

# **Roll call: A Scoping Review for School Attendance Problems Among Youth**

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## **Introduction**

The emergence of the COVID-19 pandemic shed light upon the issue of school attendance like never before. Beginning in 2020, school closures were implemented worldwide to mitigate the spread of COVID-19, and learning in virtual classrooms became the new normal. At the height of the pandemic in 2020, school closures interfered with the learning of nearly 1.6 billion students across 190 countries, corresponding to over 90% of the global population of learners (UNESCO, 2020; UN, 2020). By mid-September 2021, children and adolescents (hereafter referred to as ‘youth’) had missed an average of 4.5 months of school since the start of the pandemic, though school closure lengths varied according to the region (UNESCO, 2020).

It is well-documented in the literature that regular school attendance is central to the psychosocial development of youth, especially considering the variety and depth of social experiences that the school context has to offer (Roeser et al., 2000). Thus, concerns around the negative impact of missed school for youth are growing, and this has become a topic of increased media attention (e.g., Histrova, 2020). The circumstances around COVID-19 are unprecedented, and the full scope of the impacts for youth are unknown (UNESCO, 2020). Nonetheless, school attendance problems (SAPs) themselves have been a prevalent issue for decades, and their numerous adverse consequences are documented in the literature. For example, it has been established that SAPs are associated with the onset and exacerbation of mental health difficulties (Egger et al., 2003; Gottfried, 2014; Wood et al., 2012). It is estimated that between 15% and 30% of youth in Canada are struggling with mental health difficulties, and SAPs are both a major

contributor and consequence of the ongoing and ever-growing mental health crisis worldwide (CMHA, 2020; U.S. Department of Education, 2016).

SAPs have been a topic of discussion amongst educators, policymakers, and researchers for decades. Thus, they have been examined by researchers from diverse academic and professional disciplines, including psychology, education, social/criminal justice, and medicine, amongst others (Heyne et al., 2019; Kearney, 2003, 2008). As a result, varying perspectives exist regarding how to define, conceptualize, measure, and intervene in SAPs. This is reflected in the range of terms that have been developed to capture school absenteeism, many of which are used inconsistently across publications. Unfortunately, the plethora of divergent approaches to the study of SAPs has contributed to poor comparability and limited integration across disciplines to date. This complicates our efforts towards understanding, assessing, and intervening in SAPs. Given growing concerns around the adverse consequences of SAPs for youth, an interdisciplinary lens that would contribute to greater shared understanding is more urgent than ever (Heyward, 2021).

### **Research Objective**

To begin addressing these concerns, the present study will synthesize the extant literature on SAPs among high school youth using a scoping review methodology. It will focus specifically on how school absenteeism is conceptualized, operationally defined, assessed, and measured across various disciplines that usually do not intersect, including psychology, education, medicine, criminology, social work, and sociology. The specific research objectives of the present study are to (a) display the full range of ways that SAPs among high school students are treated in the literature, including conceptualizations, operational definitions, and assessment and measurement tools, (b) present notable points of consensus about the nature of

SAPs within and across research fields and professional disciplines, and (c) identify gaps in the extant literature on SAPs and suggest future directions for research, policy, and practice.

### **Methodology**

The scoping review aims to synthesize or ‘map’ relevant literature in a particular field of interest (Arksey & O’Malley, 2005). Its purpose is to determine the scope, variety, and nature of evidence on a topic, summarize findings from a body of knowledge that is heterogeneous in nature, and identify gaps in the literature to guide future research directions (Arksey & O’Malley, 2005; Tricco et al., 2018). I deemed the scoping review methodology to be most aligned with the objectives of this study because the intention was to report and discuss key definitions, conceptualizations, measurement tools, and interventions related to absenteeism, as well as to identify common variables linked with SAPs. The purpose of this study was not to address the feasibility, appropriateness, meaningfulness, or effectiveness of any method, intervention, or treatment related to SAPs, which is a typical objective of quantitative synthesis methodologies like meta-analysis (Munn et al., 2018).

### **Inclusion Criteria**

Studies were eligible for inclusion if they met the following criteria:

- 1) Language: published in English;
- 2) Year: published over the last 11 years (since 2012, inclusive);
- 3) Publication type: peer-reviewed empirical articles based on qualitative and/or quantitative research methods from any journal and any country. Theses and dissertations, theoretical papers, review articles, government reports, and books were not included;
- 4) Topic: school absenteeism was a central concept, meaning that a discussion of its conceptualization, operationalization, and measurement was featured in the text;

- 5) Accessibility: for full-text screening, studies were accessible online or in libraries accessible to one of the authors;
- 6) Population: study subjects or participants were youth in secondary schools, roughly capturing students in grades 7 through 12.

I chose to examine English-language studies exclusively because this is the language in which I am fluent. I also restricted my search to studies published since 2012 in order to exclude literature containing outdated terms, definitions, measurement tools, and interventions, as these have evolved dramatically over the years and continue to increase in complexity (Kearney, 2008). I also focused solely on empirical articles (not theoretical or review articles) because I was interested in mapping and reporting the ways in which SAPs are conceptualized, defined, assessed, and measured by researchers working with data derived directly from secondary school students. It was also a requirement for empirical articles to be peer-reviewed. Grey literature was excluded because it would have imposed considerable time and resource demands (Mahood et al., 2014). Finally, I restricted the population to youth in secondary schools for this review. SAPs among elementary school students were examined in a previous study (see Smith et al., 2022). I chose to examine these populations separately because differences in the frequency and nature of school absenteeism between primary and secondary students have been documented (e.g., Hancock et al., 2013; U.S. Department of Education, 2016). For example, research reports show that while school attendance rates tend to be relatively stable in primary school, they drop in secondary school, with rates of unauthorized absences increasing significantly (Hancock et al., 2013, p, 39; U.S. Department of Education, 2016).

## **Literature Search**

In order to review absenteeism literature across the fields of education, psychology, criminology, sociology, and medicine, I systematically searched the following databases in May 2023: 1) ERIC (OVID), 2) PsycInfo (OVID), 3) Criminal Justice Abstracts, 4) Sociological Abstracts, 5) Medline. I created search terms and phrases for this systematic search with the assistance of a university research librarian, who specializes in document search methods. They were modified according to each database's thesaurus and subject headings. All search strategies included two main components. The first component was dedicated to capturing SAPs and included some or all of the following concepts: school attendance, school absenteeism, school attendance problems, truancy, school refusal, school phobia, suspension, and expulsion. These concepts were coded as search terms (e.g., truan\* was used to include all versions of the word, like truancy and truant) and as subject headings, where possible. The second component was dedicated to capturing youth in secondary schools. Similarly, I used search terms and subject headings such as "secondary education", "secondary schools", and "secondary school students" to capture the secondary student population, which roughly spans students in grades 7 to 12. Variations of these subject headings were created using the terms "junior high school" and "high school" as well. Tables 1 through 5 outline the specific search strategies used for each database.

### **Screening**

The search yielded 1285 publications: ERIC (233), PsycInfo (130), Criminal Justice Abstracts (293), Sociological Abstracts (195), and Medline (278). After removing duplicates, 1121 articles were available for screening. Next, Covidence, a web-based software platform designed to streamline the process of research reviews, was used to conduct a two-step screening process: 1) title and abstract review and 2) full text review. At Step 1, publication titles and abstracts were reviewed according to the eligibility criteria stated above. When I was uncertain

about whether a publication met inclusion criterion four (i.e., absenteeism/attendance was a central concept in the study), I chose to review it during full-text screening to minimize error. I also chose to include studies with mixed samples of middle and high school students (inclusion criterion six, study population). A clear division between elementary, middle, and high school does not always exist, and when it does, it tends to vary by province/state and country. Taking an inclusive approach allowed me to include a significant number of relevant studies in the final sample. At Step 2, the full text version of each article was reviewed, with data extraction occurring concurrently. 244 studies were included in the final sample. Figure 1 shows the PRISMA diagram for this screening process.

### **Data Extraction and Synthesis**

An Excel spreadsheet (see Appendix A) was developed to record data extracted from the selected 244 articles. The data coded into the spreadsheet was categorized into 1) study characteristics and 2) absenteeism-relevant information. Study characteristics included research design, theoretical or conceptual framework (if specified), geographical location, data collection setting, and participant characteristics (e.g., sample size, participant type, informant type, age range). Absenteeism-relevant information included conceptualization, operationalization, and measurement, as well as intervention and themes or outcome variables linked with SAPs, where available. The coding process for absenteeism-relevant information was guided by the conceptual framework proposed by Heyne et al. (2019), which organizes SAPs into four predominant types: 1) school refusal, 2) school truancy, 3) school withdrawal, and 4) school truancy. A fifth category titled “undifferentiated” was added to capture circumstances in which the reason for absence was unclear or not specified by the study’s authors.

**Table 1***ERIC OVID Search Strategy*

Line	Term or phrase	Results (#)
1	Truancy/	905
2	School phobia/	166
3	Suspension/	2035
4	Expulsion/	1102
5	(school* adj2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*)).ti,ab.	2673
6	("school attendance" adj2 (problem* or difficult* or concern* or issue*)).ti,ab.	64
7	1 or 2 or 3 or 4 or 5 or 6	4995
8	exp Secondary Education/	97698
9	schools/ or private schools/ or public schools/ or junior high schools/ or high schools/ or secondary schools/	99952
10	junior high school students/ or high school students/ or secondary school students/	75412
11	(school* or class or classes or classroom*).ti,ab.	750349
12	((school* or secondary or grade*) adj2 (student* or adolescent*)).ti,ab.	112161
13	attendance/	5848
14	8 or 9 or 10 or 11 or 12	826565
15	13 and 14	4944
16	7 and 15	902
17	limit 16 to (english language and journal articles and yr="2012 - 2022")	233



**Table 2***PsycInfo OVID Search Strategy*

Line	Term or phrase	Results (#)
1	School truancy/	601
2	School refusal/	468
3	School phobia/	376
4	School suspension/	557
5	School expulsion/	257
6	(school* adj2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*)).ti,ab.	4273
7	("school attendance" adj2 (problem* or difficult* or concern* or issue*)).ti,ab.	117
8	1 or 2 or 3 or 4 or 5 or 6 or 7	5041
9	exp Secondary Education/	7488
10	schools/ or private schools/ or public schools/ or junior high schools/ or high schools/ or secondary schools/	39298
11	junior high school students/ or high school students/ or secondary school students/	43296
12	(school* or class or classes or classroom*).ti,ab.	594405
13	((school* or secondary or grade*) adj2 (student* or adolescent*)).ti,ab.	90454
14	School attendance/	2641
15	9 or 10 or 11 or 12 or 13	614855
16	14 and 15	2337
17	8 and 16	577
18	limit 17 to (english language and "0100 journal" and yr="2012 - 2022")	174

**Table 3***Criminal Justice Abstracts Search Strategy*

Line	Term or phrase	Results (#)
S1	SU school attendance or SU school absenteeism	244
S2	SU school phobia or SU exclusion from school or SU student suspension or SU student expulsion	130
S3	TI (school* N2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*)) or AB (school* N2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*))	569
S4	TI ("school attendance" N2 (problem* or difficult* or concern* or issue*)) or AB ("school attendance" N2 (problem* or difficult* or concern* or issue*))	10
S5	S1 or S2 or S3 or S4	802
S6	SU secondary education	443
S7	SU schools or SU private schools or SU public schools or SU junior high schools or SU high schools or SU secondary schools	14644
S8	SU junior high school students or SU high school students	2087
S9	TI (school* or class or classes or classroom*) or AB (school* or class or classes or classroom*)	47049
S10	TI ((school* or secondary or grade*) N2 (student* or adolescent*)) or AB ((school* or secondary or grade*) N2 (student* or adolescent*))	6928
S11	S6 or S7 or S8 or S9 or S10	49719
S12	S5 and S11	794
S13	Limit S12 to English language, academic journal, and published between 2012-2022	309

**Table 4***Sociological Abstracts Search Strategy*

Line	Term or phrase
S1	MAINSUBJECT.EXACT("School Attendance")
S2	MAINSUBJECT.EXACT("Absenteeism")
S3	MAINSUBJECT.EXACT("Truancy")
S4	TI (school* N2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*)) or AB (school* N2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*))
S5	TI ("school attendance" N2 (problem* or difficult* or concern* or issue*)) or AB ("school attendance" N2 (problem* or difficult* or concern* or issue*))
S6	S1 or S2 or S3 or S4 or S5
S7	MAINSUBJECT.EXACT("Secondary Education")
S8	MAINSUBJECT.EXACT("Schools") OR MAINSUBJECT.EXACT("Public Schools") OR MAINSUBJECT.EXACT("Private Schools") OR MAINSUBJECT.EXACT("Junior High Schools") OR MAINSUBJECT.EXACT("High Schools") OR MAINSUBJECT.EXACT("Secondary Schools")
S9	MAINSUBJECT.EXACT("Junior High School Students") or MAINSUBJECT.EXACT("High School Students")
S10	TI ((school* or secondary or grade*) N2 (student* or adolescent*)) OR AB ((school* or secondary or grade*) N2 (student* or adolescent*))
S11	TI (school* OR class OR classes OR classroom*) OR AB (school* OR class OR classes OR classroom*)
S12	S7 or S8 or S9 or S10 or S11
S13	S6 and S12
S14	limit S13 to (english language and yr="2012 - 2022" and scholarly journal)

*Note.* The number of results per search line is unavailable for reporting.

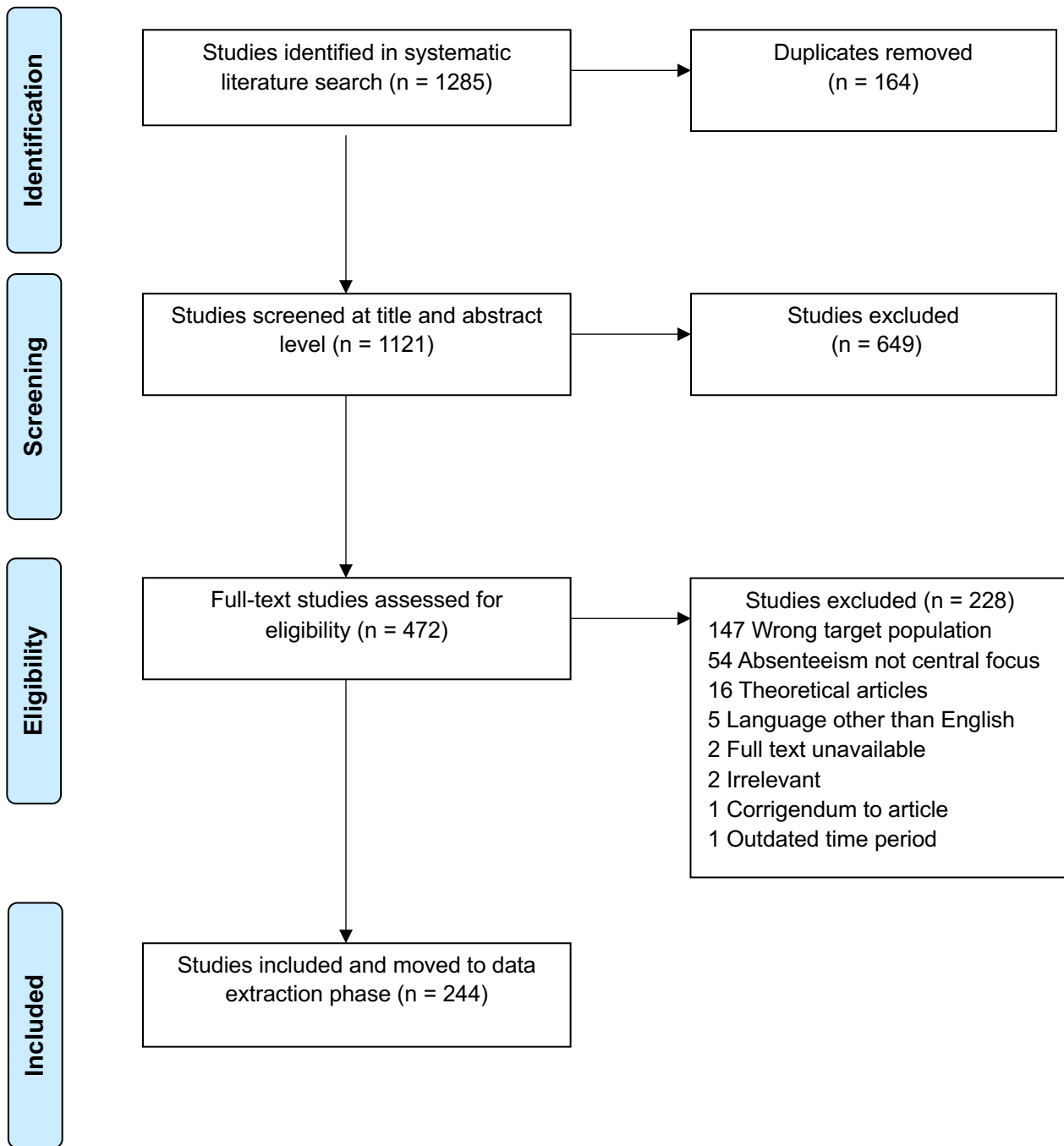
**Table 5***MEDLINE OVID Search Strategy*

Line	Term or phrase	Results (#)
1	(school* adj2 (absen* or non-attend* or refus* or phobi* or truan* or suspen* or expel* or expulsion* or exclude* or exclusion* or withdraw*)).ti,ab.	3684
2	("school attendance" adj2 (problem* or difficult* or concern* or issue*)).ti,ab.	70
3	1 or 12	3722
4	Education/	21519
5	("junior high school education" or "high school education" or "secondary school education" or "secondary education").ti,ab.	7532
6	Schools/	50936
7	("private schools" or "public schools" or "junior high schools" or "high schools" or "secondary schools").ti,ab.	17986
8	Students/ or Adolescents/	2255583
9	("junior high school students" or "high school students" or "secondary school students").ti,ab.	14820
10	((school* or secondary or grade*) adj2 (student* or adolescent*)).ti,ab.	40146
11	(school* or class or classes or classroom*).ti,ab.	964009
12	Absenteeism/	9751
13	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11	3081965
14	12 and 13	3117
15	3 and 14	815
16	limit 15 to (english language and yr="2012 - 2022" and journal article)	<sup>a</sup> 353

<sup>a</sup> This search originally yielded 354 results, however, one article was retracted due to an error made in the evaluation of the data or calculations.

**Figure 1**

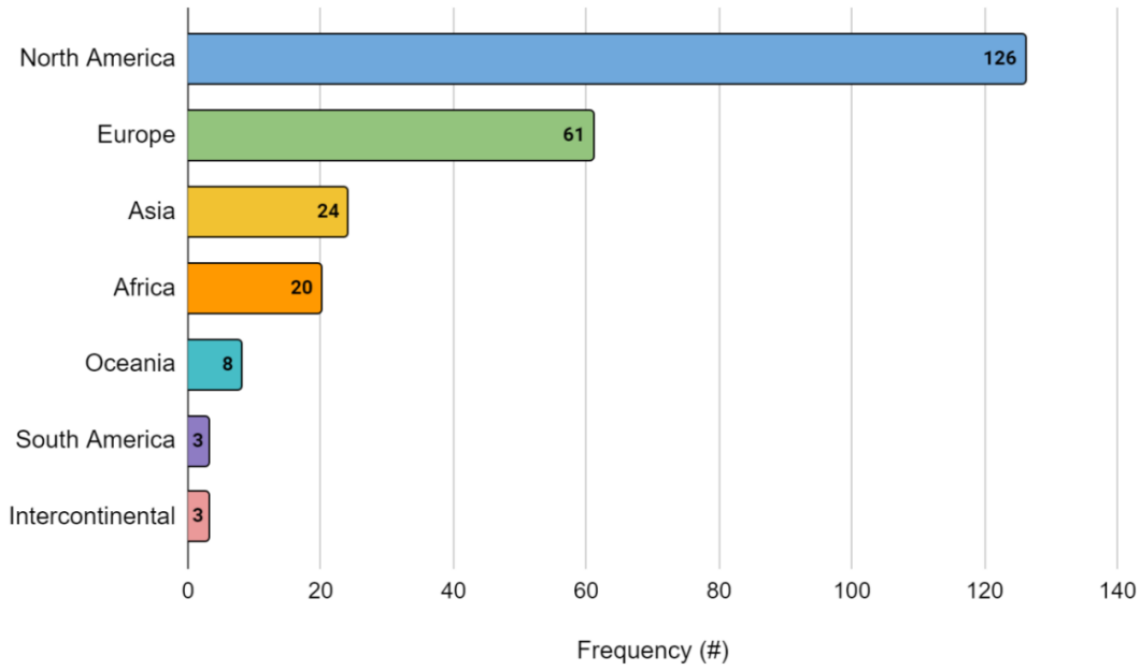
*Study Selection Flowchart*



## Results

**Figure 2**

*Study Distribution by Continent*



*Note.* An “intercontinental” study is one that collects data across two or more continents.

Approximately half (51.6%) of the 244 studies reviewed were conducted in North America (see Figure 2). Among these studies, 98% were conducted in the United States and 2% in Canada. The predominant research design was quantitative (86%). Only 91 studies (37%) explicitly cited a theoretical/conceptual framework, and four stood out as being most frequently cited (see Table 6). School was a primary data collection setting in 193 studies (79%). Researchers also collected data online, at community agencies, medical sites, family homes, research facilities, and juvenile justice facilities. Participants were primarily middle and/or high school students, roughly spanning grades 6 through 12. Some studies incorporated

parents/caregivers, school personnel, and/or community workers as informants in their samples, all of whom had personal experience with youth struggling with school absenteeism.

