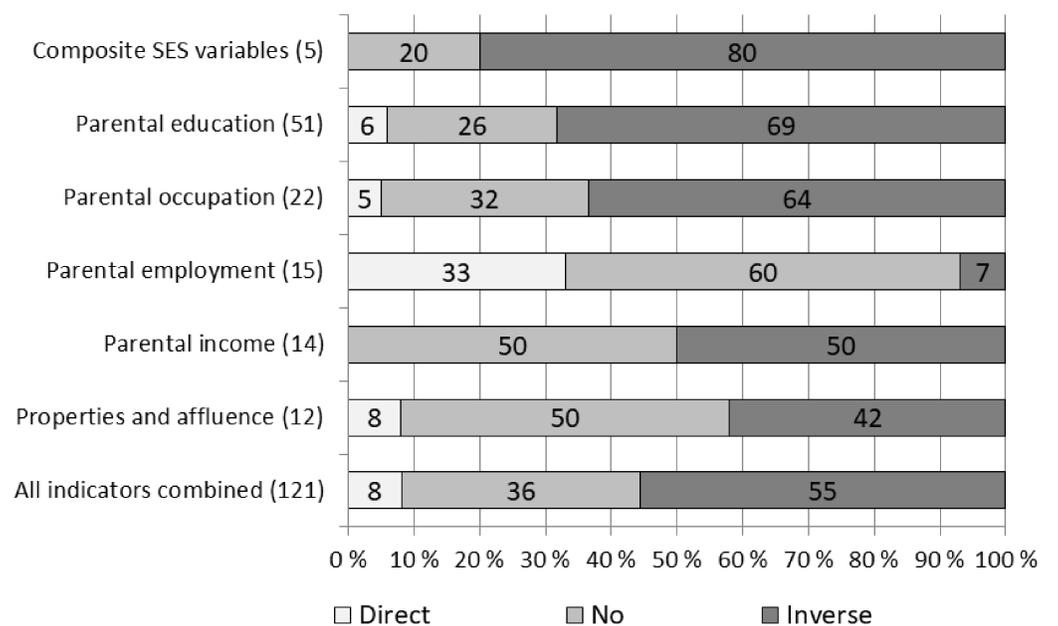


# Low family socioeconomic status is a strong predictor of childhood adiposity in Europe - a scoping review

## 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.

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