

# Socioeconomic status and school absenteeism: A systematic review and narrative synthesis

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## Abstract

School absenteeism is detrimental to life course outcomes and is known to be socioeconomically stratified. However, the link between socioeconomic status (SES) and school absence is complex given the multidimensional nature of both family SES (e.g., income, education, occupational status) and absenteeism (e.g., truancy, sickness, suspension). Despite the vast literature on socioeconomic inequalities in school attendance, no systematic review on SES and school absenteeism exists. This study systematically reviewed and provides a narrative synthesis of journal articles ( $n = 55$ ) published between 1998 to 2019 on the association between SES dimensions and forms of absenteeism. The majority of studies from high-income contexts found an association between SES and absenteeism in the expected direction, albeit on average with small effect sizes. Studies largely confirmed these findings among populations at risk of school absence and those from low- and middle-income countries. There was greater evidence for an association between absenteeism and SES measured at the family than the school level. Studies using

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SES measures of financial resources (e.g., free or reduced-price lunch) provided more evidence for this association than studies measuring sociocultural resources (e.g., parental education). We found limited evidence that socioeconomic gaps in absenteeism vary by the reasons for absence. Research on the mediating pathways between SES and absenteeism is sparse. A key implication is that attempts to address inequalities in educational outcomes must include tackling SES gaps in school attendance.

**KEYWORDS**

socioeconomic status, school absences, school attendance, educational inequality

**Context and implications****Rationale for this study**

Our narrative review synthesised the literature on socioeconomic status (SES) and school absenteeism.

**Why the new findings matter**

Inequalities in school absenteeism may partly account for socioeconomic disparities in children's academic achievement. We found that lower SES is associated with higher levels of absenteeism in most of the studies we reviewed, including among disadvantaged groups.

**Implications for policy-makers and practitioners**

Given robust evidence that school absences are detrimental to children's academic achievement, policy-makers and practitioners need to place an explicit focus on addressing socioeconomic disparities in school attendance in order to close SES achievement gaps. This will be particularly important in tackling the consequences of Covid-19 related school closures around the world. An intersectional approach that addresses multiple disadvantages should be adopted to tackle inequalities in school attendance. Researchers should address several gaps, such as directly comparing SES effects across different reasons for absenteeism and examining the mechanisms by which SES leads to absenteeism.

**INTRODUCTION**

Prolonged periods of absences during school have significant consequences for individuals' life courses. Children and adolescents who frequently miss school are at a higher risk

of dropping out from school, attaining lower qualifications, showing risky sexual and drug-related behaviours, or being involved in criminal activities (Alexander *et al.*, 1997; Hallfors *et al.*, 2002; Balfanz *et al.*, 2007; Gottfried, 2010; Balfanz & Byrnes, 2012; Morrissey *et al.*, 2014; Wolf & Kupchik, 2017). In the longer term, school absenteeism lowers employment probability (Cattan *et al.*, 2017) and leads to greater economic difficulties in early adulthood (Ansari *et al.*, 2020). To reduce the risk of these life course disadvantages for individuals and associated costs to the state, researchers, policymakers, and practitioners have stressed the role of identifying and tackling the determinants of school absenteeism (European Commission, 2013; Attendance Works, 2016; Jordan & Miller, 2017; Gottfried & Hutt, 2019; OECD, 2019).

An important risk antecedent of school absenteeism identified in several studies is family socioeconomic status (SES) (e.g., Gottfried & Gee, 2017; Gubbels *et al.*, 2019; Klein *et al.*, 2020). Students from lower SES backgrounds are over-represented among those absent from school (e.g., Morrissey *et al.*, 2014; Gottfried & Gee, 2017; Gennetian *et al.*, 2018; Gubbels *et al.*, 2019). For instance, Garcia and Weiss (2018) found that 23.2% of students eligible for free and reduced-price lunch (FRPL) missed three or more days of school per month compared to only 15.4% of those not eligible for FRPL. Students on FRPL were also more than twice as likely to be absent than their peers without FRPL (2.3% vs. 1.1%) when looking at school absence of more than 10 days a month.

Socioeconomic inequalities in school absenteeism are relevant because they parallel SES gaps in children's academic achievement (Sirin, 2005; Chmielewski, 2019) and may partly account for these socioeconomic disparities. Additionally, research suggests that school absences may be more harmful to children from lower SES families (Ready, 2010; Gershenson *et al.*, 2017; Smerillo *et al.*, 2018). This is because parents from lower SES backgrounds have fewer financial, social and educational resources necessary (e.g., Yeung *et al.*, 2002; Cooper & Stewart, 2020) to support their children in catching up with missed school lessons (Ready, 2010). Parental involvement in home learning also varies across socioeconomic strata (Guryan *et al.*, 2008), affecting how parents from different SES backgrounds moderate the harmful consequences of school absences on their children's learning. These arguments are consistent with research on the 'summer learning gap', indicating that children from lower SES families gain fewer academic skills during summer holidays than children from higher SES families (e.g., Alexander *et al.*, 2001; Downey *et al.*, 2004; Von Hippel *et al.*, 2018). Hence, socioeconomic inequalities in school absenteeism may lead to an accumulation of multiple disadvantages in the educational trajectory of children from lower SES families (Kallio *et al.*, 2016).

However, the link between family SES and school absenteeism is complex, given the multidimensional nature of family SES and school absenteeism. Researchers primarily defined and measured family SES using the traditional tripartite indicators of family income, parental occupation, and parental education. Others used proxy measures for poverty, such as FRPL, to indicate low financial resources (e.g., Garcia & Weiss, 2018). Studies also measured SES at the school or neighbourhood rather than the individual level (e.g., Kirk, 2009). While these different dimensions of family SES are associated with each other, they have independent and unique influences on educational outcomes, including school absenteeism (e.g., Schenck-Fontaine & Panico, 2019; Klein *et al.*, 2020). Further, school absenteeism forms (e.g., overall, truancy, or sickness absence) may be differently associated with family SES. To address socioeconomic inequalities in school absence effectively, we need to disentangle these complexities and provide a thorough account of the existing evidence.

Disentangling socioeconomic inequalities in school absenteeism by SES dimensions may also give us insights into possible mechanisms. For instance, greater evidence of associations between family income and school absenteeism may suggest mediating pathways via

economic resources or family stress (Shaw & Shelleby, 2014). In comparison, more robust evidence for associations with parental education hints at the role of cultural resources as hypothesised by cultural capital theories (Bourdieu, 1977). A school or neighbourhood effect of SES independent of family SES suggests the additional impact of school or neighbourhood-level risks for absenteeism (Teasley, 2004; Galster, 2012; Gottfried, 2014).

Although several reviews have examined the broad contextual determinants of school absenteeism (e.g., Gubbels *et al.*, 2019), there has been no systematic review of the literature that specifically examines the association between SES and children's school absences. Additionally, no existing studies have examined these associations considering the nuances of SES and school absenteeism. Our narrative synthesis aims to systematically synthesise the research evidence on the association between various SES dimensions and different forms of school absenteeism.

## THEORETICAL CONSIDERATIONS

Sociological and psychological theories suggest children from families with lower SES face several structural barriers that affect their developmental and educational outcomes (Bourdieu, 1977; Mayer, 1997; Conger *et al.*, 2010). These theories provide insight into how family SES can lead to increased risks of school absenteeism.

According to Bronfenbrenner's 'bioecological model' (Bronfenbrenner, 1993), children's developmental outcomes are determined by their interactions with their environment. SES influences school absenteeism by shaping children's dispositions, resources, immediate and distal environments such as neighbourhoods, and how they interact with these environments (Galster, 2012; Gottfried & Gee, 2017). Other theoretical perspectives attempt to explore the possible mediating pathways by which family economic circumstances determine educational outcomes, including school absences. These theories suggest that family income position may influence absenteeism through developmental, health, neighbourhood, family discord, parenting, and school alienation mechanisms.