**Table 6**

*Most Frequently Cited Frameworks*

Framework	Frequency
Life-course theory of cumulative disadvantage	9
Labeling theory of delinquency	5
Interdisciplinary model of school absenteeism	5
Ecological systems theory	5

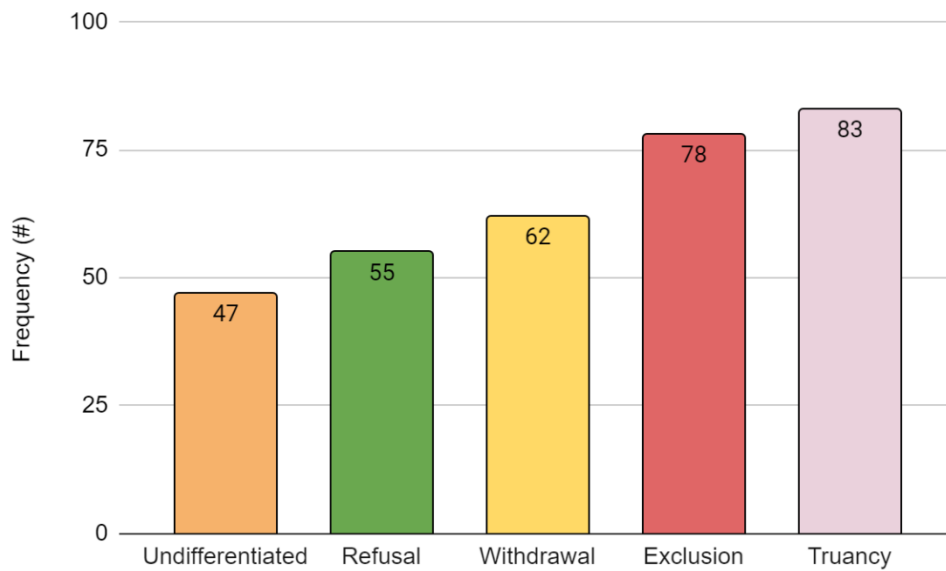
**Conceptualization**

Next, findings indicate that the two most frequent conceptualizations for SAPs were school truancy and school exclusion (see Figure 3). Heyne et al. (2019) define school truancy as absence from school that occurs without knowledge or permission from parents and is not legitimately excused by school officials, medical practitioners, or state law. This often takes the form of skipping classes, leaving school early, or missing entire school days. School exclusion is defined as school-based decision making that centers around the use of disciplinary measures, the need to satisfy academic performance requirements, and/or a lack of willingness to accommodate students' special needs, thereby excluding students from instructional and social opportunities on school grounds (Heyne et al., 2019). Two common forms of school exclusion

are suspension and expulsion. Although school truancy and exclusion stood out in the literature, all five categories were employed frequently.

**Figure 3**

*Conceptualization of SAPs by Category*



*Note.* Total instances exceed 244 because some studies used multiple conceptualizations.

### **Operationalization**

Following this, school absenteeism was most frequently operationalized by 1) type of absenteeism or 2) number of school hours and/or days missed in a specified period (see Table 7). The category “type of absenteeism” refers to circumstances in which researchers identified and studied a particular absence problem (e.g., school refusal) but did provide an operational definition (i.e., did not quantify absenteeism). This form of operationalization appears to be common among 1) qualitative studies, in which participants are interviewed about SAPs, 2) studies that specifically recruit participants with SAPs (e.g., from truancy diversion programs or family courts and services centers), and 3) studies in which the presence of an absence problem



is determined by responding “yes” to a single item measure (e.g., “have you ever received an out-of-school suspension during the past year?”)

**Table 7**

*Operationalization of School Absenteeism and Attendance*

Operationalization	Frequency
Type absenteeism	157
# hours and/or days absent	134
# hours and/or days absent + type absenteeism	68
# disciplinary incidents	16
# days attended	7
Not specified	4

*Note.* Total instances exceed 244 because some studies used multiple operational definitions

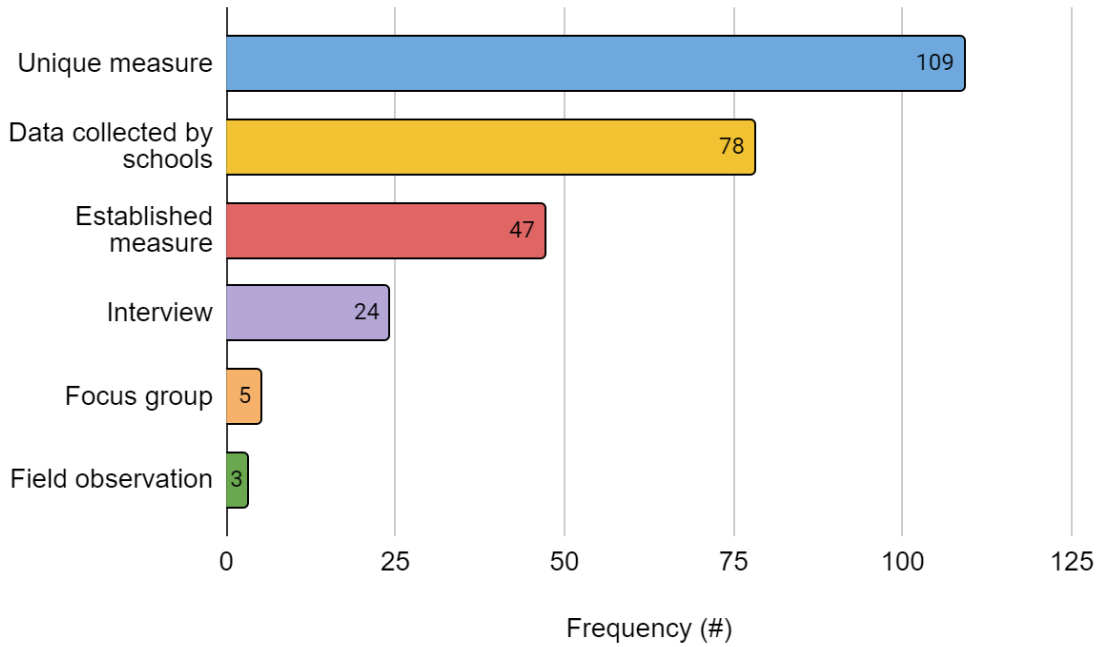
**Measurement**

Furthermore, the most common measure type for absenteeism was the unique measure (see Figure 4), which refers to any self-report item, scale, or questionnaire that was developed for a specific research project and had no prior psychometric evidence to support its validity. This finding is supported by the fact that youth were the most common informant for the measurement of absenteeism (see Figure 5). Notably, while approximately 46.6% of studies employed a unique measure to assess absenteeism, only 19% used established measures with psychometric validity. The second most common measure of absenteeism was data routinely collected by schools. In this scenario, researchers accessed databases containing official school

records to find absenteeism or attendance rates (typically organized by academic year), which was then reported in their study.

**Figure 4**

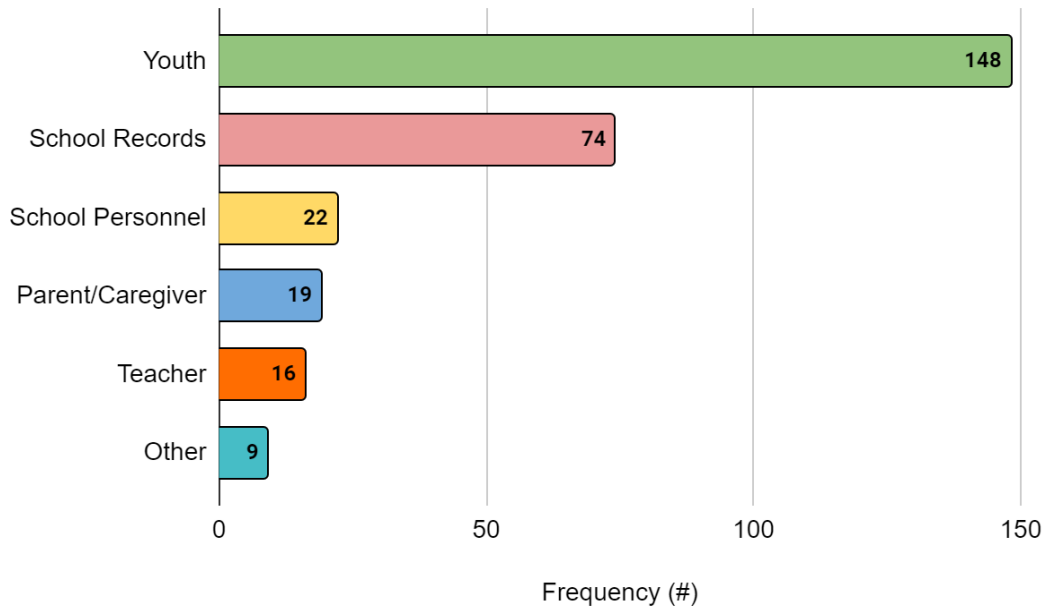
*Absenteeism/Attendance Measure Type*



*Note.* Total instances exceed 244 because some studies used multiple measure types.

**Figure 5**

*Absenteeism/Attendance Informant Type*



*Note.* Total instances exceed 244 because some studies used multiple measure types.

84 studies (about 34%) chose a reporting interval of one regular/academic year, which aligns with the frequent use of unique measures and official school records as measurement tools/sources. Unique measures were often a single yes/no question requiring participants to report, for example, whether they had ever ‘played truant’ or ‘received an out-of-school suspension’ in the past year. As for school records, they are typically organized by academic year. Similarly, one academic semester was sometimes selected as a reporting interval (4%). However, the remaining 150 studies selected seemingly arbitrary reporting intervals, such as  $x$  days (4.5%), 1 month (18%),  $x$  months (11%), lifetime (8%), or  $x$  years (1%), where  $x$  represents an arbitrary number. Overall, these measurement-related findings indicate significant reliance on participant self-report in the measurement of school attendance or absence.

## **Interventions and Variables Linked with SAPs**

Thirty-nine of the studies included in this scoping review (16%) measured attendance or absenteeism in the context of an intervention. Nine studies introduced novel interventions, meaning they had no previous citation history. The interventions employed in these studies varied greatly, meaning that no particular intervention was cited more than a few times across the 244 studies reviewed. The types of interventions employed in these studies can be broadly classified into four categories: 1) mental health, 2) physical health, 3) school engagement, climate, and safety, and 4) education/employment. See Table 8 for examples of interventions that fall under each category. Finally, themes (qualitative) and outcome variables (quantitative) linked with SAPs were identified and classified into nine domains: 1) psychological/behavioural, 2) physical health, 3) family, 4) social-cultural identity, 5) school climate and safety, 6) school academics, 7) criminal justice, 8) macrosystemic factors, and 9) adulthood outcomes. See Table 9 for a list of specific examples from each domain.

**Table 8***Types of Interventions Targeting Absenteeism or Attendance*

Domain	Nature of intervention
Mental health	<ul style="list-style-type: none"><li>• Substance abuse recovery</li><li>• Family therapy</li><li>• Cognitive behavioural</li><li>• Behavioural intervention for school refusal</li><li>• Mindfulness and emotion regulation training</li></ul>
Physical health	<ul style="list-style-type: none"><li>• Menstrual hygiene education/management</li><li>• Pain rehabilitation program</li><li>• Health consultations with school nurse</li><li>• Implementation of school-based health centers</li></ul>
School engagement, climate, and safety	<ul style="list-style-type: none"><li>• Goal setting, social and communication skills</li><li>• Promotion of positive school environment</li><li>• Increased school resource officers</li><li>• Truancy intervention (e.g., education about school attendance laws, creation of child-focused action plan, petition to juvenile justice court)</li></ul>
Education/employment	<ul style="list-style-type: none"><li>• Academic mentoring and support</li><li>• Experiential learning</li><li>• Financial literacy</li><li>• College preparation</li><li>• Employment program</li></ul>

**Table 9***Categories of Variables Linked to SAPs*

Domain	Quantitative	Qualitative
Psychological/behavioural	<ul style="list-style-type: none"> <li>• Mental health difficulties</li> <li>• Sexual risk behaviors</li> <li>• Interpersonal difficulties</li> <li>• Violent/delinquent behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Mental health difficulties</li> <li>• Future-oriented stress</li> <li>• Relationship struggles</li> </ul>
Physical health	<ul style="list-style-type: none"> <li>• Menstruation</li> <li>• Sleep difficulties</li> <li>• Illness/injury</li> </ul>	<ul style="list-style-type: none"> <li>• Menstruation</li> <li>• Chronic illness</li> </ul>
Family	<ul style="list-style-type: none"> <li>• Parent mental health difficulties</li> <li>• Negative parental attitudes or lack of involvement in school</li> <li>• Low parental education</li> <li>• Parental unemployment</li> <li>• Youth involvement in household chores or caretaking</li> <li>• Parental incarceration</li> </ul>	<ul style="list-style-type: none"> <li>• Negative parental attitudes towards education</li> <li>• Parental health issues</li> <li>• Cultural and language barriers</li> <li>• Parental unemployment</li> <li>• Strained relationships between family and school</li> </ul>
Social-cultural identity	<ul style="list-style-type: none"> <li>• Identity-related discrimination: <ul style="list-style-type: none"> <li>a) Racial/ethnic minority</li> <li>b) Sexual or gender minority</li> <li>c) Disability status</li> <li>d) Religious affiliation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Identity-related discrimination <ul style="list-style-type: none"> <li>a) Racial/ethnic minority</li> <li>b) Immigrant status</li> <li>c) Learning disability</li> </ul> </li> </ul>
School climate and safety	<ul style="list-style-type: none"> <li>• Negative school climate</li> <li>• Perceived lack of safety due to bullying and violence</li> <li>• Large school size</li> </ul>	<ul style="list-style-type: none"> <li>• Bullying and violence</li> <li>• Lack of teacher support</li> <li>• Large classroom size</li> <li>• Infrequent contact with counselors</li> </ul>

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School academics	<ul style="list-style-type: none"> <li>• Poor relationships with teachers</li> <li>• Lack of motivation or engagement</li> <li>• Lower academic outcomes</li> <li>• School dropout</li> </ul>	<ul style="list-style-type: none"> <li>• Strained family-school relationships</li> <li>• Academic difficulties/failure</li> <li>• School dropout</li> </ul>
Criminal justice	<ul style="list-style-type: none"> <li>• Criminal activity</li> <li>• Arrest</li> <li>• Incarceration</li> </ul>	<ul style="list-style-type: none"> <li>• Criminal activity</li> </ul>
Macrosystemic factors	<ul style="list-style-type: none"> <li>• Absence of state anti-discrimination policy</li> <li>• Low socioeconomic status</li> <li>• Neighborhood crime</li> </ul>	<ul style="list-style-type: none"> <li>• Family low income status</li> <li>• Inability to pay school fees</li> <li>• Unequal access to support services and resources</li> </ul>
Adulthood outcomes	<ul style="list-style-type: none"> <li>• Unemployment status</li> <li>• Low likelihood of postsecondary schooling</li> <li>• Low participation in political activities</li> <li>• Homelessness</li> </ul>	N/A

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## Conclusions and Implications

- There is an urgent need for more Canadian research on school absenteeism to better inform the policy and intervention efforts of schools and family-serving community agencies. Without Canadian empirical knowledge, efforts towards addressing school absenteeism will be heavily informed by American research. Given the significant differences between the economic and socio-political situations of the two countries, transferability of findings is questionable (Birioukov, 2021).
- Research on SAPs is primarily quantitative in nature and is typically conducted in schools. More qualitative research that explores the lived experiences of children and families in relation to school absenteeism would expand the existing knowledge base. Also, a greater body of research conducted with clinical samples of youth is of special importance to community service providers and the families they serve.
- The “story of who misses school” requires our undivided attention. Given that rates of school truancy and exclusion are disproportionately high among Black, Latinx, and Indigenous youth, those with disabilities, and those experiencing mental health difficulties, it is imperative that we address equity in order to improve school attendance (Algozzine et al., 2011; Anderson & Ritter, 2016; Gottfried & Hutt, 2019).
- Most studies used either researcher-developed measures with no known scientific foundation and/or official school records to measure SAPs. Also, they often used a single-item yes/no measure to establish the presence of an attendance problem. Notably, only about one-fifth of studies used established and validated scales for their research. Exclusive reliance on these methods poses a threat to the integrity of absenteeism research, and limits the utility of findings generated from these studies. The development and implementation of empirically validated and multi-item measures needs to be a priority for the field of SAPs.



- Finally, when we compare the nature of existing interventions for SAPs with the complex array of factors linked with SAPs in the extant literature, it is evident that we attribute importance to a child's immediate contexts (i.e., micro- and meso- systems) but often forego influential factors at the exo-, macro-, and exo- system levels. While individual, family, and school-based prevention and intervention efforts to reducing school absenteeism are necessary, they are insufficient. Future research may benefit from taking a bioecological systems approach to the study of SAPs (Melvin et al., 2019). Also, special consideration should be paid to addressing and reducing structural and environmental inequalities in order to effectively reduce SAPs (Singer et al., 2021).

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*Data Charting Table*

Reference	Design	Framework	Location	Data collection setting	Participant characteristics	Conceptualization					Operational Definition	Method
						School refusal	School truancy	School withdrawal	School exclusion	Undifferentiated		
(Ahn & Simpson, 2013)	Quant cross-sectional	N/A	United States	Alternative School	48 students across grades 7-9 (50% White, 85.4% Male) with disabilities (emotional disturbance, ADHD, learning disability, autism, traumatic brain injury, mental retardation) and from a low SES background.				X	X	-Number of missed school days in 4-month period -Hours spent for in-school suspension in 4-month period -Days spent for out-of school suspension in 4-month period	Informational school re
(Attwood & Croll, 2014)	Quant longitudinal	N/A	England	School	21000 youth in year 10 who were followed from age 14-15 until age 20-21		X				Answering yes to the question of whether they had been truant in the past academic year (at least one instance)	Establish scale/que  Department of Education Longitudinal Young People in England. <a href="http://www.education.gov.uk/research">www.education.gov.uk/research</a>
(Baker & Bishop, 2015)	Qualitative	Interpretive Phenomenological Analysis (IPA)	England	Family home	Four children aged 11-16 years who previously attended local authority comprehensive schools, now receiving support from a Home Education service due to non-attendance	X					Experienced attendance difficulties lasting at least one term	Qualitative

(Balkis, 2018)	Quant cross-sectional	N/A	Turkey	School	600 students (54.5% female) in grades 9-12 aged between 14 and 19 years (M = 16.56).		X	# of days that students were absent from school in the 2014–2015 academic year.	Informational school re
(Barboza, 2015)	Quant cross-sectional	N/A	United States	School	5,589 youth between the ages of 12 and 18 (mean = 14.77, s.d. = 1.99). Males and females comprised 51% and 49% of the sample, respectively. The majority of respondents identified racially as “white” (80%) and the rest as non-white (20%) including African/American or black, Hispanic and/or Asian.	X		At least one incidence of school avoidance or withdrawal during the school year	<a href="#">School avoidance was measured in the 2011 National Victimization School Census (SCS) University Department of Justice Statistics National Victimization School Census Supplemental Inter-university Consortium Political Research 2013-03-https://dc.icpsr33</a>
(Bell, 2019)	Quant cross-sectional	Code of the Street (Anderson, 1999)	Michigan, USA	School	30 Black students (50% male) in Detroit and Southfield Public School Districts and their parents (n=30, 83% female) were recruited for this study for a total of 60 participants. 50% of students were from low SES households and 50% were from middle-class		X	Having at least one out of school suspension from a primarily Black high school in southeast Michigan in the 2016-2017 school year	Interview

Author(s)	Study Design	Theoretical Framework	Country	Setting	Sample Description	Variables	Outcomes	Limitations
(Berkowitz & Benbenishty, 2012)	Quant cross-sectional	Lifestyle Exposure Theory and Routine Activity Theory (Cohen & Felson, 1979; Hindelang, Gottfredson, & Garofalo, 1978)	Israel	School	The overall sample consists of 259 schools across Israel (136 junior high school and 123 high schools) and 13,262 students (6,670 male adolescents and 6,309 female adolescents; 7,207 Jews and 6,055 Arabs and Bedouins)	X	# of times during the last month a student had missed school because of fear of being hurt by somebody at school or on their way to or from school	Absenteeism item/measure
(Bever Nichols & Booker Lopez, 2012)	Quant cross-sectional	1. Strain Theory (Hagan and Dinovitzer 1999; Sirin 2005) 2. Attachment Theory (Poehlmann 2005; Murray and Murray 2010), 3. Social Control Theory (Hagan and Dinovitzer 1999; Sampson and Laub 1993) 4. Stigmatization (Murray 2007)	United States	Household	The sample for the present study consisted of 3,338 offspring of female NLSY79 participants who took part in the Young Adult survey. The sample is 47% male and the mean age was 26.5 years (SD = 3.36) at the time of the 2008 survey. Minorities were overrepresented in the sample, with about a fifth of the sample self-identified as Hispanic (22.7 %) and a third identified as Black (38.9 %).	X	Dropping out and returning to school after one month at least once	Extended absence (National Survey of Young Adults)  Center for Resource (2009). National longitudinal youth data (Ohio State)
(Camacho & ...)	Quant cross-	N/A	Maryland, United	School	Participants included all public	X	The total number of	Information school re



					were 379,903 participants included in this study from Grades 7 through 12. The sample was 51% male and 49% female. White (43.5%) and Black (36.0%) students made up the majority of the sample population. Students with disabilities represented 11.3% of the sample.			during the school year	
(East & Hamill, 2013)	Quant longitudinal	Culturally informed framework based on theories of prosocial development among Mexican American youth (Knight et al., 2011)	California, United States	1. Schools 2. Community centers 3. Pediatric health clinics	195 Mexican American youth (Mean age 14.8 years; 64% girls) and their mothers participated in the study.	X		Having missed at least one full day of school to help out a family member	Absenteeism item/measure
(Lehman & Meldrum, 2019)	Quant cross-sectional	1. Critical race theory (Bonilla-Silva, 2006; Simson, 2014; Sleeter, 2017; Watts & Erevelles, 2004) 2. Implicit biases and decision-making (Carter et al., 2017;	Florida, United States	School	Data for this study come from the 2018 Florida Youth Substance Abuse Survey (FYSAS). The FYSAS is a cross-sectional survey of public middle school and high school students in the state of Florida conducted annually since 2000. Students from 364		X	Whether each youth reported having been suspended from school at least once in the past 12 months	Dichotomous suspension

		Warikoo et al., 2016)			51.3% of the sample identified as female and 17.5% identified as Black, 24.2% Hispanic, 13.3% Other, and 45.0% White.				
(Mowen & Brent, 2016)	Quant longitudinal	1. Life-course theory (Sampson & Laub, 1993)2. Labeling theory (Becker, 1963)	United States	Household	The data used for this project are panel data taken from wave 1 (collected in 1997) through wave 4 (collected in 2000) of the National Longitudinal Survey of Youth (NLSY97)		X	Whether or not a student had received a school suspension in the prior year	Suspension variableB Labor Sta National Surveys: Retrieved <a href="https://www.nlsy97.gov/">https://www.nlsy97.gov/</a>
(Pengpid & Peltzer, 2017)	Quant cross-sectional	N/A	Indonesia, Malaysia, Myanmar, Philippine, Thailand, and Vietnam	School	28 419 school children aged 13 to 15 years from six ASEAN member states. The sample size in individual countries ranged from 1741 in Vietnam to 160 66 in Malaysia, 51.6% were girls with mean age 14 years (SD = 0.8 years)		X	The number of days a student missed classes or school without permission in the past 30 days	School truancy Centers for Disease Control (CDC) Global School Student Health Brunei Darussalam 2014 Fact Retrieved <a href="http://www.p/gshs/BruneiDarussalam_2014-fact-sheet.pdf">http://www.p/gshs/BruneiDarussalam_2014-fact-sheet.pdf</a>
(Seelman & Walker, 2018)	Quant cross-sectional	N/A	United States	School	This study involves secondary data analysis of de-identified data from the biennial State Youth Risk Behavior Survey, a repeated cross		X	The number of days a student did not go to school because they felt unsafe at school or on their way to or from school in	Youth Risk Behavior Survey (YRBS) Centers for Disease Control and Prevention Youth Risk Behavior Surveillance

CDC and carried out by state health or education departments. The survey design uses complex sampling (clustered and stratified with unequal selection probabilities) that can, when weighted, represent the population of U.S. public high school students (CDC 2017).

