

# Wellbeing and Engagement Collection (WEC)



History of the WEC in the South Australian school system and psychometric properties of the WEC survey instrument

Report prepared for  
Department for Education, South Australia  
June 2020

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### Acknowledgements:

We would like to acknowledge the students and schools who have participated in the Wellbeing and Engagement Collection between 2013 and 2019. We would also like to thank our colleagues in the South Australian Government Department for Education for their assistance in collating information about the history of the WEC and their thoughtful feedback on earlier drafts of this report.

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### Suggested citation:

Gregory, T., & Brinkman, S. (2020). Wellbeing and Engagement Collection (WEC): History of the WEC in the South Australian school system and psychometric properties of the WEC survey instrument. Published by the Fraser Mustard Centre. SA Department for Education and the Telethon Kids Institute Adelaide.

ISBN 978-0-9876002-7-1

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## 1. Executive Summary

Fostering student wellbeing is increasingly seen as a central objective of education, however few education systems across the world collect information on the wellbeing of their students. The South Australian Department for Education are an exception to this rule, conducting an annual wellbeing collection to help teachers, school leaders and policy makers better understand the wellbeing and engagement of their students.

Over the past eight years, the Wellbeing and Engagement Collection (WEC) has gained traction with teachers, schools and the education department, and school-level participation rates have increased markedly each year. The collection has been expanded over time from focusing exclusively on Grade 6 students in 2013, to inviting students from Grades 4 to 12 to participate in 2019. The survey tool used to measure student wellbeing has also been refined over time to better meet the needs of the Department. These changes to the collection and the survey instrument have been described in various technical report, policy briefs and academic articles, but have not been distilled into a single report accessible to researchers, data users and policy makers who want to use the WEC data.

The aims of this report were threefold.

1. To describe the changes to the collection over time, such as the expansion of the collection to students of different ages and participation rates in different collection cycles
2. To describe the changes to the student wellbeing instrument over time, including the addition and deletion of scales and items and changes to response scales
3. To report on the psychometric properties of the scales in the student wellbeing instrument for students in different school grades (Grades 4 to 12) using the 2019 WEC data

### Key findings

#### 2019 WEC sample

A total of 95,973 students from 525 schools participated in the 2019 WEC in South Australia. Students from Grade 4 to 12 participated in the WEC, and 2019 was the first year that Senior Years students (Grade 10-12) were eligible to participate. A sub-sample of students (n = 92,825) with valid data on gender and grade level provided the sample for the psychometric analyses.

Demographic information from the school enrolment census was linked to the WEC data for the government school students (n = 73,396, 79% of the sample), and can be used to describe the sample. Approximately 5% of the sample had an Aboriginal and/or Torres Strait Islander background, and 24% had a non-English speaking background. The sample was slightly skewed towards students in the younger grades, with 54% of the sample in Primary school (Grade 4 to 7) and 46% in high school (Grade 8 to 12). Approximately 26% of the sample lived in the most disadvantaged communities in South Australia, with 21% living in the most advantaged communities.

## Psychometric properties of the Wellbeing and Engagement survey

The psychometric analyses in this report focus on the multi-item scales, and for each of these scales we explored four different types of reliability/validity.

|  |  |
|--|--|
| Internal reliability   | <b>Do the items within each scale measure the same construct?</b>  |
| Convergent validity  | <b>Are scores on this scale associated with scores on other scales that they theoretically should be associated with?</b>  |
| Discriminant validity  | <b>Do scores on this scale show weak associations with scores on other scales that they are theoretically not expected to be strongly associated with?</b>                     |
| Sub-group differences in scale scores by gender and year level | <b>Are differences in scores between sub-groups consistent with theoretical expectations? Is the scale sensitive to differences that occur as children mature and develop?</b> |

Table 1 presents a summary of the psychometric properties of each of the scales against these four different criteria. All scales had good internal reliability, for students across all grades, and all had good convergent and divergent validity. Most scales showed differences between males and females and/or grade level, suggesting that the scales are sensitive to known gender differences and/or differences that occur as children mature and develop. Two scales that were collected for children in Grades 4 to 12 showed limited evidence for differences between males and females and/or children of different ages, suggesting they may not be as sensitive to detecting changes over time.

- *Friendship intimacy*
  - This scale is highly skewed towards high levels of Friendship intimacy, especially for girls, making it difficult to detect improvements over time with this scale.
- *Engagement (flow)*
  - This scale is normally distributed with a lot of variation between students but there is limited evidence of any gender or grade level differences. Theoretically similar scales such as Cognitive engagement and Academic self-concept show quite clear patterns of lower engagement and self-concept with increasing age.

Several other scales showed limited evidence of differences between males and females and/or children of different ages. However, these scale were only measured in Senior Years students, so age effects could only be observed within a small age range (i.e. Year 10-12) and would be expected to be less pronounced. As such, we do not consider these scales to be problematic from a psychometric analysis perspective.



**Table 1. Summary of psychometric findings**

| Scale                              | Internal reliability | Convergent/<br>divergent validity | Gender and/or<br>grade effects |
|------------------------------------|----------------------|-----------------------------------|--------------------------------|
| <b>Emotional Wellbeing</b>         |                      |                                   |                                |
| Life satisfaction                  | ✓                    | ✓                                 | ✓                              |
| Sadness                            | ✓                    | ✓                                 | ✓                              |
| Worries                            | ✓                    | ✓                                 | ✓                              |
| Optimism                           | ✓                    | ✓                                 | ✓                              |
| Happiness                          | ✓                    | ✓                                 | ✓                              |
| Emotion regulation                 | ✓                    | ✓                                 | ✓                              |
| Psychological distress (*)         | ✓                    | ✓                                 | ✓                              |
| Resilience (*)                     | ✓                    | ✓                                 | ✓                              |
| <b>Engagement with School</b>      |                      |                                   |                                |
| Connectedness to adults at school  | ✓                    | ✓                                 | ✓                              |
| Important adults at school         | ✓                    | ✓                                 | ✓                              |
| School climate                     | ✓                    | ✓                                 | ✓                              |
| School belonging                   | ✓                    | ✓                                 | ✓                              |
| Peer belonging                     | ✓                    | ✓                                 | ✓                              |
| Friendship intimacy                | ✓                    | ✓                                 | !                              |
| Emotional engagement with teachers | ✓                    | ✓                                 | ✓                              |
| Cognitive engagement               | ✓                    | ✓                                 | ✓                              |
| <b>Learning Readiness</b>          |                      |                                   |                                |
| Academic self-concept              | ✓                    | ✓                                 | ✓                              |
| Perseverance                       | ✓                    | ✓                                 | ✓                              |
| Engagement (flow)                  | ✓                    | ✓                                 | !                              |
| Academic self-efficacy (*)         | ✓                    | ✓                                 | ✓                              |
| Perfectionistic striving (*)       | ✓                    | ✓                                 | ✓                              |
| Perfectionistic concerns (*)       | ✓                    | ✓                                 | ✓                              |
| Hope - agency (*)                  | ✓                    | ✓                                 | ✓                              |
| Hope - pathways (*)                | ✓                    | ✓                                 | ✓                              |

