

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

AUTONOMY AT THE TABLE - THE ROLE OF FOOD PARENTING PRACTICES IN CHILDREN'S FRUIT AND VEGETABLE CONSUMPTION: A SYSTEMATIC REVIEW AND META-ANALYSIS PROTOCOL

Authors

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VERSION 1 - REVIEW

Reviewer	1
Name	Meshkovska , Biljana
Affiliation	University of Oslo
Date	07-Nov-2024
COI	None

Thank you to the Editors for the opportunity to review this work, and thank you to the authors for their efforts. The topic that this review protocol covers is timely and relevant. Please find some of my comments below.

Introduction

Paragraph starting with line 49, page 3: the authors assume that inconsistencies of results in studies, or lack of statistical significance is due to lack of control of certain variables or lack of clarity of definitions of parenting practices. What supports this assumption?

Line 10, page 4: authors mention new instruments to assess parenting practices, please note what are these.

Materials and methods:

Page 5: 2-12 is still a wide age range, and parental practices may be different throughout this time period. How do you plan to address this?

Page 5 under intervention or exposure, exclusion criteria - you have inclusion criteria at the end of the paragraph.

Page 9: authors state that they will conduct descriptive synthesis, and consider a meta-analysis. Shouldn't you plan for a meta-analysis considering the restrictive inclusion criteria when it comes to methods of evaluation of the practices?

Page 11: please clarify who will do the training of the reviewers.

General comments:

-Please add some more information in regard to the outcomes/results you may expect based on this review protocol.

-Some limitations are discussed, but considering this is a protocol, authors should give some thought as to how these could possibly be addressed at this stage.

-I struggle to see what would be the added value of publishing this protocol in a journal, in addition to the usual practice, which is to register the protocol in a database like PROSPERO. The editors should give this due consideration.

Reviewer	2
Name	Gong, Yunyun
Affiliation	University of Leeds
Date	20-Nov-2024
COI	None

The review will focus on parental behaviours that promote healthy eating, highlights the need for autonomy-supportive practices and addresses a major gap in food parenting research. The findings of this research will be important to inform interventions for improving children's dietary habits.

Research methodology seems to be rigorous and transparent. The use of a structured and detailed search strategy across multiple databases demonstrates a comprehensive approach to retrieving relevant articles.

However, I don't feel there is any valuable to publish this systematic review protocol on your journal. It would be much useful to submit the paper once authors completed the study.

Reviewer	3
Name	Pinheiro, Anna
Affiliation	Universidad del Desarrollo, Carrera de Nutrición y Dietética
Date	27-Feb-2025
COI	None

This is a very good review proposal, with an appropriate and well-described methodology. It is important to include in the discussion the influence of food environments, both at home and in external settings (such as schools and households). Additionally, the discussion should address the potential influence of social and economic determinants of health on parental practices that may affect children's fruit and vegetable consumption.

VERSION 1 - AUTHOR RESPONSE

Reviewer #1:

Comment 1: Paragraph starting with line 49, page 3: the authors assume that inconsistencies of results in studies, or lack of statistical significance, is due to lack of control of certain variables or lack of clarity of definitions of parenting practices. What supports this assumption?

We appreciate your comment. In response, we have revised the paragraph for clarity. The new version is as follows:

Studies have shown that structure and autonomy-support practices are associated with positive outcomes in children's health, while coercive control practices are linked to negative consequences. However, the study results were heterogeneous or sometimes did not reach statistical significance^{7,9,10}. Three reviews published between 2016 and 2017 suggested that this inconsistency may be attributed to the fact that contextual variables (e.g., parenting style and family structure) and individual factors (e.g., temperament and eating behavior) are not uniformly controlled across studies or to the lack of clarity in the definitions used to describe parental practices^{7,9,10}.

Comment 2: Line 10, page 4: authors mention new instruments to assess parenting practices, please note what are these.

Although the authors acknowledge the existence of new instruments developed in recent years (Vaughn et al., 2017; Musher-Eizenman et al., 2018), this information is not essential to the scope of the review. Therefore, we have chosen to remove it and revise the paragraph as follows:

Although some systematic reviews have investigated the relationship between parental feeding practices and children's eating habits^{9,10}, these reviews were published some time ago and focused on coercive control and structure practices. There has been growing interest in studying parental feeding practices in recent years. In this regard, there remains a gap in the literature, particularly concerning investigating the relationship between autonomy-supportive feeding practices and children's eating habits. This review aims to fill this gap. This systematic review aims to examine and synthesize the available evidence on the relationship between autonomy-supportive parental feeding practices, as defined by the model proposed by Vaughn et al. (2016)⁷, and fruit and vegetable consumption in children aged two to twelve years. Herein, we present the study protocol.