(Stein & Grigg, 2019)	Quant longitudinal 1	N/A	Baltimore, United States	School	The final analytic sample consists of 2,801 unique students in the eighth grade in the 2013-2014 school year. The sample is predominately African American (87.5%) followed by White students (10.7%); the remaining 2.2% of students identify as Asian or other race-ethnicity. A total of 3.8% of the sample is Latino/a.	X	X		A student is considered chronically absent when they missed 10 or more days during school year	Information school re
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(Maeda & Hatada, 2019)	Quant longitudinal	N/A	Japan	School	35 students enrolled in grades 7 to 9 (23 males and 12 females; M=13.9 years) enrolled at a public junior high school in Japan	X	X	X	X	1. Failing to attend school without a legitimate excuse for more than 10 full days during a particular 209-day school year <sup>2</sup> . The number of whole days and half days of school a child missed during the past 4 weeks (+ reasons for absence)	1. Number in current 209-day year 2. Type of attendance measured School N Checklist Heyne et al.
Ackah et al. (2021)	Quant cross-sectional	N/A	Ghana	School	Participants: 3592 students in junior and senior high schools over the age of 12 (43.1% between 15 and 17 years)		X			# of full days of missed classes in past 30 days (without permission)	Established scale/questionnaire  2012 Global School-Based Student Health Survey (GSHS) version Citation: School-Based Health Surveys WHO, Geneva, Switzerland <a href="http://www.who.int/gshs/en/">http://www.who.int/gshs/en/</a>
(Ahslund, 2021)	Qualitative	Interpretive Phenomenological Analysis (IPA)	Sweden	School	9 students in 9th grade (50% male, aged 15-16 years) with neuropsychiatric disorders (including social phobias, ADHD, and autism spectrum disorder)				X	Not available (qualitative study) but sample was selected due to both presence of neuropsychiatric disorder and long history of school absences	Interview

Ang et al., 2014	Quant longitudinal 1	N/A	Singapore	School	136 adolescents aged 13-18 years (M = 15.21 years, SD = 0.89) were recruited from 6 schools in Singapore. Participants were 80.1% male and the ethnic composition of the sample was as follows: 44.9% Chinese, 33.8% Malay, 12.5% Indian, and 8.8% Other.	X	X	Have missed at least three days of school over three months without a valid reason (medical reasons, death of a family member, or other extenuating life circumstances)	Unique it
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Ansong et al. (2019)	Quant longitudinal	1. Asset Theory (Sherraden, 1991; Johnson and Sherraden, 2007; Sheraden et al., 2004) 2. The Asset-Experience Framework (Byner & Paxton, 2001)	Ghana	School	2000 youth in junior high school between 12-18 years				X	The number of days students attended school in the last academic term	Information on school re
Askeland et al. (2015)	Quant cross-sectional	Kearney (2008)'s Definition of School Absenteeism in Youth	Hordaland County, Norway	School	8988 adolescents (51.5 % girls) between 16 and 18 years old in upper secondary education. The majority of the participants were high school students in general studies (53.2%) or vocational training at school (32.4%)	X	X	X		The number of days and school-hours each participant had been absent during the last semester (6 months)	1. Information on school re 2. Unique item/mean

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Assa et al. (2015)	Quant cross-sectional	N/A	Petah Tikva, Israel	Children's Hospital	142 adolescents aged 10-17 years and their parents participated in the study. 43 of these adolescents have Crohn Disease, 31 have ulcerative colitis, 42 have functional abdominal pain, and 30 are age-matched healthy controls.	X	The number of school days missed during the last year due to gastrointestinal symptoms	1. Unique item/measure 2. Informative school record
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Baams et al. (2017)	Quant cross-sectional	N/A	California, USA	School	Participants in this study came from the cross-sectional 2011–2013 California Healthy Kids Survey (N = 800,740). The analytic sample WAS composed of 784,280 students aged 10-18 years (50.8% female)	X	At least one missed school day due to feeling unsafe in past 30 days	1. Inform school re 2. Establi scale/que (2011-20 Healthy I Austin, C Skager, F Clingman and Other Among C Students, Results o Biennial Healthy I Grades. V San Fran WestEd; Retrieved <a href="http://chk">http://chk</a> wp- content/u ennialRe
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Baker-Smith & Lipschultz, 2016	Quant cross-sectional	N/A	United States	School	<p>We analyze the SSOCS collected by the National Center for Education Statistics (NCES). A panel survey conducted every other year since 2000, SSOCS contains information on school-level characteristics, school-level reports of delinquency and school-level responses to delinquent behavior for approximately 3,500 elementary, middle and high schools. It is based on a stratified random sample of schools with traditional grading systems following the (NCES) sampling frame but with a focus on middle and high schools for this particular survey and contains approximately 2,500 schools in the 2008 panel (Ruddy, Neiman, Hrczaniuk, Thomas, &amp; Parmer, 2010). From this sample we remove approximately 100 schools with combined grading schemes and limit the sample to high schools in this sample year reducing the sample to 2,400</p>	X	<p>The number of disciplinary actions for “insubordination” that received out-of-school suspension as their disciplinary response</p>	Absenteeism/mean
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Balfanz et al. (2014)	Quant longitudinal 1	N/A	Florida	School	181897 students in 9th grade (54% White, 24% Black, 19% Hispanic, 2% Asian, <1% Native)	X		At least one out-of-school suspension in 9th grade	Informational school re
Bannink et al., 2014	Quant longitudinal 1	N/A	Netherlands	School	418 adolescents with an average age of 18.0 years participated in the study. 36.9% of the sample consisted of boys, 31.3% was of Dutch ethnicity and 8.6% was a parent.		X	The number of hours an adolescent was absent from school, regardless of the reason	Informational school re

Barn & Tan, 2012	Mixed methods	<p>General strain theory</p> <p>Agnew, R. (1985). A revised strain theory of delinquency. <i>Social Forces</i>, 64, 151–167.</p> <p>Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. <i>Criminology</i>, 30, 47–87.</p> <p>Agnew, R. (2001). Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. <i>Journal of Research in Crime and Delinquency</i>, 38, 153–184.</p>	England	Social service agencies	<p>A survey of 261 young people was completed. The sample was 43.3% male and 56.7% female; and aged 16–23 years old (M= 18.87, SD= 1.32). Slightly more than half (55.6%) were White; while the rest were of minority ethnic background (44.4%). This includes those of mixed-parentage (15.3%), Black-Caribbean (13.4%) and African/Asian/Chinese/other ethnic groups (15.7%).</p> <p>A total of 16 males and 22 females were interviewed via a purposive sample of volunteers.</p>	X	Having ever been suspended from school in the past	<p>1. Absent item/mean</p> <p>2. Interview</p>
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Baskerville, 2020	Qualitative	Process theory of wagging  (Baskerville, 2019)	New Zealand	School	The sample included thirteen adolescents (seven girls and six boys) between 13-18 years of age and who truanted school	X		Not specified - interview about truancy	Qualitative
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Beales et al. (2020)	Quant longitudinal 1	N/A	Australia	Medical clinic	1146 participants (54% female) who reported the presence of spinal pain at age 17, were working at 22 years of age, and provided work presenteeism information at least 3 times age 23.	X	Having missed any work or study due to low-back pain or neck pain in the last month	Nordic Musculoskeletal Questionnaire  Kuorinka & Kilbom's A Standardized questionnaire analysis of musculoskeletal symptoms Ergon.19
Belay et al. (2020)	Quant longitudinal 1	N/A	Ethiopia, Africa	School	8839 students in grades 7-12 during the 2015-2016 academic year (Mage: 13.34 years) from 15 different schools.	X	# school days attended per week	1. Research on absenteeism: Information on school re

Bennett et al. (2018)	Quant longitudinal 1	N/A	Australia	School	102 students (52.9% male) aged 10-16 years (Mage: 12.99 years) across 11 schools	X	85% or less attendance in the three previous school terms (about 30 weeks) and have no legitimate explanation for their absences from school (e.g. legitimate medical illness). This criteria is in accordance with the "Becca Bill" (SB 5439) in Washington State truancy law and dictates that students meeting this criteria undergo the ASEP intervention.	Informational school re
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Benore et al. (2018)	Quant longitudinal 1	N/A	Ohio	Medical clinic	135 children (Mage: 15.2, 74% female, 96.3% Caucasian, 2.2% African American) diagnosed with a chronic headache condition and admitted to a 3-week combined inpatient/day hospital intensive interdisciplinary pain rehabilitation treatment (IIPT) program between 2008 and 2014.			X		Number of school days missed over the past month	Absenteeism item/measure
Bianchi et al. (2022)	Quant longitudinal 1	Kearney's (2008a, 2008b) definition of	Italy	School	242 low income adolescents in grades 6-13 (Mage: 12.75, 42.6% female)	X	X	X		The number of days in which they skipped school over the	Absenteeism item/measure

Blomberg et al., 2012	Quant longitudinal 1	-Cumulative Disadvantage Theory (Sampson & Laub, 1997)  -Critical Race Theory (Ladson-Billings & Tate, 1995; Tate, 1997)	Florida	School	4,147 youths released from 115 juvenile justice institutions throughout Florida during fiscal year 2000–2001	X			The number of days youth were in attendance in public school after release from incarceration	Informational school re
Bradshaw et al. (2021)	Quant longitudinal 1	Theory of Change Process (e.g., Bradshaw et al., 2008; Bradshaw, 2009)	Maryland	School	Students in grades 6-12 across all 410 secondary schools in the state	X		X	Schools meeting or exceeding truancy rates of 8% per quarter were eligible for inclusion. This translates to students who miss 15 days in any semester or 20 or more days of school across a given school year "unlawfully".	Informational school re
Brady et al. (2020)	Quant longitudinal 1	N/A	England	Hospital	Data from this study was taken from the Avon Longitudinal Study of Parents and Children (ALSPAC), a longitudinal birth cohort study of children born in Avon county from April 1, 1991 to December 31, 1992. From birth to			X	The specific number of days missed from school over the past 12 months due to infections, hospital investigations, other investigations, asthma, eczema/itchy rash, hay	Absentee item/mea



					completed by multiple informants, and extensive clinical assessments. A full description of the study recruitment and sample characteristics can be found in official study reports (Boyd et al., 2012; Fraser et al., 2013). In brief, the ALSPAC enrolled sample (aged from birth to 18 years) had an overall total of 15,247 pregnancies, 75.3% of the determined eligible sample. Mothers reported on their children's absenteeism at 13 years of age.				distributions of scores when days of absence were totaled, there was a strong rationale for creating a binary categorization in which a score of 6 days of more indicated a high degree of health-related school absenteeism.	
Brolin-Laftman et al. (2020)	Quant cross-sectional	N/A	Sweden	School	9482 ninth-grade students (ages 15–16 years) and 2090 teachers in 150 school units.			X	Student absence on >10 occasions during the current school year (from self-report) was considered to be sickness absence	Establish scale/questionnaire (SSS)Kjellberg, Holmin v I.; Löfgren Modin, E Report for Survey w the Stock Survey; I 2018:2; I Public H Stockholm Stockholm 2018; Av https://w chealth/p research-public-he (accessed November
Burdick-	Quant	N/A	Maryland	School	4200 first-time	X	X		# of days absent	Informati

Burton et al., 2014	Quant longitudinal 1	N/A	Pennsylvania Ohio	Medical clinic	Black, 4% Hispanic)  Data comes from participants recruited in the first two years of a National Institutes of Health (NIH) funded longitudinal study. 108 adolescents (29% males and 71% females) ranging in age from 14 to 19 (M = 16.26 years, SD = 0.92 years). Represented racial groups included 38% White, 59% African American, and 2% other. The ethnicity of the sample was predominately non-Hispanic (90%). A total of about 26% percent of the sample (n = 28) was classified as sexual minority.	X	X	X	X	The number of times in the past month a student had been absent with or without an excuse	Absentee item/mean
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Carreon et al., 2018	Quant longitudinal 1	N/A	United States	Hospital	161 adolescent-parent dyads participated. Adolescents diagnosed with IBD between 11-18 years of age (Mage: 14.5 years, 56.5% male, 90.1% Caucasian, 5% African American, 0.6% Hispanic, 0.6% Asian, 2.5% Other).	X	Type of absenteeism	1. Functioning Inventory Pediatric Checklist Pediatric Life Inventory (PedsQL) Greene J functional inventory neglected child health Pediatr P 1991;16: MS, Mur Burns BJ psychoso in outpat practice. 1986;109 78.Varni Kurtin PS reliability of the Pediatric Life Inventory Version 4 Core Scale and patient population 2001;39:
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Cho & Lee, 2021	Quant longitudinal 1	N/A	Minnesota, United States	School	3977 first-time offenders who were enrolled in Minnesota public schools between ages 10 and 15 in the academic years of 2021 and 2011 (approximately 62% male, 39% White, 40% African American, 14% Native American, and 7% Hispanic youth). This allowed us to follow each youth for at least 3 years based on their first adjudicated offense record. We identified 698 first-time juvenile offenders (17.5%) as having at least one official record for substantiated maltreatment incidents before their initial involvement in the juvenile justice system.					X		Having had at least one out of school suspension before first adjudicated offense	Informational school re
Christani et al., 2015	Quant cross-sectional	N/A	United States	School	The study's population consisted of all individuals from the National Adolescent Health public data set. The National Longitudinal Study of Adolescent to Adult Health (Add Health) is a longitudinal study of a nationally representative sample of over 20,000 adolescents	X	X	X		X		The number of days a student was absent from school for reasons detailed in measurement section	National Adolescence (ADHeal

Author	Study Design	Country	Setting	Population	Intervention	Outcome	Measurement	
Clementi et al., 2017	Quant cross-sectional	N/A	Texas	Medical clinic	122 adolescents aged 12-21 years (Mage: 15.58 years; 73% female, 66% White, 19% Hispanic, 12% African American, 3% Other)	X	Number of school absences in the past month	Absenteeism/meal
Collin et al., 2016	Quant cross-sectional	Not specified	England	School	ALSPAC is a population-based study which aims to investigate a wide range of influences on the health and development of	X	The total number of authorized and unauthorized school absences during one school year	Information school re

					questionnaires administered at four time-points during the antenatal period then at regular intervals following birth. Parent- and child-reported fatigue data were available for 4962 and 4847 children, respectively. These data allowed us to classify presence/absence of CFS in 5756 children at age 16 years (included in the sample). 52.4% of these children were female.					
Collins et al., 2016	Quant longitudinal 1	N/A	England	Medical clinic	Adolescents aged 16 years		X		The number of days (in the past year) a child missed school/college because of tiredness/lack of energy (chronic fatigue syndrome)	1. Absent item/mean 2. Inform school re
Costello & Smyth, 2017	Quant longitudinal 1	Group contingency model (e.g., Skinner et al., 2000)Skinner, C., Cashwell, T., & Skinner, A. (2000). Increasing tootling: The effects of a peer-monitored group contingency program on students'	Ireland, Europe	Community agency	10 participants took part in the current intervention, all were male and their ages ranged from 13 to 17 years. The participants were recruited through a project in a community-based organization in Ireland.			X	School attendance was defined as the number of days a student attended school during an eleven-week intervention period	Information school re Baseline attendanc the previous weeks2. I attendance during th (over ele

Crankshaw et al., 2020	Mixed methods	N/A	Africa	School	All learners who participated in the survey were female (N = 472) and were between the ages of 16–22 years, with an average age of 17.5 years. Ninety-five percent (n = 444) of the survey participants were black female learners. Sixty-one percent (n = 285) of all the learners had ever repeated a grade	X	Having ever missed school due to period	Absentee item/mean
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Daily et al., 2020	Quant cross-sectional	Social Ecological Perspective (Cohen et al., 2009)Cohen J, McCabe L, Michelli NM, Pickeral T. School climate: research, policy, practice, and teacher education. Teach Coll Rec. 2009;111(1):180–213.	Virgina, United States	School	6839 middle school (49% female, 82% white) and 7470 high school (51% female, 85.0% white) students from 26 West Virginia schools.	X	X			The number of days a student was absent from school during the last 30 days due to skipping class or illness	Absentee item/mean
Dannow et al., 2020	Qualitative	N/A	Denmark, Europe	1. University clinic 2. Family home	The sample included three families with three boys aged 13–15 years	X	X	X		Being absent from school more than 15% of the time within a three-month period	Interview
Davis et al., 2018	Quant cross-sectional	N/A	Indonesia	School	1159 adolescent girls across 16 schools in grades 7-12 (Mage: 15 years)		X			Having missed one or more days of school as a result of menstruation during a girl's most recent	Absentee item/mean



Day et al., 2018	Quant cross-sectional	N/A	California	School	-31896 youth in middle and high schools aged 10-18 years (Mage: 14.47 years).-Sample was 51.3% female and 1.0% transgender-Sample was racially and ethnically diverse (52.9% Hispanic, 33% White, 30.7% Multiracial, 11.1% Asian, 7.4% Black)	X	X	X	Having skipped school or cut classes at least once in the past 12 months	Absentee item/measure
de Groot et al., 2017	Quant cross-sectional	Not specified	Denmark, Europe	School	328 Dutch adolescents in grades 7 and 9 of senior general secondary education or university preparatory education was willing to participate.			X	The total number of school days that the participants were absent from school due to illness throughout the entire academic year	Information school re

Del Toro & Wang, 2022	Quant cross-sectional	N/A	United States	School	818 African American adolescents aged 11-17 years (Mage: 13.56 years, 48.7% male) enrolled in 12 public middle and high schools		X		Having ever been suspended for a minor infraction during one school year	Informational school re
Devenney & O'Toole, 2021	Qualitative	Not specified	Ireland, Europe	School	Participants were 17 professionals (8 male and 9 female) working in or supporting second-level schools in Ireland. These included principals, teachers, other school based staff and professionals from outside agencies (e.g. school completion officer).	X			Topic of interview was school refusal	Qualitative

Diaz-Herrero et al., 2018	Quant cross-sectional	<p>1. Bar-On Model of Emotional-Social Intelligence (Bar-On 2004, 2006)</p> <p>2. Emotional Intelligence Ability Model (Mayer &amp; Salovey, 1997)</p> <p>Bar-On, R. (2004). The bar-on emotional quotient inventory (EQ-i): Rationale, description and summary of psychometric properties. In G. Geher (Ed.), <i>Measuring emotional intelligence: Common ground and controversy</i> (pp. 111–142). Hauppauge: Nova Science Publishers.</p> <p>Bar-On, R. (2006). The Bar-On model of emotional-social intelligence. <i>Psicothema</i>, 18, supl., 13–25.</p> <p>Mayer, J. D., &amp; Salovey, P. (1997). What is emotional</p>	Chile	School	2362 Chilean adolescents (56.8% female) aged 13-17 years (Mage: 15.25 years) across 15 different high schools	X	Instrument measures school refusal	<p>School Refusal Assessment Revised (Chilean A)</p> <p>Kearney, Identifying of school behavior: the School Assessment Journal of Psychopa Behavior Assessment 235–245. <a href="https://doi.org/10.1027/A:10207">https://doi.org/10.1027/A:10207</a></p> <p>Gonzálve Kearney, San Martí Sanmartí M., Inglés García-F M. (2017) Refusal A Scale-Re version: Invariance means di across ge Journal of Psychoed Assessment <a href="https://doi.org/10.10734282">https://doi.org/10.10734282</a></p>
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Emotional development and emotional intelligence: Educational implications (pp. 4–30). Nueva York: Basic Books.

