Does school starting age impact well-being and test scores?

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### Introduction

One potential role of the school system is to decrease inequalities in the resources for learning between socioeconomically advantaged and disadvantaged children. A young school starting age may help more disadvantaged children by compensating for their more limited learning resources at home. However there is danger with such an approach, as there is evidence that being relatively young in a school year is a disadvantage that could even offset any additional benefit of starting school early. For more advantaged children when they start school or are younger in the year may be less important as home resources can compensate. For example, Suziedelytea and Zhu (Suziedelyte and Zhu 2015) found that while early school starting age had positive impacts for cognitive ability in young primary school children in Australia, particularly those disadvantaged, it had negative impacts on social development across the socioeconomic spectrum. In Scotland, children whose 4th birthday is in February will normally start school that August while those born March onward will start the following August. Pupils not aged five by the August start can delay school a year with those born in January and February who delay automatically entitled to an extra year of nursery provision however this is discretionary for those born September to December. While much work in Scotland has been conducted on pupils social and emotional in Scotland in recent years (for an overview see ) and some focus has been paid to school readiness and starting age, most reports associations rather than a causal focus . This is a significant gap as there is consistent evidence from natural experiment studies in other countries that school starting age can affect the likelihood of mental health problems and of a diagnosis of attention deficit hyperactivity disorder (ADHD) (Dee and Sievertsen 2018; Chen, Fortin, and Phipps 2015; Elder 2010; Evans, Morrill, and Parente 2010; Schwandt and Wuppermann 2016). Here it is school starting age affecting relative age within the school year that is the studied mechanism. Most studies assess these affects by socioeconomic background finding that impacts across the socioeconomic spectrum but sometimes less so in those more advantaged (Dee and Sievertsen 2018; Chen, Fortin, and Phipps 2015; Elder 2010; Evans, Morrill, and Parente 2010). A German study suggests that more educated parents may be more likely to seek an ADHD diagnosis got their young for year child but recognizes their evidence for this is weak (Schwandt and Wuppermann 2016). Crawford et al. (2014) outline the four possible mechanisms through which age at starting school might impact education and wellbeing outcomes: age at test, age of starting school, length of schooling and relative age. As exams are generally taken at the same time, age at test may be an important mechanism. By studying test taken at the same age, they showed that most of the effect of starting age on test performance in England was through age at test. Analysis of England’s PISA test scores (where the sample is age selected so age at test is less of a factor) found little impact of school starting cut-off, this was interpreted as an extra year of schooling (length of schooling) having little effect (Luyten, Peschar, and Coe 2008; Benton 2014). It could also be driven by age of starting school or relative age effects or a combination of all three offsetting. Luyten et al. (2008) suggest that any positive effect of being in a higher grade was greatest in more disadvantaged pupils. This raises the possibility of a trade off between better test scores and worse mental wellbeing especially for disadvantaged pupils

### Method

#### Data

We are using The Programme for International Student Assessment (PISA) 2018 data for Scotland (and England as a comparison). PISA surveys 15 years old students (with some leeway so includes some aged 16 ) in formal schooling in countries across the OECD using a standard framework with local adaptations. The core aim is to assess and compare countries on students’ literacy in reading, maths and science. School based fieldwork in Scotland between 8th October and 14th December 2018. A two stage stratified sample was employed, schools and then students in schools were sampled (for details see (Government 2018)). Scotland had an 81% participation rate meeting the 80% target of the OECD. Surveys were computer administered and in addition to assessing the core literacies students completed a questionnaire covering their socio-economic background and their wellbeing which we draw on in this study as well. The Scottish questionnaires are available to download at [[http://www.oecd.org/pisa/publications/UK%20(Scotland).zip](http://www.oecd.org/pisa/publications/UK%20(Scotland).zip)](http://www.oecd.org/pisa/publications/UK%20(Scotland).zip) . As PISA is aimed at a specific age, it can cover a number of school years (grades in PISA terminology) . In Scotland the sample was split between S4 and S5 pupils (PISA grades 11 and 12) , the few in other years are excluded in our analysis as any pupils who said they had repeated a year. These exclusions reduced the sample from 2998 pupils to 2802 pupils. Given the complex survey design all analysis incorporates replication weights and student weights. The weights are scaled to the population rather than the sample hence why in the following the sample size is 42,243. Table 1 describes the sample overall and by school year. We include four measures of socio-economic position. PISA’s summary scale is the index of economic, social and cultural status (ESCS). It is based on three indices, parental education (International Standard Classification of Education), parental occupation (International Socio-Economic Index) and PISA’s home possessions scale. There is some imputation for missing data when calculating the ESCS.