Comment 3: Page 5: 2-12 is still a wide age range, and parental practices may be different throughout this time period. How do you plan to address this?

We acknowledge that the age range of 2 to 12 years is broad and that parental feeding practices may vary throughout this period. To address this issue, we plan to conduct a subgroup analysis in the meta-analysis, stratifying studies by narrower age groups (e.g., children aged 2–5 years vs. 6–12 years) to explore potential differences in the association between autonomy-supportive feeding practices. Additionally, we will assess heterogeneity and perform sensitivity analyses to examine whether age-related variations influence the overall findings. Therefore, the following paragraph has been modified as follows:

Regression coefficients and Pearson and Spearman correlation coefficients, as available in the included studies, will be used to estimate the association between parental feeding practices and children's fruit and vegetable consumption. The meta-analysis will calculate the weighted average of the regression and correlation coefficients to estimate the association's average effect, considering each study's sample weight.

To explore potential variations in the effects, subgroup analyses will be conducted, stratifying the studies by country of origin, children's age group, reporting perspective (whether reported by parents or children), method of parental feeding practice assessment, and dietary intake assessment¹⁶. Additionally, a sensitivity analysis will be performed to evaluate the robustness of the results, considering the influence of potential sources of bias and variability in the data. The results will be objectively categorized and, if necessary, subcategorized. These findings will be presented clearly and concisely through figures, diagrams, or other appropriate graphical elements to illustrate patterns, trends, and outcomes²⁰.

Comment 4: Page 5 under intervention or exposure, exclusion criteria - you have inclusion criteria at the end of the paragraph.

As recommended, the adjustment was made in Table 1, moving the criteria to the inclusion criteria section, as shown below:

They evaluated at least one autonomy-supportive parental feeding practice and used validated instruments or tools with verified internal consistency of the items.

Patterns or profiles that include only autonomy-supportive practices will be included in this review.

Comment 5: Page 9: authors state that they will conduct descriptive synthesis, and consider a meta-analysis. Shouldn't you plan for a meta-analysis considering the restrictive inclusion criteria when it comes to methods of evaluation of the practices?

We acknowledge that, due to the restrictive inclusion criteria related to the methods of assessing parental feeding practices, a meta-analysis could be a more direct and appropriate approach. However, we initially opted to conduct a descriptive synthesis to ensure that all characteristics of the included studies are fully understood before proceeding with the meta-analysis. The descriptive synthesis will allow for a more thorough assessment of the consistency and quality of the data, which will help better inform the meta-analysis approach. If the available data are sufficient and appropriate, we will adjust the analysis to conduct the meta-analysis as needed.

Comment 6: Page 11: please clarify who will do the training of the reviewers.

The recommendation has been addressed by the authors:

Reviewers assessing study eligibility will undergo training on inclusion and exclusion criteria, with the training conducted by the author specializing in systematic review (G. M. A.). They will also receive training on bias risk assessment tools and data extraction spreadsheets. Moreover, the training process covered how to correctly use the Rayyan software and standardize procedures too.

General comments 1: Please add some more information in regard to the outcomes/results you may expect based on this review protocol.

The recommendation has been addressed by the authors by incorporating the Strengths and Limitations section:

This systematic review protocol has several strengths. First, the future review, conducted with rigor and transparency, is expected to identify gaps in the existing literature, encouraging further research to deepen the understanding of parental feeding practices and their impact on child health. By investigating the relationship between parental feeding practices and children's consumption, the review may promote healthy eating habits from an early age, with potential long-term effects on an individual's life. Additionally, the results may identify more effective parenting food practices for encouraging fruit and vegetable consumption, providing important evidence to guide healthcare professionals and child caregivers. The findings may support the development of programs and interventions that promote feeding practices that are more responsive to children's needs. The subgroup analysis is likely feasible, as it enhances the understanding of result consistency and the factors influencing the findings, such as contextual and methodological differences between studies. Finally, the review may be relevant for informing public policies and health programs to improve child health.

General comments 2: Some limitations are discussed, but considering this is a protocol, authors should give some thought as to how these could possibly be addressed at this stage.