Dong & Krohn, 2019	Quant longitudinal 1	Labeling theory (Bernburg, 2009; Krohn & Lopes, 2015; Lemert, 1951; Paternoster & Iovanni, 1989; Schur, 1971)	New York, United States	School	The data for the current study come from the Rochester Youth Development Study (RYDS). The RYDS has collected 14 waves of data across three study phases, covering the subjects from their early teenage years (about age 14) to young established adulthood (age 31). Phase 1 covered the adolescent years of the subjects from about 14 to 18 years of age. In Phase 1, 960 respondents and their primary caretakers (most often biological mothers) were interviewed nine and eight times respectively at 6-	X	Having ever been suspended or expelled during the course of the longitudinal study	Absentee item/mean
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Duncan et al., 2016	Quant longitudinal	N/A	United States	School	We analysed the data obtained from three cycles of the National Health and Nutrition Examination Surveys (NHANES), 2003—2004, 2005—2006, and 2007—2008. The final analytic sample consisted of 3119 children (50% male) aged 12-19 years (68.04% White, 15.79% Black, 16.17% Mexican/Hispanic).		X		Adolescents who missed nine days of school or more were considered as ‘having excessive school absenteeism (ESA)’	National Nutrition Examination (NHANES) Survey National Center for Health Statistics CfDCaP. Health and Examination – about the Health and Examination 2009
Dunne et al., 2013	Quant cross-sectional	N/A	Ghana	School	Total sample size for the survey was 7137 adolescents aged 15-20 years comprising 4018 boys with a weighted percentage of 56.3 and 3119 girls with a weighted percentage of 43.7.	X			The number of days students missed classes or school without permission over the past 30 days	Tuancy 2008 Ghana School-based Health Survey Ghana G-based Student Survey (2008) Questionnaire Ghana Education Service.
Dymnicki et al., 2021	Quant longitudinal	Multitiered System of Support (MTSS) framework	Colorado, United States	School	The study included two cohorts (46 schools in total) in Colorado that met implementation readiness criteria (based on feasibility visits) and agreed to participate in the		X	X	Having ever missed a school day (unexcused) or having ever received an in-school or out-of-school suspension	Informational school re

					36 schools. Staff and 62,590 students in these 46 schools (21,109 sixth-grade students, 20,891 seventh-grade students, and 20,590 eighth-grade students), located within nine districts on Colorado's Front Range, participated in this study. Forty-four percent of students were classified as White, 41.7% as Latino/Hispanic, 6.9% as Black, 3.7% as mixed, and 2.8% as Asian, with the remainder in other categories (including Pacific Islander and Native American).				
Echeverria et al., 2014	Quant cross-sectional	Not specified	United States	Household	The mean age of participating youth was 13.5 years, which was similar across all categories of poverty. Slightly more than half of study participants were male and 60.5% of youth were non-Hispanic white, 17.1% were Hispanic, 15.2% were non-Hispanic black, and 7.2% were other, non-Hispanic.	X		The number of school days missed in one academic year. 11 or more school days missed per year represented a "high" number of school absences according to the National Center for Health Statistics National Center for Health Statistics. 2003 & 2007 National Surveys of Children's Health. Merged	School attendance variable

and Adolescent Health, Child and Adolescent Health Measurement Initiative. Hyattsville, MD: U.S. Department of Health and Human Services. Available at: [www.childhealthdata.org](http://www.childhealthdata.org). Data received July 2012.

Edmunds et al., 2013	Quant longitudinal 1	Early College High School Model (American Institutes of Research & SRI International, 2009)	North Carolina, United States	School	For engagement-related outcomes available through administrative data collected by NCDPI, the sample included a total of 1,607 Grade 9 students in 18 cohorts in 12 schools. The outcomes included in this sample come from students who were ninth-graders in 2005-2006, 2006-2007, 2007-2008, and 2008-2009. The sample for the survey analysis includes 575 ninth-graders associated with 10 early colleges. There were a total of 349 students in the treatment group (assigned to an early college) and 195 control group students who were	X	Having been suspended out-of-school at least once in a given year.	Informational school re  1. School measure 2. Suspended
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the comprehensive high schools in the district.

Erdmans, 2012	Qualitative	Not specified	Connecticut, United States	Family home	62 Black, White, and Latina pregnant and mothering students who were attending public high schools in Connecticut when they became pregnant.	X	X	X	X	Mothers who were enrolled in high school when they were first pregnant and subsequently dropped out were included in the study	Qualitative
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Eyllon et al., 2022	Quant longitudinal 1	1. Theory of Collateral Consequences 2. Social Stress Process Framework (Brown et al., 2007; Thoits, 2010; Turner & Avison, 2003)	United States	School	The Add Health study is a complex stratified cluster design-based survey that represents 132 schools located in 80 distinct U.S. communities. The first Wave includes 17,670 students in grades seven through twelve who had valid parent surveys. Wave II was collected in 1996 from 14,738 students who were in grades seven through eleven in Wave I. Data for this study come from Waves I and II in-home surveys, the Wave I parent survey, and the school administrator survey. Our analytic sample is based on 13,568 Wave I respondents who were successfully re-interviewed at Wave II and had valid survey weights. We restricted our sample to respondents with no history of suspension or expulsion who had valid data for both of our outcomes yielding a sample of 8,878. The sample is 46% male and the mean age is 15.67 years.	X	Whether a school administers in-school or out-of-school suspensions in response to student infractions	School data from Add Health Harris, K. J. R. (2010). Longitudinal study of adolescent health (add health) (1994-2002) [dataset]. Ann Arbor, MI: Carolina Center, University of North Carolina at Chapel Hill [distributed by the University of North Carolina at Chapel Hill]. Harris, K. J. R. (2010). Longitudinal study of adolescent health (add health) (1994-2002) [dataset]. Ann Arbor, MI: Carolina Center, University of North Carolina at Chapel Hill [distributed by the University of North Carolina at Chapel Hill]. Research Report 08-06.
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Black, 6% Asian,  
and 3% Other.

Felver et al., 2019	Quant longitudina l	N/A	New York, United States	School	27 students in grades 9-12 participated in this study (67% female, Mage: 16.39 years). The ethnic composition of the sample was 48% Black, 30% White, 15% Asian/Pacific Islander, 4% Hispanic/Latino, 4% American Indian.		X	The number of unexcused student absences in one quarterly marking period	Informati school re
Fields & Wotipka, 2020	Quant cross- sectional	Public Opinion and Isomorphism Perspectives (Everly & Schwarz, 2014)	United Stat es	School	957,244 survey respondents in grades 9-12 (51% female). Racial/ethnic composition information is available for 938,981	X		Whether or not the student has been absent due to feeling unsafe in the past 30 days	Absentee from The Disease C Youth Ri Surveilla (YRBSS)  Centers f Control s

Author(s)	Study Design	Setting	Country	Location	Population	Age	Gender	Race/Ethnicity	Sample Size	Outcome	Measurement	
Finch et al., 2018	Quant longitudinal	Recovery High Schools (Moberg & Finch, 2007)	United States	Treatment facility	194 adolescents enrolled in Minnesota, Wisconsin, or Texas schools (Age: 16 years, 86% White, 49% female) after receipt of formal inpatient or outpatient substance use disorder (SUD) treatment. Adolescents were recruited from 10 SUD treatment facilities.			American Indian, 1.4% Pacific Islander, 3.8% Multiracial)	X	X	Number of full days skipped school in past 3 months	Absenteeism item/measure from www.cdc.gov
Finning et al., 2017	Qualitative	N/A	England	School	16 educational practitioners across				X	X	Type of absenteeism	Focus group

worked with students aged 11-18 in secondary schools.

Finning et al., 2020	Qualitative	Bronfenbrenner's Ecological TheoryBronfenbrenner, U., and P. A. Morris. 2006. "The Bioecological Model of Human Development." In Handbook of Child Psychology: Theoretical Models of Human Development, 6thed. Vol. 1. 793-828. Hoboken, NJ, US: John Wiley & Sons.	United Kingdom	School	16 secondary school educational practitioners from three schools in the South West of the UK. Practitioners could be working in any teaching or non-teaching role, but were required to have experience of working with pupils with attendance problems.	X	X	X	Not specified	Focus gr
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Flannery et al., 2012	Quant cross-sectional	An interdisciplinary model of school absenteeism  Kearney, C. A. (2008). An interdisciplinary model of school absenteeism in youth to inform professional practice and public policy. <i>Educational Psychology Review</i> , 20, 257–282. doi:10.1007/s10648-008-9078-3	United States	School	Participants in this study were 8,457 ninth-grade students who had at least one or more office disciplinary referrals (ODRs) for missing one or more classes without permission during the first semester of their freshman year. Students were nested within 193 public high schools in the United States. 56.3% were male. 1.1% were Native American, <1.0% were Asian, 8.8% were Latino, 21.5% were African American, 26.4% were Caucasian, and 39.5% identified as an “other” racial category.	X	X	Truancy: Two office discipline referral codes were combined: a) skip (miss class without permission) and b) truant (unexcused absence for half day or more)  In-school-suspension: Consequence for referral results in a period of time spent away from scheduled activities/classes during the school day  Out-of-school suspension: Consequence for referral results in a 1 to 3-day-period when student is not allowed on campus  Expulsion: Consequence for referral results in student being dismissed from school for one or more days	Informational school re 1. Truan 2. In-scho 3. Out-of suspensio 4. Expuls
Furrer et al., 2012	Quant longitudinal 1	N/A	United States	School	Selection criteria for SUN students included (a) enrollment in 9th to 12th grade as of October 1, 2008, (b) attending one of 12 high schools or		X	The total number of days absent in one academic year	Informational school re

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services on at least  
30 days during the  
school year1 (M  $\frac{1}{4}$   
48 days, SD  $\frac{1}{4}$   
20.3, ranged from  
30 to 139 days).  
The final sample  
included 441 SUN  
participants across  
four SUN sites

Gallé-Tessonneau & Gana, 2018	Quant longitudinal (scale development)	Berg's definition of school refusalBerg, I. 1992. "Absence from School and Mental Health." The British Journal of Psychiatry: the Journal of Mental Science 161: 154–166. doi:10.1192/bjp.161.2.154. Berg, I. 1997. "School Refusal and Truancy." Archives of Disease in Childhood 76 (2): 90–91. doi:10.1136/a dc.76.2.90.	France, Europe	1. School2. Mental health centers	Study 2 (scale validation): A community sample of 624 adolescents (58% girls) aged 10–16 years old (Mage = 12.4 years) were recruited from six French public middle schools for this study. Another 31 adolescents (15 boys and 16 girls) aged 10–16 years old (Mage = 13.3 years) displaying school refusal were recruited from five mental health centers according to Berg's criteria of school refusal.	X	X	School refusal Berg, (1992, 1997) has five clinical criteria:(1) Reluctance, severe difficulty in attending school, or frequent refusal to go to school(2) Seeking the comfort and security of home, preferring to remain close to parental figures, especially during school hours; (3) Displaying evidence of emotional upset and distress when the adolescent is faced with the prospect of having to go to school, although this may take the form of unexplained physical symptom (including dizziness, headaches, nausea, back pain);(4) Absence of serious antisocial tendencies, apart from possible aggressiveness when attempts are made to force school attendance;(5)	1. The SC Evaluation (SCREE) Information school re Tessonne Gana, Ka Developr Validation School R Evaluatio Adolesce Pediatric 44(2), 15
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reasonable efforts to ensure the presence of the child in school since the problem began. Absenteeism 1.

Absenteeism at school was defined as the number of times in the past 3 weeks a student (1) went to the school infirmary, (2) went to the school office, (3) called parents to leave school and return home, and (4) delay. 2.

Absenteeism from school was defined as the total number of half-days a student was absent within the past 3 weeks.



Gallé-Tessonneau & Heyne, 2020	Qualitative	Berg's definition of school refusalBerg, I. 1992. "Absence from School and Mental Health." The British Journal of Psychiatry: the Journal of Mental Science 161: 154–166. doi:10.1192/bjp.161.2.154. Berg, I. 1997. "School Refusal and Truancy." Archives of Disease in Childhood 76 (2): 90–91. doi:10.1136/a dc.76.2.90.	France, Europe	1. Schools2. Mental health centers	There were 42 participants divided across four groups: (a) 15 middle school students not displaying SR (8 girls and 7 boys) aged 11–16 years (M = 13.7, SD = 1.3); (b) 6 adolescents displaying SR (2 girls and 4 boys) aged 11–15 years (M = 13.6, SD = 1.7); (c) 17 middle school professionals (e.g., teacher, school director, school nurse; 12 women and 5 men) aged 32–60 years (M = 45.4, SD = 7.8); and (d) 4 care professionals working with adolescents displaying SR (i.e., psychiatrists and psychologists, all women) aged 29–42 years (M = 34.5, SD = 5.6).	X		Berg, (1992, 1997) presented five clinical criteria of school refusal:(1) Reluctance, severe difficulty in attending school, or frequent refusal to go to school(2) Seeking the comfort and security of home, preferring to remain close to parental figures, especially during school hours; (3) Displaying evidence of emotional upset and distress when the adolescent is faced with the prospect of having to go to school, although this may take the form of unexplained physical symptom (including dizziness, headaches, nausea, back pain);(4) Absence of serious antisocial tendencies, apart from possible aggressiveness when attempts are made to	Qualitative
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have made reasonable efforts to ensure the presence of the child in school since the problem began.

Gase et al., 2014	Quant cross-sectional	N/A	California, United States	School	We analyzed data from the Reducing health Inequities through Social and Educational change (RISE) study to examine key correlates of chronic truancy in a targeted student population. The sample consisted of 909 students in grades 9-12 (44% male, Mage: 16.4 years, 84.3% Hispanic, 12.3% Black, 3.4% Other)	X	The number of times a student cut or skipped class in a typical month	Absentee item/mean
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Gase et al., 2016	Qualitative	N/A	Los Angeles, United States	School	39 youth aged 13-19 years (51% female) with a history of truancy in middle or high schools. Participants were 79% Hispanic/Latino and 29% African American/Black.	X	Having reported skipping class or ditching school at least once per month currently or in the past year	Qualitati
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Geller & Mark, 2022	Quant cross-sectional	N/A	United States	Hospital	Data were drawn from the Fragile Families and Child Wellbeing Study (FFCWS), a population-based survey of urban families, which has followed a cohort of nearly 5000 children born in 20 large cities, along with their families, over the first 15 years of the “focal children’s” lives. Mothers were recruited into the study between 1998 and 2000, at the hospital following the	X	X	The number of days a student missed school either due to illness or as a result of skipping school	1. Number of days missed due to illness (total)2. Number of days missed due to chronic absence (binary variable)
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as possible after the birth. The FFCWS parents were contacted for follow-up interviews five additional times: both parents were contacted around the focal children's first, third, fifth, and ninth birthdays (hereafter the Y1, Y3, Y5, and Y9 surveys), and a single primary caregiver, most often the child's mother, was contacted around the focal children's (now "focal youths") fifteenth birthdays (the Y15 survey). In both the Y9 and Y15 waves, the youths were also interviewed, providing their perceptions of experiences within their families, schools, and neighborhood. The current analytic sample consisted of 2614 participants and the sample was 50% Black, 25% Hispanic, 17% White, 6% Multi-racial, 2% Other race.

Geven et al., 2017	Quant longitudinal	Normative Social Influence Theory (Deutsch & Gerard, 1955)	Sweden	School	Data on Swedish adolescents are drawn from the CILS4EU data (Kalter et al. 2013). All participants attended 8th and 9th grade (wave 2)	X		Skipping school one at least one occasion	Absentee item/measure  Kalter, F Hewston Jonsson, Kalmijn, & van T
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school. In Sweden, 5025 students in 251 classes in 129 schools participated in the first wave in the school year of 2010–2011. 4110 students participated in both waves, and 5448 in one of the waves. We estimate hybrid models on 5448 students (14–15 years, 49% boys), and stochastic actor-based models (SIENA) on a subsample of these data (2480 students in 98 classes; 49% boys)

Goddard et al., 2021	Quant longitudinal	Not specified	Connecticut, United States	School	Three schools with school-based health center programs (N = 1566 students) were chosen to participate in this study. 221 (27.0%) of the registered users had an asthma diagnosis at the high-school, 133 (23.0%) of the registered users (n = 561) had an asthma diagnosis at one of the middle-schools, and 26 (13.0%) of the registered users (n = 197) had an asthma diagnosis at the other middle school.	X	Missing class time due to a medical visit for asthma	Seat time
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Gonzalvez  
et al., 2018

Quant  
cross-  
sectional  
(factorial  
invariance)

N/A

Chile

School

The sample  
comprised 2,678  
Chilean students  
(43.7% boys) aged  
13 to 17 years  
recruited from  
seven different  
communes

X

School refusal  
was measured

School R  
Assessm  
Revised

Kearney,  
Identifyin  
of school  
behavior:  
the Schoo  
Assessme  
Journal

Goppalan et al., 2018	Quant cross-sectional	N/A	India	School	2014 children aged 12-15 years (55% male)		X	The percentage of school days missed in the last academic year	Information on school re
Gottfredson et al., 2020	Quantitative longitudinal	N/A	California, United States	School	33 treatment schools (those that increased resource officer staffing levels at the time of investigation) and 72 comparison schools were included in the sample		X	The incidence of an expulsion or out-of-school suspension in response to a student's disciplinary offense	1. Inform school re 2. Absen item/mea
Graham et al., 2014	Qualitative	N/A	California, United States	School	Participants were parents of students with a range of disabilities who had recently transitioned to their		X	Students with disabilities who generally have difficulty attending school	Qualitati



serving  
predominantly  
students with  
disabilities  
throughout the  
district.

Grant et al., 2013	Mixed methods	N/A	Malawi, Africa	School	835 female students	X	X	X		The number of days a female student missed school the last time they had their period	Absentee item/mean  Malawi S Adolesce (MSAS)  Malawi I Educatio Skills and Reproduc Education 2. Domas Institute Press.
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Green et al., 2012	Quant longitudinal 1	1. The self-system model of motivational development (Skinner et al., 2008, 2009)	Australia	School	The longitudinal sample comprises 1866 high school students from six Australian high schools completing the instrumentation at T1 (3rd term of the school year) and T2 (one-year later). Around 39% of the participants were female. The mean age of respondents was 13.86 years (SD ¼ 1.28) at T1 and 14.79 years (SD ¼ 1.28) at T2.	Number of full day absences in past term	Absentee item/mean
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Green et al., 2015	Quant cross-sectional	System of care approach (Stroul & Friedman, 1986)	United States	Community agency	We used data from the SAMHSA's Children's Mental Health Initiative Systems of Care (SOC). The final sample included 4365 adolescents and their parents. Adolescents were on average 14.4 years old (range: 12-18 years) and a majority were male (60.2%). Adolescents reported that they were non-Latino White (40.3%), non-Latino Black (30.7%), Latino (17.7%), or Other race/ethnicity (11.3%).	X	X	Having been absent from school 1 day or more per week	Absenteeism/meal
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Green, 2022	Quant cross-sectional	<p>1. Critical Race Theory</p> <p>2. Critical Race Feminism</p> <p>Delgado, R., &amp; Stefancic, J. (2001). Critical race theory: An introduction (1st ed.). New York University Press.</p> <p>Collins, PH. (2000). Black feminist thought: Knowledge, consciousness, and the politics of empowerment (2nd ed.). Routledge.</p>	United States	School	<p>This study relies on two waves of data collected from two national longitudinal program evaluations—Teens, Crime and the Community/Community Works (TCC/CW) and the second Gang Resistance Education and Training (G.R.E.A.T.) program. The final analytic sample consisted of 3,448 students from 45 schools (31 from G.R.E.A.T. and 14 from TCC/CW).</p>	X	Having received at least one in-school or out-of-school suspension in the past 6 months	Absentee item/measure
Grinshyteyn & Yang, 2017	Quant cross-sectional	N/A	United States	School	<p>This secondary data analysis was performed using the 2013 Youth Risk Behavior Survey (YRBS). The YRBS was started in 1990 as a survey to monitor health risk behaviors among youth in the United States. The analytic sample included 13,554 high school students in 9th to 12th grade</p>	X	The number of days a student missed school because they felt they'd be unsafe at school or on their commute to/from school in the past 30 days	<p><a href="#">Youth Risk Behavior Survey (Centers for Disease Control and Prevention Behavior System (YRBS Data Guide. 2014. at: <a href="http://healthycyber.org/yrbbs-2013-user-guide">http://healthycyber.org/yrbbs-2013-user-guide</a> Accessed 10, 2014.</a></p>

Grooms & Bohorquez, 2021	Qualitative	Critical sensemaking approach  Helms Mills, J., Thurlow, A., & Mills, A. J. (2010). Making sense of sensemaking: The critical sensemaking approach. <i>Qualitative Research in Organizations and Management</i> , 5(2), 182–195.	Iowa, United States	School	Two school leaders (Matt, the principal, and Eloise, the school counselor) and one district leader (Luke, the superintendent), who participated in semi-structured interviews	X	X	Not specified	Qualitative
Guadamuz et al., 2019	Quant cross-sectional	N/A	Thailand	School	2070 students grades 7–12 (aged 13–20 years) from 15 secondary schools (n = 2,070) around Thailand.	X		Having ever skipped school without any authorized reasons	Absentee item/measure

