

## Types and correlates of school absenteeism among students with intellectual disability

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### Abstract

**Background** It appears that students with intellectual disability (ID) are more frequently absent from school compared with students without ID. The objective of the current study was to estimate the frequency of absence among students with ID and the reasons for absence. Potential reasons included the attendance problems referred to as school refusal, where absence is related to emotional distress; truancy, where absence is concealed from parents; school exclusion, where absence is instigated by the school; and school withdrawal, where absence is initiated by parents.

**Methods** Study participants were 629 parents (84.6% mothers) of Australian school students ( $M_{\text{age}} = 11.18$  years; 1.8% Aboriginal and/or Torres Strait Islander) with an ID. Participants completed a questionnaire battery that included the School Non-Attendance Checklist via which parents indicated the reason their child was absent for each day or half-day absence their child had over the past 20 school days. The absence data presented to parents had been retrieved from school records.

**Results** Across all students, absence occurred on 7.9% of the past 20 school days. In terms of school attendance problems as defined in existing literature, school withdrawal accounted for 11.1% of absences and school refusal for 5.3% of absences. Students were also absent for other reasons, most commonly illness (32.0%) and appointments (24.2%). Of students with more than one absence ( $n = 217$ ; 34.5%), about half were absent for more than one reason. Students attending mainstream schools had lower attendance than those attending special schools.

**Conclusions** Students with ID were absent for a range of reasons and often for multiple reasons. There were elevated rates of school withdrawal and school refusal. Understanding the reasons for absenteeism can inform targeted prevention and intervention supports.

**Keywords** absenteeism, intellectual disability, school attendance problem, school refusal

### Background

School is an important context for the cognitive, social and emotional development of children and

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adolescents (hereafter referred to as students). Poor school attendance is associated with negative outcomes such as lower academic attainment, impaired social and emotional development, drug use and subsequent school dropout (Townsend *et al.* 2007; Hancock *et al.* 2013; Gottfried 2014; Ansari & Pianta 2019). Promoting attendance and reducing school absenteeism are priorities for governments and educational authorities around the world.

School absenteeism is a complex phenomenon, whereby reasons for absence and factors associated with absence are many and varied (Melvin *et al.* 2019). Heyne *et al.* (2019) presented a typology of four main types of absenteeism that can become school attendance problems (SAPs): (1) school refusal; (2) truancy; (3) school withdrawal; and (4) school exclusion. Under this typology, school refusal refers to students who typically display serious emotional upset at the prospect of going to school and commonly stay home from school with their parent's knowledge and despite parents' efforts to support their child to attend. Truancy occurs when a student is absent from school without school permission, and typically, there are efforts to conceal the absence from parents. School withdrawal occurs when a child is absent because of parent choice or with a level of parent acceptance or cooperation. School exclusion refers to absenteeism attributable to the school and may be precipitated by, for example, inappropriate disciplinary exclusion following severe behaviour problems or an inability to provide adequate education and support needs for a student. Regardless of the reason for absence, missing 10% or more of school days is considered problematic (Department of Education 2016; Department for Education 2019; Victorian Auditor General 2022) and is associated with increased risk of school dropout (Schoeneberger 2012).

The impact of absenteeism may vary by the reason for absenteeism. For example, Hancock *et al.* (2018) used longitudinal attendance data from a representative community sample of Australian school students aged 14–15 years and found that adolescents who reported being absent due to illness, stress, anxiety, depression or family caring responsibilities had poorer academic outcomes than students reporting non-attendance due to family events or out-of-school activities. This suggests that

not all absences from school are equal in terms of their impact and raises the importance of understanding reasons for absenteeism.

