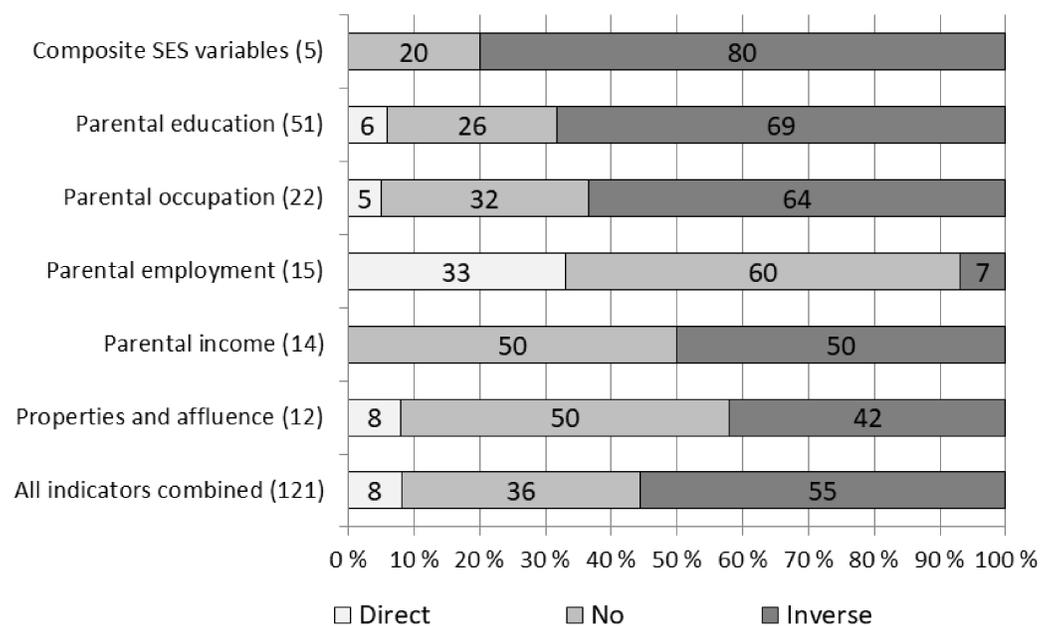


Low family socioeconomic status is a strong predictor of childhood adiposity in Europe - a scoping review

Results and conclusions

- Parental socioeconomic status (SES) is inversely associated with childhood adiposity (higher SES associated with lower adiposity) in Europe.
- Low parental education is consistently related to higher childhood adiposity (Figure 1).
- Parental employment is not a strong predictor of childhood adiposity (Figure 1).
- Positive associations between SES and adiposity indicators (higher SES associated with higher adiposity) were mainly found in studies from upper middle-income countries, while results from high-income countries were mostly inverse.
- Differences exist in associations depending on SES indicator used, on sex and age of the population, and on categorization and measurement method of the outcome variable.
- Findings of this review affirmed previous findings on inverse SES inequalities in childhood adiposity in Western and high-income countries.
- Parental SES and childhood adiposity indicators used in the literature show great heterogeneity and yield divided results.
- Use of compatible SES and adiposity indicators is recommendable to produce comparable results across studies. Careful consideration should be put to country-specific characteristics in harmonization.



* Positive association: while SES indicator receives ascending levels, also adiposity indicator receives ascending levels. Inverse association: while SES indicator receives ascending levels, adiposity indicator receives descending levels. The figures in the parentheses denote number of association analyses in the group in question.

Figure 1. Proportions (%) of directions of associations* between different SES indicator groups and adiposity (Figure published in Sares-Jäske et al. 2022)

Background

- Childhood obesity constitutes a major public health problem worldwide.
- In part of the European countries childhood obesity prevalence seems to have plateaued or even decreased.
- However, SES inequalities in adiposity persist, and according to part of the studies, continue to widen.
- In high-income countries, higher SES is associated with lower prevalence of obesity, while in medium- to low-income countries the association seems to have a reverse direction.
- Of the commonly used family-level SES indicators, parental education and occupation seem to be the strongest inverse indicators of childhood adiposity.

Objectives

- Aims of this scoping review were to explore:
 - Which family SES and childhood adiposity indicators have been used the most in Europe during the 21st century.
 - Which indicators yield most frequently significant results.
 - Whether the results show different distributions in selected sub-populations (boys/girls, different age groups) or according to different outcome categorizations (adiposity definitions, collection method of adiposity information).

Methods

- This study employed a scoping review method.
- Literature search was conducted in Feb-Apr 2021 using PubMed and reference lists of articles.

- Inclusion criteria for original articles:
 1. European general population data,
 2. Published and data collected between Jan 2000-Apr 2021,
 3. Participants aged 0-17 years,
 4. Articles written in English,
 5. Main exposure is a family-level SES indicator, and
 6. Main outcome is a childhood or adolescence adiposity indicator, overweight, obesity, or change in one of the preceding.
- A total of 53 original articles with 121 association analyses were included.

Funding

The STOP project received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 774548. The content of this document reflects only the authors' views and the European Commission is not liable for any use that may be made of the information it contains.