The recommendation has been addressed by the authors by incorporating the Strengths and Limitations section:

However, some limitations are expected. Firstly, the tools used to assess parental practices and food consumption are often self-reported, which increases the likelihood of social desirability bias. Secondly, most studies may be cross-sectional, preventing causal inferences between variables. Thirdly, heterogeneity in the definitions and methodologies of the included studies may complicate the comparison and synthesis of results. Fourthly, as observed in other reviews^{9,10}, most studies on parental feeding practices are limited to Western populations. Since culture can influence parent-child relationships, the findings may not be generalized to other cultures. Finally, as the aim of this review is to conduct a meta-analysis, subgroup analysis may provide important insights into contextual and methodological variations, allowing for a more robust interpretation of the findings.

General comments 3: I struggle to see what would be the added value of publishing this protocol in a journal, in addition to the usual practice, which is to register the protocol in a database like PROSPERO. The editors should give this due consideration.

Although we recognize that PROSPERO is an important platform for registering protocols and promoting transparency, we believe that publishing protocols in scientific journals offers additional benefits. The detailed publication of the protocol allows other researchers to access more comprehensive methodological information, including justifications for the choice of inclusion criteria, analysis strategies, and data management approaches. Moreover, it increases the visibility of the work, encouraging collaborations and enhancing the potential impact of the results. It also serves as a reference that can be formally cited, promoting the dissemination and replication of research. Finally, publishing the protocol in a peer-reviewed journal provides an opportunity for further feedback from the scientific community before the completion of the study, strengthening the quality of the subsequent systematic review. Additionally, it is standard practice for BMJ Open to publish protocols.

Reviewer #3:

Comment 1: This is a very good review proposal, with an appropriate and well-described methodology. It is important to include in the discussion the influence of food environments, both at home and in external settings (such as schools and households). Additionally, the discussion should address the potential influence of social and economic determinants of health on parental practices that may affect children's fruit and vegetable consumption.

To address this recommendation, the first two paragraphs were substantially revised and are highlighted in red.

It is important to highlight that these factors do not act in isolation but interact. In this sense, family demographic characteristics such as race, ethnicity, education level, income, and food security can influence the food practices parents adopt, which, in turn, impact children's food preferences and consumption⁷.

Excerpted part of the text:

The following part of the text was removed:

The quality of evidence from the articles included in this review will be assessed using the Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) system²⁴. Each study will be categorized into one of four levels: high, moderate, low, or very low. We will use the GRADE-pro GDT software for this analysis²⁵.

Although we acknowledge the relevance of the GRADE method for assessing the quality of evidence, we have chosen not to apply it in this review. Considering that most of the included studies have a cross-sectional design and that we have already conducted a thorough analysis of the risk of bias, we believe this evaluation is sufficient to interpret the robustness of the findings without compromising the methodological transparency of the study. Furthermore, other reviews published in high-impact journals have only conducted a risk of bias analysis.

Mendes MM, Gomes APO, Araújo MM, Coelho ASG, Carvalho KMB, Botelho PB. Prevalence of vitamin D deficiency in South America: a systematic review and meta-analysis. *Nutr Rev.* 2023 Sep 11;81(10):1290-1309. doi: 10.1093/nutrit/nuad010.

Santos AC, Passos AFF, Holzbach LC, et al. Lack of sufficient evidence to support a positive role of selenium status in depression: a systematic review. *Nutr Rev.* Published online October 29, 2022. doi:10.1093/nutrit/nuac095.

Reviewer #2:

The review will focus on parental behaviours that promote healthy eating, highlights the need for autonomy-supportive practices and addresses a major gap in food parenting research. The findings of this research will be important to inform interventions for improving children's dietary habits. Research methodology seems to be rigorous and transparent. The use of a structured and detailed search strategy across multiple databases demonstrates a comprehensive approach to retrieving relevant articles. However, I don't feel there is any valuable to publish this systematic review protocol on your journal. It would be much useful to submit the paper once authors completed the study.

We believe that publishing protocols in scientific journals offers additional benefits. The detailed publication of the protocol allows other researchers to access more comprehensive methodological information, including justifications for the choice of inclusion criteria, analysis strategies, and data management approaches. Moreover, it increases the visibility of the work, encouraging collaborations and enhancing the potential impact of the results. It also serves as a reference that can be formally cited, promoting the dissemination and replication of research. Finally, publishing the protocol in a peer-reviewed journal provides an opportunity for further feedback from the scientific community before the completion of the study, strengthening the quality of the subsequent systematic review.