Note. (\*) These scales have been validated with Grade 10-12 students. It is unknown whether they have good psychometric properties with Grade 4 to 9 students.

While the psychometric analyses focus on the multi-item scales, we also explored the frequencies of all single items (e.g. cyberbullying, skipping breakfast, sleep quality) by gender and grade level. We identified no unusual age or gender patterns that might suggest the items were functioning in a problematic way.

In summary, the psychometric analyses of the 2019 WEC survey suggest all items and scales function well, with some small issues identified with the Friendship intimacy and Engagement (flow) scales. It is important to note that some of the scales were only administered to the Senior Years students (Grade 10 to 12), and as such we do not know whether they have good psychometric properties for younger students or not. Caution should be taken if considering adding these scales to the WEC for younger students.

## 2. Background

The importance of social and emotional wellbeing for learning and lifelong opportunities has long been recognised by educators, and fostering student wellbeing is increasingly seen as a central objective of education (British Columbia Ministry of Education, 2015; Ministry of Education Singapore, 2015; OECD, 2015). However, the measurement of wellbeing still receives far less attention within most education systems than the measurement of academic achievement. This lack of knowledge about the social and emotional wellbeing of students presents a significant knowledge gap, particularly for policy makers who want to be able to evaluate the impact of their policies and programs on students' wellbeing as well as their academic outcomes.

In 2012, the South Australian Department for Education<sup>1</sup> recognised this gap in their population-level administrative data and set out to trial the collection of student wellbeing data in their schools. In 2012, a Canadian student wellbeing measure – the Middle Years Development Instrument (MDI) - was adapted for use with school children in Australia, and in 2013 was trialled in a sample of approximately 5,000 Year 6 students across the state of South Australia.

Over the past eight years, the student wellbeing collection has gained traction with teachers, schools and the education department, and school-level participation rates have increased markedly each year. In addition, the student wellbeing collection has been expanded incrementally over time from focusing exclusively on Grade 6 students in 2013, to inviting students from Grades 4 to 12 to participate in 2019. In 2019, the Wellbeing and Engagement Collection (WEC) captured information on more than 95,000 students from 526 schools across the state, representing 89% of government schools, 52% of Catholic schools and 19% of Independent schools.

Over the years a series of technical reports and academic articles have explored the psychometric properties of the student wellbeing instrument and these findings have led to a number of changes to the instrument. While this commitment to continuous improvement has helped to ensure the survey remains contemporary and fit for purpose, it presents some challenges to researchers and policy makers who want to explore longitudinal changes over time in different aspects of student wellbeing.

The aims of this report were threefold.

4. To describe the changes to the collection over time, such as the expansion of the collection to students of different ages and participation rates in different collection cycles
5. To describe the changes to the student wellbeing instrument over time, including the addition and deletion of scales and items and changes to response scales
6. To report on the psychometric properties of the scales in the student wellbeing instrument for students in different school grades (Grades 4 to 12) using the 2019 WEC data

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<sup>1</sup> Referred to as the Department for Education and Child Development at the time

### 3. History of the Wellbeing and Engagement Collection

This section provides a description of the history of the WEC from a small scale pilot with Grade 6 students in 2012-13 to the most recent 2019 WEC that captured information on more than 95,000 students from 526 schools across the state. The history of the WEC<sup>2</sup> is described in six stages.

- Stage 1: Adaptation and piloting of a student wellbeing survey (2012-13)
- Stage 2: System wide collection with Grade 6-9 students (2014-15)
- Stage 3: Review of the student wellbeing survey (2015-16)
- Stage 4: Extension to Grade 4 and 5 students (2017)
- Stage 5: Trial of new scales for Senior Years students (2018)
- Stage 6: System wide collection with Grade 4-12 students (2019)

This section of the report will address the first two aims.

1. To describe the changes to the collection over time, such as the expansion of the collection to students of different ages and participation rates in different collection cycles
2. To describe the changes to the student wellbeing instrument over time, including the addition and deletion of scales and items and changes to response scales

---

<sup>2</sup> While we use the term “Wellbeing and Engagement Collection (WEC)” throughout this document, the survey and collection have been referred to using several different names over the history of the WEC, including the *Middle Years Development Instrument (MDI)* and *Survey of Wellbeing and Student Engagement*. These other terms have been used in previous reports and papers describing the wellbeing collection/survey.

## Stage 1: Adaptation and piloting of a student wellbeing survey (2012-13)

In 2012, the Middle Years Development Instrument (MDI) was adapted for use with school children in Australia (Schonert-Reichl et al., 2013a; Schonert-Reichl et al., 2010). This adaptation process involved consultations with key stakeholders including educators, principals, school psychologists, school staff, social workers, Aboriginal Education officers, Australian Education Union representatives, administrators from the Independent and Catholic school sectors, and academics (Gregory et al., 2019). Small wording changes were made to better reflect common terms or activities in Australia such as replacing “pop” with “soft drink” and changing “ice hockey” to “cricket”. In addition, the 4-item perseverance scale from the EPOCH Measure of Adolescent Wellbeing (Kern, Benson, Steinberg, & Steinberg, 2015), was added onto the end of the survey.

In July 2012, Grade 6 students from two Adelaide schools participated in a process pilot of the MDI survey to test survey materials with Australian students and teachers. This process pilot was followed by a test of the online survey collection system with about 500 students from nine schools in the Adelaide Hills, in late 2012. Following the success of these two pilot studies, a broader student wellbeing trial was conducted in 2013.