Table 1: Student characteristics in Scotland PISA 2018 by grade.

| Characteristic | % miss | Overall, N = 42,2431 | S4, N = 20,6231 | S5, N = 21,6201 |
| --- | --- | --- | --- | --- |
| Age | 0% | 15.76 (0.30) | 15.51 (0.17) | 16.00 (0.17) |
| Sex | 0% |  |  |  |
| Female |  | 51% | 49% | 54% |
| Male |  | 49% | 51% | 46% |
| ESCS | 5.4% | 0.23 (0.86) | 0.21 (0.85) | 0.25 (0.86) |
| Highest Occupation of parents (ISEI) | 16% | 58 (21) | 58 (21) | 58 (21) |
| Home possessions scale | 0.1% | 0.14 (0.91) | 0.12 (0.92) | 0.17 (0.90) |
| Highest Education of parents (ISCED) | 12% |  |  |  |
| None |  | <0.1% | <0.1% | 0% |
| ISCED 1 |  | 0.2% | <0.1% | 0.3% |
| ISCED 2 |  | 4.0% | 3.5% | 4.5% |
| ISCED 3B, C |  | 14% | 15% | 13% |
| ISCED 3A, ISCED 4 |  | 17% | 18% | 15% |
| ISCED 5B |  | 13% | 12% | 14% |
| ISCED 5A, 6 |  | 52% | 52% | 53% |
| 1Mean (SD); % | | | | |

#### Design

As illustrated in Figure 1 Scotland’s February / March cut off leads to a large jump in the probability of being in S4 as opposed to S5. This allows a regression discontinuity design.