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Gyimah & Yelkperi, 2017	Mixed-methods	N/A	Ghana	School	135 participants were selected, including 20 teachers, 100 students, 10 parents and 5 opinion leaders	X	Truancy	1. Semi-structured
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Hagborg et al., 2018	Quant longitudinal 1	N/A	Sweden	School	Data from 667 high school girls and 649 boys aged 12-18 (52.1% female, mean age 14.3) was used from the longitudinal multidisciplinary research program LoRDIA (Longitudinal Research on Development In Adolescence).	X	Moderate absenteeism was defined as 5–15% of unexcused absence during one school semester and excessive absenteeism was defined as either 20–50% 50% or more unexcused absence during one school semester	Absenteeism item/mean
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Haight et al., 2016	Qualitative	Not specified	United States	1. School 2. Home	This article is part of a larger research program examining out-of-school suspensions of 31 black middle- and high-school-age students from the perspectives of the youths, 28 of their caregivers, and 19 educators involved in the disciplinary incident. For this study, participants were four black students, their caregivers (two mothers, one grandmother, and one father), and six educators involved	X	One incident of an out-of-school suspension	Qualitative
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Hamlin, 2020	Quant longitudinal 1	N/A	New York	School	61,684 students (50% male) in grades 6-12 (39% Hispanic, 30% Black, 17% Asian, 14% White)	X	Chronic absence was a dichotomous variable indicating whether a student had been absent 18 or more times during the school year. This threshold for chronic absenteeism coheres with the U.S. Department of Education's (2019) classification of chronic absence.	Informational school re...  1. Total a... (count va... 2. Chroni... (dichoto...
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Hancock et al., 2018	Quant longitudinal 1	School absenteeism and school refusal behavior in youth (Kearney, 2008)	Australia	School	The study commenced in 2004 with two cohorts of children and families who were followed up with every two years, with six waves of data now. We use data from the K-cohort at Wave 6, which includes 3537 children aged 14–15 years.	X	X	X			Number of times in the last six months that an adolescent was absent from school	Absenteeism item/mean
Haney-Caron et al., 2016	Quant longitudinal 1	N/A	United States	Juvenile Justice Facility	This study involved secondary analyses of data from a randomized control trial of the Juvenile Justice Anger Management				X		Number of days of school missed during the previous year	Absenteeism item/mean

					60 female youth who had been placed in one of three residential, juvenile justice facilities, two in New Jersey and one in Pennsylvania. Participants ranged in age from 14 to 19 years (Mage: 16.95 years) and self-identified as Black or African American (59.02%), bi- or multiracial (27.86%), White (9.84%), and Asian (3.33%); 31.15% identified as Hispanic and 68.85% identified as non-Hispanic.				
Havik et al., 2014c	Qualitative	N/A	Norway	<ol style="list-style-type: none"> <li>1. Counseling services</li> <li>2. Special schools</li> <li>3. Community organizations</li> </ol>	A convenience sample of 17 parents with children displaying or having displayed school refusal were invited to participate. Their children, eight girls and nine boys, were aged from 10 to 18 (mean age 14.7 years) at the time of the interview.	X		Interview about school refusal	Qualitative

Havik et al., 2015a	Quant cross-sectional	Conceptual framework for school non-attendance from Kearney (2008)Kearney, C.A. (2008a). Helping school refusing children and their parents: A guide for school-based professionals. New York: Oxford University Press	Norway	School	Students were recruited from 45 schools in seven municipalities in Norway, including a relatively large Norwegian city as well as several towns and rural districts. A total of 5,465 students from the 6th to 10th grades participated (ages 11–15; 51% male and 49% female).	X	X		The number of full days of school non-attendance in the last three months	School non-attendance questionnaire Bru, E., & K. (2015) reasons for attendance Scandinavian Journal of Educational Research 59(3), 31
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Havik et al., 2015b	Quant cross-sectional	Conceptual framework for school non-attendance from Kearney (2008)Kearney, C.A. (2008a). Helping school refusing children and their parents: A guide for school-based professionals. New York: Oxford University Press	Norway	School	A total of 5,465 students aged 11-15 years from the sixth to the tenth grades participated (51% males and 49% females). Students were from 45 different schools. The students who reported being absent for any full school days in the last three months were included in further analyses about the reasons for school non-attendance, resulting in a sub-sample of 3,629 students (49.6% males and 50.4% females).	X	X	X		The number of full days of school non-attendance in the last three months	School non-attendance questionnaire Bru, E., & K. (2015). Reasons for school non-attendance in Scandinavia. <i>Journal of Educational Research</i> , 118(3), 311-321.
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Hayes, 2012

Quant cross-sectional

1. Relations of parenting style and parenting involvement (Paulson, 1994)2. Parental involvement and adolescents' educational expectations (Trusty, 1999)

United States

School

145 parents/guardians of urban African American high school adolescents

X

X

1. Number of school days missed in one academic year2. Number of discipline referrals

Absenteeism/mean Missed2. Referrals

Heerde et al., 2020	Quant longitudinal	1. Life-course theory (Elder et al., 2003; Hser et al., 2007) 2. The social development model (SDM; Catalano & Hawkins, 1996).	1. Washington, USA 2. Victoria, Australia	School	1945 young adults (51% female; n = 984 in Victoria), ranging between 12 and 16 years of age (mean = 13.01 years). Participants were initially recruited as adolescents in state-representative secondary school samples at age 12 years and have been followed to age 25 years.	X	Number of times in past year that a participant was suspended from school	Absenteeism item/measure
Heerde et al., 2020	Quant cross-sectional	N/A	United States	School	The current study analyzes longitudinal data from the International Youth Development Study (IYDS). Data comes from the grade 7 cohort extracted from early-mid adolescence (grade 7 [2002], grade 8 [2003], and grade 9 [2004]) and young adulthood (2014), as this was the cohort chosen for long-term follow-up in the USA, and therefore has the most complete data in both states at these time points.	X	The number of times in the past year that a student was suspended from school	Suspension from the Youth Development Study (IYDS)  McMorris-Hemphill, Toumbourou, Catalano, Patton, G. Prevalence of substance delinquency in adolescence: Victoria, Washington, United States. <i>Journal of Educational Psychology</i> , 94, 634–644. <a href="https://doi.org/10.109019">https://doi.org/10.109019</a>



Victoria). In 2002, 989 (51%) participants identified as female. The sample age ranged between 12 and 16 years (mean (M) = 14.01 years). The majority of the Victorian sample identified as Australian (91%) and the Washington State sample had a majority identifying as white (65%). In 2014, the sample ranged in age between 23 and 27 years (M [SD] = 25.14[.84]) and female participants formed 53% (n = 966) of the sample.

Hemez et al., 2019	Quant longitudinal 1	Life-course perspective (Elder, 1985; Farrington, 2003; Laub & Sampson, 1993; Sampson & Laub, 2003)	United States	School	To explore the relationship between school suspension and incarceration, we use the first 15 rounds of the National Longitudinal Survey of Youth 1997 (NLSY97). Sponsored by the Bureau of Labor Statistics, the NLSY97 collects information on a variety of topics including the educational and employment outcomes of adolescents as they transitioned into adulthood. The initial sample	X	Having ever been suspended from school	1. Suspended (binary)2. number of which received suspension National Survey of (Moore et al., 2000)http://www.bls.gov/survey/youth/attachme/technicalS...rt.pdf
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were between the ages of 12 and 16 in 1997 (born between 1980 and 1984), as well as an oversample of 2,236 Black and Hispanic adolescents, resulting in an initial sample size of 8,984 respondents. Yearly interviews were conducted for the first 15 rounds (1997–2011), with the survey switching to a biennial design after 2011. Although the NLSY97 suffers from some attrition, more than 80% of the original sample is retained during the first 15 rounds of the survey.

Hemphill et al., 2014	Quant longitudinal 1	N/A	1. United States 2. Australia	School	Participants were seventh grade students enrolled in the International Youth Development Study (IYDS) (N = 1945), followed up in grades 8 (N = 1832) and 9 (N = 1796). The IYDS used standardized methods in Washington State, United States and Victoria, Australia. The sample was composed almost entirely of 12- and 13- year-olds in both states. Boys	X	X	1. The number of times in the past 12 months a student was suspended from school 2. The number of whole days a student missed because they skipped or 'cut/wagged' during the last 4 weeks	Absentee item/mean
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Hill & Mrug, 2015	Quant cross-sectional	N/A	United States	School	This study utilized data collected with the PRIDE Survey in a single metropolitan area in the Southeastern U.S. The sample includes 23,615 middle school and high school students attending grades 6–12 (approximately 80% participation rate). The mean age of the students was 14 years old. The sample comprised 47% males and 53% females. Racial/ethnic composition of the sample was 53% African-American, 41% Caucasian, 2% mixed, 2% Hispanic, and 2% other. School-level data were obtained from 42 middle schools (grades 6–8, ages 12–14) and 24 high schools (grades 9–12, ages 15–18).	X	The number of school days missed in one academic year	Information on school re
Holt et al., 2013	Quant cross-sectional	N/A	Singapore	School	3096 youth participated in the study (2,303 males (55.5%) and 1,844 females (44.5%)) across 2 primary and 8 secondary schools in Singapore in 2006. These schools were located across the country, and incorporated students from all social economic	X	Having skipped school due to bullying on at least one occasion	Absentee item/mean

Holtes et al., 2015	Quant cross-sectional	N/A	Netherlands	School	1167 secondary school students of Dutch ethnicity (53.7% male, Mage: 15.9 years).	X	Number of hours that an adolescent spent truanting in the past 4 weeks	Absentee item/measure
Houck et al., 2012	Quant cross-sectional	N/A	New England, United States	School	Between 2007 and 2009, 138 7th grade adolescents from 3 New England public middle schools participated in an HIV prevention intervention study for at risk youth. The current study used data from baseline adolescent assessments completed on audio computer-assisted self interview. The total sample was 51% male; participants' average age was 13.14 years. The racial composition of the sample was	X	Students were described as havin a history of truancy if they had ever missed school without a valid excuse	Youth In Gadow K Adolesce to the Ch Inventori Stony Br Checkma

Author(s)	Design	Theoretical Framework	Location	Setting	Sample	X	Y	Notes
Hughes et al., 2017	Quant cross-sectional	1. Racial Threat (Blalock, 1967) 2. Intergroup Contact (Allport, 1954)	Florida, United States	School	Across 66 of the 67 school districts in the state of Florida, 335 public middle schools and 313 public high schools are included in this sample	X	The number of suspensions for Black, Hispanic, and White students in one academic year	Information on school re-
Hughes, 2022	Quant cross-sectional	1. Foucault's (1977) carceral continuum perspective 2. Place-based stratification theory (Shaw & McKay, 1942) Foucault, M. (1977). Discipline and punish: The Birth of the prison. Vintage. Shaw, C. R., & McKay, H. (1942). Juvenile delinquency and urban areas.	Florida, United States	School	The data for this study combine 2011–2013 school and school district data from the Florida Department of Education (FDOE) with incarceration data from the Florida Department of Corrections (FDOC), county-level demographic data from the U.S Census and crime data from the Uniform Crime Report. Across 66 Florida counties (or school districts), 287 public middle schools and 272	X	The number of out-of-school suspensions a student received in one academic year	Information on school re-suspension rates. White students were suspended at a higher rate than Hispanic students.

Author(s) and Year	Study Design	Definition of Problematic Absence	Country	Setting	Sample Size and Demographics	Measurement of Problematic Absence	Measurement of School Relevance	Outcome	Measurement of Outcome	Measurement of School Relevance
Hysing et al., 2015	Quant cross-sectional	N/A	Norway	School	8346 adolescents aged 16-19 years (54% female)	X		Substantial school absence understood as 10 or more full-day absences OR more than 19 hours of absence in past semester (6 months). Used the 90th percentile as a cutoff		Information on school relevance
Hysing et al., 2017	Quant cross-sectional	N/A	Norway	School	10,243 Norwegian adolescents aged 16–19		X	Number of hours and days of non-attendance at school over the past semester (6 months)		Information on school relevance
Hysing et al., 2019	Quant cross-sectional	N/A	Norway	School	10,220 adolescents aged 16-19 years (54% female)		X	Both days and school hours of absence for the last semester (6 months)		Information on school relevance
Ingul et al., 2012	Quant cross-sectional	Kearney's (2008) definition of problematic absence	Norway	School	865 adolescents (52.3% female) ranging in age from 16 to 21, with a mean age of 17.18 years and standard deviation of 1.15 years.	X	X	Number of days absent from school in previous semester		Absenteeism item/measure

Inoue et al., 2018	Quant longitudinal	N/A	Japan	School	17,378 junior high school students in Japan	X	In the Japanese education system, a student is considered to have withdrawn from school when the total number of absent days reaches 30 days during an academic year. Thus, we used this definition for the outcome variable of school absenteeism. This defines only the event of having withdrawn from school and includes many reasons for being absent.	Information school re
Inthaphatha et al., 2021	Quant cross-sectional	N/A	Laos, Asia	School	1,366 girls aged 13-19 years across six secondary schools (Mage: 15.8 years)	X	Having missed at least one day of school due to menstrual anxiety, menstrual leak, and/or dysmenorrhea in the last six months.	Absentee item/mea

Iverson et al., 2016	Quant cross-sectional	N/A	Washington	School	937 adolescents (53.3% male, 44.7% Hispanic/Latino, 37.6% White) between the ages of 12 and 19 years attending public schools.	X		X	Data were provided by Washington State Center for Court Research (George et al., 2015), representing children for whom a court petition was filed with the state due to excessive absenteeism, in accordance with Washington state statutory law (BECCA Bill, 1995, E2SSB 5439).	Absentee item/meal
Johannessen et al., 2020	Qualitative	N/A	Norway	School	In total, 17 school nurses and 25 teachers gave their informed consent and 11 focus group interviews were conducted (five groups of teachers, five groups of school nurses and one group consisting of three teachers and one school nurse from a special school for immigrants). All participants were ethnic Norwegians, six of the teachers were males and 19 were females. All of the school nurses were females. The ages of the teachers ranged from 29 to 62 years and they had 3-40 years of experience in	X		X	Not specified but interview about school withdrawal	Focus gr



Author(s)	Method	Theoretical Framework	Country	Setting	Sample	Intervention	Outcomes	Measurement
Kansiime et al., 2020	Mixed methods	Social Cognitive Theory (Bandura, 2004)	Uganda	School	2-34 years of experience as a school nurse.  369 students (188 girls; 81.0%; and 181 boys; 83.0%) participated in the endline survey. At baseline, the mean age was 15.4 years (SD 1.31; range 12–20) for girls and 16.2 (SD=1.5; range 13–21) for boys. The majority (n=361; 80.2%) were Christian and 198 (44.0%) were of Ganda ethnicity.	X	Number of days of missed school due to menstruation	Absenteeism item/mean
Karlberg et al., 2020	Quant longitudinal	N/A	Sweden	School	2770 students followed from 7th to 9th grade (aged	X	Absenteeism was defined as missing more	Information school re

Kathryn et al., 2014	Quant longitudinal 1	Routine Activity Theory (Cohen and Felson 1979; Felson 1998)	1. Pennsylvania 2. Arizona	Court System	Data for the present analyses were drawn from a sample of 1,354 adolescents (1,170 males and 184 females) participating in the Pathways to Desistance study, a prospective study of serious juvenile offenders in two major metropolitan areas (see Schubert et al. 2004 for complete details of study methodology). The enrolled adolescents were between 14 and 17 years of age at the time of committing a serious felony offense for which they were adjudicated. The mean age of the sample is 16 years and the sample is primarily Black (41.5 %), followed by Hispanic-American (33.5 %), non-Hispanic White (20.2 %), and other ethnicities (4.8 %)	X	X	(approximately four full days of unauthorized absence across the academic year)  Whether or not a student reported truancy or suspension or expulsion in a given month	1. Month or expuls school 2. Month from sch
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Kearney & Hendron, 2016	Quant cross-sectional	Response to Intervention Model  Kearney, C. A., & Graczyk, P. A. (2014). A response to intervention model to promote school attendance and decrease school absenteeism. <i>Child and Youth Care Forum</i> , 43, 1–25. doi:10.1007/s10566-013-9222-1	Nevada, United States	1. Family courts and services center 2. Truancy diversion program	Participants included 398 middle and high school students ages 11 through 19 years (M = 14.41; SD = 1.80 years). Youths identified as Hispanic (66.9 percent), African American (9.7 percent), European American (7.9 percent), other (6.9 percent), multi-racial or biracial (4.6 percent), Asian American (2.3 percent), and Native American (1.3 percent). Slightly more than half were male (52.9 percent).		X				Students who had approached or exceeded the legal limit of 10 absences in a 15-week semester	Informational school re
Keppens et al., 2019	Quant cross-sectional	N/A	Belgium	School	The LiSO project follows a cohort of 6457 students in 57 schools who started secondary education in the school year 2013–2014 (Stevens et al., 2015). A regional sampling strategy was used whereby nearly all students in the targeted cohort who attended school in the target geographic region were included in the study (Dockx et al., 2019). For the present study, data were used from wave 4 (T4) which was gathered at the end of the fourth year (May 2017) of	X	X	X			The number of times a student skipped school without a valid reason in the current school year (includes explanation for absence)	1. Absent item/mean Informational school re

items gauging self-reported school absenteeism. The total sample of students in T4 consisted of 6545 students in 53 schools. Within this sample, 4344 students completed the questionnaire in a valid way resulting in a total response rate of 66.69%.

Keppens, 2022	Quant cross-sectional	Not specified	Belgium, Europe	School	A random sample of 10% (n = 6260) of all pupils enrolled in the fourth year of secondary education (which equates to students of ages 15–16 years if they have followed a standard trajectory) in the 2014–15 school year. 51.04% of the participants were boys and 12.80% spoke a foreign language at home. The mean age of the study population was 16.38 years (SD = 0.69)	X	One school absence is registered as a half school day of non-attendance	Informational school re
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Kim & Gentle-Genitty, 2020	Quant cross-sectional	Transformative School-Community Collaboration (TSCC; Kim, 2017)	Indiana	School	3428 students across 14 schools. About 53% were female (n = 1726) and 59% were White (n = 2024). More than 56% of students (n = 1905) were aged 6–15 years, whereas about 44% were aged 16–20 years.	X	Days of missed school in the last school year	Absenteeism/mean
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Author	Study Design	Year	Country	Setting	Study Description	1	2	3	4	5	6	7	8	9	10
Kirksey, 2019	Quant longitudinal	N/A	California	School	This study used pre-registered secondary data from a California school district and the sample size of participants is not specified. Demographic information provided includes participants being 52% Male, 78% Hispanic, 5% Asian, 4% Other Race, 1% Black							X	X	Number of classes and full school days missed in one academic year	Information on school re-attendance 1. Percent days missed 2. Percent missed 3. Discip
Klein et al., 2020	Quant cross-sectional	N/A	Scotland, Europe	School	This research uses data from the Scottish Longitudinal Study (SLS), which is a large-scale anonymized record linkage study in Scotland. Our study sample consists of 4620 students in their final year of compulsory schooling. We adjust our multivariable analysis with the following confounders: student sex (53% boys; 47% girls), place of residence (22% rural; 78% urban), ethnicity derived from parental information (97% "White"; 3% "Other ethnic background"), and	X	X	X		X				The number of half-days students missed school due in their final year of compulsory schooling	Information on school re-attendance Overall a Sickness- absentee Truancy/ exclusion due to far



Kljakovic & Kelly, 2019	Mixed methods	N/A	England	1. Alternative education program 2. Mental health service agency	Qualitative part of this study Three group interviews were conducted. The first was held with Individual Tuition programme (IT) professionals (n = 5), the second with Tower Hamlets Child and Adolescent Mental Health Services professionals (n = 4), and the third with managers at Tower Hamlets local authority, the PRU and CAMHS (n = 5). Each interview was conducted using a semi-structured interview schedule.	X			Interview topic was school refusing adolescents	Qualitative
Kookana et al., 2016	Quant cross-sectional	N/A	India	School	72 Indian students (42 females and 30 males) aged 13-14 years in 8th grade participated in the qualitative interviews. For the school attendance variable, the data were collected on an anonymous basis (only gender was noted) from those schools that were willing to participate. In total, the data represented the school attendance of 232 students of 8th year		X	X	The total number of days a student was absent in one month	1. Absent item/mean 2. Inform school re



Koutra et al., 2011	Quant cross-sectional	N/A	Greece	School	320 high school students aged 14-19 years (53.4% female)	X	X	X	X	At least one absence (full day or single hour) or suspension from school during past year	Absentee item/measure
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Kramer et al., 2017	Quant cross-sectional	N/A	New York, United States	Hospital	104 adolescent inpatients with BPD aged 13-17 years (94.2% female, 30.3% Non-White, Mage: 15.7 years) compared with 60 age-matched psychiatrically healthy comparison subjects (83.3% female, 33.3% Non-White, Mage: 14.8 years)		X	Number of students who were suspended or expelled from school	Suspension measure Background Information (Adolescent) Zannarini Background Information adolescent (BIS-AD) McLean-Parks 2006.
Krisdapong et al., 2013	Quant cross-sectional	N/A	Thailand	School	1063 children aged 12 years (50.4% female) and 811 children aged 15 years (51.8%) from the Sixth Thailand National Oral Health Survey.		X	Number of school absences in the current semester due to toothache (3 months)	Absenteeism item/measure
Kuhlmann et al., 2020	Quant cross-sectional	N/A	Missouri, United States	School	58 female students in grades 9-12		X	Last school year, having missed school for any reason related to a period	Absenteeism item/measure