Students with disabilities have higher rates of school absenteeism and lower rates of school completion, relative to students without disabilities (Department of Education 2016; Gottfried *et al.* 2017; Australian Institute of Health and Welfare 2019; Department for Education 2020). Further, students with intellectual disabilities (IDs) have lower rates of post-secondary education and employment, relative to students with other types of disabilities (Grigal *et al.* 2011; Newman *et al.* 2011; Australian Bureau of Statistics 2012). Unfortunately, there is very little research about school absenteeism among students with disabilities. Emerging evidence suggests that risks for absenteeism differ across types of disability (Gottfried *et al.* 2017; Black & Zablotzky 2018). For example, Black & Zablotzky (2018) analysed data from a national health survey in the USA and found that the odds of chronic absenteeism (defined as parent report of their child missing 15 or more days in the past 12 months) due to illness or injury were greater among children with ID [odds ratio = 1.57, 95% confidence interval (CI): 1.03 to 2.39] and autism spectrum disorder (hereafter referred to as autism; odds ratio = 2.89, 95% CI: 1.59 to 5.27) compared with children without a developmental disability. Moreover, the effect of disability on attendance was additive, with a larger number of disabilities being associated with greater odds of chronic absenteeism. However, the survey data only comprised parent reports of student absences due to illness or injury, excluding other possible reasons for absence such as school refusal and truancy. Moreover, Black & Zablotzky (2018) relied on 12-month recall of attendance, making no use of school-recorded attendance.

Little is known about the frequency of absenteeism, reasons for absenteeism or factors associated with absenteeism among students with ID, because the majority of research focuses on typically developing students or aggregates students with ID and other types of disability (e.g. Gottfried *et al.* 2017). This obscures the rates of, and reasons for, absenteeism in students with ID. There are several exceptions. An early study by Kurita (1991) examined the frequency of school refusal among students with pervasive developmental disorders and/or ID (the total number

with ID is not stated). They found that school refusal was more likely among children with autism compared with children with ID without autism. Totsika *et al.* (2020) found that persistent absence, defined as absence during at least 10% of school sessions in a 1-month period, occurred among 43% of the children with autism. While their study included children with ID, these children only comprised 21% of the sample. Totsika *et al.* (2020) also examined the frequency of types of SAPs and found that school refusal was the reason for 43% of absences.

In sum, there is a lack of research on the rates and types of absenteeism and SAPs among students with ID. Understanding school absenteeism is an important first step in addressing educational inequalities for students with ID. Subsequent efforts to maximise school attendance among students with ID would provide both educational and social benefits. Knowledge of the types of SAPs most commonly experienced by students with a disability can help focus prevention and intervention efforts on areas of greatest need. The aim of the current study was to establish the frequency of absenteeism and the range of reasons for school non-attendance among students with ID. With respect to the latter, the study also aimed to identify the frequency of four SAP types – school refusal, truancy, school exclusion and school withdrawal. A secondary aim was to examine child and school demographic correlates of absence.

## Methods

### Recruitment

Children with disabilities in the state of Victoria, Australia, can attend mainstream schools or schools for students with a disability. There are two types of special schools in Victoria – schools specifically for children with mild–moderate IDs and schools for children with moderate–severe–profound IDs. Primary and secondary schools catering for students with ID (hereafter referred to as special schools) across Victoria were sent information about the study and invited to participate. To facilitate recruitment, special schools consenting to participate were asked to distribute study information to families via paper and/or electronic media.

In addition, recruitment was facilitated by mailing study information to a database of parents of children

with an ID who participated in prior research and provided consent to receive information about future research opportunities. These parents had children who attended special and/or mainstream schools. Prospective participants were able to consent to participate via paper or online. Participating households were given a bookstore gift voucher (AUD\$40) in recognition of the time taken to participate. Figure 1 depicts the recruitment process.