With regard to developmental, health, and neighbourhood mechanisms, the 'investment model' suggests that economic hardship restricts lower SES families to invest in proper nutrition, health, housing, neighbourhood, and other inputs that improve a child's well-being (Mayer, 1997; Shaw & Shelleby, 2014). Poor health and well-being outcomes arising from a lack of financial resources may decrease children's school attendance.

The role of family discord and parenting is detailed by the 'family stress model' (Conger *et al.*, 2010; Shaw & Shelleby, 2014). In this model, familial economic pressures and the strain of having fewer resources available for day-to-day living will increase psychological distress among parents. Such stressors result in greater family conflict, separation, and unresponsive parenting styles, leading to inadequate monitoring of children's school attendance. Family stress is also associated with punitive parenting, leading to childhood conduct problems (Kiernan & Huerta, 2008; Rijlaarsdam *et al.*, 2013; Sosu & Schmidt, 2017), a known risk antecedent of absenteeism.

Bourdieu's (1977) 'cultural capital theory' provides insight on how schools may alienate children from lower socioeconomic backgrounds. The cultural capital theory argues that schools are based on middle-class ideals and, therefore, particularly suit children from these backgrounds. Thus, children from disadvantaged social classes may feel alienated and disengaged from school practices, leading to lower school attendance. A common thread in all theories is that SES determines circumstances in which children grow and develop. These circumstances play a significant role in shaping school behaviour, including attendance. However, they emphasise different factors (e.g., developmental, health, neighbourhood,

family discord, parenting and school alienation) as the key mediator of the SES-absenteeism association.

Overall, the mechanisms by which SES is associated with school absenteeism are multifaceted and may depend on the operationalisation of SES and the nature of school absenteeism. The consequences of living in socioeconomic disadvantages such as poor health, behaviour problems, or exposure to crime are all likely to contribute to the association between SES and children's school attendance (Currie, 2009; Slopen *et al.*, 2011; Burdick-Will *et al.*, 2019). While empirical evidence suggests these factors are associated with absenteeism, limited research on these mechanisms exist. As argued earlier, understanding how different SES dimensions are associated with school absenteeism will provide further insights into the dominant mediating pathways.

## THE NEED FOR SYSTEMATIC REVIEW AND NARRATIVE SYNTHESIS

Several complexities exist in the association between SES and school absenteeism. First, SES is defined and measured in multiple ways (e.g., family income, parental occupation, parental education), making it difficult to draw clear-cut conclusions about the nature of socioeconomic disparities in school absenteeism. Although different SES dimensions are interrelated, evidence from studies linking family SES to developmental or educational outcomes suggests that different components of family SES are likely to influence school absenteeism independently from each other and to a varying extent (Bukodi & Goldthorpe, 2013; Schenck-Fontaine & Panico, 2019). As argued earlier, disentangling socioeconomic inequalities in school absenteeism by SES dimensions may give us further insights into the mechanisms.

Second, school absenteeism does not refer to a single concept but is defined and measured differently. Absenteeism can be defined as excused or unexcused absences or as more specific reasons for school absence such as exclusion, sickness, truancy, or vacation during school term (e.g., Heyne *et al.*, 2019; Klein *et al.*, 2020). Family SES may be a risk antecedent of excused absences such as sickness due to socioeconomic inequalities in children's health (e.g., Evans & Kim, 2007; Currie, 2009). It may also be a risk factor for truancy due to, for instance, differences in behaviour problems (Mazza *et al.*, 2017). However, the strength of this relation and its consistency across SES dimensions may differ across these forms of absenteeism.

Third, how studies measure school absences further complicates collecting clear-cut evidence on the link between SES and school absenteeism. For instance, there are significant variations in the duration of absenteeism (ranging from one week to over a year) and its measurement (self-reported survey vs. administrative information). The relation between SES and school absenteeism may differ across other background characteristics such as race and gender. It is not clear whether these characteristics influence the nature of the association found in studies to date.

Fourth, we do not know a lot about the mediating pathways between SES and school absenteeism. Many risk antecedents identified in previous reviews (e.g., child externalising and internalising problem behaviour) are influenced by socioeconomic disadvantage (Rijlaarsdam *et al.*, 2013; Mazza *et al.*, 2017) and are, therefore, possible mediators of the link between SES and school absenteeism. As a result, there is a need to systematically review studies that considered the mediating pathways between SES and school absenteeism.

Despite these complexities, no studies have synthesised knowledge examining these nuances in the relation between SES and school absenteeism. The few existing reviews on school absenteeism have tended to focus on broad contextual determinants of absenteeism combined with issues relating to the definition, policy, comorbidity, prevalence, or

treatment (King & Bernstein, 2001; Reid, 2005; Kearney, 2008; Gubbels *et al.*, 2019). The meta-analysis by Gubbels *et al.* (2019) identified risk factors clustered into child, family, school, and peer-interaction risk domains. It considered only studies on 'problematic school absenteeism', such as truancy, thereby excluding studies investigating risk factors for overall absenteeism or excused absences such as sickness. This exclusion may downplay the role of SES in shaping school absenteeism. Health problems are socioeconomically stratified, and family SES is a well-established risk antecedent of health outcomes (Reiss, 2013).

Moreover, although Gubbels *et al.* (2019) examined the risks posed by SES, they did not sufficiently differentiate between SES dimensions. They further did not provide a synthesis of evidence on moderating and mediating factors. Efforts to address socioeconomic inequalities in school attendance and to reduce their effect on life-course outcomes require a clearer understanding of the nature of the association between SES and school absenteeism. In this review, we address the gaps outlined above by systematically reviewing and narratively synthesising the evidence on the association between SES at various levels (family, school, neighbourhood) and forms of school absenteeism.

Specifically, we ask the following research questions:

1. What is the overall association between SES and school absenteeism?
2. Does the association between SES and school absenteeism differ depending on the SES dimensions considered?
3. Does the association between SES and school absenteeism vary by the reasons for absence?
4. Is the association between SES and school absenteeism moderated by other student characteristics?
5. What factors mediate the association between SES and school absenteeism?
6. Does the association between SES and school absenteeism vary across study characteristics?

## METHOD

### Search strategy

To systematically identify, screen and select journal articles on SES and school absenteeism (from preschool to upper secondary school), we followed the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines (Moher *et al.*, 2009). Our electronic search included databases in education (ERIC and Education database), sociology (ASSIA, Sociological Abstracts and Sociology database), psychology (PsycINFO, PsycARTICLES), and other multidisciplinary (JSTOR and Web of Science) fields.

First, medical subject headings (MeSH terms) for absenteeism and socioeconomic status were constructed and searched in each database. We used the following terms in our electronic search: (absenteeism, absen\*, truan\*, exclu\*, miss\*, suspen\*, attend\*, expulsion, late\*, discipline\*) AND (socioeconomic, socio-economic, "status attainment," "social mobility," "social class," "class-mobility," occupation\*, wealth, earning\*, age, sex, gender, income\*, inequalit\*, stratification, marital status, ethnic\*, wage\*, "parent\* education", poverty). To increase the sensitivity of the search terms, we used the proximity operator 'N5' to identify papers on various forms of school absenteeism. That is, school N5 absen\*, school N5 suspen\*, school N5 miss\*, school N5 exclu\*, school N5 expulsion\*, school N5 atten\*, school N5 late\*.

Using the proximity operator ensured that the studies retrieved had at least a single instance where the words 'school' and 'absenteeism' were within a five-word distance to each other regardless of the order in which they appear. After that, we combined the terms for absenteeism or SES using the Boolean logic OR, and for absenteeism and socioeconomic status using AND.

To avoid missing out on recently published research, we repeated our search with the exact keywords in Google Scholar for research published between January 2018 and May 2019. In the last step, we manually searched the reference lists and performed forward citation, searching with all articles that remained in our sample after the title and abstract review. We also searched for articles on SES and absenteeism in the reference list of Gubbels *et al.*'s (2019) systematic review.