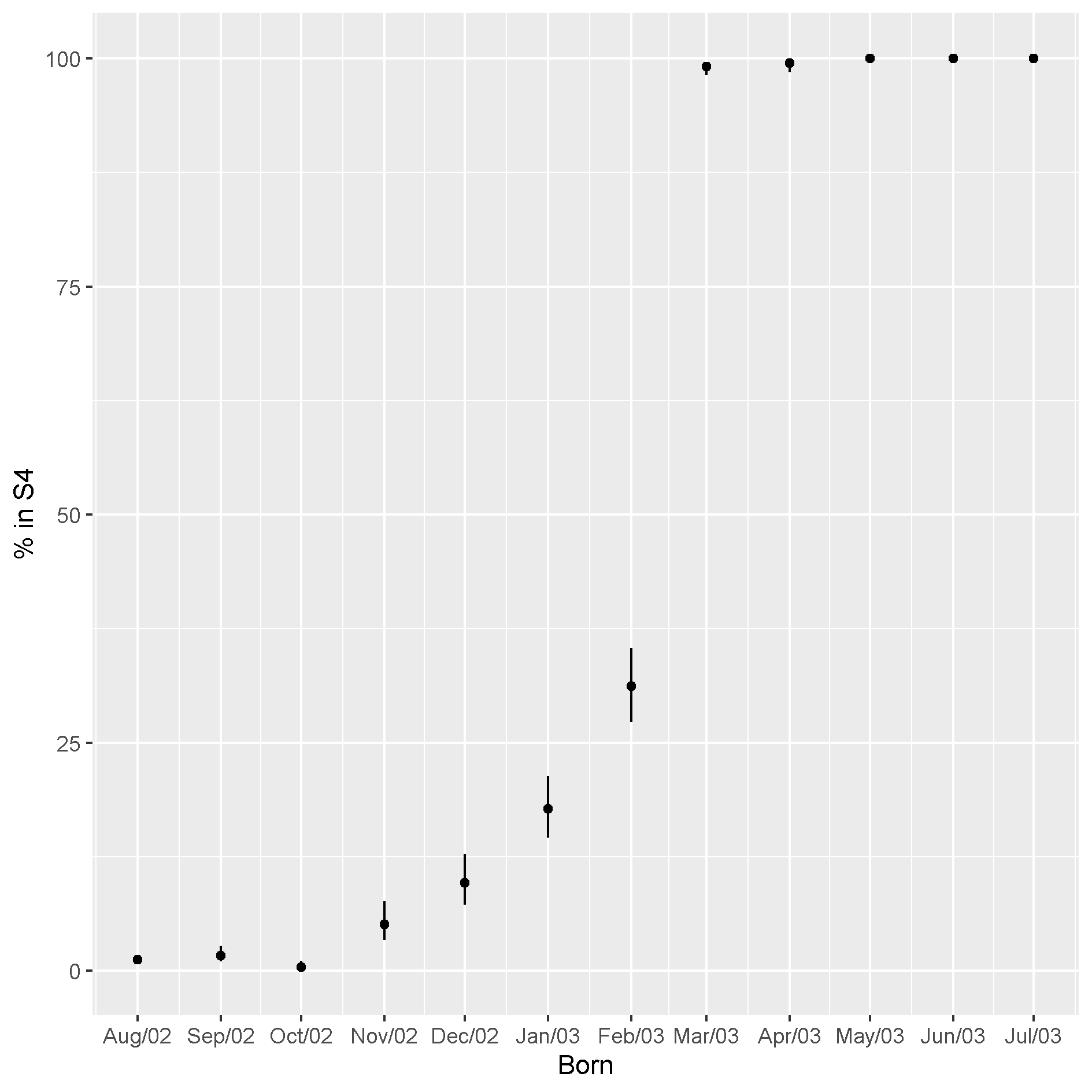


Figure 1 - The probability of being in grade 11 by date of birth.

There are two types of regression discontinuity , local randomisation and continuity. We have the running variable of date of birth with a cut point in Feb / March that means the probability of one less year (S4) of schooling at nearly the same age jumps. Our effect is local to those at the cut point, in other words those born in Feb / March. As we only have a discrete date of birth (we do not know day only month and year) the more natural approach is local randomisation. Here we limit analysis to those in Feb and March, our window. Our assumptions are that the running variable is not related to the potential outcomes in our window and that treatment (grade) is effectively randomised.

* To assess these assumptions (indirectly) table 2 compares those born February / March and the only main difference is a small one (obviously) in age. Also we can run a test to see if there is evidence of bunching in the distribution of month of birth at the cut point , there doesn’t seem to be (p=r round(density\_result$results[[3]], 2)).

Table 2 Student characteristics by month at cut off

| Characteristic | Feb, N = 3,8861 | March, N = 3,7001 | p-value2 |
| --- | --- | --- | --- |
| Age | 15.73 (0.04) | 15.65 (0.04) | <0.001 |
| Sex |  |  | 0.2 |
| Female | 51% | 48% |  |
| Male | 49% | 52% |  |
| ESCS | 0.21 (0.83) | 0.15 (0.88) | 0.2 |
| Highest Occupation of parents (ISEI) | 56 (21) | 55 (22) | 0.4 |
| Home possessions scale | 0.12 (0.84) | 0.04 (0.97) | 0.067 |
| Highest Education of parents (ISCED) |  |  | <0.001 |
| None | 0% | 0.4% |  |
| ISCED 1 | 0.3% | 0% |  |
| ISCED 2 | 5.0% | 2.1% |  |
| ISCED 3B, C | 10% | 12% |  |
| ISCED 3A, ISCED 4 | 15% | 21% |  |
| ISCED 5B | 14% | 12% |  |
| ISCED 5A, 6 | 55% | 52% |  |
| 1Mean (SD); % | | | |
| 2Wilcoxon rank-sum test for complex survey samples; chi-squared test with Rao & Scott's second-order correction | | | |

* Of course because of deferral option not everyone born February is in grade 12. Table 3 shows that those deferring are more likely to be male and (slightly) more advantaged. This obviously violates the assumptions set out?
* Yes, but their is a solution. As the cut date is “random” it can be used as an instrument for grade. This is a so called “fuzzy” regression discontinuity.