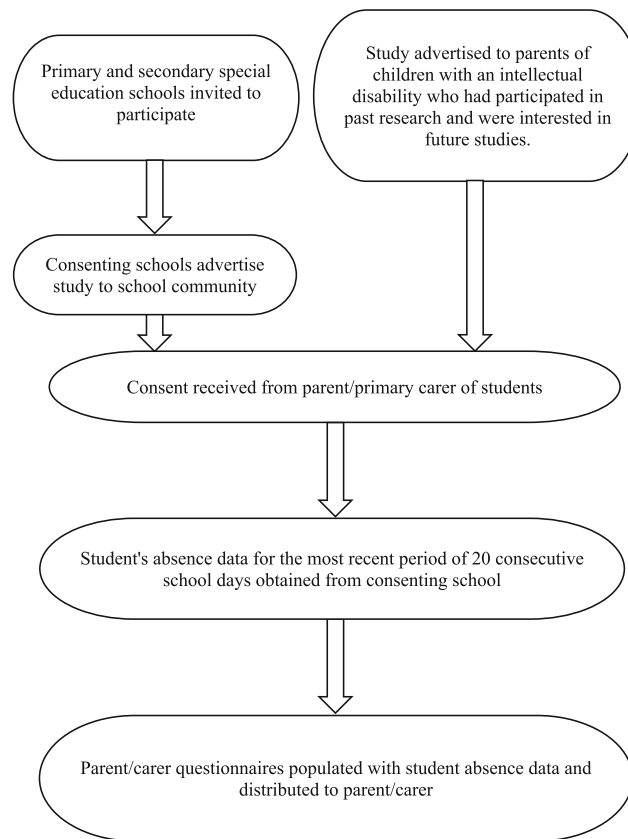
### Participants

To be eligible, students had to be enrolled in a primary or secondary school in the state of Victoria, Australia, and have a parent-reported diagnosis of ID. Parents who could not understand written English were excluded as written informed consent was required. Study respondents were the parents or primary caregivers (hereafter parents) of the children. Student absence data for the most recent period of 20 consecutive school days were obtained from school administrative records. Participants were excluded if the school failed to provide absence data.

Parents of 793 children were recruited. Of these, 125 withdrew or consented but did not participate, and 39 parents did not meet eligibility criteria because the school did not provide data ( $n = 4$ ), their child was too young or old for the study ( $n = 7$ ), their child did not have an ID ( $n = 27$ ) or their child was not currently enrolled in a school ( $n = 1$ ). The final sample consisted of 629 parents (84.6% mothers; 10.2% fathers; 5.2% another relative, professional carer or legal guardian).

Students ranged in age from 5 to 18 years ( $M = 11.18$  years,  $SD = 3.5$ ) and 65.2% were male (Table 1). The majority of children (90.7%) were Australian born and a small group (1.8%) identified as Australian Aboriginal and/or Torres Strait Islander (which is double the state average of 0.9%; Australian Bureau of Statistics 2018). Parent reports of additional child conditions are presented in Table 2. Half of the sample were reported by their parents to have a diagnosis of autism (51.8%).

A high proportion of students in the sample attended a special school (90.5%) with the remaining 9.5% attending a mainstream school. Students attending a mainstream school were younger ( $M = 9.53$ ,  $SD = 2.88$ ) than those attending a special school ( $M = 11.36$ ,  $SD = 3.52$ ) [ $t(979) = 4.57$ ;



**Figure 1.** Study methodology.

**Table 1** Sample demographics

	<b>N = 629</b> <b>n (%)</b>
Student	
Age, years (M, SD)	11.18 years (3.5)
Male	410 (65.2)
Female	218 (34.7)
Another gender	1 (0.2)
Australian Aboriginal and Torres Strait Islander	11 (1.8)
Country of birth	
Australia	569 (90.7)
Other	58 (9.3)
School type	
Special	569 (90.5)
Mainstream	60 (9.5)
School location	
Metropolitan school	480 (76.3)
Regional schools	
Inner regional	132 (21)
Outer regional	17 (2.7)

**Table 2** Parent-reported student conditions in addition to intellectual disability

	<b>n (%)</b>
Autism spectrum disorder	321 (46.9)
Down syndrome	43 (6.8)
Cerebral palsy	25 (4.0)
Acquired brain injury	14 (2.2)
Fragile X syndrome	7 (1.1)
Williams syndrome	5 (0.8)
Fetal alcohol syndrome	4 (0.6)
Childhood disintegrative disorder	2 (0.3)
22q11.2 deletion syndrome	2 (0.3)
Motor neurone disease	1 (0.2)
Prader–Willi syndrome	1 (0.2)
Tuberous sclerosis	1 (0.2)
Other chromosome or genetic condition	71 (11.3)
Other neurological condition	29 (4.6)
Other physical disability	13 (2.1)

$P < 0.01$ ]. Most students attended schools in major cities ( $n = 480$ , 76.3%) while 149 (23.7%) attended schools in 'inner' or 'outer regional' areas [Accessibility and Remoteness Index of Australia (ARIA+); Hugo Centre for Migration and Population Research 2016]. There were no students attending schools in 'remote' locations.