For the 2013 trial, four South Australian regions were selected to include communities in metropolitan and regional areas with high and low levels of socioeconomic disadvantage. All schools (Government, Catholic and Independent) in these regions with children in the target age range (Grade 6) were invited to participate in the pilot. A total of 115 Government schools (participation rate = 80%), 16 Catholic schools (participation rate = 36%) and 7 Independent schools (participation rate = 25%) took part in the pilot. In addition, 31 schools from other regions approached the Department for Education about participating in the trial and they were also included, taking the total number of schools to 169. Of the 5,614 students eligible to participate in the pilot, a total of 4,798 students participated in the wellbeing collection for a student-level participation rate of 86%. Participating schools received reports on the wellbeing of their students and the response from students, teachers and other school staff was overwhelmingly positive. Based on the success of the 2013 pilot project, a broader student wellbeing collection was planned in 2014 for all schools across the state with students in the final two years of primary school (Grade 6 and 7) and the first two years of high school (Grade 8 and 9).

## Stage 2: System wide collection with Grade 6-9 students (2014-15)

In 2014 and 2015, all South Australian schools were invited to participate in the wellbeing collection. Student level participation rates remained relatively stable during the period but school-level participation rates in the government/public education section increased markedly from 29% in 2014 to 65% in 2015. Details of the participation rates within the different school sectors is shown below, and more detail on the students is provided here (Gregory et al., 2019).

### 2014 Wellbeing and Engagement Collection

- 153 of 525 Government schools (29% participation rate)
- 26 of 103 Catholic schools (25% participation rate)
- 10 of 93 Independent schools (11% participation rate)

### 2015 Wellbeing and Engagement Collection<sup>3</sup>

- 337 of 522 Government schools (65% participation rate)
- 17 of 103 Catholic schools (17% participation rate)
- 12 of 94 Independent schools (13% participation rate)

In 2014, schools had an eligible student population of 21,233 students (Grade 6-9) and 17,620 of these students participated in the wellbeing collection (83% student participation rate). In 2015, schools had an eligible student population of 35,502 students (Grade 6-9) and 29,189 of these students participated in the wellbeing collection (82% student participation rate).

For information on school-level participation rates in all WEC cycles see *Appendix 2*.

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<sup>3</sup> One change was made prior to the 2015 Wellbeing and Engagement collection, with the 4-item engagement (flow) scale from the EPOCH Measure of Adolescent Wellbeing (Kern et al., 2015) added to the survey.

In the WEC, students provide information in response to a range of survey questions. The responses can be presented and summarised against four overarching domains of students' lives, as shown below in Figure 1<sup>4</sup>.

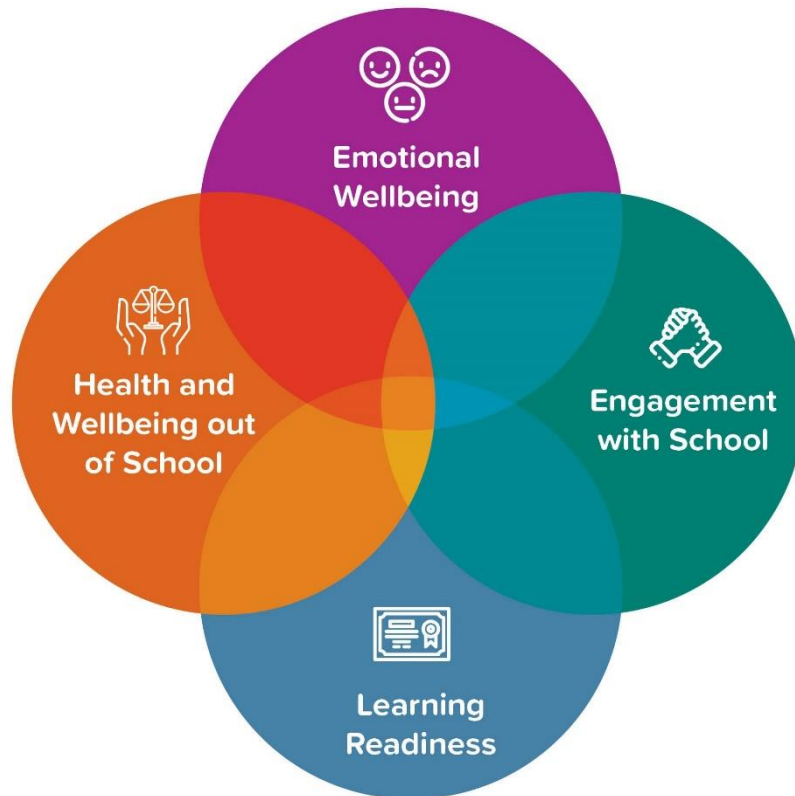
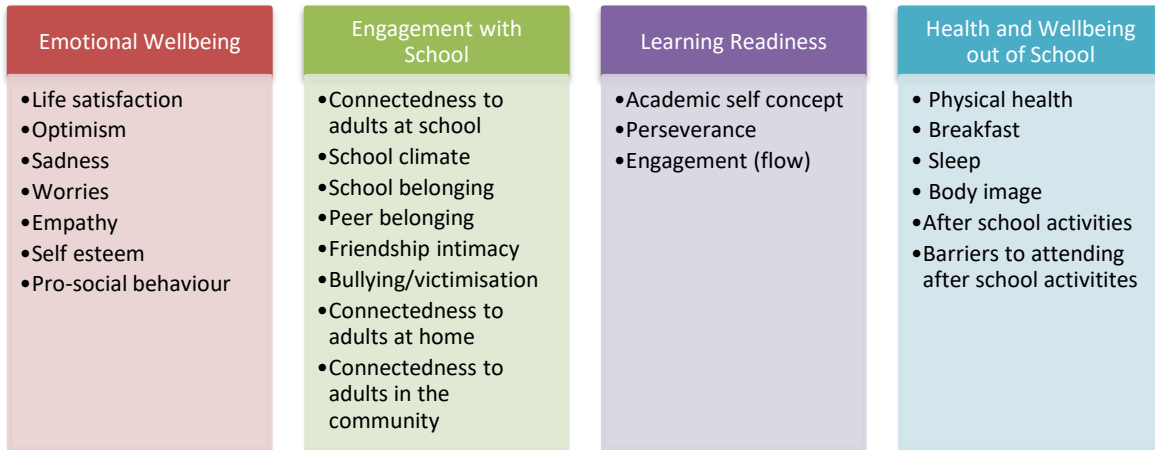


Figure 1. Four key domains measured in Wellbeing and Engagement Collection

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<sup>4</sup> In earlier iterations of the WEC school reports, scale and constructs were presented under the broad domains of (1) Social and emotional wellbeing (2) Connectedness/Relationships, (3) School Experiences, (4) Physical Health and Wellbeing, and (5) After school activities, in line with the structure of the Middle Years Development Instrument.