Table 3 Student characteristics by grade and month at cut off

| Characteristic | S4 Feb, N = 1,1321 | S5 Feb, N = 2,5011 | S4 March, N = 3,4631 |
| --- | --- | --- | --- |
| Age | 15.73 (0.04) | 15.73 (0.04) | 15.65 (0.05) |
| Sex |  |  |  |
| Female | 43% | 55% | 48% |
| Male | 57% | 45% | 52% |
| ESCS | 0.32 (0.77) | 0.15 (0.84) | 0.19 (0.85) |
| Highest Occupation of parents (ISEI) | 59 (21) | 55 (21) | 56 (22) |
| Home possessions scale | 0.19 (0.89) | 0.08 (0.82) | 0.07 (0.94) |
| Highest Education of parents (ISCED) |  |  |  |
| None | 0% | 0% | 0% |
| ISCED 1 | 0% | 0.5% | 0% |
| ISCED 2 | 2.7% | 5.9% | 2.2% |
| ISCED 3B, C | 12% | 10% | 12% |
| ISCED 3A, ISCED 4 | 13% | 16% | 21% |
| ISCED 5B | 10% | 15% | 13% |
| ISCED 5A, 6 | 62% | 52% | 52% |
| 1Mean (SD); % | | | |

* The other flavour of regression discontinuity is based on the continuity assumption. Basically this allows the forcing variable (and de facto other variables) to be related to the outcome but in a smooth fashion so that any jump at the cut point can be assigned to the intervention. It involves fitting regression lines either side of the cut point in a window of data define by the forcing variable. With discrete data the lack of a continuous forcing variable is slightly problematic.
* An attraction of also using this approach is that we can use age as the forcing variable, we might expect age to increase exam performance but not in a jump. This then allows us to account for any small age at test differences. Using England were everyone is in the same grade can also help with this.
* As with local randomization there is also a fuzzy version of continuity regression discontinuity that works in the same way.

#### Outcomes

##### Wellbeing

We will use the PISA framework of wellbeing that covers three main dimensions (cognitive, psychological and social) (Govorova, Benı́tez, and Muñiz 2020).

**Cognitive**

Students were asked whether they agreed with the statement “Your intelligence is something about you that you can’t change very much.”

Table 4 Cognitive wellbeing

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Agree: Your intelligence is something about you that you can't change very much. | 2.6% |  |
| Strongly disagree |  | 29% |
| Disagree |  | 43% |
| Agree |  | 22% |
| Strongly agree |  | 6.4% |
| 1% | | |

**Psychological**

Students were asked about the following eight domains of psychological well being most of which contain a number of questions

* Learning goals

Table 5 Learning goals

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| How true for you: My goal is to learn as much as possible. | 3.5% |  |
| Not at all true of me |  | 3.4% |
| Slightly true of me |  | 11% |
| Moderately true of me |  | 35% |
| Very true of me |  | 34% |
| Extremely true of me |  | 16% |
| How true for you: My goal is to completely master the material presented in my classes. | 3.8% |  |
| Not at all true of me |  | 11% |
| Slightly true of me |  | 20% |
| Moderately true of me |  | 36% |
| Very true of me |  | 22% |
| Extremely true of me |  | 11% |
| How true for you: My goal is to understand the content of my classes as thoroughly as possible. | 4.4% |  |
| Not at all true of me |  | 3.6% |
| Slightly true of me |  | 10% |
| Moderately true of me |  | 24% |
| Very true of me |  | 40% |
| Extremely true of me |  | 22% |
| 1% | | |