## Measures

### *Demographics questionnaire*

Parents completed a questionnaire that requested information about their child's age, gender, Australian Aboriginal and/or Torres Strait Islander status, additional conditions, family residence postal code, school type (mainstream or special) and Victorian school geographical location on the basis of access to services.

### *Index of Relative Socio-economic Disadvantage*

Socio-Economic Indices for Areas (SEIFA; Australian Bureau of Statistics 2016) were used to assess relative social disadvantage. These indices measure socio-economic disadvantage for each Australian postal code based on resident's material and social resources and social participation. The indices rely upon a combination of individual-level and household-level data collected in the Australian 2016 National Census of Population and Housing. The Index of Relative Socio-economic Disadvantage (IRSD) is a community-level summary measure of relative disadvantage that has been estimated for each postal code. The IRSD has a mean score of 1000 and a standard deviation of 100, with higher scores indicating less disadvantage. Each participant was assigned an IRSD based on their home address.

Accessibility and Remoteness Index of Australia (Hugo Centre for Migration and Population Research 2016) classifies all areas of Australia as one of five levels of remoteness (in order of increasing remoteness): major cities of Australia, inner regional Australia, outer regional Australia, remote Australia and very remote Australia. ARIA+ is a geographical measure with levels of remoteness based on road distances to the nearest service centres in five categories of population size. ARIA+ was used to classify each school with participating students in the sample.

Victoria, the state in which the study was conducted, does not have any 'very remote' areas.

### *School absence*

Absence data for the past 20 school days were obtained with parental consent directly from the school's official records. Secondary schools provided absence data by school period (blocks of time allocated for lessons or classes). Primary schools provided absence data by half day (morning or afternoon). Absence data were converted to a percentage of each day absent and then classified as half-day absence (school attendance with more than 1.5 h of absence) or full-day absence (no attendance that day). For each student, the percentage of time absent was determined by dividing the summed total number of days absent and half days absent, by 20 days multiplied by 100. For example, a student with three days absent and four half days absent  $((3 \times 1) + (4 \times 0.5)/20 \times 100)$  was absent 35% of days.

### *School Non-Attendance CheckList*

Types of school non-attendance were determined using the School Non-Attendance CheckList (SNACK; Heyne *et al.* 2019). The SNACK includes 14 reasons for non-attendance. The reasons correspond with different types of SAPs, namely, school refusal, school withdrawal, truancy, school exclusion and other reasons for absenteeism (e.g. a doctor's appointment). The reasons are grouped according to the following sentence stems: 'My child ...' [e.g. was reluctant or refused (school refusal)], 'I or my partner ...' [e.g. gave my child a day off (school withdrawal)], 'Our family ...' (e.g. had an urgent situation), 'The school ...' [e.g. sent my child home due to his or her behaviour (school exclusion)] and 'Other ...' (e.g. weather conditions). The SNACK includes an additional open response option of 'something else' to allow parents to report reasons beyond the 14 provided. In the current study, parents were provided with the dates on which their child was absent for a half or full day according to school records. If any absences had been recorded, parents were asked to nominate the main reason that best explained their child's absence, across the most recent consecutive 20 days of school. In the event of school holidays, data collection was delayed until a 4-week period (i.e. 20 school days) had elapsed. In prior



studies, the SNACK has been used to measure reasons for school non-attendance among autistic school students (Adams 2022), autistic students with and without ID (Totsika *et al.* 2020) and students with neurodevelopmental conditions (Totsika *et al.* 2022).

### Procedure

The study was approved by the Monash University Human Research Ethics Committee (CF16/944-2016000499) and the Victorian Department of Education and Training (2016-003127). When a parent consented to participate in the study, school administrators were contacted to provide absence data for the most recent 20-day period (i.e. 4-week period). These dates were then provided to the parent so that the SNACK could be populated for each absence. Parent questionnaires were completed in paper format (32.2%), online (60.4%) or by interview (by telephone or in person; 4.2%). Figure 1 depicts recruitment and data collection procedures.