Kumbeni et al., 2021	Quant cross-sectional	N/A	Ghana	School	705 adolescent girls aged 12-19 years	X		Whether or not a student was absent from school due to menstruation-related issues during the last menstruation	Absentee item/measure: Menstruation-related school absence. Number of days absent in a month
Kupchik & Catlaw, 2015	Quant longitudinal	Methodological strategy from McFarland and Thomas (2006)	United States	School	We used participant data from Add Health, a longitudinal, nationally representative sample of adolescents who were in Grades 7 to 12 in the 1994-1995 school year. It includes a cluster sample of 80 high schools selected from a sampling frame of 26,666, and their feeder		X	Having ever been suspended from school	Absentee item/measure

					school questionnaires, and an administrator from each school completed an administrator questionnaire. Of these students, 20,745 were randomly selected to complete in-home interviews at multiple times. We use all cases of adolescents who have complete data from in-school Wave 1 questionnaires, Wave 1 and Wave 2 school administrator interviews, in-home Wave 1 questionnaires, in-home Wave 1 parental questionnaires, in-home Wave 3 questionnaires, and in-home Wave 4 questionnaires (n = 9,006 for Wave 3; n = 7,361 for Wave 4).					
Kupchik et al., 2022	Quant longitudinal 1	1. Social-cognitive theory (Bandura, 1986) 2. Ecological systems theory (Bronfenbrenner, 1979)	Delaware, United States	School	The sample consisted of 28 schools, within which there were N = 3160 8th grade students and N = 1650 11th grade students. This sample is composed of 45% White students, 29% Black students, 19% Latino/a students, and 3% of students of other or multiple	X	X		Having ever skipped a day of school	Skipping variable 1 Department of Education School S  Bear, G. Harris, A. Hearn, S. (2019). T manual for Delaware survey: S school cl bullying student

Lane et al., 2019	Quant longitudina l	Systems Perspective McIntosh, K., & Goodman, S. (2015). Integrating multi-tiered systems of support: Blending RTI and PBIS. New York, NY: Guilford Press	United Stat es	School	Study 1: Participants were 2,313 middle school students (1,202 males) attending one of four middle schools in the Midwest who were rated by their advisory teachers (n = 171) on the SRSS-IE. Schools served students in sixth (34.52%), seventh (33.81%), and eighth (31.67%) grades. Students were predominantly White (75.08%, n = 1,690). Study 2: Participants were 2,727 students (1,393 males) attending one of two public high schools in the Midwest who were rated by their second-period	X	The total number of days a student was assigned in- school suspension due to serious or repeated infractions	Informati school re
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Author(s), Year	Study Design	Response Rate	Country	Setting	Participants	Intervention	Outcomes	Measurement	
					(23.99%), 11th (25.06%), and 12th (21.72%) grades. Students were predominantly White (76.23%, n = 2,008),				
Langdon et al., 2022	Quant cross-sectional	N/A	Washington, United States	Hospital	99 participants aged 12-17 years who were mostly female (70%) with an average age of 14.8 years. Participants are 39% Caucasian, 33% African American, 21% Other, 4% Unknown, 2% No response.	X		The number of full days with less than half normal functioning in school and partial days of school missed over the preceding three months.	Absenteeism/meal
Lannegrand-Willems et al., 2012	Quant cross-sectional	N/A	France, Europe	School	Participants were 523 students (317 males, 60.6%; 206 females, 39.4%) aged 15- to 22-years-old (M $\frac{1}{4}$ 16.13; SD $\frac{1}{4}$ 0.95).		X	Absenteeism was defined as missing between 4 and 10 half-days of school per month  Problematic absenteeism was defined as missing more than 10 half-days of school per month.	Information school re
Larm et al., 2017	Quant cross-sectional	N/A	Sweden	School	2045 students in 9th grade aged 15-16 years (49.7% female)	X		At least one absence from school (without valid reason)	Absenteeism/meal

Leos-Urbel, 2014	Quant longitudinal 1	Not specified	New York, United States	School	24,179 students who applied to the summer employment program for the summer of 2007 and were in New York City public schools in both the school years before and after the program (school years 2006 to 2007 and 2007 to 2008).	X	The number of days a student attended school	Informational school re
Lerang et al., 2018	Quant cross-sectional	N/A	Norway, Europe	School	The sample contained 1975 students from grades 8–10 (age 14–16) in 11 Norwegian lower secondary schools	X	The number of days a student was absent from school in the previous fall semester	Absentee

Lessard et al., 2020	Quant cross-sectional	N/A	United States	Social Media	All participants (ages 13–17 years) identified as LGBTQ, spoke English, and were currently living the U.S. The final analytic sample included 17,112 participants. Self-reported ethnicity revealed the sample to be 62% White, 11% Latino/a, 6% African American, 4% Asian, and 17% from other ethnic groups. Taking into account sex assigned at birth and gender identity, participants were 43% cisgender female, 24% cisgender male, 21% transmasculine/non-binary, 8% transgender male/boy, 3% transfeminine/non-binary, and 1% transgender female/girl. Just over a third of the sample identified as gay/lesbian (38%), 35% identified as bisexual, 2% identified as heterosexual and 26% of the sample identified as something else (e.g., pansexual, asexual)	X	Whether or not participants had every received an out-of-school suspension	School suspension variable from Health Survey of Children and Youth (HSCY) (Harris, K. J. R. (2011). Longitudinal adolescent health (ages 1994-2008) [dataset]. Ann Arbor, MI: Carolina Population Center, University of North Carolina at Chapel Hill [distributed by the Center for Communications Programs, University of North Carolina at Chapel Hill] for Political Science Research Center, 08-06.
Liping et al., 2013	Quant cross-sectional	N/A	United States	Family home	3470 adolescents aged 12-17 years	X	Number of sick days taken in	Absenteeism item/measure



Lowry et al., 2022	Quant longitudinal 1	N/A	United States	School	Data were combined from the 2015, 2017, and 2019 national Youth Risk Behavior Surveys to produce nationally representative samples of U.S. high-school students who identified as gay/lesbian (n=1,061), identified as bisexual (n=3,210), were not sure of their sexual identity (n=1,696), or identified as heterosexual (n=35,819).	X		Number of days absent due to perception of unsafety at school during the past 30 days	Absentee item/mean
Lucia, 2016	Quant cross-sectional	1. Self-Control Theory (Gottfredson and Hirschi, 1990) 2. Hirschi's Social Control Theory (2002)	Switzerland	School	The sample consisted of 4574 pupils in grades 8 and 9 in Canton Vaud between 2003 and 2005. All schools from five districts were included and all pupils enrolled in the 24 schools took part in the study. The pupils ranged in age from 12 to 18 (mean age = 14.9, SD = 0.97), with 51.3 percent in grade 8 and 48.7 percent in grade 9. Approximately half (49.5 percent) were girls.	X		Missing school for at least a whole day without a legitimate excuse during the last 12 months (i.e., truancy)	Absentee item/mean

Mackner et al. (2012)	Quant cross-sectional	N/A	Ohio	Medical clinic	50 adolescents with inflammatory bowel disease (62% male, 90% White) and 42 healthy comparison adolescents (52% male, 83% White) and their parents. For the IBD sample, eligibility criteria included age 11 to 17 years, diagnosis of IBD for at least 1 year, and a gastroenterology (GI) clinic visit within 1 week of completion of the study questionnaires. For the healthy comparison sample, eligibility criteria included age 11 to 17 years and no history of a chronic illness, defined as a 6-month or longer condition requiring treatment by a medical subspecialist.	X		Number of full day absences in one school year	Information on school re
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Maeda & Heyne, 2019	Quant longitudinal 1	1. Berg's criteria for school refusal (Berg, 1997, 2002) 2. Active approach to clinic-based treatment for school refusal (e.g., Aida, 1978; Maeda, 2012) Aida, M. (1978). Futoukou ni taisuru chichioya ni yoru kyouseihou [One approach to school refusal: flooding method by the client's father]. <i>Jpn. J. Psychother.</i> 4, 57–63. Maeda, N. (2012). The effects of active parental intervention on school refusal behavior. <i>Prog. Soc. Welf. Res.</i> 7, 15–25 Berg, I. (1997). School refusal and truancy. <i>Arch. Dis. Child.</i> 76, 90–91. doi: 10.1136/adc.76.2.90	Japan	School	The parents of 62 adolescents were given the opportunity to implement the school-based rapid school return approach. In 39 cases (19 males and 20 females) the parents agreed to implement the approach. These cases constitute the intervention group. The 39 adolescents were between 12 and 14 years ( $M=13.4$ , $SD=0.6$ years). The non-intervention group comprised the 23 cases (13 males and 10 females) in which the parents did not agree to implement the approach. The 23 adolescents were aged between 12 and 15 years ( $M=13.3$ , $SD=1.0$ years).	X		Adolescents who had missed more than four consecutive school days or 10 intermittent school days in the school year so far, and who met Berg's (1997, 2002) school refusal criteria, were included in the study.  *Berg's school refusal criteria include (a) remaining at home with the knowledge of the parents; (b) an absence of severe antisocial behavior, apart from possible aggressiveness when the young person is forced to go to school; (c) parental attempts to get the child to attend school; and (d) displaying emotional upset at the prospect of attending school.	Absentee item/mean
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in Child and  
Adolescent  
Psychiatry: A  
Comprehensiv  
e Textbook,  
3rd Edn, ed  
M. Lewis  
(Sydney,  
NSW:  
Lippincott  
Williams &  
Wilkins),  
1260–1266.

Maeda, 2016	Qualitative	N/A	Japan, Asia	School	The intervention was done with three Japanese secondary school children exhibiting school-refusal behaviours	X	<a href="#">Japan's Ministry of Education defines school-refusing children as those who are absent from or unable to attend school for over 30 days per year due to physical, psychological, social and/or emotional factors, with the exception of disease and economic reasons. Their behaviour closely matched the criteria proposed by Blagg and Yule (1984), which included extreme difficulty in attending school with refusal and absence from school for at least three days; accompanying emotional upset marked by temper tantrums, sleep disturbances and psychosomatic complaints; remaining at home with the knowledge and permission of parents and the absence of significant antisocial problems such</a>	Informational school re
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[or inappropriate sexual activity.Ministry of Education, Culture, Sports, Science and Technology-Japan. \(2000\). Survey of School Refusal. Blagg, N. R., & Yule, W. \(1984\). The behavioural treatment of school refusal-A comparative study. Behaviour Research and Therapy, 22, 119-127. \[http://dx.doi.org/10.1016/0005-7967\\(84\\)90100-1\]\(http://dx.doi.org/10.1016/0005-7967\(84\)90100-1\)](#)

Maeda, 2017	Qualitative	Morita TherapyIshiyama F. I. (1986). Morita therapy: Its basic features and cognitive intervention for anxiety treatment. Psychotherapy: Theory, Research, Practice, Training, 23.	Japan, Asia	School	One 14-year-old Japanese female student enrolled in the eighth grade in a local public junior high school.	X		The number of school days that the adolescent attended over the course of one academic year	Information school re
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Maina et al.,  
2020

Quant  
cross-  
sectional

N/A

Kenya

Family  
home

426 male  
adolescents aged  
10–14 years living  
in households  
covered by the  
Nairobi Urban  
Health and  
Demographic

X

Having ever  
missed school  
during the past  
month

Absentee  
item/mea

					informal settlement.					
Martin, 2020	Qualitative	Berg's definition of school refusal  Berg I. School refusal and truancy. Arch Dis Child (1997) 76(2):90-1. doi:\10.1136/a dc.76.2.90	France, Europe	School	52 school personnel in middle and high schools from two regions of France	X			In interviews, we specifically used the standard definition of school refusal by Berg (9, 27), which includes: a) reluctance or refusal to attend school, often leading to prolonged absences, b) staying at home during school hours with parents' knowledge rather than concealing the problem from parents, c) experience of emotional distress at the prospect of attending school (somatic complaints, anxiety, and unhappiness), and d) absence of severe antisocial behavior.	Qualitative
Marvul, 2012	Quant longitudinal	Not specified	New York, United States	School	The sample included 40 truant male students who were randomly assigned to intervention and control conditions. All of the participants were classified as at-risk for school failure.		X		All students had assigned to the program because of severe truancy in their regular schools.	Informational school re number o over the c months ( intervent control g



50 between Black and Hispanic students, with a small number of Native American and other students, with the “Other” students being of mixed race.

Maynard et al., 2012	Quant cross-sectional	N/A	United States	Household	This study is based on public-use data from the 2010 National Survey on Drug Use and Health (NSDUH; SAMHSA 2011). The sample consisted of adolescents aged 12–17 years that reported having skipped one or more days of	X	Having skipped one or more days of school during the previous 30-day period	Absentee item/measure
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the sample is 15.2 years (SD = 1.6). The respondents were evenly distributed between males (50.2 %) and females (49.8 %). 55.5% of participants are White, 22.7% are Hispanic, and 14.1% are African-American. The remaining 7.8% of youth reported American Indian or Alaska Native, Asian, other Pacific Islander or Native Hawaiian identities, or more than one race and were categorized as “other” race/ethnicity.

Maynard et al., 2017	Quant cross-sectional	N/A	United States	Household	This study examined public-use data collected between 2002 and 2014 as part of the National Survey on Drug Use and Health (NSDUH). The current study restricted analyses to non-Hispanic White, African American, and Hispanic respondents between the ages of 12 and 17 (n = 209,393).	X	The number of days a student missed school because they skipped, cut, or just didn't want to be there in the past 30 days	Truancy the National Drug Use (NSDUH) Substance Mental Health Administration from the Survey of and Health of national Rockville Substance Mental Health Administration
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Mazerolle, Antrobus, et al. 2017	Quant longitudinal 1	Third Party Policing (Mazerolle 2014; Mazerolle & Ransley 2006)	Queensland, Australia	School	102 truanting young people aged 10-16 years (Mean: 12.98 years) and their guardians were recruited for the study. Approximately 53% of the sample was male. 51 youth were randomly allocated to both the experimental and control conditions.	X	Students needed to have 85% or less attendance in the three previous school terms and have no legitimate explanation for their absences from school (e.g., legitimate medical illness)	Information on school re
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McGarvey et al., 2014	Quant longitudinal 1	N/A	United States	Household	The sample includes 147 adolescents aged 12-18 years. Overall, the majority of the adolescents were males and there were more White than African-American adolescents enrolled.	X	X	The average number of days that students missed school and were expelled from school in one academic year	1. Absent variable 2. Expuls
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McNeely et al., 2019	Quant longitudinal	N/A	United States	School	The linked dataset contained 4412 students in 7th–10th grades referred to TIP between 2006 and 2009.	X	Five full days of unexcused absence from school (prompts referral to the Truancy Intervention Program)	Informational school re
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Meinck et al., 2015	Quant cross-sectional	Bronfenbrenner's Ecological Theory (Bronfenbrenner, 1979)	South Africa	1. Non-governmental organizations2. School3. Community	603 children aged 13-19 years (47.9% female)				X	Number of days in past week children did not attend school	Absentee item/measure
Melander et al., 2022	Qualitative	N/A	Finland	School	The ten focus groups had 55 participants, one to eleven per group. Most participants (75%) were female. The groups included (vice) principals, special education/resource/subject teachers, guidance counselors, school social workers, school psychologists, school nurses, school doctors, and social workers working in child protective services	X	X	X		Not specified	Focus group
Miiró et al., 2018	Mixed methods	N/A	Uganda, Africa	School	The study was conducted among students in secondary school years (predominantly age 15–16 years) in four secondary schools.				X	Whether a girl missed a half-day or full-day of school during her period	1. Interview 2. Self-report

Mitchell et al., 2020	Quant cross-sectional	1. The Minority Threat Hypothesis (which is rooted in conflict theory; Quinney, 1977; Turk, 1969). 2. School Prisonization (Hirschfield, 2008)	Arizona	School	This study uses a sample of schools (259 middle and high schools) across Arizona, drawn from the 2004 wave of the Arizona Youth Survey (AYS) and Safe and Drug-Free Schools (SDFS) survey conducted in Arizona. Data are derived from the 2004 AYS and the 2004 wave of the SDFS. The AYS is a biennial school-based survey of eighth-, 10th-, and 12th-grade students, administered in schools across all 15 counties in Arizona. All schools (e.g., traditional public, private, charter, and reservation schools) are eligible to	X	Removal of a student for at least 1 year, referral of a student to law enforcement, suspension or removal of a student for less than 1 year, and/or transfer of a student for at least 1 year.	Absentee item/measure
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					this sample is representative of all students within the state of Arizona.			
Morris & Perry, 2016	Quantitative longitudinal	Racial Segregation and the Achievement Gap Condron, Dennis J., Daniel Tope, Christina R. Steidl, and Kendralin J. Freeman. 2012. "Racial Segregation and the Black-White Achievement Gap, 1992-2009." <i>The Sociological Quarterly</i> 54:130-57	Kentucky, United States	School	Our sample includes 16,248 students in grades 6 through 10 who were enrolled in 17 district public schools. At baseline, about 65 percent of students are in grades 6 to 8 (ages 11 to 13), and 35 percent in grades 9 to 10 (ages 14 to 16). Approximately 49 percent of students in the sample are girls and 51 percent are boys. The majority of these students are white (59 percent) or black (25 percent). However, 10 percent are Latino, 4 percent are Asian, and 3 percent classify themselves as some other race.	X	Whether or not a student was suspended in a given academic year	Information on school re
Mowen et al., 2019	Quantitative longitudinal	1. Cumulative Disadvantage Theory (Sampson & Laub, 1997) 2. Labeling Theory	United States	Household	A national, household-based survey, the NLSY97 consists of a total of 8,984 youth between the ages of 12 and 18	X	Having ever been suspended from school across the four waves of data collection	Absenteeism/meal



					collected from the same respondents over time. Data collection occurred annually. The first wave of data were collected in 1997 (ages 12–18), wave two in 1998, wave three in 1999, and wave four data were collected in 2000 (ages 16–22). Participants were 51.4% female and 52.5% White, 21.6% Black, 20.2% Hispanic, and 5.7% Other. The mean age at wave one is 14.047 years (range is 12–18 years)				
Mukherjee et al., 2020	Quant longitudinal	N/A	United States	School	Participant data was drawn from the Youth Risk Behavior Surveillance Survey for 1991-2017. 195,280 students in grades 9-12 had valid survey responses during 1991-2017. Nearly 63% were non-Hispanic white, 14% non-Hispanic black or African American, 16% Hispanic, 4% non-Hispanic Asian or Native Hawaiian or other Pacific Islander, less than 1% non-Hispanic American Indian or Alaska Native, and more than 3% non-Hispanic multiracial	X		During the past 30 days, the number of days a student did not go to school because they felt unsafe at school or on their way to or from school	Absentee item/mean

Mulia et al., 2022	Quant longitudinal	Cumulative disadvantage theory and the chain of risks model from life-course epidemiology. Kuh D, Ben-Shlomo Y, Lynch J, Hallqvist J, Power C. Life course epidemiology. J Epidemiol Community Health. 2003;57:778–83.	United States	Household	Data are from 1299 black Americans (654 females and 645 males) in the US National Longitudinal Survey of Youth, followed from 1979 (aged 15–19 years) to 2012.			X		Having ever been suspended or expelled from high school	Unique id
Munoz et al., 2014	Quant cross-sectional	N/A	Kentucky, United States	School	The sample included one Early College High School Initiative (ECHS) school and two matched control schools. The ECHS school sample included 146 students (40.41% female). Control school A had 184 students (45.11%) and control school B had 89 students (48.31% female)			X	X	The number of out-of-school suspensions a student received in one academic year	Informational school re 1. School rate 2. School rate

Nichols et al., 2016	Quant cross-sectional	Developmental ecological perspective  Brofenbrenner, U., & Ceci, S. (1994). Nature-nurture reconceptualized in developmental perspective: A bioecological model. <i>Psychological Review</i> , 101(4), 568–586.	United States	School	Participants were drawn from the In Home Survey of the Add Health dataset, a nationally representative study of seventh to twelfth grade students in the United States between 1994 and 1995 (Harris et al. 2009)	X		The number of days a student skipped school during one school year	Truancy in the In Home Survey of the Add Health  Harris, K. M., C. T., W. J., Hussey, J., Entzel, P. (2009). <i>The Longitudinal Adolescent Research Project</i> [WWW document]. URL: <a href="http://www.addhealth.com/project">http://www.addhealth.com/project</a>
Nijhof et al., 2016	Quant cross-sectional	N/A	Netherlands, Europe	Outpatient clinic	204 adolescents (ages 10–18 years who visited the pediatric rheumatology and immunology outpatient clinic at Wilhelmina Children’s Hospital from April through July 2013 were invited to participate in the study. As a reference group, we used healthy subject data collected from the		X	School attendance was measured as the percentage of classes attended during the 6 months prior to the study	Absenteeism item/measure

					female) with a mean 6 SD age of 15.3 6 0.5 years (22)				
Nik Jafaar et al., 2013	Quant cross-sectional	N/A	Malaysia	School	373 16-year-old adolescents attending three high-risk schools in Kuala Lumpur. The study sample consisted of an approximately equal number of male (56.6%, n = 211) and female (43.4%, n = 162) subjects. The racial distribution of the study sample was 63% Malay (n = 234), 26% Chinese (n = 100), 9% Indian (n = 33) and 2% other (n = 6), which is representative of the Malaysian population	X		“Truants” are identified as those who were “absent from school on official schooling day without verbal or written reasons from parent(s) or guardian or a medical doctor” for a total of 20 days or more (moderate to severe truancy) based on the guidelines by Kuala Lumpur Federal Territory Education Department (2004; p. 89).	Information school re
Novak & Krohn, 2020	Quant longitudinal	Labeling Perspective (Paternoster & Iovanni, 1989)	United States	Community agency	838 youth at-risk of maltreatment and/or with a history of maltreatment whose data is from the LONGSCAN study (Runyan et al., 1998). Participants are 55% Black, 25% White, 7% Hispanic, 13% Other. 56% are female.		X	Whether they had been suspended at least once in the past year	Absentee item/mea

Novak et al., 2022	Quant longitudinal 1	1. The age-graded theory of informal social control (Sampson & Laub, 1993). 2. Cumulative disadvantage framework (Sampson & Laub, 1997)	1. Philadelphia 2. Arizona	Family Home	Data from this study were taken from participants in the Pathways to Desistance Study, a longitudinal study of factors affecting desistance among serious adolescent offenders. From 2000 to 2003, the study enrolled 1,354 youth offenders who had been processed in juvenile justice systems or waived to the adult court systems in Phoenix and Philadelphia. To be eligible for the study, individuals had to be between 14 and 18 years old and adjudicated or found guilty of at least one felony or serious misdemeanor violent, property, or drug offense (Schubert et al., 2004). The analytic sample was reduced to include only youth aged 14 to 16 at Wave 1 (approximately ages 16–18 at wave 5) to focus on the school-aged participants (N=829). At Wave 1, youth were 15 years old, on average. Forty percent identified as Black, 33% as Hispanic, 22% as White, and 4% as	X	Being suspended or expelled at least once from school in their lifetime	Absentee item/measure to Desistance StudySchubert, Mulvey, Steinberg, Cauffman, S. H., He Knight, C. Operation from the desistance Youth violence juvenile justice 237-255.
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Novak, 2022	Quant cross-sectional	<p>1. Labeling Theory (Lieberman et al., 2014; Paternoster &amp; Iovanni, 1989)</p> <p>2. Life course theory of cumulative disadvantage (Sampson &amp; Laub, 1997)</p> <p>3. Age-graded theory of informal social control (Sampson and Laub, 1993)</p> <p>Lieberman, A. M., Kirk, D. S., &amp; Kim, K. (2014). Labeling effects of first juvenile arrests: Secondary deviance and secondary sanctioning. <i>Criminology</i>, 52(3), 345–370.</p> <p>Paternoster, R., &amp; Iovanni, I. (1989). The labeling perspective and delinquency: An elaboration of the theory and an assessment of the evidence. <i>Justice Quarterly</i>, 6(3), 359–395</p> <p>Sampson, R. J., &amp; Laub, J. H. (1992).</p>	United States	<p>1. Social service agencies</p> <p>2. Medical clinics</p>	Data for 763 youth were drawn from the LONGSCAN study. 55.44% of the sample identified as male, 55.18% identified as Black, 25.16% as White, 13.50% as Other, 6.16% as Hispanic.	X	X	1. Having ever been suspended from school, either at or before age 12 or between the ages of 13 and 162. Whether or not a youth has skipped school in the past year (reported at age 12)	1. Suspension variable2. variable
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University  
Press. Sampson,  
R., & Laub,  
J. (1997). A  
life-course  
theory of  
cumulative  
disadvantage  
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stability of  
delinquency.  
In T.  
Thornberry  
(Ed.),  
Developmental  
theories of  
crime and  
delinquency  
(pp. 133-161).  
New  
Brunswick,  
NJ:  
Transaction  
Publishers.