In 2014/2015, the following sub-domains were measured within each of the four key domains for all children in Grades 6 to 9.



**Figure 2. Constructs measured in Wellbeing and Engagement Collection (2014-15)**

Most of the constructs used to define students Emotional Wellbeing, Engagement with School, and Learning Readiness domains were measured by 3 to 5-item scales. Whereas, most constructs used to define Health and Wellbeing out of School were measured with single items. Detailed information on the scales and items used to measure each of the sub-domains, as well as changes that occurred over time, are presented in *Appendix 1*.

In the next section, we describe two reviews that were conducted on the WEC survey instrument following the 2014/15 system roll out, and the subsequent changes that were made to the instrument.

## Stage 3: Review of the student wellbeing survey (2015-16)

### Review of the Emotional Wellbeing measures

In 2015, a review was conducted to explore the constructs and scales in the Emotional Wellbeing section of the instrument (Gregory & Brinkman, 2015). The review explored the research literature about each of the constructs (e.g. sadness) to see whether they were (1) an *important predictor* of life outcomes such as health, education, relationships, employment, and psychological wellbeing, and (2) *modifiable* during the middle years of schooling. The review also explored the key wellbeing theories to see if any key constructs were missing. Secondly, the review explored the different scales (e.g. 3-item sadness scale) to see whether they were reliable and valid measures, and whether they were sensitive to change at both the bottom and top end of the distribution (i.e. no floor or ceiling effects). Based on this review, several changes to the WEC scales were recommended. Specifically, the recommendations were:

- **RECOMMENDATION 1:** Add the 4-item EPOCH Happiness scale
- **RECOMMENDATION 2:** Remove the 4-item EPOCH Engagement scale, and instead create a module on school engagement that better meets the needs of the Department
- **RECOMMENDATION 3:** Remove the 3-item Empathy scale
- **RECOMMENDATION 4:** Replace the 3-item worries (anxiety) scale with items that measure worries at school and home, rather than just worries about peer problems.
- **RECOMMENDATION 5:** Remove the 3-item Self-Esteem scale.
- **RECOMMENDATION 6:** Add a short Emotion Regulation scale.

Three of these recommendations were enacted prior to the 2016 WEC. Specifically, the EPOCH Happiness scale was added, and the Empathy and Self-esteem scales were removed from the WEC. In response to concerns from some schools that the instrument took too long, several other scales were also removed at this time. These were the (1) prosocial behaviour, (2) connectedness to adults at home, and (3) connectedness to adults in the community scales.

The other three recommendations led to a subsequent research study (see below) that aimed to:

1. Test the reliability and validity of alternate **worries (anxiety)** scales
2. Test the reliability and validity of a short **Emotion Regulation** scale.
3. Trial a set of **student engagement** items to determine which combinations of items should be included in a new module on student engagement.



## Review of student engagement scales

In 2015, student engagement was measured in the WEC using the 4-item EPOCH Engagement scale, which included items such as “I get so involved in activities that I forget about everything else” and “When I am learning something new, I lose track of how much time has passed”. These items measure the concept of flow - a psychological state that accompanies highly engaging activities where time passes quickly, attention is fully focused on the task at hand and time seems to disappear (Csikszentmihalyi, 1990). While a substantial body of literature has explored the construct of flow, it is very different to the concept of student engagement in the education literature that has been linked to school completion, dropout and academic achievement.

In the school and education literature, student engagement is considered a multi-faceted construct made of up three domains: emotional, cognitive and behavioural engagement (Appleton, Christenson, Kim, & Reschly, 2006; Fredricks, Blumenfeld, & Paris, 2004).

- *Emotional engagement* refers to the way students feel about their teachers and, whether they like their school and whether they have a sense of belonging.
- *Cognitive engagement* refers to student’s willingness to put in the effort needed to master skills and succeed academically at school, and has a strong motivational component.
- *Behavioural engagement* refers to student’s involvement in academic, social and extracurricular activities at school, and also involves behaving in a way that is consistent with school expectations (i.e. not skipping school, being suspended or expelled).

To address this gap in the measurement of student engagement in the WEC, a study was conducted to trial several different student engagement instruments and scales, create measures of emotional and cognitive engagement and explore their psychometric properties (Gregory, Fairweather-Schmidt, & Brinkman, 2016). In addition, new items measuring worries were created and tested, and an emotion regulation scale was also tested.

Based on this review, several additional changes were made prior to the 2016 WEC.

1. A new 5-item **emotional engagement with teachers** scale was added.
2. A new 5-item **cognitive engagement scale** was added.
3. A new **6-item emotion regulation scale**<sup>5</sup> was added.
4. The 3-item MDI worries scale was replaced with a **4-item worries/anxiety scale** that measured worries across multiple contexts (school, home).

Detailed information on all changes to the scales and items used to measure student wellbeing and engagement in the WEC, and the timelines for these changes, are presented in *Appendix 1*.

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<sup>5</sup> The cognitive re-appraisal sub-scale from the *Emotion Regulation Questionnaire for Children and Adolescents (ERQ-CA)* was used. Cognitive re-appraisal is a positive emotion regulation strategy that involves changing the way you think about an emotion provoking situation, in an attempt to change how you feel about it.