### Data analyses

Descriptive statistics were generated to describe the sample demographics attendance (overall absence percentage; percentage of students with one or more half-day absence; percentage of students with one or more full-day absence) and the reasons for absence, including the frequency of SAP types. School refusal and truancy were calculated using the refusal and truancy items in the SNACK ('was reluctant or refused' and 'skipped/wagged/truanted', respectively). Rates of school withdrawal were obtained by summing absences due to parent choice (i.e. 'gave my child a day off'; 'kept my child home for other reasons'; and 'arranged extra holidays'). Rates of school exclusion were obtained by summing absences due to a school decision restricting attendance (i.e. 'sent my child home due to his or her behaviour' and 'asked that my child stay away from school'). *T*-tests were used to examine differences in attendance by gender (male or female), school type (special vs. mainstream), school size [greater or less than mean student per school (295 students)] and school socio-economic index (SEIFA).

## Results

### Frequency and reasons for absence

Overall, the percentage of absence from school across the sample was 7.9% (95% CI: 5.8% to 10.0%) (or 92.1% attendance). Two hundred and sixty-seven students (42.0% of the sample) had no absences during the 20 consecutive school days assessed. One hundred and twenty-nine students (20.5%) were absent for one or more half days; 325 students (51.6%) were absent for one or more full days. One hundred and eighty-four students (29.3%) were absent for at least 10% of this time.

Table 3 summarises parent-reported reasons for absences (half or full day). A breakdown of reasons for half-day and full-day absences can be found in Table S1. Illness was the most common reason reported, with 32.0% of students absent at least once during the 20-day period for this reason. Appointments were the next most common reason for absences with 24.2% of the sample absent at least once for this reason. Giving the child a rest day was a reason for at least one absence for 5.4% of students.

Regarding the frequency of the four SAPs, there were 11.1% of students (95% CI: 8.6% to 13.6%;  $n = 70$ ) with at least one absence due to school withdrawal (Table 3). There were 5.3% of students (95% CI: 3.5% to 7.1%;  $n = 33$ ) with at least one absence due to school refusal. School exclusion and truancy were less frequently reported reasons for absences and reported for 1.9% of students (95% CI: 0.8% to 3.0%;  $n = 12$ ) and 0.3% of students (95% CI: -0.1% to 0.7%;  $n = 2$ ), respectively. As a large percentage of students had parent-reported autism in addition to ID (46.9%), we examined the frequency of SAPs for this subgroup. The percentage of students reporting at least one absence due to each SAP was similar to the total sample – school withdrawal (10.0%; 95% CI: 6.7% to 13.3%), school refusal (5.6%; 95% CI: 3.1% to 8.1%), school exclusion (2.2%; 95% CI: 0.6% to 3.8%) and truancy (0.6%; 95% CI: 0.0% to 1.5%).

Of students with more than one absence ( $n = 217$ ), 51.6% ( $n = 112$ ) were absent for more than one reason. Of those with at least one absence due to school refusal, 11 (33%) also had an absence due to an appointment, and 17 (51.1%) also had an absence due to illness. Of those with at least one absence due to school withdrawal, 22 (31.4%) also had an absence

**Table 3** Number of student absences by reason as nominated by the parent

SNACK stem	Reason for absence	SAP	Students with non-attendance n (%)	Range of days absent	Absences reported* (% of total absences reported)	Mean absences per student
My child	(1) was sick	–	201 (31.96)	0.5–20	524 (47.78)	2.61
	(2) had an appointment	–	152 (24.17)	0.5–14	238 (21.70)	1.57
	(3) was reluctant or refused	School refusal	33 (5.25)	0.5–6.5	67 (6.11)	2.03
	(4) skipped/wagged/truanted	Truancy	2 (0.32)	1	2 (0.18)	1
I or my partner	(5) gave my child a day off	School withdrawal	34 (5.41)	0.5–9	62 (5.65)	1.82
	(6) arranged extra holidays	School withdrawal	31 (4.93)	0.5–12	98 (8.93)	3.16
	(7) kept my child home for other reasons	School withdrawal	9 (1.43)	0.5–3	11 (1.00)	1.22
		School withdrawal (total)	70 (11.13)	0.5–12	171 (15.58)	2.44
Our family	(8) had other difficulties	–	17 (2.7)	0.5–5	30 (2.73)	1.76
	(9) had an urgent situation	–	5 (0.79)	1–5	11 (1.00)	2.2
	(10) had a religious holiday or cultural observance	–	1 (0.16)	1	1 (0.09)	1
The school	(11) sent my child home due to his or her behaviour	School exclusion	7 (1.11)	0.5–1	9 (0.82)	1.29
	(12) asked that my child stay away from school	School exclusion	5 (0.79)	0.5–10	36 (3.38)	7.2
		School exclusion (total)	12 (1.91)	0.5–10	45 (4.20)	3.75
	(13) was closed	–	1 (0.16)	1	4 (0.36)	1
Other	(14) Weather conditions	–	1 (0.16)	2	2 (0.18)	2
	(15) Something else	–	1 (0.16)	2	2 (0.19)	2