## Eligibility criteria

This study examined research published in journal articles within the past 21 years (1998–2019). Studies from all countries were eligible. To avoid publication bias, we also included studies in which the relations between SES and school absenteeism were secondary interest (e.g., SES was a control variable). The majority of primary studies included in the review investigated a vast range of risk factors for school absenteeism, potentially reducing the risk of publication bias. For practical purposes, we limited our systematic review to studies published in English. In addition to these restrictions, we applied the following criteria for including articles in our review:

### 1. Studies needed to include family SES measures.

We considered common family SES measures such as composite scores, parents' occupation, parents' education, family income, poverty, proxies of poverty (such as FRPL), and neighbourhood and housing characteristics of deprivation. Our review excluded any studies using composite SES scores comprising indicators other than socioeconomic factors (e.g., age or ethnicity), number of books, or subjective measures of socioeconomic circumstances.

### 2. Studies needed to consider school absenteeism as the outcome variable.

We defined school absenteeism as being absent from school premises during a school day of regular classes. Our definition excludes expulsions, if defined as permanent removal, but includes out-of-school suspensions during which students are temporarily removed from school. It also excludes tardiness because students attend classes later during a school day. Our definition prohibits any form of exclusionary discipline that allows for an alternative educational provision and keeps children within the school premises (e.g., in-school suspension). We further refrained from including studies focusing on absenteeism from one curricular subject or studies focusing on dropout (i.e., where students left schools permanently). We also discarded studies in which the measure of absenteeism was a combination of forms of absenteeism that met our inclusion criteria (e.g., out-of-school suspension) and those which did not (e.g., expulsion). We did not include analyses that controlled for school absenteeism from previous school years, as this may underestimate the association between SES and school absenteeism. Lastly, studies investigating absences from college or other forms of post-secondary education were not considered.

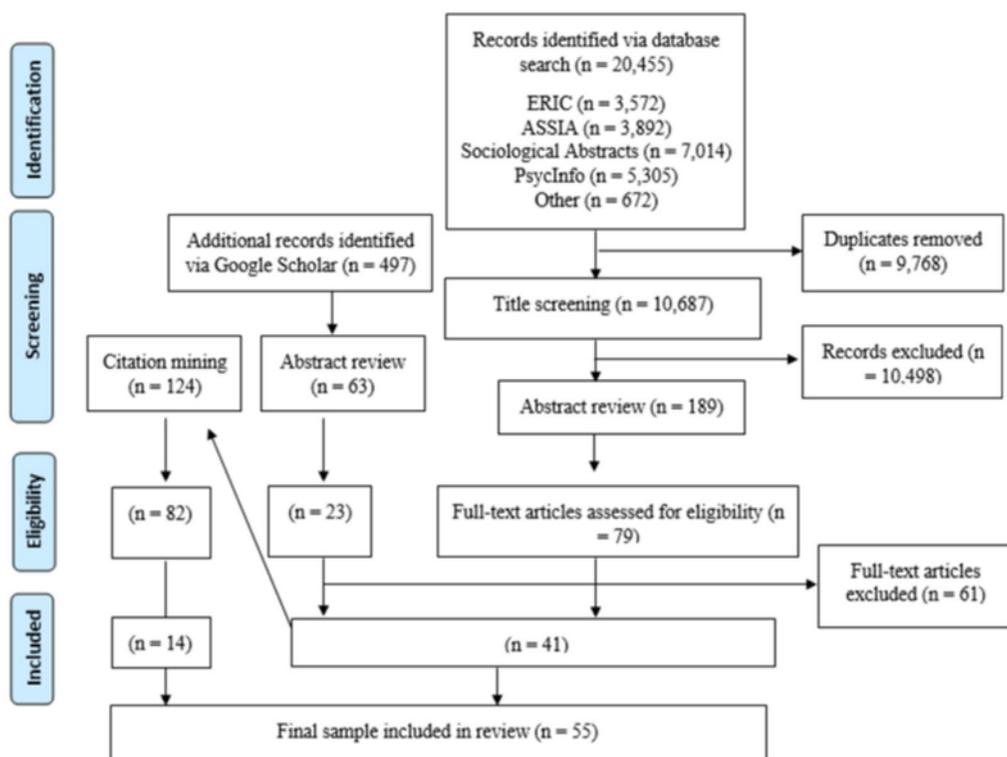


FIGURE 1 Flow chart of search and selection process

## Study selection

Figure 1 shows the selection process of journal articles. The initial search via electronic databases produced 20,455 records in total. After removing duplicates, 10,687 titles were reviewed. Following the title review, 189 studies were deemed relevant for abstract consideration. When reviewing abstracts, we only included studies that were published in journals. Overall, we considered 79 studies for full-text review.

Our Google Scholar search of studies published between January 2018 and May 2019 found 497 records based on the same search terms. After removing duplicates and reviewing titles, 63 titles were selected. After reviewing the abstracts, 23 studies were selected for full-text review.

The total number of articles retrieved from both sources was 102 articles (79 from the main search; 23 from Google Scholar). Following the full-text review, we removed 61 studies either because they did not meet our inclusion criteria or quality threshold. We excluded studies for which: (a) it was unclear how SES was measured, (b) the timeframe of absenteeism considered was very short (one week), (c) statistical output was not reported or reported only selectively, (d) results in tables and text were inconsistent, and (e) there were putative errors in the statistical analysis (e.g., incorrect coding of multiple dummy variables). Overall, we included 41 studies from our review after detailed reading and analysis of selected manuscripts.

The citation mining of the 41 included articles and the review of Gubbels *et al.*'s (2019) reference list resulted in 124 studies for further investigation. After removing duplicates and any research not published in journals, we reviewed 82 full texts. Fourteen additional studies were included in our final review. In total, we considered 55 studies that met our inclusion criteria and were of sufficient quality to be part of our review.

## Data extraction and analysis

We read and extracted data from the included studies using an author-developed data extraction instrument (see Tables S1–S4 in the Supplementary Material for abridged version). The instrument consisted of the following sections: study focus (primary vs. secondary), year of publication, country, geographic area (urban vs. rural), school stage, subgroup restrictions (e.g., by race or populations with pre-existing health conditions), level of data (individual vs. school-level), sample size, the form of absenteeism considered, the period of absenteeism considered, the type of data on absenteeism (survey vs. administrative data), the measurement of absenteeism (e.g., binary vs. continuous), the dimension and number of SES measures used, statistical analysis (bivariate vs. multivariable), the effect size and their interpretation for each SES measure, and whether the study mentioned or tested any mechanisms.

Due to the vast heterogeneity of studies regarding study focus (primary vs. secondary), SES and school absenteeism measures, design and statistical methodology, we refrained from using meta-analytic techniques as this may lead to misleading conclusions (Cheung & Slavin, 2016; See, 2018). Instead, we adopted a narrative synthesis for summarising our findings. Following the literature on family SES and developmental outcomes (Anderson *et al.*, 2018; Cooper & Stewart, 2020), we summarised the results based on the direction of effect size estimates for each SES dimension considered. We converted all effect sizes (e.g., Cohen's *d*, correlation coefficients, odds-ratio, standardised regression coefficients) into a common effect size metric, the correlation coefficient *r* (Lipsey & Wilson, 2001; Peterson & Brown, 2005; Borenstein *et al.*, 2009). Our sample includes effect sizes drawn from studies using bivariate and multivariable analysis. 'Positive' indicates an association in the expected direction, that is, lower SES increases the level of school absenteeism. 'Negative' refers to an association in the opposite direction to that expected, that is, lower SES decreases the level of school absenteeism. To provide descriptive evidence on the practical significance of the association between SES and absenteeism, we used the effect size guidelines by Funder and Ozer (2019), differentiating between tiny ( $r < 0.05$ ), very small ( $0.05 \geq r < 0.1$ ), small ( $0.1 \geq r < 0.2$ ), medium ( $0.2 \geq r < 0.3$ ), large ( $0.3 \geq r < 0.4$ ), and very large ( $r \geq 0.4$ ).

We differentiated studies from high-income and middle- and low-income countries using the World Bank's classification of economies based on gross national income per capita. For studies from high-income countries and using individual-level data ( $n = 37$ ), we provided the proportions of effect sizes finding an SES effect in the categories discussed above. We also investigated whether these proportions vary with the SES measure used, the forms of absenteeism, and other study characteristics.