## Stage 4: Extension to Grade 4 and 5 students (2017)

Between 2014 and 2016, students in Grade 6, 7, 8 and 9 were invited to participate in the WEC. By 2017, the WEC was gaining momentum within the Department for Education and senior executives and school leaders asked whether it would be possible to collect wellbeing data on *all* children in the education system. There were some concerns about early primary children's capacity to read, comprehend and complete the survey. However, it was thought that Grade 4 and 5 children<sup>6</sup> should be able to complete the survey, and in 2017 students in Grades 4 and 5 were provided an opportunity to participate in the survey for the first time. The number of students from each grade level who completed the WEC in each calendar year from 2014 to 2017 is presented in Table 2.

**Table 2. Number of students who participated in the SA WEC by grade and year (2014-2017)**

|              | 2014          | 2015          | 2016          | 2017          |
|--------------|---------------|---------------|---------------|---------------|
| Grade 4      | -             | -             | -             | 10,172        |
| Grade 5      | -             | -             | -             | 10,432        |
| Grade 6      | 4,450         | 7,981         | 10,962        | 11,907        |
| Grade 7      | 4,453         | 7,921         | 11,273        | 11,202        |
| Grade 8      | 4,640         | 7,057         | 10,583        | 10,549        |
| Grade 9      | 4,077         | 5,936         | 9,983         | 9,003         |
| Grade 10     | -             | -             | -             | -             |
| Grade 11     | -             | -             | -             | -             |
| Grade 12     | -             | -             | -             | -             |
| <b>Total</b> | <b>17,620</b> | <b>28,895</b> | <b>42,801</b> | <b>63,265</b> |

Source: Numbers provided by the SA Department for Education from the All SA Students Survey (A5552451).pdf. Please note a small number of students who completed the survey but had an unknown year level have been omitted from this table.

<sup>6</sup> The WEC survey has developed over time but was originally adapted from the MDI, which has been validated in Canada for use with Grade 4 children.

## Stage 5: Trial of new scales for Senior Years students (2018)

There was also interest in measuring wellbeing for senior years students (Grade 10 to 12), particularly by school principals. For older students there was a recognition that some additional wellbeing constructs might be important in the final phase of their high school education. In 2018, a series of consultations were undertaken with different stakeholders in the SA Department for Education to explore the different aspects of wellbeing that should be added to the survey for Senior Years students specifically. Suggestions included measuring perfectionism, resilience, psychological distress, hope/goals, electronic device use before bed, body image, usual sleep time, academic self-efficacy, and feelings about the future.

Following these consultations, a set of new multi-item scales and single items were selected and trialled in a sample of approximately 2,100 Grade 10, 11 and 12 students from five South Australian schools. Psychometric analyses were conducted and based on the results several scales and single items were added to the WEC in 2019, for students in the Senior Years only. Specifically, two scales (psychological distress and resilience) were added to the *Emotional Wellbeing* domain, five scales and two single items were added to the *Learning Readiness* domain, and the electronic device use before bed item was added into the *Health and Wellbeing out of School* domain for all students. Figure 3 shows all of the constructs measured in the 2019 WEC.

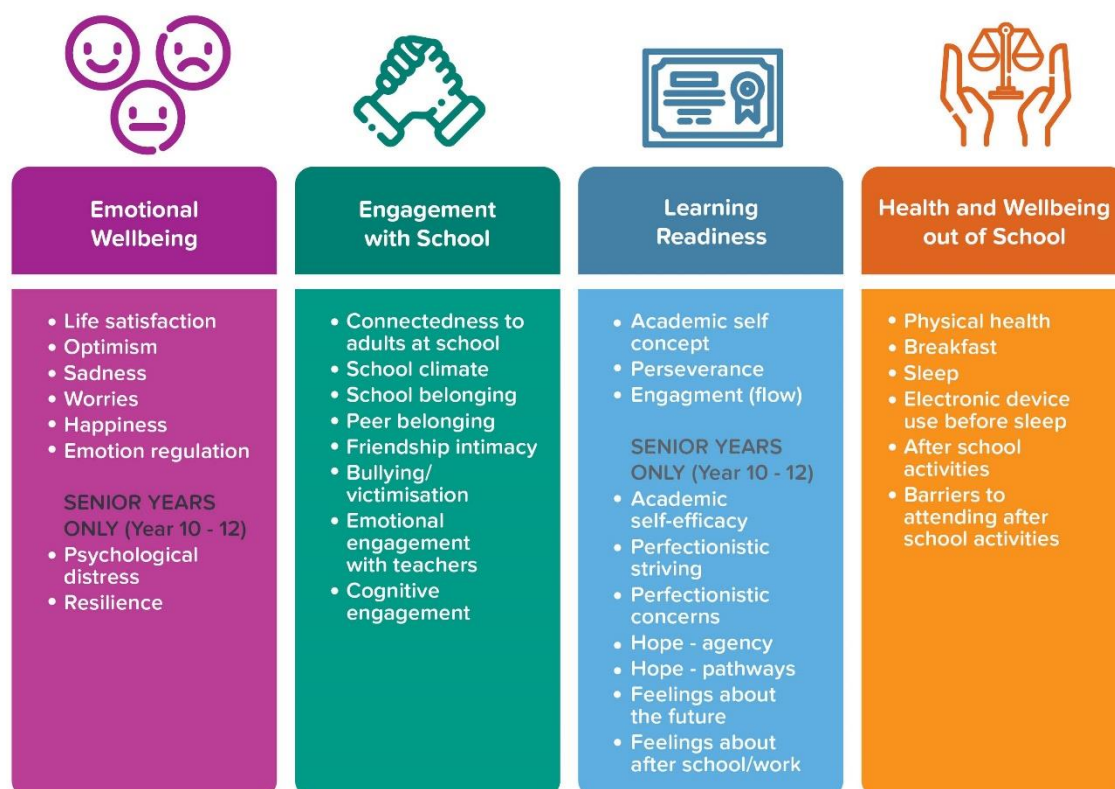


Figure 3. Constructs measured in Wellbeing and Engagement Collection (2019)

Two other changes to the survey instrument were made after the Senior Years trial and prior to the 2019 WEC. Given that a range of changes were being made to the instrument at this time, it provided an opportunity to address some concerns that has been raised by teachers and students over the preceding few years.

