

The impact of parental feeding practices on infant feeding behavior: a systematic review and meta-analysis

Baritaki M.,¹ Efstratiadou E.,² Michou E.,³ Briana D.¹

National and Kapodistrian University of Athens¹,

University of Peloponnese,² University of Patras,³ Greece

Introduction

Parental feeding practices play a critical role in shaping toddlers' eating behavior and self-regulation.¹ Responsive strategies, such as encouraging self-feeding and recognizing hunger cues, foster **healthy eating patterns**, whereas controlling approaches — including restriction and pressure — are associated with **maladaptive outcomes** and reduced autonomy.^{2,3} Despite growing research in this field, **evidence for toddlers aged 18–36 months remains fragmented**. This project presents the **first systematic review and meta-analysis** focusing exclusively on this developmental stage, conducted in accordance with **PRISMA 2020 guidelines**.⁴ Findings underscore that **parental feeding practices are modifiable**, highlighting early opportunities for intervention to promote adaptive feeding and prevent later difficulties.^{5,6}

Aims

To systematically assess the effects of responsive compared with controlling parental feeding practices on toddlers' (18–36 months) feeding behavior and self-regulation, drawing on evidence from randomized and clinical studies.

Methods

Design & Search Strategy

Systematic review and meta-analysis following **PRISMA 2020** guidelines. Searches in **PubMed**, **Scopus**, and **CINAHL** (up to June 2024) using keywords on *parental feeding practices, responsive feeding, and toddler behavior*.

Inclusion Criteria

Randomized controlled trials (RCTs) involving **toddlers aged 18–36 months** or **preterm infants** with feeding or developmental outcomes.

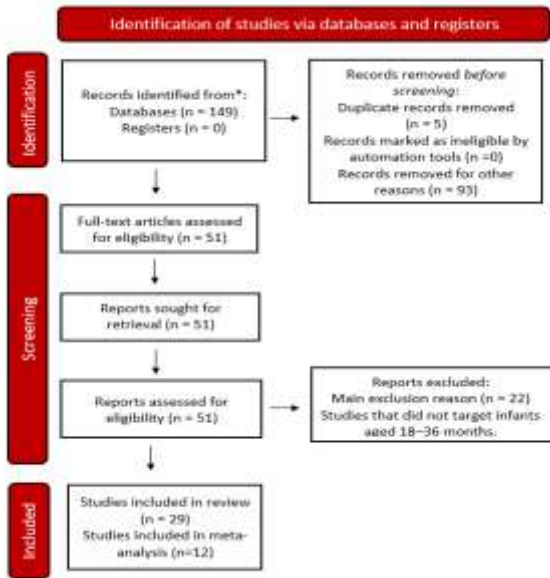
Studies required **quantitative data** (mean, SD, n) to calculate **effect sizes**.

Analysis

Data extracted into **Excel** and analyzed in **Jamovi (v2.4)** using a **random-effects model (REML)**.

Outcomes expressed as **Standardized Mean Differences (SMD)** with **95% confidence intervals**.

Results



Meta-Analysis Findings

The meta-analysis included **12 RCTs** with **1,078 participants**. A **random-effects model (REML)** estimated a **moderate, statistically significant pooled effect size** in favor of supportive parental feeding practices: **SMD = 0.318**, 95% CI [0.006–0.629], $z = 2.00$, $p = 0.046$.

Figure 1. PRISMA 2020 flow diagram of study selection

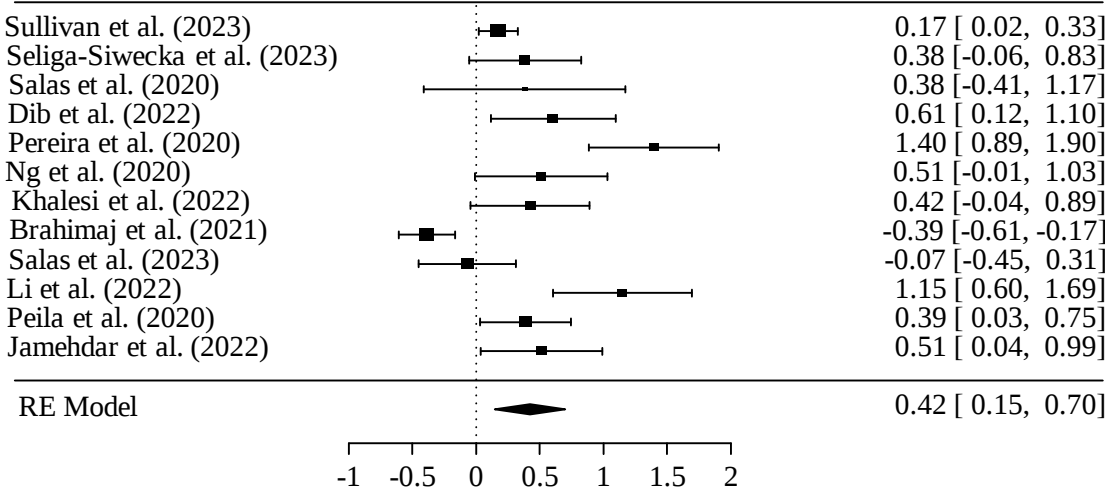


Figure 2. Forest plot of standardized mean differences (SMD) across 12 RCTs

Supportive strategies (breastfeeding, responsive feeding, kangaroo mother care) were linked to **positive feeding behaviors and better self-regulation**, whereas controlling practices (pressure to eat, restriction) showed **negative or null effects**. **Heterogeneity:** High ($I^2 = 88.2\%$); sensitivity analyses confirmed **robustness** of results. **Publication bias:** Minor asymmetry (Begg $p = 0.045$; Egger $p = 0.075$); results remained stable (*Fail-safe* $N = 70$); no missing studies in Trim-and-Fill.

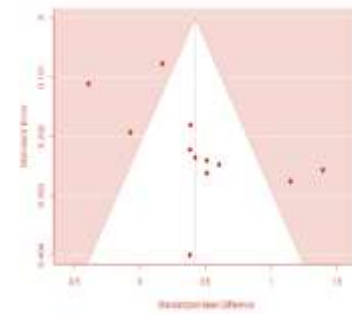


Figure 3. Funnel plot assessing publication bias

Conclusion

Supportive parental feeding practices, such as **responsive feeding, breastfeeding, and kangaroo mother care**, show a **moderate, positive impact** on toddlers' feeding behavior and self-regulation. These findings highlight **early parent–infant interaction** as a **modifiable factor** for promoting healthy eating and developmental outcomes. Despite high heterogeneity, the overall effect was **statistically robust and consistent** across studies. Early, responsive-based interventions may help **prevent later feeding difficulties** and support **adaptive self-regulation** in early childhood.

15th Annual Congress
**Advancing Dysphagia Care:
Innovations and Best Practices**

7 - 11 October 2025 | Athens, Greece

www.essd2025.org



CERTIFICATE OF PRESENTATION

THIS IS TO CERTIFY THAT

Maria Baritaki

PRESENTED A/AN

Poster

ENTITLED

The Impact of Parental Feeding Practices on Toddler Feeding Behavior: A Systematic Review and Meta-Analysis

AT THE

**ESSD 2025 15th Annual Congress
Advancing Dysphagia Care: Innovations and Best Practices**

Chair of the ESSD 2025 Congress

Emilia Michou

ESSD President

Rainer Dzewas