The remaining 18 studies were clustered into those from low- and middle-income countries (LMIC) ( $n = 3$ ), based on specific subgroups of the population ( $n = 9$ ), and using school-level data ( $n = 6$ ). The synthesis of the nine studies based on subgroups of the population includes special education students, Black students, students with disabilities, low-income students (2), discipline-referred students (2), asthmatic students, and students with sickle cell disease.

## FINDINGS

### Study characteristics

Figure 2 shows the association between studies' sample size and type of data on absenteeism (survey vs. administrative data) over time. There was an increase of journal articles investigating the link between SES and school absenteeism over time, with more than 80%

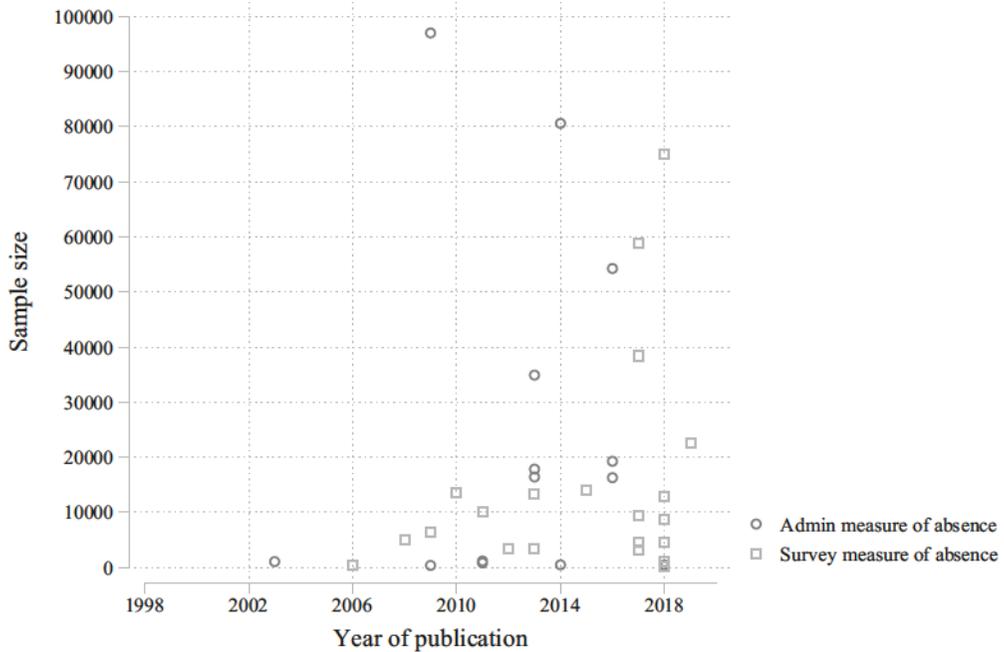


FIGURE 2 Sample size and measurement of absenteeism by year of publication. Note: Sample restricted to high-income contexts and general student population

of our reviewed articles published from 2010. The number of studies using larger sample sizes increased over time, and this trend was similar for studies using administrative and survey data. While there is a huge variety of sample sizes across studies (min = 166; max = 291,040; median = 9350), there is no indication that the sample size is dependent on the type of data.

Table 1 provides summary statistics for the 37 comparable studies from high-income countries. It shows an equal proportion of studies examining the association between SES and school absenteeism as a primary or secondary focus. The overwhelming majority (83%) of studies was conducted in the United States. Only 6 out of 37 articles referred to the European context: two studies from the United Kingdom (Attwood & Croll, 2006; Paget *et al.*, 2018), two studies from Switzerland (Sälzer *et al.*, 2012; Teuscher & Makarova, 2018), one from Ireland (Darmody *et al.*, 2008), and one from Norway (Ingul *et al.*, 2012). Almost two-thirds (65%) of the studies drew on data from the general population, with 30% focused exclusively on urban areas, and only two studies (5%) were based on rural areas (Hunt & Hopko, 2009; Rhoad-Drogalis & Justice, 2018). We found studies on all school stages, although research within high school contexts was predominant. The most prominent forms of absenteeism considered were overall absenteeism (38%), out-of-school suspension (30%) and truancy (22%). Only one study considered more than one form of absenteeism (truancy and sickness-related absence) (Austin & Totaro, 2011).

Studies varied in their measurement of absenteeism concerning duration, type of data, and operationalisation. The overwhelming majority of studies (73%) used only one measure of SES in their analysis. The most popular measures of SES were FRPL (30% of the estimates), parental education (21%) and family income (19%). The majority of studies (76%) used SES measures at the family rather than the school or neighbourhood level. Finally, multivariable statistics was the most common analytic strategy (70%).

TABLE 1 Study characteristics ( $n = 37$ )

	No. of studies (%)
Study focus on family SES and absenteeism	
Primary	19 (51)
Secondary	18 (49)
Country	
USA	12 (32)
US state/city/district	19 (51)
UK	2 (5)
Ireland	1 (3)
Norway	1 (3)
Switzerland	2 (5)
Geographic location	
Urban and rural	24 (65)
Urban	11 (30)
Rural	2 (5)
School stage	
K-12	2 (5)
Elementary to high school	6 (16)
Kindergarten and elementary school	2 (5)
Elementary and middle school	3 (8)
Middle and high school	4 (11)
Preschool	2 (5)
Kindergarten	2 (5)
Elementary school	3 (8)
Middle school	3 (8)
High school	10 (27)
Form of absenteeism measured	
Overall absenteeism	14 (38)
Sickness	3 (8)
Truancy	8 (22)
Suspension	11 (30)
Truancy and sickness	1 (3)
Period of absenteeism measured	
<Half of school year	3 (8)
One school year	27 (73)
>One school year	6 (16)
Ever in school career	1 (3)
Type of data on absenteeism	
Administrative	16 (43)
Student self-reported	13 (35)
Parent reported	4 (11)

(Continues)

TABLE 1 (Continued)

	No. of studies (%)
Teacher reported	4 (11)
Measurement of absenteeism	
Binary	19 (51)
Categorical	4 (11)
Continuous	14 (38)
No. of family SES dimensions measured	
One	27 (73)
Two	5 (14)
Three	4 (11)
Four	1 (3)
Dimension of family SES measured*	
Free and reduced-price school lunch	16 (30)
Parental education	11 (21)
Parental occupation	5 (9)
Poverty	5 (9)
Housing tenure	2 (4)
Family income	10 (19)
Composite score	4 (8)
Family SES level considered	
Individual	28 (76)
Individual + school	6 (16)
School	1 (3)
Neighbourhood	2 (5)
Statistical analysis	
Bivariate	11 (30)
Multivariable	26 (70)

\**n* = 53: number of family SES measures used across all studies irrespective of considered level (family, school, neighbourhood).

## Socioeconomic status and school absenteeism

The 37 studies in high-income contexts investigated the association between 57 measures of SES and school absenteeism (Table 2). However, five papers (representing five effect estimates) did not provide sufficient information to calculate effect sizes, resulting in 52 estimates. The effect size estimates for each study are included in Supplementary Table S1. Table 2 shows that only three effect sizes (6%) were 'negative' and very small, that is, lower SES was associated with lower absenteeism levels. Studies overwhelmingly (94%) found 'positive' results, that is, lower SES was associated with higher absenteeism levels; 29% were of tiny effect size, 12% can be interpreted as very small, 31% were small, 19% were medium, and 4% large. Hence, most studies found 'positive' effects that were at least small ( $r \geq 0.1$ ). Effect size estimates ranged from  $-0.10$  to  $0.40$ , with a median effect size of  $0.11$ . The unweighted mean of the effect size estimates was  $0.11$ , 95% CI [0.08; 0.14].