- In the *Health and Wellbeing out of School section*, there was an item asking students to rate their body weight from 1=very underweight to 5=very overweight. Several teachers and schools expressed concerns that the item was too sensitive and might cause distress, particularly for female students. As such, this item was removed from the survey.
- Some students and teachers noted that the survey was confusing to complete because of the range of different response options used across different scales (see Table 3). A decision was made by the Department for Education to align the response scales in the WEC. Two different response scales were used depending on whether the item asked about a fixed view of one’s self (e.g. “I am a hard worker”; 1 = strongly disagree to 5 = strongly agree) or a behaviour exhibited with varying levels of frequency (e.g. “I finish whatever I begin”; 1 = none of the time to 5 = all of the time). In *Appendix 1* full details are provided about the response options used for each item and scale in the WEC survey and any changes over time.

**Table 3. Example of different response scales used in WEC (pre-2019)**

| <i>EPOCH Perseverance scale</i>   | <i>Satisfaction with Life Scale – Adapted for Children</i>  | <i>Brief Resilience Scale</i>   |
|---|---|---|
| 1 = not at all like me<br>2 = a little like me<br>3 = somewhat like me<br>4 = mostly like me<br>5 = very much like me | 1 = disagree a lot<br>2 = disagree a little<br>3 = don’t agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = strongly disagree<br>2 = disagree<br>3 = don’t agree or disagree<br>4 = agree<br>5 = strongly agree |

## Stage 6: System wide collection with Grade 4-12 students (2019)

In 2019, student wellbeing and engagement information was collected for school students in Grade 4 to Grade 12 across the public schooling system. In 2019, the Wellbeing and Engagement Collection (WEC) captured information on more than 95,000 students from 526 schools across the state, representing 89% of government schools, 52% of Catholic schools and 19% of Independent schools.

**Table 4. Number of students who participated in the SA WEC by grade and year (2014-2019)**

|              | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Grade 4      | -             | -             | -             | 10,172        | 12,284        | 13,472        |
| Grade 5      | -             | -             | -             | 10,432        | 12,917        | 12,771        |
| Grade 6      | 4,450         | 7,981         | 10,962        | 11,907        | 12,874        | 13,123        |
| Grade 7      | 4,453         | 7,921         | 11,273        | 11,202        | 12,407        | 12,017        |
| Grade 8      | 4,640         | 7,057         | 10,583        | 10,549        | 11,440        | 11,329        |
| Grade 9      | 4,077         | 5,936         | 9,983         | 9,003         | 10,744        | 10,031        |
| Grade 10     | -             | -             | -             | -             | -             | 9,299         |
| Grade 11     | -             | -             | -             | -             | -             | 7,760         |
| Grade 12     | -             | -             | -             | -             | -             | 6,171         |
| <b>Total</b> | <b>17,620</b> | <b>28,895</b> | <b>42,801</b> | <b>63,265</b> | <b>72,666</b> | <b>95,973</b> |

Source: Numbers provided by the SA Department for Education from the All SA Students Survey (A5552451).pdf. Please note a small number of students who completed the survey but had an unknown year level have been omitted from this table.

Information on the school-level participation rates for each WEC cycle can be found in *Appendix 2*, and information on the timing of the WEC during each calendar year is available in *Appendix 3*.

### Description of sample

Data from the 2019 WEC were used to explore the psychometric properties of the WEC survey. As shown in Table 4 on the previous page, a total of 95,973 students ranging from Grade 4 to 12 completed the WEC in 2019. Psychometric analyses were explored for the full sample as well as sub-groups of students based on grade level and gender. As such, cases with missing information on gender (n = 3,128, 3% of sample) were excluded from the analysis sample. The final samples for the psychometric analyses are presented in Table 5 below.

**Table 5. Number of students used in psychometric analyses**

|              | Males         | Females       | Total         |
|--------------|---------------|---------------|---------------|
| Grade 4-5    | 12,735        | 12,399        | 25,134        |
| Grade 6-7    | 12,011        | 12,427        | 24,428        |
| Grade 8-9    | 10,099        | 10,600        | 20,699        |
| Grade 10-12  | 10,626        | 11,928        | 22,554        |
| <b>Total</b> | <b>45,471</b> | <b>47,354</b> | <b>92,825</b> |

Source. 2019 WEC data extract

Most of these students attended a public/government school (n = 74,752, 80.5%) with the remainder recruited from Catholic or Independent schools (n = 18,072, 19.5%). Data for students from government schools was linked to the enrolment census by the South Australian Department for Education to provide information on the demographic characteristics of these students. This linkage was successful for the vast majority of the government students in the analysis sample (n = 73,396, 98.2%). Unfortunately, demographic information was unavailable for students in the analysis sample who attended Independent or Catholic schools.

We present information on the demographic characteristics of the government students in the analysis sample (n = 73,396, 79% of the sample). Information about the mean student age within each grade level for the Government school students is likely to generalize to all students in the analysis sample. However, it is important to note that other demographic characteristics of the sample such as the proportion of children with an Aboriginal and/or Torres Strait islander background and/or a non-English speaking background are likely to be somewhat different in Independent and Catholic schools students compared with Government school students.

Table 6 shows the age distribution of children in each of the Grade level groups used in the analyses.

- Grade 4-5 students ranged from 8 to 12 years of age (Mean = 9.9 years, SD = 0.6)
- Grade 6-7 students ranged from 9 to 14 years of age (Mean = 11.9 SD = 0.6)
- Grade 8 to 9 students ranged from 11 to 18 years (Mean = 13.9, SD = 0.6)
- Grade 10 to 12 students ranged from 13 to 76 years (Mean = 16.5, SD = 1.9)

**Table 6: Age (in years) for government students in analysis sample (n = 73,396)**

|                          | N      | Mean | SD  | Range         |
|--------------------------|--------|------|-----|---------------|
| Grade 4-5                | 20,207 | 9.9  | 0.6 | (8.2 - 12.3)  |
| Grade 6-7                | 19,499 | 11.9 | 0.6 | (9.8 - 14.3)  |
| Grade 8-9                | 16,015 | 13.9 | 0.6 | (11.8 - 18.0) |
| Grade 10-12 <sup>7</sup> | 17,675 | 16.5 | 1.9 | (12.9 - 75.6) |
| Total                    | 73,396 | 12.9 | 2.7 | (8.2-75.6)    |

Some of the WEC scales are collected for Senior Years students only, and psychometric analyses are presented for Grade 10, 11 and 12 student separately (rather than as a combined group). As such, the age distribution for Grade 10, 11 and 12 students is also presented below.