* Motivation to master tasks

Table 6 Motivation to master tasks

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Agree: I find satisfaction in working as hard as I can. | 3.5% |  |
| Strongly disagree |  | 3.3% |
| Disagree |  | 19% |
| Agree |  | 56% |
| Strongly agree |  | 21% |
| Agree: Once I start a task, I persist until it is finished. | 3.7% |  |
| Strongly disagree |  | 3.8% |
| Disagree |  | 33% |
| Agree |  | 50% |
| Strongly agree |  | 14% |
| Agree: Part of the enjoyment I get from doing things is when I improve on my past performance. | 3.8% |  |
| Strongly disagree |  | 2.3% |
| Disagree |  | 17% |
| Agree |  | 58% |
| Strongly agree |  | 22% |
| Agree: If I am not good at something, I would rather keep struggling to master it than move on to something I may [...] | 4.4% |  |
| Strongly disagree |  | 8.9% |
| Disagree |  | 36% |
| Agree |  | 42% |
| Strongly agree |  | 13% |
| 1% | | |

* Resilience (or self-efficacy)

Table 7 Resilience (or self-efficacy)

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Agree: I usually manage one way or another. | 4.8% |  |
| Strongly disagree |  | 1.4% |
| Disagree |  | 7.5% |
| Agree |  | 74% |
| Strongly agree |  | 17% |
| Agree: I feel proud that I have accomplished things. | 5.0% |  |
| Strongly disagree |  | 1.3% |
| Disagree |  | 11% |
| Agree |  | 62% |
| Strongly agree |  | 25% |
| Agree: I feel that I can handle many things at a time. | 4.9% |  |
| Strongly disagree |  | 5.6% |
| Disagree |  | 26% |
| Agree |  | 55% |
| Strongly agree |  | 13% |
| Agree: My belief in myself gets me through hard times. | 5.3% |  |
| Strongly disagree |  | 7.9% |
| Disagree |  | 32% |
| Agree |  | 48% |
| Strongly agree |  | 13% |
| Agree: When I’m in a difficult situation, I can usually find my way out of it. | 5.3% |  |
| Strongly disagree |  | 3.0% |
| Disagree |  | 14% |
| Agree |  | 64% |
| Strongly agree |  | 18% |
| 1% | | |

* Fear of failure

Table 8 Fear of failure

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Agree: When I am failing, I worry about what others think of me. | 3.5% |  |
| Strongly disagree |  | 10% |
| Disagree |  | 24% |
| Agree |  | 40% |
| Strongly agree |  | 26% |
| Agree: When I am failing, I am afraid that I might not have enough talent. | 3.2% |  |
| Strongly disagree |  | 9.3% |
| Disagree |  | 24% |
| Agree |  | 41% |
| Strongly agree |  | 25% |
| Agree: When I am failing, this makes me doubt my plans for the future. | 3.4% |  |
| Strongly disagree |  | 7.9% |
| Disagree |  | 20% |
| Agree |  | 38% |
| Strongly agree |  | 34% |
| 1% | | |

* Meaning in life

Table 9 Meaning in life

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Agree: My life has clear meaning or purpose. | 4.2% |  |
| Strongly disagree |  | 11% |
| Disagree |  | 32% |
| Agree |  | 44% |
| Strongly agree |  | 12% |
| Agree: I have discovered a satisfactory meaning in life. | 5.0% |  |
| Strongly disagree |  | 11% |
| Disagree |  | 39% |
| Agree |  | 41% |
| Strongly agree |  | 9.7% |
| Agree: I have a clear sense of what gives meaning to my life. | 5.2% |  |
| Strongly disagree |  | 10% |
| Disagree |  | 33% |
| Agree |  | 44% |
| Strongly agree |  | 13% |
| 1% | | |