TABLE 2 Effect sizes of SES on absenteeism by SES dimension ( $n = 52$ )

	<i>n</i>	Negative		Positive			
		Very small	Tiny	Very small	Small	Medium	Large
Overall	52	3 (6)	15 (29)	6 (12)	16 (31)	10 (19)	2 (4)
Family SES dimensions							
Free and reduced-price school lunch							
Overall	16	–	4 (25)	2 (13)	8 (50)	1 (6)	1 (6)
Family	10	–	–	1 (10)	7 (70)	1 (10)	1 (10)
School	6	–	4 (67)	1 (17)	1 (17)	–	–
Poverty							
Overall	5	1 (20)	1 (20)	1 (20)	1 (20)	1 (20)	–
Family	4	1 (25)	1 (25)	–	1 (25)	1 (25)	–
Neighbourhood	1	–	–	1 (100)	–	–	–
Family income							
Overall	9	–	3 (33)	1 (11)	–	5 (56)	–
Family	8	–	3 (38)	–	–	5 (63)	–
Neighbourhood	1	–	–	1 (100)	–	–	–
Parental occupation							
Family	5	1 (20)	1 (20)	–	2 (40)	1 (20)	–
Housing tenure							
Overall	2	–	1 (50)	–	–	–	1 (50)
Family	1	–	–	–	–	–	1 (100)
Neighbourhood	1	–	1 (100)	–	–	–	–
Parental education							
Family	11	1 (20)	5 (45)	2 (18)	1 (9)	2 (18)	–
Composite score							
Overall	4	–	–	–	4 (100)	–	–
Family	3	–	–	–	3 (100)	–	–
Neighbourhood	1	–	–	–	1 (100)	–	–
Level							
Family	42	3 (7)	10 (24)	3 (7)	14 (33)	10 (24)	2 (5)
School/ Neighbourhood	10	–	5 (50)	3 (30)	2 (20)	–	–

Note: Percentages in parentheses are rounded up so may be slightly more than 100 in some cases. Sample restricted to high-income contexts and general student population.

Figure 3 indicates the trends in effect sizes over time. It illustrates that there is cumulative evidence that lower SES students are more frequently absent from school than students from higher SES families. While there is no particular trend regarding the magnitude of effect sizes, most recent studies are of tiny and very small effect sizes.

### Evidence from low- and middle-income countries (LMIC)

The three papers on SES and school absenteeism from LMIC contexts represent research from Kenya (Dreibelbis *et al.*, 2013), India (Prakash *et al.*, 2017), and six member countries

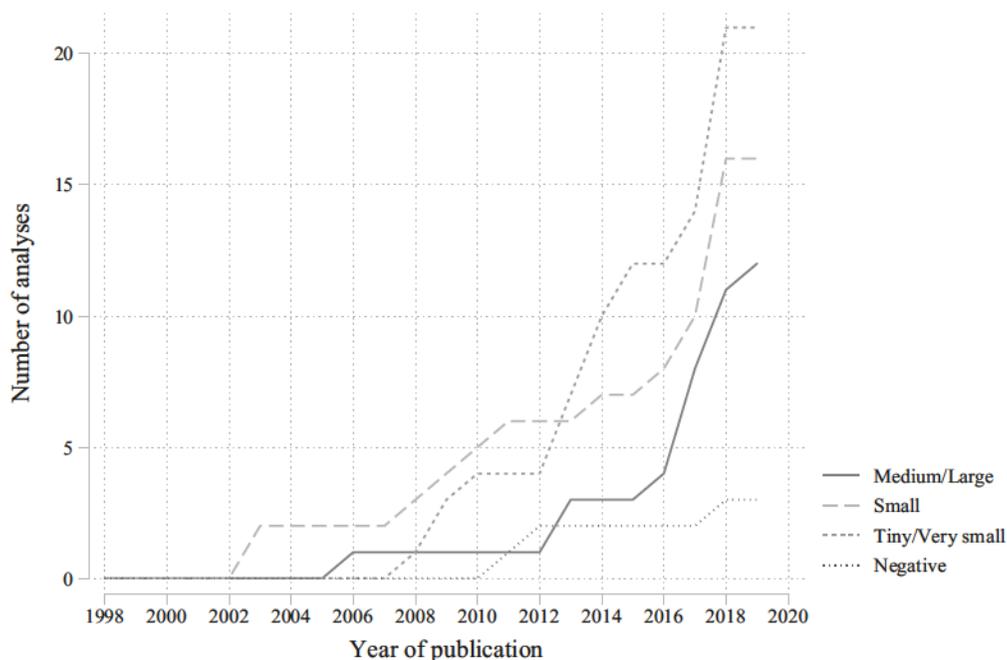


FIGURE 3 SES effect sizes on absenteeism by year of publication (cumulative). Note: Sample restricted to high-income contexts and general student population

of the Association of Southeast Asian Nations (ASEAN) (Pengpid & Peltzer, 2017). Each of these papers assessed absenteeism over a time frame of less than one month, relied on a parent or student self-report of days absent and used various SES measures (for more information, see Table S2 in the Supplementary Material).

Dreibelbis *et al.* (2013) found that household wealth reduced the risk of school absenteeism by four percentage points for Kenyan girls, whereas the education of both female and male head of the household had no impact. Among Kenyan boys, being from a family where the male head of household had at least a primary education reduced the risk of absenteeism by four percentage points. Household wealth and the education of the female head of the household were not associated with absenteeism among boys. Prakash *et al.* (2017) investigated school absenteeism among low-caste girls in India. They found that household wealth was 'positively' associated with a risk of frequent absenteeism (more than four days absent in the last 30 days), with those from the wealthiest quintile being at the lowest risk. The effect size for this association was medium ( $r = 0.23$ ). For ASEAN countries, Pengpid and Peltzer (2017) showed that more days of reported hunger was 'positively' associated with increased truancy, albeit with a small effect size ( $r = 0.10$ ). Overall, the results from LMIC countries reflect findings from high-income contexts.

### Evidence from studies among at-risk groups

Nine studies analysed the relation between SES and school absenteeism among at-risk groups. They included low-income students (Ansari & Purtell, 2018; Gennetian *et al.*, 2018), students that were referred for discipline problems (Anyon *et al.*, 2014; Gregory *et al.*, 2018), students with disabilities (Sullivan *et al.*, 2014), students with asthma (Meng *et al.*, 2012),

students with sickle cell disease (Schwartz *et al.*, 2009), students with special education needs (Achilles *et al.*, 2007), and African American students (Hannon *et al.*, 2013). All of these studies were conducted in the USA.

Eight out of the nine subgroup studies found a 'positive' association between SES and school attendance. One study reported both a 'positive' and a 'negative' association for the two different socioeconomic measures in their analysis (Anyon *et al.*, 2014). Effect size estimates based on eight studies (excluding Gennetian *et al.*, 2018) range from  $-0.02$  to  $0.28$ ; 43% were of tiny effect size, 7% very small, 29% small and 21% medium.

SES was associated with out-of-school suspension among students with disabilities (Sullivan *et al.*, 2014), those with special education needs (Achilles *et al.*, 2007), and among African American students (Hannon *et al.*, 2013). A 'positive' association was also reported between FRPL eligibility and suspension among those who received a referral due to discipline problems (Gregory *et al.*, 2018). Anyon *et al.* (2014) reported a 'positive' association between FRPL and suspension among students who received disciplinary referrals but a 'negative' association between homelessness and suspension, suggesting that homeless students were less likely to be suspended than non-homeless peers.

Meng *et al.* (2012) reported an association between low family income and the number of days missed from school due to asthma-related sickness. Schwartz *et al.* (2009) found an association between family income and absenteeism among students with sickle cell disease, with those from higher-income households less likely to be absent from school. Ansari and Purtell (2018) reported a 'positive' association between parental education and absenteeism from Head Start among 3- to 4-year-olds from low-income households. Finally, Gennetian *et al.* (2018), using fixed-effects regressions, found that higher family income was 'positively' associated with increased school attendance among low-income students across all three different grades investigated. Overall, the evidence from studies based on subgroups mainly supports findings on the general student population. Effect sizes for the individual studies are reported in Supplementary Table S3.