\*A total of 1097 absences reported where an absence is either a half or a full day absent. SAP types: school withdrawal is the sum of items 5–7; school exclusion is the sum of items 11 and 12; school refusal is item 3; and truancy is item 4.

Parent  $N = 629$ . Nine parents provided reasons for some but not all absences (24 absences were not provided with a reason; range = 1–4 absences per participant); 7 parents did not provide reasons for any of their child's absences (17 absences were not provided with a reason; range = 1–5 absences per participant). SAP, school attendance problem; SNACK, School Non-Attendance Checklist.

due to an appointment, and 24 (34.3%) also had an absence due to illness. Five students (15.2%) missed at least 1 day due to school withdrawal and at least 1 day due to refusal to attend.

### Demographic factors associated with absence

There was no significant difference in percentage of time absent from school when comparing male ( $M = 8.0\%$  absence,  $SD = 13.5$ ) and female ( $M = 7.7\%$ ,  $SD = 12.3$ ,  $P > 0.05$ ) [ $t(626) = 0.23$ ;  $P = 0.82$ ]. Students attending mainstream schools ( $M = 13.3\%$  absence,  $SD = 17.5$ ) were absent for a greater percentage of time than students at special schools ( $M = 7.4\%$ ,  $SD = 12.5$ ) [ $t(65.52) = 2.59$ ;  $P < 0.01$ ]. No differences in absence rates were

observed between students at metropolitan schools ( $M = 7.8\%$  absence,  $SD = 12.8$ ) compared with rural schools ( $M = 8.3\%$ ,  $SD = 14.0$ ) [ $t(627) = 0.43$ ;  $P = 0.67$ ]; larger schools ( $\geq 295$  enrolled students,  $M = 7.1\%$  absence,  $SD = 11.4$ ) compared with smaller schools ( $< 295$  enrolled students,  $M = 8.3$ ,  $SD = 13.9$ ) [ $t(627) = 1.05$ ;  $P = 0.30$ ]; or schools in lower school socio-economic areas (below SEIFA score of 1000;  $M = 7.7\%$  absence,  $SD = 13.5\%$ ) compared with higher (at or above an SEIFA score of 1000;  $M = 8.0\%$  absence,  $SD = 12.4$ ) [ $t(626) = 0.31$ ;  $P = 0.75$ ]. In summary, absence was higher for students attending mainstream versus special schools but did not differ by student gender, school setting (metropolitan vs. rural), school size or school socio-economic status.

## Discussion

There is a large body of research on school absenteeism (e.g. Kearney *et al.* 2019), but little is known about absenteeism and SAPs among students with ID. Prior studies show higher rates of absenteeism among students with disabilities, but data are rarely disaggregated to report on students with ID as a distinct group.

In the current study, students with ID were found to be absent from school 7.9% of the time (or 92.1% attendance). The amount of absenteeism identified in this study is lower than the 13% absenteeism recorded among all students attending special schools (13%) in the state of Victoria during a comparable time period (i.e. 2018; Australian Curriculum, Assessment and Reporting Authority 2019). The lower rate of absenteeism in the current sample is likely to have been influenced by the study methodology. Participants were predominantly recruited through schools. Therefore, if children had a significant problem with attendance, parents may not have received information about the study.

Forty-two per cent of students with ID had 100% attendance during the 4-week period of the study, which is comparable with a UK sample of students with autism (36%; Totsika *et al.* 2020). Absenteeism was significantly higher for students with ID attending mainstream schools compared with those attending special schools. This finding requires replication, given the small number of students in the current study who attended mainstream schools. This finding might suggest, however, that students in mainstream schools are more susceptible to absenteeism due to a lower level of resources for student and families, and the need for professional learning on inclusive education in these schools (O’Gorman & Drudy 2010; Woodcock & Woolfson 2019). It might also suggest a higher likelihood of students with ID in mainstream schools experiencing adversity such as bullying (Christensen *et al.* 2012).