**Table 7: Age (in years) for government in analysis sample (n = 17,675)**

|          | N      | Mean | SD  | Range         |
|----------|--------|------|-----|---------------|
| Grade 10 | 6,969  | 15.5 | 0.4 | (12.9 – 17.7) |
| Grade 11 | 6,014  | 16.8 | 2.3 | (14.7 - 75.6) |
| Grade 12 | 4,692  | 17.7 | 1.8 | (15.8 – 51.0) |
| Total    | 17,675 | 16.5 | 1.9 | (12.9 - 75.6) |

<sup>7</sup> The high maximum age in the Senior Years students is because some mature aged students return to school to complete Grade 11 and 12 later in life. The number of students aged over 18 years in this group was small (n = 411, 2.3% of Grade 10-12 sample; 0.6% of the total analysis sample).

**Table 8: Demographic characteristics for government students in analysis sample (n = 73,396)**

|   | N      | %     |
|---|--------|-------|
| Gender  |        |       |
| Male  | 37,075 | 50.5% |
| Female  | 36,321 | 49.5% |
| Aboriginal and/or Torres Strait Islander Status |        |       |
| Indigenous                                      | 3,861  | 5.3%  |
| Non-Indigenous                                  | 69,057 | 94.7% |
| Non-English speaking background                 |        |       |
| Yes   | 17,463 | 23.8% |
| No  | 55,775 | 76.2% |
| Grade level                                     |        |       |
| Grade 4-5                                       | 20,207 | 27.5% |
| Grade 6-7                                       | 19,499 | 26.6% |
| Grade 8-9                                       | 16,015 | 21.8% |
| Grade 10-12                                     | 17,675 | 24.1% |
| Socio-economic status                           |        |       |
| Most disadvantaged                              | 18,912 | 25.9% |
| 2   | 12,128 | 16.6% |
| 3   | 11,528 | 15.8% |
| 4   | 15,100 | 20.7% |
| Most advantaged                                 | 15,283 | 20.9% |

*Note.* Socio-economic status is measured by SEIFA 2016 Index of Disadvantage and Advantage quintiles based on student postcode of residence.

Table 8 presents information on the demographic characteristics of government students in the analysis sample. Approximately 5% of the sample had an Aboriginal and/or Torres Strait Islander background, and 24% had a non-English speaking background. The sample was slightly skewed towards the students in the younger grades, with 54% of the sample in Primary school (Grade 4 to 7) and 46% in high school (Grade 8 to 12). Approximately 26% of the sample lived in the most disadvantaged communities in South Australia, with 21% living in the most advantaged suburbs.



## Statistical approach

For each of the multi-item scales in the WEC (e.g. the 4-item Happiness scale), we present information on the internal reliability, convergent and discriminant validity, and explore sub-group differences in scores by student grade and gender. We also provide links to additional academic papers that have explored the reliability and validity of these scales in other samples.

Table 9 provides information about the different aspects of reliability and validity that are explored in this section of the report, as well as the key question(s) that each test answers, and an example to aid interpretation. These different types of reliability and validity are tested by exploring the internal reliability of the scales, correlation matrices and information on the distribution of scales (mean, SD) for the full sample, as well as comparison for boys and girls and students of different ages.

**Table 9. Different aspects of validity and reliability explored in this report**

| Type of validity  | What question(s) does this answer?   | Additional information  |
|---|--|---|
| Internal reliability  | <b>Do the items within each scale measure the same construct?</b>  | If all items within a scale measure the same underlying construct (e.g. happiness) then these items should be highly correlated, and the internal reliability of the scale should be high.  |
| Convergent validity   | <b>Are scores on this scale associated with scores on other scales that they theoretically should be associated with?</b>  | An instrument has good convergent validity when scores on that instrument are correlated with measures of similar, related constructs. For example, we would expect scores on the sadness scale to be positively correlated with scores on a worries scale, as both are measures of internalising behaviours.   |
| Discriminant validity   | <b>Do scores on this scale show weak associations with scores on other scales that they are theoretically not expected to be strongly associated with?</b>                                   | An instrument has good discriminant validity when scores on that instrument do not correlate strongly with measures of dissimilar, unrelated constructs. For example, we would not expect scores on sadness scale to be strongly correlated with a measure of perseverance.   |
| Sub-group differences in scale scores by gender and year level <sup>1</sup> | <b>Are differences in scores between sub-groups consistent with theoretical expectations?</b><br><br><b>Is the scale sensitive to differences that occur as children mature and develop?</b> | If the research literature suggests differences in a construct according to gender and age, we would expect the instrument to be sensitive to these differences. For example, if the literature suggests that girls have higher levels of worries than boys, and display increases in worries with age during adolescence, then a worries scale with good construct validity <sup>8</sup> should show these same patterns.<br><br>It is important to note that we do not expect to see age effects for all constructs in the WEC, so a lack of age effects does not necessarily mean the scale is not performing as expected. |

<sup>8</sup> Exploring the convergent and discriminant validity, and whether sub-group difference are consistent with theoretical expectations are all components of construct validity, which refers to the degree to which scores on the scale are consistent with hypotheses about the underlying construct that is being measured.

Full results of all psychometric analyses are presented in *Appendix 4*.

- Internal reliability statistics for all WEC scales for the full sample, boys and girls, and students in different year levels (Table 17)
- Correlation matrices for all WEC scales for students in four year level groups
  - Grade 4-5 students (Table 18)
  - Grade 6-7 students (Table 19)
  - Grade 8-9 students (Table 20)
  - Grade 10-12 students (Table 21)
- Mean and SD for all WEC scales for the full sample and sub-groups split by gender and year level (Table 22 to Table 25)
- Frequencies for all WEC single items (e.g. items on sleep, breakfast and after school activities) are presented in (Table 26 to Table 30).

In the next section of the report, information from these various analyses is brought together to provide a summary of the psychometric properties of each scale.