## Evidence from studies based on school-level data

Six studies examined the association between school-level SES and absenteeism using school-level data (Raeffele Mendez *et al.*, 2002; Christle *et al.*, 2004; Gregory *et al.*, 2011; Gagnon *et al.*, 2017; van Eck *et al.*, 2017; Allen *et al.*, 2019). All of these were US based and used the percentage of students on FRPL as the measure of school-level SES. Five of the six studies found an association in the expected direction, with the remaining study reporting a medium 'negative' association ( $r = -0.25$ ). Among the 'positive' findings, effect sizes ranged from  $r = 0.12$  to  $0.57$  with 33% small, 50% large and 17% very large. More specifically, three of the studies found that schools with a higher percentage of children on FRPL had a higher suspension rate (Raeffele Mendez *et al.*, 2002; Christle *et al.*, 2004; Gagnon *et al.*, 2017). Allen *et al.* (2019) provided further evidence for these 'positive' associations between school-level FRPL, suspension and overall absenteeism. Gregory *et al.* (2011) reported that school SES was associated with a greater risk of suspension for White and Black high schools students. Only Van Eck *et al.* (2017) found a 'negative' association whereby schools with a higher percentage of students eligible for FRPL had a lower rate of chronic absenteeism. Overall, the evidence from school-level data suggests that lower school-level SES is associated with increased school absenteeism. However, due to potential issues of 'ecological fallacy', the findings cannot be interpreted as representing associations with family SES (Sirin, 2005).

## SES dimensions and school absenteeism

Table 2 shows how effect sizes vary across SES dimensions. Studies that employed a composite SES measure, FRPL, and parental occupation were more likely to find small or larger associations. Over 60% of analyses using these measures at the family, school or neighbourhood level found small or larger associations with school absenteeism. The second group of SES measures (family income, poverty, housing tenure) found associations with school absenteeism that were small or larger in over 40% of analyses. Parental education forms the third category, with less than 30% of all analyses showing associations considered small or larger. Very small 'negative' associations were only found once for poverty, parental occupation, and parental education. This heterogeneity may suggest that, compared to household financial conditions, socio-cultural resources play a less decisive role in determining children's school attendance. However, the comparison is limited as some of the SES measures (e.g., composite score and housing tenure) are based on a small number of studies.

Another way of examining the importance of SES is the difference between individual versus school or neighbourhood measures. Table 2 indicates that effect sizes for family SES at the individual level are larger than for neighbourhood and school SES. Although more than one-fourth of analyses using family SES measures found medium or large 'positive' effects, there are no studies with medium or large 'positive' effects using neighbourhood and school SES measures. Furthermore, 33% of analyses found a small 'positive' effect using family SES measures, but only 20% of analyses with neighbourhood or school measures. Albeit the three 'negative' effect sizes can all be found in analyses with family SES, the percentage finding only tiny or very small effect sizes among neighbourhood or school SES is 80% compared to only 31% among family SES. This stark contrast between effect sizes for family SES and school/neighbourhood SES is also evident when considering our most common measure of FRPL.

Regarding studies that examined family and school SES in the same analysis ( $n = 6$ ), four of these analyses found that the effect size for family SES was greater than the effect size for school/neighbourhood SES (e.g., medium vs. tiny). In contrast, one study found a small effect size for both SES levels. For one study, we could not determine the effect size for the school SES measure.

Finally, we examined the evidence for a multidimensional effect of SES on school absenteeism. Only a small number of studies ( $n = 10$ , see Table 1) analysed more than one SES dimension in a multivariable analysis (not counting the same measure at different levels). Only three out of ten studies found 'positive' associations that were small or larger for each of the SES measures analysed. Hence, evidence for multiple associations between SES dimensions and school absenteeism is limited.

## SES and forms of absenteeism

Table 3 reports effect sizes by the form of absenteeism considered. The majority of analyses found a 'positive' association that is small or larger (55%) between SES and overall absenteeism. The percentage of small or larger 'positive' findings is similar for out-of-school suspension (53%) but somewhat reduced for truancy (50%). For sickness-related absenteeism, the percentage of small or larger effect sizes for SES is 67% and considerably higher than for other absenteeism forms. However, we need to interpret these differences with caution as the evidence, particularly for sickness absence, is sparse. Overall, differences in effect sizes of SES across forms of absenteeism tend to be small.

TABLE 3 Effect sizes of SES on absenteeism by absence form ( $n = 52$ )

	<i>n</i>	Negative		Positive			
		Very small	Tiny	Very small	Small	Medium	Large
Overall absenteeism	20	1 (5)	5 (25)	3 (15)	8 (40)	3 (15)	–
Sickness absence	3	–	1 (33)	–	–	2 (67)	–
Truancy	8	1 (12.5)	2 (25)	1 (12.5)	2 (25)	2 (25)	
Suspension	21	1 (5)	7 (33)	2 (9.5)	6 (29)	3 (14)	2 (9.5)

Note: Percentages in parentheses. Sample restricted to high-income contexts and general student population.

## Moderators

Six articles examined whether the association between SES and school absenteeism varied across students' race (Gregory *et al.*, 2011; Ganao *et al.*, 2013; Gottfried, 2014; Gennetian *et al.*, 2018) or gender (Austin & Totaro, 2011; Hannon *et al.*, 2013; Gottfried, 2014; Gennetian *et al.*, 2018).

### Race

Two of the four studies examining the moderating role of race (Gregory *et al.*, 2011; Ganao *et al.*, 2013) investigated whether SES was associated with out-of-school suspension among both White and Black students. Whereas Ganao *et al.* (2013) reported tiny effect sizes for family income among both groups (White  $r = 0.03$ ; African American  $r = 0.01$ ), Gregory *et al.* (2011) found large school SES effects among schools mainly serving White students ( $r = 0.31$ ) and small effects among schools mainly serving Black students ( $r = 0.13$ ). The reduced impact of school SES among Black students may be due to a smaller school SES variance in this group. Gottfried (2014), using least square regressions, found that multiple neighbourhood SES measures (housing tenure, family income, and poverty) were 'positively' associated with absenteeism for Black students while only family income was 'positively' associated with absenteeism for White students. Gennetian *et al.* (2018), using fixed-effects models, found that family income was 'positively' associated with absenteeism among African American and Hispanic students. The effect of income level on student attendance did not differ by these racial groups. Overall, the limited evidence suggests that race moderates the association between school/neighbourhood SES and absenteeism but is no moderator for the link between family SES and absenteeism.

### Gender

All five studies considering moderation by gender (Austin & Totaro, 2011; Dreibelbis *et al.*, 2013; Hannon *et al.*, 2013; Gottfried, 2014; Gennetian *et al.*, 2018) found that SES was 'positively' associated with school absenteeism among male and female students. The findings by Austin and Totaro (2011) did not reveal any differences in the relation between family income and truancy. Gennetian *et al.* (2018) showed that family income level had a similar 'positive' association with student attendance among male and female students. Dreibelbis *et al.* (2013) found that household wealth reduced the risk of school absenteeism

for Kenyan girls but not boys, while the education of the male head of household reduced the risk of absenteeism for Kenyan boys but not girls. The education of the female head of household did not have any impact on absenteeism among boys and girls. Gottfried's (2014) findings suggest that neighbourhood poverty is more strongly associated with poorer school attendance among boys than girls. The effect of family income at the neighbourhood level did not differ across a child's gender. Findings from Hannon *et al.*'s study (2013) on African American students indicates a small effect size of SES among female students ( $r = 0.12$ ) and tiny effect size for male students ( $r = 0.02$ ). Overall, the limited evidence is inconclusive about whether gender moderates the link between SES and absenteeism and in which direction.

## Mediators

In our review, only one study explored the mechanisms between SES and school absenteeism. Ingul *et al.* (2012) investigated whether externalising and internalising problems were mediating pathways for the link between parental education and school absences in Norway. While internalising behaviour was predicted by parental education, it did not predict absenteeism. Externalising behaviour was a predictor of school absenteeism, but it was not associated with parental education. Hence, externalising and internalising behaviour did not mediate the link between parental education and school absenteeism.