We also sought to understand the reasons for absences and the frequency of absences related to different types of SAPs (Heyne *et al.* 2019). School withdrawal occurred on at least one occasion for 11.1% of the sample, indicating the need for greater understanding of why parents choose to excuse their children from school, even if for a short time. The majority of instances of school withdrawal occurred when parents provided additional holidays or rest

days. Permission to take holidays during school term is at the school’s discretion. If holidays are taken during term without permission, parents in Victoria, Australia, might receive a warning or a fine (Department of Education and Training 2021). The number of fines issued to parents in the current sample is unknown. Giving a child a rest day is presumably granted by parents with the child’s well-being in mind. This raises the empirical question of whether higher attendance is unquestionably better for all students, all the time, particularly for students with disabilities. If parents regularly give their child a day off school so the child can rest or the parent can have a break from getting their child to school, this may signal the need for further understanding of the reasons for the absences. It also flags the need for appropriate supports for the family or at school to maximise student well-being and attendance as well as adjustments in the context of school.

School refusal was the next most common type of absence after school withdrawal. Instances of school refusal occurred among 5.3% of students. No study has yet used a comparable parent-report methodology to estimate the frequency of school refusal among typically developing students. However, the estimate is numerically higher than the estimate of 3.6% as reported by Havik *et al.* (2015) in which students self-reported school refusal (defined as missing school ‘quite often’ due to fears, worries, sadness or avoidance of unpleasant situations). Moreover, Havik *et al.* (2015) used a 3-month timeframe for reporting instances of school refusal, compared with the 1-month timeframe in the current study. The seemingly higher rate of school refusal in the current study may be explained by the well-established higher level of mental health problems, including anxiety and depression among children and adolescents with ID compared with those without (Einfeld *et al.* 2006; Emerson & Hatton 2007).

School exclusion was rare in the current sample, occurring among just 1.9% of students. However, those who were ‘asked to stay away by their school’ had the highest average number of days missed (7.2 days). Prior studies in the UK reported a higher percentage of school exclusion than the current study: 9.0% of autistic students (Totsika *et al.* 2020) and 7% of students with a neurodevelopmental disorder (Totsika *et al.* 2022). The difference may point to variation in exclusionary practices between Australia



and the UK. However, both school refusal and exclusion may have been under-detected in the current sample due to school-based recruitment methods. For example, study fliers placed in student school bags and newsletter items may not have reached parents. Truancy was very uncommon, occurring for only two students in the current sample (i.e. 0.32% of students). This may reflect the high level of supervision many students with an ID require and receive during transport to school and the level of independent functioning required to conceal absence and spend time away from school unsupervised.

The high rates of absences due to illness (32.0% of students) and medical and allied health appointments (24.2%) in this study are to be expected. Children with ID have higher rates of chronic and multiple health conditions and subsequent health care utilisation than children without disabilities (Boulet *et al.* 2009). The current findings are consistent with two other studies. Black & Zablotsky (2018) found that students with ID had higher rates of chronic absenteeism due to illness and injury (14%), relative to students with autism (9.0%) or attention-deficit hyperactivity disorder (5.2%). Totsika *et al.* (2020) reported that students with autism and ID were significantly more likely to have absences for health reasons (i.e. illness or appointments) than students with autism without co-occurring ID.

There is a tendency among school authorities and researchers to classify absences related to illness and/or appointments as 'excused' or 'authorised' (Kearney 2016). Even 'authorised' absences, when excessive, can have negative educational consequences (Hancock *et al.* 2018). Thus, it is unhelpful to minimise the substantial number of absences among students with IDs due to illness and appointments. In the current study of Australian students, 32% were absent at least once because of illness and 24% were absent at least once for a medical or allied health appointment. In the UK, Totsika *et al.* (2020) used the same measure and the same timeframe and found that 18% of students were absent due to illness and 15% due to an appointment. In the UK, some health services may be provided to students within special schools, which is one possible reason for the lower absences rates in the UK study. Nevertheless, both rates of absence due to illness and appointments are high, drawing

attention to the likely impact on learning and development and the need for collaboration between health and education to develop solutions to address this issue.