* Positive feelings

Table 10 Positive feelings

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Happy | 3.1% |  |
| Never |  | 1.4% |
| Rarely |  | 5.3% |
| Sometimes |  | 57% |
| Always |  | 36% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Scared | 3.7% |  |
| Never |  | 12% |
| Rarely |  | 48% |
| Sometimes |  | 36% |
| Always |  | 4.1% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Lively | 4.1% |  |
| Never |  | 2.6% |
| Rarely |  | 16% |
| Sometimes |  | 54% |
| Always |  | 27% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Miserable | 3.8% |  |
| Never |  | 12% |
| Rarely |  | 41% |
| Sometimes |  | 41% |
| Always |  | 6.0% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Proud | 3.9% |  |
| Never |  | 4.6% |
| Rarely |  | 28% |
| Sometimes |  | 55% |
| Always |  | 12% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Afraid | 3.8% |  |
| Never |  | 5.6% |
| Rarely |  | 24% |
| Sometimes |  | 49% |
| Always |  | 21% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Joyful | 4.2% |  |
| Never |  | 2.2% |
| Rarely |  | 16% |
| Sometimes |  | 60% |
| Always |  | 22% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Sad | 3.6% |  |
| Never |  | 4.9% |
| Rarely |  | 32% |
| Sometimes |  | 55% |
| Always |  | 8.3% |
| Thinking about yourself and how you normally feel: how often do you feel as described below? Cheerful | 4.3% |  |
| Never |  | 2.2% |
| Rarely |  | 13% |
| Sometimes |  | 59% |
| Always |  | 26% |
| 1% | | |

* Life satisfaction

Table 11 Life satisfaction (out of 10)

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Lifesat | 3.1% | 7.27 (2.56) |
| 1Mean (SD) | | |

* Attitudes to competition

Table 12 Attitudes to competition

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Agree: I enjoy working in situations involving competition with others. | 2.4% |  |
| Strongly disagree |  | 6.9% |
| Disagree |  | 22% |
| Agree |  | 48% |
| Strongly agree |  | 23% |
| Agree: It is important for me to perform better than other people on a task. | 2.7% |  |
| Strongly disagree |  | 5.9% |
| Disagree |  | 34% |
| Agree |  | 42% |
| Strongly agree |  | 18% |
| Agree: I try harder when I’m in competition with other people. | 2.7% |  |
| Strongly disagree |  | 5.4% |
| Disagree |  | 16% |
| Agree |  | 46% |
| Strongly agree |  | 32% |
| 1% | | |

**Social**

* Exposure to bullying

Table 13 Exposure to bullying

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| During the past 12 months, how often: Other students left me out of things on purpose. | 11% |  |
| Never or almost never |  | 65% |
| A few times a year |  | 24% |
| A few times a month |  | 7.8% |
| Once a week or more |  | 3.7% |
| During the past 12 months, how often: Other students made fun of me. | 11% |  |
| Never or almost never |  | 52% |
| A few times a year |  | 28% |
| A few times a month |  | 12% |
| Once a week or more |  | 8.1% |
| During the past 12 months, how often: I was threatened by other students. | 11% |  |
| Never or almost never |  | 79% |
| A few times a year |  | 14% |
| A few times a month |  | 4.7% |
| Once a week or more |  | 2.6% |
| During the past 12 months, how often: Other students took away or destroyed things that belonged to me. | 11% |  |
| Never or almost never |  | 87% |
| A few times a year |  | 8.5% |
| A few times a month |  | 2.7% |
| Once a week or more |  | 1.7% |
| During the past 12 months, how often: I got hit or pushed around by other students. | 11% |  |
| Never or almost never |  | 82% |
| A few times a year |  | 12% |
| A few times a month |  | 3.9% |
| Once a week or more |  | 2.7% |
| During the past 12 months, how often: Other students spread nasty rumours about me. | 11% |  |
| Never or almost never |  | 71% |
| A few times a year |  | 20% |
| A few times a month |  | 5.7% |
| Once a week or more |  | 3.7% |
| 1% | | |

