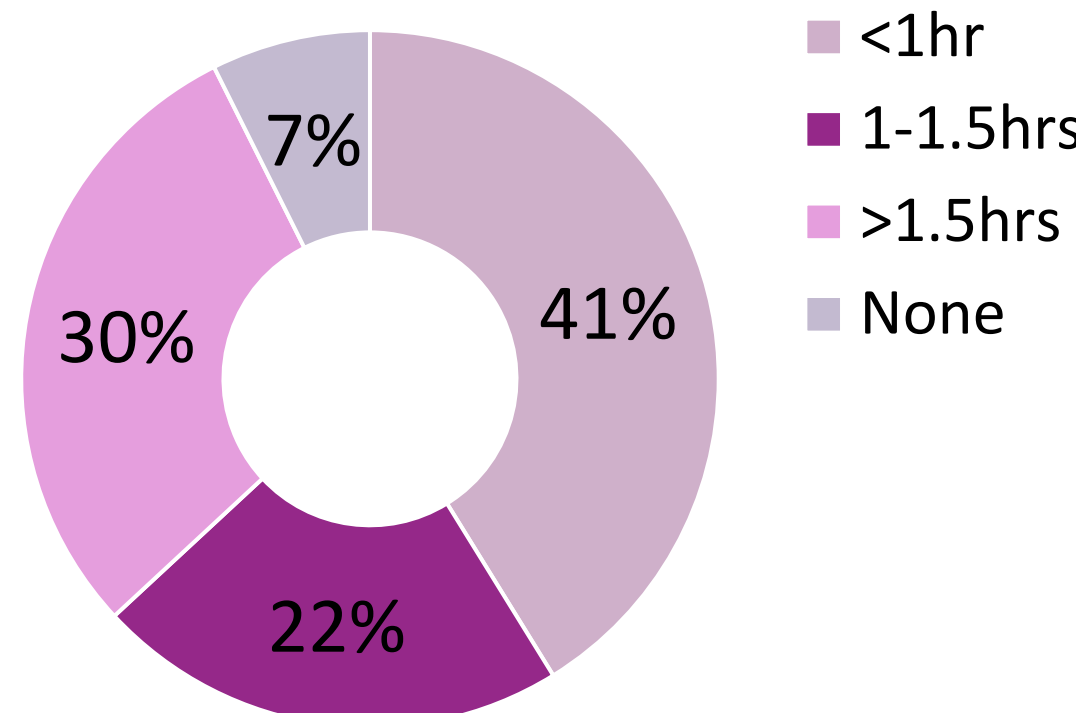


Figure 3: Child’s screen time

Indulgent mothers showed 6x greater odds for allowing the greatest amount of screen time

Breastfeeding mothers had 3x greater odds of adopting authoritarian feeding

Was the child breastfed?

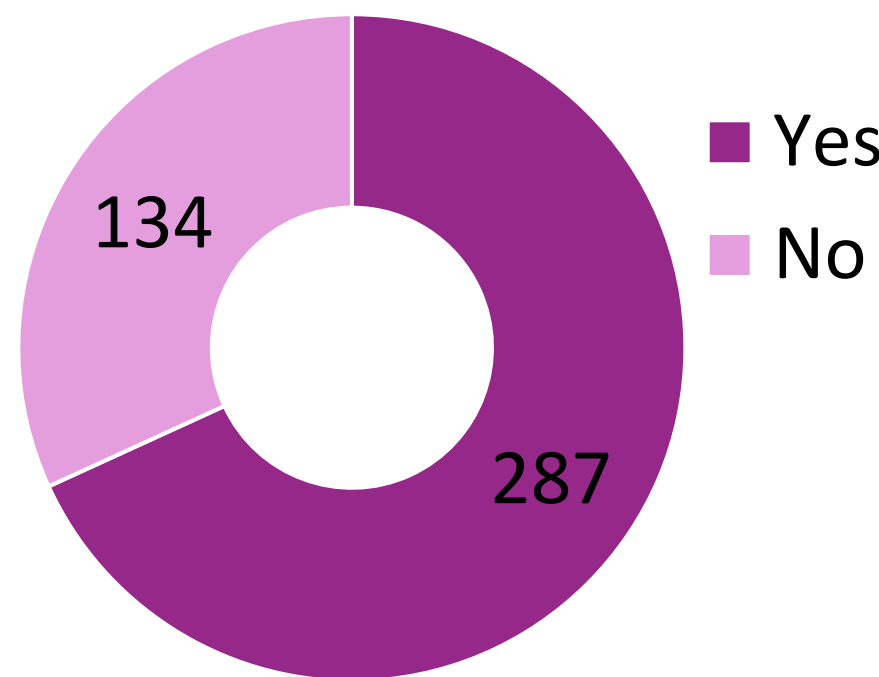


Figure 4: Breastfed vs Non-breastfed

3. Attitudinal factors

Table 3: Attitudinal factors associated with feeding styles

Variable	Feeding style	OR	P-value
Child preferences (barrier):	Authoritative	4.40	<0.001
	Authoritarian	0.14	<0.001
	Indulgent	3.90	<0.001
	Uninvolved	0.65	0.140
Convenience (Barrier):	Authoritative	1.02	0.944
	Authoritarian	0.40	0.002
	Indulgent	2.78	<0.001
	Uninvolved	1.02	0.950
Level of interest in providing a healthy diet:	Authoritative	2.06	0.003
	Authoritarian	1.75	0.036
	Indulgent	1.15	0.610
	Uninvolved	0.20	<0.001

Convenience is associated with being 3x more likely indulgent

Higher interest in a healthy diet less associated with uninvolved

Higher interest associated with 2x more likely authoritative feeding

Child preferences less likely to be authoritarian

Conclusion

- Maternal feeding styles were influenced more by modifiable factors, such as breastfeeding, screen time, perceived barriers to healthy eating, and interest in providing a healthy diet, than by broader sociodemographic factors.
- These observations emphasise the importance of maternal behaviours in shaping responsive feeding environments.

Future Implications

- Future research should reassess these associations using more up-to-date Irish data to ensure these findings reflect current feeding practices.
- The upcoming NPNS II will be particularly valuable, as it will offer an updated, nationally representative database on dietary intake and health behaviours among Irish children aged 1-4 years.

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