It is important to note that when students had multiple absences, parents often reported different reasons for their child's various absences. Indeed, approximately one half of all students who were absent for more than 1 day missed school for more than one reason. About 30% of those with absence due to school refusal or withdrawal were also absent for an appointment. Absence due to illness applied to 34% of those with absence due to school withdrawal and 51% of those with absence due to school refusal. The high rate of co-occurring absence due to school refusal and illness likely reflects somatic symptoms in the presentation of school refusal (Li *et al.* 2021). Reasons for non-attendance can be complex and, therefore, cannot be assumed to be homogenous for each individual. This has consequences for the conceptualisation of SAPs (Heyne *et al.* 2019) and implications for the prevention of absenteeism and provision of supports and interventions for students, families and schools.

A limitation of the current study was that participants were predominately recruited via schools. Students with chronic absence may be underrepresented because their families may not have received or engaged with study information provided by the school. Another limitation is that a large majority of students were at special schools and so the results are less representative of students with ID who attend mainstream schools. This bias resulted from our pragmatic decision to focus recruitment on special schools because mainstream schools typically have a small proportion of student with ID. In addition, parents with low literacy may have been precluded from participating because the information sheet and consent forms were only available in written format. Further, the study relied upon parent-reported ID rather than an assessment or a review of an existing assessment report. However, as noted earlier, the majority of students attended special schools that require a diagnosis of ID for enrolment. A strength of the current study is the use of absence data obtained directly from the school for a recent consecutive 4-week period. While school attendance data may have errors (Keppens & Bach Johnsen 2021), use of school data reduced risks that

parents would under-estimate or over-estimate their child's attendance and assisted with recall of reason for absence.

The findings raise several areas for future research. Collection of similar data about students without disabilities would provide useful datasets for comparison, thus facilitating appropriate targeting of prevention and intervention efforts. This could help refine preventions and intervention efforts for students with and without IDs. Our comparison of attendance rates between students in mainstream and special schools requires replication with equal representation from each group. The current study identified the reasons for absenteeism, but it did not examine the consequences of absenteeism on learning, social and emotional outcomes. A case in point is school withdrawal. When parents withdraw a child from school for a rest, this reduces attendance rates but may have a positive impact for the child. Interviews with parents would shed light on the reasons for temporarily withdrawing a child from school and any benefits and risks of this practice as well as guidance on how schools can best support these students.

### Implications

This study has implications for both practice and research. In practice, differentiating between types of SAPs seems to be an important task because it can guide decision-making about the type of supports and interventions needed to improve a student's attendance. For example, the finding that school withdrawal is common among students with ID underscores the importance of school personnel fostering a positive relationship with parents (e.g. Sheldon 2007) to facilitate open communication about the needs of the parents and their child. Another finding relevant for practice in the field of school attendance is the high rate of students whose absence on different occasions was due to different reasons. The heterogeneity of absenteeism needs to be considered when developing an understanding of absenteeism and mobilising supports. Regarding implications for research, the study findings highlight the need to develop methodologies to recruit parents whose children are not attending school. This may include recruitment via social media campaigns or advocacy organisations.

### Conclusions

School attendance is a benchmark for optimal child development (Kearney & Graczyk 2020). For this reason, it is important to identify ways to maximise the attendance among those at risk of frequent absenteeism and those already frequently absent. The current study is an important step in this direction, identifying the rates of different types of absenteeism among students with ID. Describing the phenomenology of attendance problems lays the foundation for understanding factors that contribute to SAPs and assists in identifying targets for intervention and support.

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[Correction added on 09 February 2023, after first online publication: <Open access publishing facilitated by Deakin University, as part of the Wiley - Deakin University agreement via the Council of Australian University Librarians.> Funding statement has been added.]

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### Conflict of interest

The authors declare that there is no conflict of interest.

### Ethics approval statement

This project was approved by the Monash University Human Research Ethics Committee (project number CF16/944-2016000499).

### Patient consent statement

Participants provided written informed consent to participate in this study.

## Data availability statement

The participants of this study did not give written consent for their data to be shared publicly.

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## Supporting Information

Additional Supporting Information may be found online in the supporting information tab for this article.

**Table S1.** Total number of student absences, half day absences and full day absences by reason as nominated by the parent