Only a small proportion of papers in our review discussed potential mechanisms in their literature reviews (Darmody *et al.*, 2008; Hunt & Hopko, 2009; Nolan *et al.*, 2013; Gottfried, 2014; Morrissey *et al.*, 2014; Gottfried & Gee, 2017; Lim *et al.*, 2019). Even among studies whose primary goal was to investigate the association between SES and school absenteeism, only a quarter provided some theoretical considerations on how SES affects school absence risk. For instance, Gottfried and Gee (2017) investigated multiple influences of chronic absenteeism through the lens of Bronfenbrenner's (1993) bioecological model of development. Darmody *et al.* (2008) focused on individual and institutional habitus (Bourdieu, 1977), while Hunt and Hopko (2009) drew on social control theory (Hirschi, 1969). Other studies provided arguments for the association between SES and school absenteeism based on specific mediators, such as parental involvement (Nolan *et al.*, 2013), role modelling (Gottfried, 2014), health (Lim *et al.*, 2019), and multiple risk antecedents (Hunt & Hopko, 2009; Morrissey *et al.*, 2014). Hence, the empirical findings on SES and school absenteeism are not well situated in a clear theoretical framework.

## The role of study characteristics

Figure 4 shows the percentages of analyses finding a small or larger SES effect on school absenteeism in the expected direction (i.e., 'positive') by study characteristics (Table S5 in the Supplementary Material differentiates between all effect size groups). Studies found more frequently larger effect sizes if the primary focus was SES and school absenteeism. They were also more likely to report larger effect sizes when the data were collected from urban or rural areas, elementary school stages, administrative sources, and using binary or categorical outcome measures or shorter periods of absenteeism. Studies using bivariate statistics reported considerably more effect sizes of small or larger effect than those using multivariable analyses. There is also an indication that the likelihood of gaining effect sizes greater or equal to small decreases with the study's sample size.

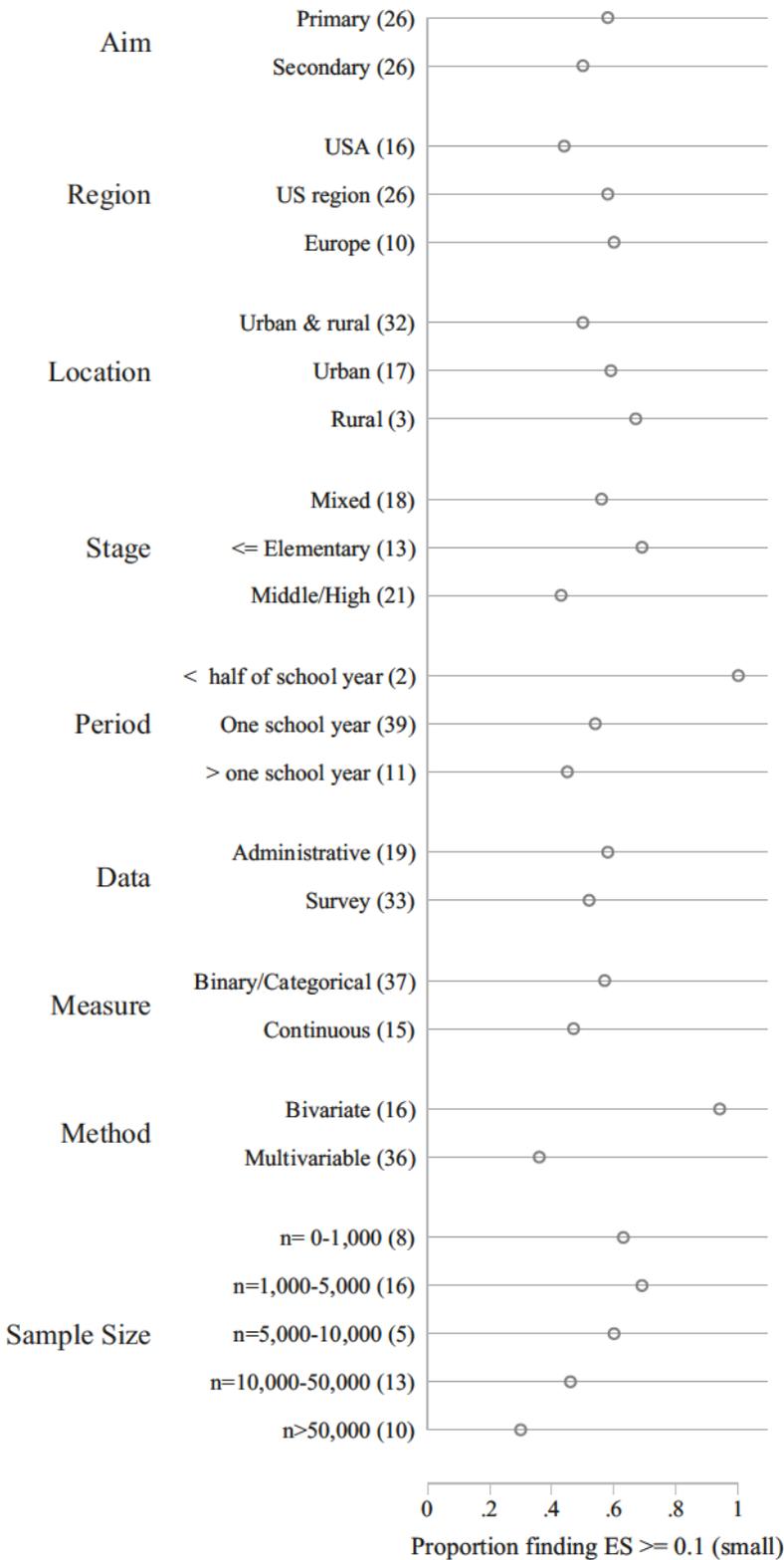


FIGURE 4 Proportion of effect sizes being small or larger by study characteristics. Note: Sample restricted to high-income contexts and general student population. Number of effect sizes in parentheses

## DISCUSSION

The current study aimed to systematically synthesise evidence on the association between SES and school absenteeism from the past two decades (1998–2019). Overall, most findings from high-income contexts, LMIC contexts, and at-risk groups show that SES is ‘positively’ linked to school absenteeism. The average effect size for SES in studies from high-income contexts (unweighted mean  $r = 0.11$ ) is similar to those found in a recent meta-analysis (low family SES: weighted mean  $r = 0.134$  and low parental education: weighted mean  $r = 0.155$ ) of risk factors of school absenteeism and dropout (Gubbels *et al.*, 2019). Given that frequently absent students miss out on important learning experiences that influence their educational achievement (Gershenson *et al.*, 2018; Gottfried, 2009, 2010; Morrissey *et al.*, 2014; Smerillo *et al.*, 2018), socioeconomic inequalities in school absenteeism likely play an important role in socioeconomic disparities in educational achievement. This suggests a need for an explicit focus on addressing socioeconomic disparities in school attendance to close the SES-achievement gap.

The strong evidence of socioeconomic differences in absenteeism among populations known to be at a higher risk of absenteeism (e.g., low-income students, those with a disability or at risk of suspension) also suggests an accumulation of multiple disadvantages in the educational trajectory of the most vulnerable children (e.g., Kallio *et al.*, 2016). Socioeconomic risks may, therefore, intersect with other disadvantages to influence school absenteeism. These possible interaction effects should be taken into account in research, policy and practice interventions to address school absenteeism.

Despite support for socioeconomic differences in absenteeism, almost half of the studies (47%) from high-income contexts found an association that can be considered as very small ‘positive’, tiny ‘positive’ or very small ‘negative.’ Although the reasons for these weak associations require further investigation, evidence from our review on whether associations differ by SES dimensions provides some insights. We found that studies using parental education yield smaller effect sizes than studies using free or reduced-price lunch or composite SES scores. This may suggest that sociocultural resources play a less decisive role in determining children’s school attendance than financial endowments. There was also greater evidence suggesting that SES at the family rather than school level is associated with school absenteeism. A tentative conclusion from our review is that family-level processes (e.g., Bourdieu, 1977; Bronfenbrenner, 1993; Mayer, 1997; Conger *et al.*, 2010) arising from low SES have more detrimental effects on absenteeism than school-level processes. A key implication is that interventions to reduce social disparities in school absenteeism need to include support that addresses family-level economic circumstances.