* Student competition

Table 14 Student competition

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Think about your school, how true: Students seem to value competition. | 12% |  |
| Not at all true |  | 2.9% |
| Slightly true |  | 32% |
| Very true |  | 48% |
| Extremely true |  | 17% |
| Think about your school, how true: It seems that students are competing with each other. | 12% |  |
| Not at all true |  | 2.0% |
| Slightly true |  | 24% |
| Very true |  | 51% |
| Extremely true |  | 22% |
| Think about your school, how true: Students seem to share the feeling that competing with each other is important. | 12% |  |
| Not at all true |  | 6.0% |
| Slightly true |  | 33% |
| Very true |  | 46% |
| Extremely true |  | 15% |
| Think about your school, how true: Students feel that they are being compared with others. | 12% |  |
| Not at all true |  | 4.7% |
| Slightly true |  | 22% |
| Very true |  | 40% |
| Extremely true |  | 32% |
| 1% | | |

* Student co-operation

Table 15 Student co-operation

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Think about your school, how true: Students seem to value cooperation. | 13% |  |
| Not at all true |  | 5.4% |
| Slightly true |  | 43% |
| Very true |  | 43% |
| Extremely true |  | 8.7% |
| Think about your school, how true: It seems that students are cooperating with each other. | 13% |  |
| Not at all true |  | 4.1% |
| Slightly true |  | 35% |
| Very true |  | 51% |
| Extremely true |  | 9.3% |
| Think about your school, how true: Students seem to share the feeling that cooperating with each other is important. | 14% |  |
| Not at all true |  | 6.9% |
| Slightly true |  | 39% |
| Very true |  | 45% |
| Extremely true |  | 9.3% |
| Think about your school, how true: Students feel that they are encouraged to cooperate with others. | 14% |  |
| Not at all true |  | 6.2% |
| Slightly true |  | 33% |
| Very true |  | 49% |
| Extremely true |  | 12% |
| 1% | | |

* Parents’ emotional support

Table 16 Parents’ emotional support

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Thinking about <this academic year>: My parents support my educational efforts and achievements. | 9.0% |  |
| Strongly disagree |  | 2.3% |
| Disagree |  | 3.1% |
| Agree |  | 33% |
| Strongly agree |  | 62% |
| Thinking about <this academic year>: My parents support me when I am facing difficulties at school. | 9.4% |  |
| Strongly disagree |  | 2.8% |
| Disagree |  | 7.0% |
| Agree |  | 37% |
| Strongly agree |  | 53% |
| Thinking about <this academic year>: My parents encourage me to be confident. | 9.5% |  |
| Strongly disagree |  | 2.7% |
| Disagree |  | 6.2% |
| Agree |  | 35% |
| Strongly agree |  | 56% |
| 1% | | |

* Sense of belonging scale

Table 17 Sense of belonging scale

| Outcomes | % miss | N = 42,2441 |
| --- | --- | --- |
| Thinking about your school: I feel like an outsider (or left out of things) at school. | 5.2% |  |
| Strongly agree |  | 4.9% |
| Agree |  | 19% |
| Disagree |  | 51% |
| Strongly disagree |  | 25% |
| Thinking about your school: I make friends easily at school. | 5.4% |  |
| Strongly agree |  | 16% |
| Agree |  | 59% |
| Disagree |  | 20% |
| Strongly disagree |  | 4.3% |
| Thinking about your school: I feel like I belong at school. | 5.8% |  |
| Strongly agree |  | 9.5% |
| Agree |  | 55% |
| Disagree |  | 27% |
| Strongly disagree |  | 8.5% |
| Thinking about your school: I feel awkward and out of place in my school. | 5.8% |  |
| Strongly agree |  | 5.2% |
| Agree |  | 20% |
| Disagree |  | 54% |
| Strongly disagree |  | 21% |
| Thinking about your school: Other students seem to like me. | 6.1% |  |
| Strongly agree |  | 13% |
| Agree |  | 74% |
| Disagree |  | 10% |
| Strongly disagree |  | 2.6% |
| Thinking about your school: I feel lonely at school. | 5.9% |  |
| Strongly agree |  | 4.0% |
| Agree |  | 11% |
| Disagree |  | 49% |
| Strongly disagree |  | 36% |
| 1% | | |

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