Obsuth et al., 2017	Quant longitudinal 1	N/A	London, Europe	School	300 students across 17 schools were assigned to the treatment condition and 306 students across 19 schools were assigned to the control condition. Of the 606 total students, 71% were male (M age = 14.05 years) and 176 (29%) were female (M age = 13.98 years). More students identified themselves as “Black-African, Black-Caribbean or Black British” (n = 244; 40.3 %) than any other category, with “White British” students comprising the second largest racial grouping (n = 151; 24.9 %).	X	Having been suspended or excluded from school at least once in the academic year	School exclusion measure
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Ohlson et al.  
(2016)

Quant  
cross-  
sectional

Educational  
Performance  
Framework  
(Goldhaber &  
Brewer, 1997;  
Levin, 2004)

Florida

School

1657 teachers  
across 50 schools  
(71% female, 51%  
White, 28%  
Hispanic/Latino,  
18% African-  
American/Black,  
3% Asian/Pacific  
Islander)

X

X

Excessive  
student absences  
were quantified  
as 21 or more  
days absent  
within each  
school

Informati  
school re

Author(s)	Study Design	Year	Country	Setting	Sample Description	Gender	Age	Sexual Orientation	Other	Measurement	Outcome	
Onyeaka et al., 2020	Quant cross-sectional	N/A	Benin, Ghana and Liberia (Africa)	School	8912 school-going adolescents aged 11–18 years who participated in the Global School-based Student Health Survey between 2012 and 2017. They participated in three West African countries.			X			The number of days a student missed classes or school without permission in the past 30 days	Truancy WHO, Global School-based Student Health Survey (Geneva, 2012, <a href="http://www.who.int/gshs/en">http://www.who.int/gshs/en</a> )
Ozcan, 2020	Qualitative	N/A	Turkey	School	21 school counsellors participated in this research (57% female)	X		X	X	X	Not specified	Qualitative
Palmer & Gretak, 2017	Quant cross-sectional	N/A	United States	1. Online 2. Community Agencies	8215 middle and high school students who identified as lesbian, gay, bisexual, queer, or a sexual orientation other than heterosexual or described themselves as transgender or as having another gender identity that is not cisgender. Students were 16.08 years on average and 68.6% identified as White, 14.8% as Hispanic/Latinx, and 8.4% as Multiracial, and	X		X		X	Missed school at least once due to safety concerns	Absenteeism/meal item/meal item 1. Four middle school districts 2. One middle school and

Peltzer & Pengdid, 2018	Quant cross-sectional	N/A	Africa	School	25,372 school-going adolescents (Mage 14.3 years, 51.8% male) across 9 African countries		X					The number of days that a student missed classes or school without permission in the past 30 days	Truancy School-Based Survey (2017) Centers for Disease Control and Prevention (2018). Cross-sectional survey (2017). Retrieved from <a href="https://www.cdc.gov/od/oc/ohrt/school-based-student-truancy-survey/">https://www.cdc.gov/od/oc/ohrt/school-based-student-truancy-survey/</a>
Pengpid & Peltzer, 2018	Quant cross-sectional	N/A	Oceania	School	Data utilized were from the cross-sectional “Global School-Based Student Health Survey (GSHS)”. The total sample included 10968 adolescents (mean age 14.1 years) from seven Pacific Island countries.		X					The number of days a student missed class or school without permission in the past 30 days	Truancy Global School-Based Student Health Survey (GSHS) Centers for Disease Control and Prevention (CDC). (2018). Global school-based health survey Retrieved from <a href="https://www.cdc.gov/gshs/">https://www.cdc.gov/gshs/</a>
Pengpid & Peltzer, 2020	Quant cross-sectional	N/A	Kuwait, Asia	School	The study sample comprised of 3,637 in-school adolescents (15 years median age) in grades 8-12 from Kuwait, 51.1% were girls and 48.9% were boys.		X					The number of days a student missed classes or school without permission in the past 30 days	Global School-Based Student Health Survey (GSHS; (2018). Citation: School-Based Health Survey WHO, Geneva, Switzerland. <a href="http://www.who.int/gshs/en/">http://www.who.int/gshs/en/</a>
Perelman et al., 2019	Quant cross-sectional	N/A	Europe	School	Adolescents aged 15-16 years across 36 European countries	X	X	X	X			Having missed at least 3 school days in the last month	Absenteeism item/mean Percentage with absenteeism days (due to skip, any reason) Number of days missed in the last month (due to illness or any reason)

Pesta, 2018	Quant cross-sectional	Life course theory of cumulative disadvantage  Sampson, R., & Laub, J. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. In T. Thornberry (Ed.), <i>Developmental theories of crime and delinquency</i> (pp. 133-161). New Brunswick, NJ: Transaction Publishers.	United States	Household	Data of 4822 participants are drawn from the National Longitudinal Study of Adolescent to Adult Health (Add Health). 2805 participants identified as non-Hispanic White, 1065 as non-Hispanic Black, and 451 as Hispanic.	X	Having ever received an out-of-school suspension or having ever been expelled from school	Exclusion variable
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Pflug et al., 2016	Quant cross-sectional	N/A	Germany	School	Secondary school students aged 10-21 years (Mage: 15.1 years, 52.9% male)	X	X	X	X	The child or adolescent was considered a school absentee, if they had missed school during the past 7 calendar days, regardless whether they had been absent for single lessons, parts of a school day or for one or more days. Additionally, the question of whether the child or adolescent frequently stayed away from school had to be answered with a "yes". Therefore, even	Absentee item/mean
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Author(s)	Study Design	Age Group	Country	Setting	Sample Size	Year	Gender	Outcome	Measurement	
Prakash et al., 2017	Quant cross-sectional	Not specified	India	School	2275 adolescent girls aged 13-14 years		X	X	The number of days in the past month that an adolescent did not attend classes. Those who reported being absent from school for 4 or more days in the past 30 days were defined as 'frequently absent.'	Absentee item/measure
Prince et al., 2018	Quant cross-sectional	N/A	South Carolina, United States	School	360 students with disabilities in a southeastern state who exited special education in the school years ending June 2009, 2010, and 2011		X		Number of out-of-school suspensions or expulsions for violent and/or criminal offenses	Information on school re

Reference (author, date)									
Rivara et al., 2022	Quant longitudina 1	N/A	Washingto n, United States	School	200 adolescents aged 11 to 18 who had a medically diagnosed sports or recreational related concussion within the past 9 months, and at least 3 symptoms persisting at least 1 month after injury. They had a mean age of 14.7 years, 62.0% were female, approximately 80% were White.	X		Number of missed school days due to injury (concussion)	Concussion Assessment Survey (CLASS) Vaughan L, Sady M CA, Gioi Academi concussio and adole Pediatric 2015;135 1050. [P 2596301- Babikian et al. Iden challenge concussio psychom for the C Learning & School Ed. (CLA Pediatr N 2020;6:2
Rocque et al., 2016	Quant longitudina 1	N/A	London, England	1. Research Office 2. Family home	Cambridge Study in Delinquent Development (CSDD; Farrington (1980, 1989; see also, West & Farrington, 1973).	X		Whether or not a boy was considered truant between ages 12 and 14	Absentee item/mean Farrington Later life truants in Cambridg Berg & J

					South London. The sample was generated by targeting all boys aged 8 to 9 on the list of six primary school registries within a one-mile radius of the research office. The sample was working class, mostly White (97%), and aged 8 to 9 when the study was initiated (Farrington, 1996; West & Farrington, 1973). Interviews have been conducted when the boys were approximately aged 8, 10, 14, 16, 18, 21, 25, 32, and most recently, at age 48.			
Rose et al., 2017	Quant cross-sectional	1. Dual-factor model of mental health (Greenspoon and Saklofske 2001)2. Subjective well-being (Keyes, 2006)	Michigan, United States	Household	This study is a secondary analysis of the 2001–2003 National Survey of American Life—Adolescent Supplement (NSAL-A; Jackson et al. 2004). The final sample consisted of 1170 participants, 810 African Americans 360 Blacks of Carribean descent. They ranged in age from 13 to 17 years (Mage: 15.03 ). The sample did not significantly differ by gender (48% male; 52% female).	X	Having ever been suspended or expelled from school	Absenteeism item/measure of suspension/expulsion from the Longitudinal Adolescent Health (A Harris 2009)



Rosenbaum, 2018	Quant longitudinal 1	1. The secondary deviance hypothesis (Gibson & Haight, 2013; Michail, 2012)  2. Selection bias (no citation provided)	United States	School	The National Longitudinal Study of Adolescent and Adult Health (Add Health) comprises a nationally representative sample of adolescents attending public and private high schools and their feeder middle schools in 1994-1995. The Add Health surveys were given to adolescent respondents in 1995 (Wave 1, response rate 79.0%), 1996 (Wave 2, 88.6%), 2001 (Wave 3, 77.4%), and 2008 (Wave 4, 80.3%); their parents (93% female parents) in 1995 (response rate 82.5%); and school administrators in 1995 (response rate 97.7%; National Longitudinal Study of Adolescent Health, 2015). Respondents were a 9,593 person subsample who participated in the first two surveys, at least one of the subsequent surveys (Wave 3 and/or 4), and reported at baseline having never received an out-of-school suspension or been expelled from school. (“II”	X	Whether the student had been suspended during a particular academic school year	Suspension from Ad  Harris, K J. R. (201 longitudi adolescen health (ac 1994-200 Use]. An Carolina Center, U North Ca Hill [dist university for Politi Research 08-06.
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“Have you ever been expelled from school?”).

Saelzer & Lenski, 2016	Quant cross-sectional	Sutherland's theory of differential association Sutherland, E. H. (1924). <i>Criminology</i> (4th ed.). Philadelphia, PA: Lippincott	Germany, Europe	School	Our data are drawn from the PISA 2012 sample in Germany (Prenzel, Saelzer, Klieme, & Koller, 2013). Participants consisted of 4,763 students in 210 high schools, located in all 16 federal states of Germany. All students were born in the year 1996 and, according to the birth cohort definition, were 15 years old at the time of the PISA test.	X	Truancy was defined as having ever skipped at least one lesson of the school day	5-item truancy index Kitayon A., & Schmitt (2005). Effect of leaving a school day Research in Austria: 3
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Sanderson et al., 2013	Quant cross-sectional	1. The Developmental Asset Profile (DAP; Search Institute, 2005) 2. Cultural and Social Capital (Mignone & O'Neil, 2005)	Alberta	School	67 high school students in grades 10-12 (52% male) in the community of Hobbema, which is comprised of four Cree nations: Samson, Louis Bull, Montana, and Ermineskin.	X	Those with less than 75% attendance rates are considered to have low attendance	Informational school re
Seidu et al., 2019	Quant cross-sectional	N/A	Ghana	School	This study used data drawn from the 2012 Global School-based Health Survey (GSHS). A total of 1 433 pupils were surveyed. This sample included 791 (55.2%) males and 642 (44.8%)	X	The number of days a student missed class or school without permission in the past 30 days	<a href="#">Truancy</a> <a href="#">Centers for Control (Global S</a> <a href="#">Student F</a> <a href="#">Retrieved</a> <a href="https://www.hs/index">https://www.hs/index</a>

					participants were aged 15 years or older.				
Seidu et al., 2022	Quant cross-sectional	N/A	Africa	School	This study used secondary data of the 2015 round of the Seychelles Global School-based Health Survey (GSHS). For this study, 1,833 adolescents were included in the analysis. More than half (57.1%) were females and the remaining were (42.9%) males. Majority of the adolescents (62.6%) were within the age range 11–14 years.	X		The number of days a student missed classes or school without permission in the past 30 days	Truancy measure (M., Viswanathan & Bovet, 2010). Seychelles school-based health survey (Seychelles Health Survey, 2015), p. 83.
Shabazian, 2014	Quant longitudinal	1. Critical Race Theory (Delgado & Stefancic, 2006) 2. Spatial Theory (Hartigan, 1999)	United States	School	Data for this study were collected from the second largest urban school district in the United States. The sample population was 56 high schools (grades 9-12) located in the district with a population of 468,681 students over three school years (2001-2004).		X	Number of suspensions or expulsions for each of three school years (2001-2004)	Information on school re-
Shorter et al., 2020	Quant cross-sectional	N/A	United States	School	Participants were 367 adolescents (females: n = 214;	X		Truancy was defined as the total number of	Absenteeism item/measure

					Appalachian region (geographically and culturally) of rural East Tennessee. The sample was 94% Caucasian with a mean age of 15.9 years (SD = 1.4) and a mean grade-level of 10.2 years (SD = 1.2). Participants were 58.3% female and 41.7% male, with the majority of children (53.4%) living at home with both parents (n = 196).			academic school year	
Siennick et al., 2019	Quant cross-sectional	Risk-Needs-Responsivity (RNR) model Andrews, D. A., & Bonta, J. (2010). The psychology of criminal conduct (5th edn.). New Providence: Matthew Bender and Company. Andrews, D. A., & Dowden, C. (2006). Risk principle of case classification in correctional treatment: a meta-analytic investigation. International Journal of Offender Therapy and Comparative Criminology	United States	School	869 youth with documented police contact across four participating high schools	X		Whether or not a student received a school suspension during the observation/study period	Information school re

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Siriwardhana et al., 2013	Quant cross-sectional	N/A	Sri Lanka	School	1505 children aged 12-17 years attending government schools in 17 districts	X			20% absence in one academic year	Informational school re
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Sivakami et al., 2015	Quant cross-sectional	N/A	India	School	Surveys were conducted among 1800 menstruating school girls in class 8-10 (above 12 years of age, Mage: 14.1 years) of 43 government schools selected through stratified random sampling in three Indian states in 2015.	X		Whether or not a student goes to school during their period	Absentee item/meal
Sivertsen et al., 2013	Quant cross-sectional	N/A	Norway	School	9338 adolescents aged 16-19 years (53.5% female). 306 had delayed sleep phase syndrome (DSPS; Mage: 18 years) and 9032 did not have DSPS (Mage: 17.8 years)		X	Days and hours of absence during past semester (calculated separately)	1. Inform school re 2. Unique item/meal
Sivertsen et al., 2015	Quant cross-sectional	N/A	Norway	School	8347 high-school students aged 16–19 years (53.3% girls) The overall prevalence of DSP	X		Number of days and school hours of absence for the last semester (6	Informati school re

Author(s) & Year	Study Design	Intervention/Model	Country	Setting	Participants	Gender	Outcome	Measurement	Notes
Skedgell & Kearney, 2016	Quant cross-sectional	Response to Intervention Model (Kearney & Graczyk, 2014)	United States	1. Family Courts & Services Center 2. Truancy Diversion Program	118 middle and high school students aged 11-19 years (Mage: 15.10) from a large school district and their parent(s). Youth were mostly female (50.8%) and were Hispanic (73.5%), African-American (10.2%), multiracial (4.3%), Asian-American (3.4%), European American (2.6%), or other (6.0%).		X	Percentage of full school days missed from the current academic year at the time of assessment	Informational school re
Skubak Tillyer & Tillyer, 2016	Quant cross-sectional	A General Multilevel Model of Violent Victimization Wilcox, P., Land, K. C., & Hunt, S. A. (2003). Criminal circumstance: A dynamic multicontextual criminal opportunity theory. New York: Aldine de Gruyter	United States	School	Data collected from 11,070 adolescents (51% female, mean age = 15.04 years) during the first two waves of the National Longitudinal Study of Adolescent to Adult Health were used in this study		X	Whether the participant reported skipping school for one full day without an excuse during the current year	Skipping variable Halpern, Whitsel, Tabor, J. Udry, J. National Study of Adult Health design (V document http://www.u/project sign.
Soares et al., 2019	Quant cross-sectional	N/A	Brazil	School	282 adolescents aged 12-17 years (57.8% female, Mage: 17 years)		X	At least one full day of school absence without permission of your parents or legal guardians in the past 30 days	Absentee item/mean



Soderman et al., 2019	Quant cross-sectional	N/A	Sweden	Online	1785 adolescent women (Mage: 16.2 years)		X			The number of instances of school/work absenteeism in past year	Absenteeism item/measure
Stewart-Tufescu et al., 2022	Quant longitudinal	N/A	Manitoba	School	1002 adolescents aged 14-17 years and one of their parents		X	X		1. Number of days absent in one month 2. Number of suspensions received	Absenteeism item/measure 1. Self-reported absenteeism 2. Self-reported suspensions
Strand et al., 2017	Quant longitudinal (scale development)	Life course developmental theories (Cullen, 1994; Farrington, 2003; Laub & Sampson, 2003)Cullen, F. T. (1994). Social support as an organizing concept for criminology: Presidential address to the Academy of Criminal Justice Sciences. <i>Justice Quarterly</i> , 11, 527-559Farrington, D. P. (2003), <i>Developmental</i>	Washington, United States	School	The participants were adolescents (N = 937, 53% male) between 13 and 17 years of age and attending public school in Washington state. This sample includes only youth for whom a court petition was filed with the state, with the majority filed due to excessive unexcused absenteeism, in accordance with Washington state statutory law (BECCA Bill, 1995, E2SSB 5439). The racial-ethnic background of the sample was predominately		X			This study includes only those youth for whom a court petition was filed with the state, with the majority filed due to excessive unexcused absenteeism in accordance with Washington state statutory law (BECCA Bill, 1995, E2SSB 5439). The new law requires the school district to file a truancy petition directly with the juvenile court if a juvenile has five unexcused	The Washington Assessment of Risks and Students' (George et al., 2015)George Coker, E. Strand, P. McBride, McCurley, Washington Assessment and need for WARNS Olympia. for Court Administrators of the Co

and empirical issues-The 2020 Sutherland Award Address. Criminology, 41, 221-225. doi:10.1111/j.1745-9125.2003.tb00987.xLaub, J. H., & Sampson, R. J. (2003). Shared beginnings, divergent lives: Delinquent boys to age 70. Cambridge, MA: Harvard University Press.

individuals who identified as African American (6%), Native American/Alaskan (7%), and Asian/Pacific Islander (3%).