Free or reduced-price lunch (FRPL) was the most widely used SES dimension in our review. However, this measure is commonly considered as a poor operationalisation of a family’s economic conditions (Harwell & LeBeau, 2010) because not all students living in financial hardship claim FRPL. Additionally, in some contexts, FRPL may provide an incentive for lower SES students to go to school and may lead to underestimating the true SES effect on school absence. While FRPL captures relatively little variation in family income, it does capture other SES dimensions that are not measured by family income (Domina *et al.*, 2018). This suggests that other family SES measures should be considered additional components rather than substitutes for FRPL when analysing educational outcomes, including school absenteeism.

Despite an increasing call for investigating the multidimensional effects of family SES on educational outcomes (Bukodi & Goldthorpe, 2013; Schenck-Fontaine & Panico, 2019), only a small number of studies examined more than one SES dimension in their analysis. Although there is some evidence that different SES dimensions have differing impacts on school absenteeism, more research is required to draw clear-cut conclusions on the

conditions under which multidimensional effects arise. The range of SES measures uniquely associated with absenteeism covers a broad spectrum of dimensions.

Most studies focused on measuring overall absenteeism (e.g., the number of half-days absent during a school year) or out-of-school suspension. Fewer studies focused on the association between family SES and sickness-related absenteeism despite solid evidence on the link between family SES and children's health (e.g., Evans & Kim, 2007; Currie, 2009). There was no clear-cut evidence that socioeconomic inequalities are stronger for one form of absenteeism than another. However, research directly comparing SES effects across different reasons for absenteeism is sparse.

Generally, the literature on SES and school absenteeism seems atheoretical, with only a limited number of studies providing theoretical considerations on why this association exists. Only one study in our review investigated the mediating pathway of externalising and internalising behaviour between parental education and school absenteeism (Ingul *et al.*, 2012). While several studies use multiple predictors in their model, they did not address possible causal pathways between them. Using a vast number of predictors of absenteeism may result in overcontrol and collider bias when adjusting for variables that lie on the mediating path between SES and school absenteeism (Elwert & Winship, 2014). Therefore, it may be more informative to explicitly model the direct and indirect effects of SES on school absenteeism.

The extent to which student characteristics moderate the association between SES and school absences requires further investigation. There was inconclusive evidence about whether socioeconomic disparities in school absenteeism differ across boys and girls, and race did not moderate the link between family SES and absenteeism. Findings were also inconsistent in how the association between school and neighbourhood SES and absenteeism varied across race. There were noticeable influences of a range of study characteristics on the magnitude of association between SES and school absenteeism, particularly the study design and sample size. Therefore, we should exercise caution in interpreting SES effects on school absenteeism based on a single study and replicate results using different designs, data and contexts.

In addition to those highlighted above, our narrative synthesis has implications for policy-makers, practitioners and researchers. Since school absenteeism harms children's academic achievement (Gershenson *et al.*, 2018; Gottfried, 2009, 2010; Morrissey *et al.*, 2014; Smerillo *et al.*, 2018), it is likely to be an important pathway by which SES influences children's school performance and later life-course outcomes. If narrowing socioeconomic attainment gaps is our aim, then there is an urgent need to focus on socioeconomic disparities in school absenteeism more explicitly. Our review also shows that family SES is an important predictor of school absenteeism among disadvantaged groups such as those with disability. This suggests that policymakers need to take an intersectional approach that addresses multiple disadvantages. Interventions to reduce absenteeism should be tailored to subgroups, targeting combinations of socioeconomic and demographic risk factors and conceptualising a multi-component intervention framework that combines personalised and whole-school interventions (Gee, 2018). The findings are also relevant within the current global context of Covid-19 related school closures. During the Covid-19 school closures, socioeconomic inequalities in engagement with home learning have exacerbated (Andrew *et al.*, 2020; Education and Endowment Foundation, 2020; Kuhfeld *et al.*, 2020), which likely led to an increase in disparities in educational achievement (Engzell *et al.*, 2021). Covid-19 also exacerbated school absenteeism and perpetuated socioeconomic disparities in school attendance once schools reopened (Sosu & Klein, 2021). Hence, SES-achievement gaps have also likely grown even when students returned to school.

Future research may be concerned with several gaps in the literature. First, our knowledge of social inequality in school absenteeism is mainly restricted to overall measures

of school absences and school suspensions. Researchers should focus on more precise reasons for school absenteeism, such as family holidays during the school term, family emergencies, caring responsibilities, or other difficult family circumstances. Ideally, studies should compare social inequalities in different forms of school absenteeism using the same data. Only one study in our review considered more than one form of absenteeism. A comparison may provide us with greater insights into the role of family resources and behaviours in shaping social disparities in school absences.

Second, future research on risk factors of school absenteeism needs to consider the multidimensionality of family SES. Almost three-quarters of the studies in our review tested the association between one SES dimension and school absenteeism, ignoring other dimensions. These studies fail to address the unique effects of different socioeconomic dimensions on the risk of school absence, thereby underestimating the full scope of social inequality in school absenteeism. The mediating pathways by which family income and parents' education affect children's risk of school absence are likely to differ as studies of the link between family SES and educational outcomes suggest (Bukodi & Goldthorpe, 2013; Schenck-Fontaine & Panico, 2019). Using SES dimensions interchangeably may lead to misleading conclusions if the link between one SES dimension and school absenteeism is mainly driven by another SES dimension that remains unobserved.

Third, future research, in addition to modelling SES at the family level, should incorporate neighbourhood and school SES characteristics more often. Most studies in our review focused on family SES and school absenteeism. Differentiating these levels and measuring their unique effects may help us better understand the multifaceted ecological determinants of school absenteeism.

Fourth, there is a need to investigate the mediating pathways between family SES and school absenteeism. Future studies should draw on new or existing theoretical propositions such as the Family Stress Model (Conger *et al.*, 2010), Bronfenbrenner's 'bioecological model' (Bronfenbrenner, 1993; Gottfried & Gee, 2017), or the 'investment model' (Mayer, 1997) to examine potential mediators (e.g., familial stress, environmental factors, nutrition, health) of the association between family SES and school absenteeism. These mediating pathways may vary across different socioeconomic characteristics and forms of absenteeism considered.

Finally, we do not know much about the relations between SES and school absences in different educational settings. While the overwhelming majority of studies were conducted in the United States, evidence on other contexts is sparse, with only a few studies focusing on European and LMIC countries. The association between SES and school absenteeism may depend on the configuration of educational and social security systems. More research exploring socioeconomic inequalities in school absences in different contexts is required.

## CONCLUSION

Our systematic review shows that children from low-SES backgrounds are more likely to be absent from school than their peers from high-SES backgrounds. Interpreting this overall finding is complicated by the multiple ways in which SES and school absenteeism are measured. However, our narrative synthesis indicates that irrespective of the SES dimension or absenteeism form considered, socioeconomic inequalities exist. Hence, an important dimension of socioeconomic disparities in children's educational experiences includes missing out on school. A key implication is that attempts to address inequalities in educational outcomes must involve tackling socioeconomic gaps in school attendance. There is abundant evidence that missing out on school has detrimental consequences for academic achievement and longer-term educational outcomes, particularly for students from lower

socioeconomic backgrounds (Ready, 2010; Gershenson *et al.*, 2017; Smerillo *et al.*, 2018). Targeted interventions to increase school attendance among low-SES students are vital in tackling socioeconomic achievement gaps.

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## CONFLICT OF INTEREST

We have no known conflict of interest to disclose.

## ETHICS STATEMENT

Ethical approval for this research was granted by the University of Strathclyde, School of Education ethics committee.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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