Studsrod & Bru, 2012

Quant cross-sectional

Self-determination theory

Norway, Europe

School

The total sample comprised 272 boys and 288 girls (n = 564 four

X

Whether a student ever "played truant"

Informational school re

1. Truan

		why' of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268.			school in western Norway.				
Tanner-Smith & Fisher, 2016	Quant cross-sectional	Ecological systems theoryBronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.	United States	School	The data for this study came from two large national surveys—the School Crime Supplement to the National Crime Victimization Survey (N = 38,707 students; 51 % male, 77 % White, MAge = 14.72) and the School Survey on Crime and Safety (N = 10,340 schools; average student composition of 50 % male, 57 % White).	X		The number of days the adolescent skipped class in the past month (0–20 days)	1. Truancy from the Supplement to the National Crime Victimization Survey (NCVS)2. attendance at School Safety and Crime and (SSOCS) Department (2009). National victimization school crime supplement Codebook [Computer file users (ICPSR2007–2008) survey on crime and safety Survey data for restricted file users (308). Washington: National Youth Adolescence Education

Tanton et al., 2021	Quant longitudinal 1	N/A	Uganda	School	232 female students at baseline consented/assented. The mean age was 15.4 years (SD 1.31; range 12–20 years). The majority (n=193; 83.2%) were Christian and 93 (42.7%) were of Ganda ethnicity.	X	School attendance was defined as i) attended a full day of school—including if they missed some classes or ii) attended a full day at school and all classes	Absentee item/measure
Tegegne & Sisay, 2014	Mixed methods	N/A	Ethiopia, Africa	School	The quantitative study was conducted among 595 randomly selected adolescent school girls. Nine in-depth interviews with five school-dropout girls and four female teachers, and four focus group discussions among school girls were conducted. The girls were in grades 7-8 and were aged 10 to 19 years.	X	Any occurrence of missing school related to menstruation	Qualitative and focus

Thomas & Hennem, 2019	Qualitative	The regime of discipline Foucault (1977) Foucault M (1977) Discipline and Punish: The Birth of the Prison. New York: Penguin.	Norway, Europe	School	Attendance-related data for 38 high schools from the Oslo Municipality website was obtained (total of 18,678 students). The qualitative interview portion of this study includes a sample of 21 students in a single class from one high school.	X	The number of days students were absent from school in one academic year	1. Inform school re Qualitati interview observati
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Thompson et al., 2020	Quant cross-sectional	Developmental cascades theory  Patterson, G. R., DeBaryshe, B. D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. American Psychological Association, 44(2), 329.	United States	School	Participants (49.8% female) came from eight public high schools in a Midwestern state (n=5262) with students in grades 9 (n=1580; 30%), 10 (n=1382, 26%), 11 (n=1258, 24%), and 12 (n=1042, 20%). Seventy-three percent of the students identified as White, 13% as Black, 5% as Asian, 5% as Latinx, and 5% as some other race or two or more races.	X	The number of in-school and out-of-school suspensions in the spring school semester	Information on school re
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van den Toren et al., 2021	Quant cross-sectional	N/A	Netherlands	School	555 adolescents aged 14-18 years (Mage: 15.6 years old, 47% female, 79.1% Dutch)	X	X	Number of days absent in the past four weeks, either due to sickness or truanting	Absentee item/measure
Van der Put et al., 2013	Quant cross-sectional	N/A	Washington, United States	Juvenile court	For this study, secondary data from the Washington State Juvenile Court Pre-Screen Assessment (WSJCPA) validation study were used (Barnoski, 2004). The sample consisted of 21,810 American juveniles, aged 12 to 18, who appeared before the courts for a criminal act in the period from January 1999 to January 2000 and	X		A truancy petition is equal to 7 unexcused absences in a month or 10 in a year	The Washington Juvenile Screen Assessment (WSJCPA) Barnoski, 2004. Assessing offense: Washington Juvenile assessment Olympia, Washington Institute Policy, 1

					committed a sexual or violent felony offense were selected from this data set. The sexual offenses included both sexual offenses against a child who was at least 5 years younger than the offender and sexual offenses against a person of similar age or an adult person. The following research groups were selected: All female adolescents who had committed a felony sexual offense (n = 40) b) All boys who had committed a felony sexual offense (n = 743) c) All girls who had committed a violent offense other than a sexual offense (n = 533)					
van der Put, 2013	Quant cross-sectional	N/A	United States	Juvenile court	For this study, secondary data from the Washington State Juvenile Court Pre-Screen Assessment (WSJCPA) validation study were used (Barnoski, 2004). This dataset consisted of 21,810 American adolescents, aged 12–18, who appeared before the courts for a criminal act and for whom the	X		X	1. Having ever missed a full day of school (unexcused) or having received a truancy petition or equivalent. 2. Having ever received an out-of-school suspension, having ever been expelled, or having ever dropped out from school	1. Truancy Suspension variable from Washington State Juvenile Court Pre-Screen Assessment (WSJCPA) (2004). 2. A study by Barnoski (2004) for re-offending validation of Washington State juvenile court assessments. WA: Washington State Institute for Public Policy.



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a sexual offense were selected from this dataset. (a) MSOs: all female adolescents whose most serious sexual offense was a misdemeanor offense (n = 31). Misdemeanour offenses include the following offenses: public indecency or indecent exposure, obscene phone calls, obscenity or pornography.(b) PSOs: all female adolescents who committed a felony offense in which the victim was less than five years younger or older than the offender (n = 15).(c) CSOs: all female adolescents who committed a sexual offense against a child who was at least five years younger than the offender (n = 25). These offenses include child molestation and child rape.

Vanneste, Mathijssen, et al., 2016	Quant longitudinal 1	N/A	Netherlands, Europe	School	In school year 2011–2012, the Medical Advice for Sick-reported Students (MASS) intervention had been applied by seven out of all 21 schools for pre-vocational secondary education in the Netherlands. These seven schools were asked to participate in the study as an intervention school. In 2014, within the group of the 14 remaining schools, seven schools were asked to participate in the study as a control school, by providing anonymised absence data of their students retrospectively. The intervention group consisted of students who were attending one of the intervention schools, had been identified by the school as having extensive medical absence according to the MASS-criteria, and had been referred to a youth health care physician during school year 2011–2012. The control group consisted of students who were attending one of the control schools, and who were identified	X	Students having extensive medical absence as identified by intervention criteria (i.e., reported sick four times in 12 school weeks or more than six consecutive school days)	Information on school re  The number of periods a days reported during the weeks pre measures
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according to the MASS criteria. The intervention group consisted of 493 students (12 % of the total school population of 4159 students) and the control group consisted of 445 students (14 % of the total school population 3153 students). The total study group, including both intervention and control groups, consisted of 938 students, of whom 40% were male and 60% female.

Vanneste, van de Loo, et al., 2016

Qualitative N/A

Netherlands Schools

17 principals and special education needs coordinators working in nine secondary schools in the Netherlands

X

Students having extensive medical absence (i.e., reported sick four times in 12 school weeks or more than six consecutive school days)

Qualitative

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Vardanian et al., 2019	Quant longitudinal	N/A	Denmark	1. Family home 2. Community center	687 families	X	Having skipped school at least once in the past month	Absenteeism/meal
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Vaughan et al., 2016	Quant cross-sectional	N/A	United States	Family home	3000 Hispanic or Latino youth (50.7% male) in grades 7–12 from Wave I in-home interviews of the National Longitudinal Study of Adolescent Health (Add Health; Harris et al., 2009).	X		The number of times a participant skipped a whole day of school without an excuse.	Absentee item/measure
Vaughn et al., 2013	Quant cross-sectional	Developmental-ecological framework (no citation provided)	United States	Household	18,819 youth aged 12–17 years. The mean age of the study sample is 14.6 years old. The respondents are evenly distributed between males (51.0%) and females (49.0%) but are unevenly distributed in terms of race/ethnicity.	X		The number of days they missed school from skipping in the past 30 days	2009 National Drug Health (NDA) Substance Abuse and Mental Health Administration of Applied Psychology (2009). Re: the 2008 survey on health: National findings. MD: Substance Abuse and Mental Health Services Administration
Veliz & Shakib, 2012	Quant longitudinal	Social Control Theory (Hirschi, 1969)	United States	School	50 American high schools were surveyed in 2003-2004 and 2005-2006		X	Being suspended out-of-school for 5 or more days	Suspension obtained Survey on Safety (SSOS) <a href="https://nces.gov/ssocs">https://nces.gov/ssocs</a>

Vellos & Vadeboncoeur, 2015	Qualitative	Sociocultural perspective to absenteeismGutiérrez, K. D. 2002. "Studying Cultural Practices in Urban Learning Communities." Human Development 45: 312–321.Lave, J., and E. Wenger. 1991. Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.	British Columbia, Canada	School	A sample of students from Mountain High, a small senior high school alternative programme situated on a different site than the mainstream high school to which it was attached. It was designed for grade 11–12 students (16–19 years of age).	X	Many of the students in this alternative programme had been referred to the programme after not meeting attendance requirements at their mainstream high schools. According to the attendance policy for Mountain High (1995), truancy was defined as absence from class(es) without reason or permission, leaving campus without checking out. Number of truancy offenses were cumulative each semester. Accumulating a certain number of truancy offenses had consequence. For example, a first offense (1–3 trancies) resulted in having a teacher meet with a student to review expectations and assign a classroom consequence; also, the teacher contacts parents.	Field obs
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Walter et al., 2012	Quantitative longitudinal	N/A	Germany, Europe	School	147 anxious-depressed adolescents with chronic school absenteeism were recruited from the inpatient unit of the Department for Child and Adolescent Psychiatry and Psychotherapy at the University of Cologne. 84 boys (57.1%) and 63 girls (42.9%)	X		To be eligible for the study, participants had to have least 14 days without school attendance or at least 50 skipped classes in the last school report. In terms of outcome measure, discontinuous school attendance was	Absenteeism item/measure
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average age of 15.1 years (SD = 1.5).

missed) in the past two weeks

Walter et al., 2014	Quant longitudinal	N/A	Germany, Europe	1. Outpatient unit of the Department of Child and Adolescent Psychiatry 2. Local private practices	Of the 36 study participants who completed inpatient treatment and were analyzed, 21 were boys and 15 were girls aged from 13 to 18 years (M = 15.1; SD = 1.3).	X	Participants had to have stopped attending school (at least 14 days without school attendance) or had to have at least 50 skipped classes on the last school report (covering the preceding 6 months) to be considered chronically absent	Absentee item/measure
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Walter et al., 2017	Quant (scale development)	N/A	Germany, Europe	Inpatient/outpatient facilities	Participants were recruited at nine inpatient or outpatient facilities across Germany that specialize in treating adolescents with school absenteeism. The sample consisted of 62 adolescents (56.5% girls) aged 11 to 17 years (M = 14.7 years). Most were German (n = 57, 91.8%), 36 (58.0%) had already repeated one grade due to school absencing behavior, and 34 (54.8%) were living in a single parent household.	X		Participants were included in the study if they had missed at least 10 days at school during the previous 3 months without any somatic reason	School Readiness Assessment (SRAS) - version
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Walter et al., 2022

Quantitative longitudinal

Interdisciplinary model of school absenteeismKearney, C.A. (2008). An interdisciplinary model of school absenteeism in youth to inform professional practice and public policy. Educational Psychology Review, 20, 257–28

Germany, Europe

School

49 adolescents aged between 11 and 18 years with clinically-relevant school absenteeism behavior. Out of the total of 49 participants, n = 27 (55.1 %) were female. The participants' mean age was M = 14.20 years (SD = 1.99).

X

If a patient had missed less than 2.5 days (25 %) of school within the last 2 weeks or less than 11 days (15 %) within the last 15 weeks before the start of therapy, this was considered to be mild school absenteeism

1 Inform school re Establish scale/que ool atten (informat collected of source school re Teacher l (TRF), th Behavior (CBCL), Self Rep Doepfner J., Kinne Arbeitgr Child Be Checklist Manual c Schulalte Child Be Checklist M. Acher Elternfra das Verh Kindern Jugendlie (CBCL/6 Lehrerfra das Verh Kindern

Author(s)	Method	Theoretical Framework	Location	Setting	Participants	Intervention	Outcomes	Limitations	References
Wambugu & Mokoena, 2016	Qualitative	Classical liberal theory Boyd W (1956) Emile	Kenya, Africa	School	The participants were students who returned to school after they had raised money for	X	The number of days that a student missed school after being sent home	1. Qualitative 2. Absence variable	Child Behavior Checklist for aged children and adolescents (M. Achenbach Behavior Checklist/6-18 Teacher Report Form (TRF/6-18) and Self-Report Form (SRF/6-18)). H. Doepfner, J. Kinne, Arbeitsgemeinschaft Deutsche Psychiater (2014). M. Achenbach, deutsche Form der Behavior Checklist/6-18 (CBCL/6-18) [M. Achenbach, Elternfragebogen zum Verhalten der Kinder und Jugendlichen (CBCL/6-18) Lehrerfragebogen zum Verhalten der Kinder und Jugendlichen (TRF/6-18), Fragebogen zum Verhalten der Kinder und Jugendlichen (SRF/6-18)]. H. Doepfner, J. Kinne, Arbeitsgemeinschaft Deutsche Psychiater (2014). M. Achenbach, deutsche Form der Behavior Checklist/6-18 (CBCL/6-18) [M. Achenbach, Elternfragebogen zum Verhalten der Kinder und Jugendlichen (CBCL/6-18) Lehrerfragebogen zum Verhalten der Kinder und Jugendlichen (TRF/6-18), Fragebogen zum Verhalten der Kinder und Jugendlichen (SRF/6-18)].

					committee and the head teacher.				
Watts et al., 2018	Quant longitudinal	Social Bonding Theory (Hirschi, 1969)	Tennessee	School	10541 American adolescents (first recruited during the 1994-1995 school year while they were in Grades 7 to 12) aged 11 to 23 (Mage: 16.15 years). 53% of participants are White, 21% Black, and 16% Hispanic.	X		Having ever received an out-of-school suspension	Absentee item/mean
Weiler et al., 2019	Quant longitudinal	Rhodes' model of youth mentoring  Rhodes J, Spencer R, Keller TE, Liang B, & Noam G (2006). A model for the influence of mentoring relationships on youth development. Journal of Community Psychology, 34, 691–707. doi:10.1002/jcop.20124	United States	School	The current sample consisted of adolescents and their mentors who participated in a previously published evaluation of a preventive intervention for high-risk youth known as Campus Connections (Weiler, Haddock, Henry, Zimmerman, Krafchick, & Youngblade, 2015). Of the 204 adolescents with complete mentor-report data, 54.5% were male and were 11 to 18 years old (M =14.9). Over half of youth	X		The number of unexcused absences in the past month	Absentee item/mean

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American Indian or Alaskan Native, 2.0% as Black or African American, 1.5% as Native Hawaiian or other Pacific Islander, and 7% as other. Mentors (n = 204) were undergraduate university students who were selected after an application process, which included passing a background check, specifying reasons for becoming a mentor, and previous coursework or experience relevant to working with youth.

Welch & Payne, 2012	Quant longitudinal 1	Racial Threat (Blalock, 1967)	United States	School	The National Study of Delinquency Prevention in Schools (Gottfredson et al., 2000) is the source for our study's data. The final analytic sample in this study includes 294 public, nonalternative middle and high schools.	X	1. Expulsion (exclusion of students for over 30 days) 2. Suspension (exclusion of students for 30 days or less) 3. In-school suspension (brief exclusion of students from attendance in regular classes).	Absenteeism item/measure Principal Questionnaire on, G. D. D. C., Cz Cantor, D B., & Ha (2000). A study of preventive Final report City, MD
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Welch et al., 2022	Quant longitudinal	Cumulative Disadvantage Framework (Sampson & Laub, 1997)	United States	School	A sub-sample of 14,484 individuals enrolled in 129 schools were drawn from the Add Health longitudinal study. Add Health is a multi-wave nationally representative survey of youth in the United States conducted by the University of North Carolina Population Center. Wave I of the Add Health data was collected during the 1994–1995 school year among	X	Having ever been suspended or expelled from school	Absenteeism/mean
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Widdowson et al., 2021	Quant cross-sectional	<p>1. Labeling Theory                  2. Routine Activity Theory                  Sampson, R. J., &amp; Laub, J. H. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. <i>Developmental Theories of Crime and Delinquency</i>, 7, 133–161                  Cohen, L. E., &amp; Felson, M. (1979). Social change and crime rate trends: A routine activity approach. <i>American Sociological Review</i>, 44(4), 588–608.</p>	United States	Household	<p>The data for this study came from waves 1 to 8 of the National Longitudinal Survey of Youth 1997 Cohort (NLSY97). The current study uses data from all 7628 respondents between 12 and 19 years (49.6% male).</p>	X	<p>Whether or not a student had been suspended from school</p>	<p>1. School variable                  2. school variable</p>
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Wilkerson  
et al., 2016

Quant  
cross-  
sectional

Raywid's  
(1994)  
conceptualizat  
ion of three  
types of  
alternative  
schools

Raywid, M.  
A. (1994).  
Alternative  
schools: The  
state of the  
art.  
Educational  
Leadership,  
52, 26–31.

United Stat  
es

School

A total of 5863  
students in grades  
9-12 were included  
in the sample. 5031  
of them attended  
traditional schools  
(50.2% male,  
63.8% African  
American, 18.1%  
Hispanic, 10.9%  
White, 6.5% Asian)  
and 832 attended  
alternative  
remediation  
schools (52.3%  
male, 73.7%  
African American,  
19.7% Hispanic,  
5.8% White, 0.6%  
Asian)

X

The number of  
suspensions  
received in one  
academic year  
across all  
students within  
a school

Informati  
school re

1. Attend  
variable  
2. Suspen  
variable

Wilkie, 2012	Qualitative	N/A	Australia	School	22 participants, consisting of senior secondary students and their mathematics teachers, participated in the study	X	The types of chronic illness experienced by students in the study included cancer, anorexia nervosa, conversion disorder, renal failure, multiple sclerosis and cochlear implant complications. Most students experienced prolonged absence from school ranging from 6 months to a year, often followed by months of intermittent absence.	A combin questionn notes and and quali interview
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Williford et al., 2020	Quant longitudinal	1. Ecological Systems Theory (Bronfenbrenner, 1977, 1979) 2. Social Development Model (Catalano & Hawkins, 1996; Catalano et al., 2004)	United States	School	272 youth (51.8% male) aged 13-18 years (Mage: 15.59 years)	X		The number of days a student was absent in one academic semester	Informational school re
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Wolf & Kupchik, 2016	Quant longitudinal 1	N/A	United States	School	The study's population consisted of a subset of individuals from the National Adolescent Health public data set. The National Longitudinal Study of Adolescent to Adult Health (Add Health) is a longitudinal study of a nationally representative sample of over 20,000 adolescents who were in grades 7-12 during the 1994-95 school year, and have been followed for five waves to date, most recently in 2016-18. The study sample consisted of 9612 students for which attendance data was available.	X		Whether the respondent had ever been suspended by the wave 1 interview	Suspensions from National Longitudinal Study of Adolescent Health (ADHealth) 2015) Adolescent Health National Survey of Adolescent Health 2015, Report www.cpc.unc.edu/projects/addhealth
Wooldridge, 2017	Quant longitudinal 1	N/A	Maryland	School	222 students in 8th grade across 6 middle schools with AVID programs.	X	X	Number of suspensions received	Information about school re- 1. Attendance 2. Suspensions

Wormington et al., 2014	Quant cross-sectional	N/A	California, United States	School	<p>2,808 middle school (Mage=13.5 years) and 6,821 high school students (Mage=15.8 years). Both samples were fairly gender balanced (middle school sample: 51.4% girls; high school sample: 48.5% girls). The middle school sample was primarily White (64.8%) but also identified as Black/African American (3.3%), Hispanic/Latino (16.4%), Asian American (19.2%), Native Hawaiian/Pacific Islander (3.1%), American Indian/Alaskan Native (4.6%), or another racial or ethnic group (16.4%). Most students in the high school sample self-identified as White (63.9%), but also included a sizable portion of students who identified as Hispanic/Latino (11.0%) and Asian or Pacific Islander (16.1%). Smaller groups of students identified themselves as Black or African American (3.8%), American Indian/Native American (3.1%), or other.</p>	X	The number of times a student had missed school in the past 12 months	<p>California Kids Sur middle an versions Ed, 2009</p> <p>WestEd. Californi Kids Sur Main rep Francisco Health an Developr for the C Departme Education</p>
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Yang & Ham, 2017	Quant cross-sectional	Socio-ecological perspectives of children's well-being Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. <i>Developmental Psychology</i> , 22(6), 723–742. Earls, F., & Carlson, M. (2001). The social ecology of child health and well-being. <i>Annual Review of Public Health</i> , 22, 43–66. Garcia-Coll, C., & Szalacha, L. A. (2004). The multiple contexts of middle childhood. <i>Children of Immigrant Families</i> , 14(2), 81–97	AustraliaEuropeCanadaUnited States	School	A large-scale dataset containing information on 205,512 children in 9,141 schools	X		The number of times students skipped days of school without authorization during the past two weeks	Absenteeism/mean
Yu et al., 2017	Quant cross-sectional	N/A	Washington	School	5929 Latino/Hispanic middle and high school students in grades 6-12		X	Number of days absent from school in past 30 days	Absenteeism/mean

Zelezny-Green, 2014	Mixed methods	N/A	Africa	School	<p>1. I administered a survey to 133 students to gather data on school attendance, and mobile phone access and usage.</p> <p>2. I then held six focus group discussions with four to six girls in each. The ages of girls who took part in the study ranged from 13 to 20, and girls from each level of secondary school (grades 9–12 for those familiar with the K–12 system)</p> <p>3. Finally, I conducted semi-structured interviews with 12 school community members, including students, teachers, parents, and the principal. In the interviews, I asked about the NDSS learners' after-school activities, and their views on use of mobile phones to support education and learning during outside-of-school hours.</p>	X	Number of school days missed per month	Information on school re
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Zendegui et al., 2021	Quant longitudinal (scale development)	N/A	New York, United States	Hospital	Participants were 110 youth ages 13 to 18 years (M = 15.41 years) admitted to an adolescent partial hospitalization program. The majority of participants identified as female (57.3%), Caucasian (59.1%), and non-Latino (70.0%).	X	Having ever missed school due to mental health issues	School Inclusion Questionnaire (SIQ) Role Functioning Scale (RFS) (Bennett, P., Zendegui, A., Chiu, A., description of refusal by adolescents with acute cardiac conditions [Manuscript preparation] Department of Psychiatry, Cornell M
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Zhang, 2018	Quant longitudina l	N/A	Virginia, United States	School	238 middle and high schools were the units of analysis	X	Number of out- of-school suspensions over the course of three school years	Informati school re
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Zusevics et al., 2013	Quant longitudinal 1	A constructivist model of teaching and learning (Thomas, 2000; Thomas and Mergendoller, 1999)	Wisconsin, United States	School	Four teachers (two male and two female participants) participated in interviews. All four teachers were white and averaged 10-15 years of health teaching experience. Eight public school students also participated in the focus groups.	X	The number of days students were absent from school in one semester	Attendance
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