## Emotional Wellbeing domain

### Life satisfaction

| Life satisfaction scale |   |
|-------------------------|---|
| 1                       | In most ways my life is close to the way I would want it to be.   |
| 2                       | The things in my life are excellent.                              |
| 3                       | I am happy with my life.  |
| 4                       | So far I have gotten the important things I want in life.         |
| 5                       | If I could live my life over again, I would have it the same way. |

|  |   |
|--|---|
| <b>Internal reliability</b>                          | The Life satisfaction scale had high internal reliability for students in all grades, with Cronbach's alpha statistics ranging from .84 for Grade 4-5 students to .89 for Grade 8-9 students.                                       |
| <b>Convergent validity</b>                           | Scores on the Life satisfaction scale correlated strongly with other theoretically similar scales including Optimism ( $r = .71$ to $.79$ for students in different grades) and Happiness ( $r = .68$ to $.76$ )                    |
| <b>Discriminant validity</b>                         | Scores on the Life satisfaction scale showed a lower correlation with theoretically distinct scales such as Perseverance ( $r = .43$ to $.49$ ) and Engagement (flow) ( $r = .37$ to $.45$ ).                                       |
| <b>Sub-group differences by gender and age group</b> | Scores on the Life satisfaction scale are sensitive to differences in age, with older students having lower mean scores on this scale than younger students, as expected. Similar patterns were seen for girls and boys (Figure 4). |

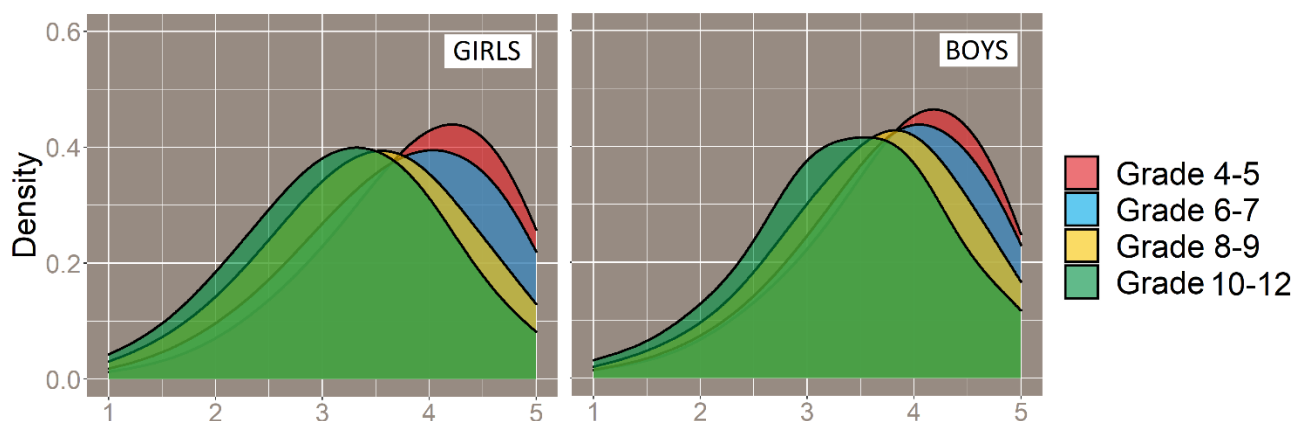


Figure 4. Distribution of scores on the WEC Life satisfaction scale

## Optimism

| Optimism scale |   |
|----------------|---|
| 1              | I have more good times than bad times.                        |
| 2              | I believe more good things than bad things will happen to me. |
| 3              | I start most days thinking I will have a good day.            |

|  |   |
|--|---|
| <b>Internal reliability</b>                          | The Optimism scale had high internal reliability for students in all grades, with Cronbach's alpha statistics ranging from .75 for Grade 4-5 students to .83 for Grade 8-9 students.  |
| <b>Convergent validity</b>                           | Scores on the Optimism scale correlated strongly with other theoretically similar scales including Life satisfaction ( $r = .71$ to $.79$ for students in different grades) and Happiness ( $r = .70$ to $.79$ )  |
| <b>Discriminant validity</b>                         | Scores on the Optimism scale showed a lower correlation with theoretically distinct scales from the Learning Readiness domain such as Academic self-concept ( $r = .46$ to $.54$ ), Perseverance ( $r = .44$ to $.51$ ) and Engagement (flow) ( $r = .38$ to $.46$ ). |
| <b>Sub-group differences by gender and age group</b> | Scores on the Optimism scale are sensitive to differences in age, with older students having lower mean scores on this scale than younger students. These age patterns are slightly more pronounced in girls than boys.   |

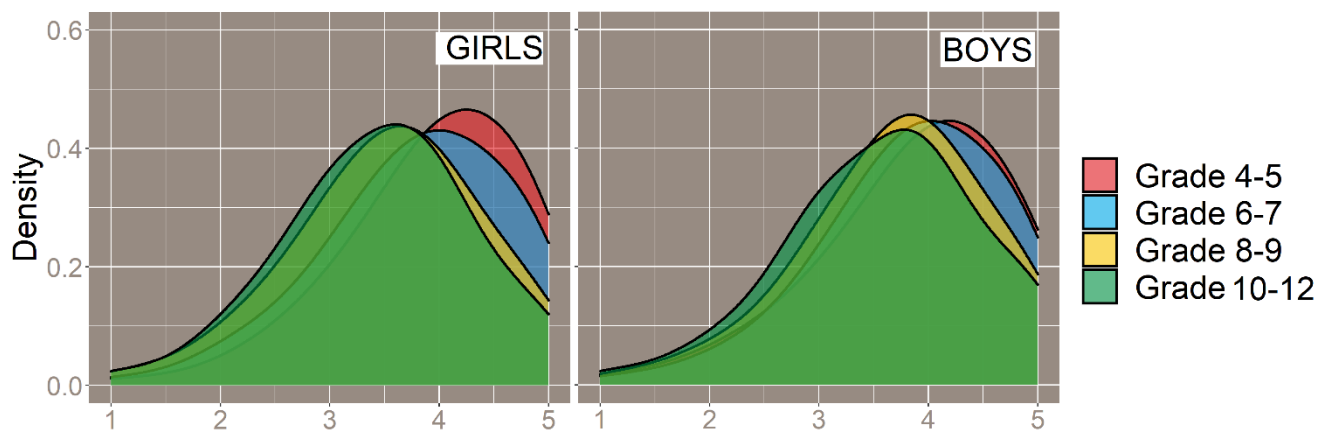


Figure 5. Distribution of scores on the WEC Optimism scale

## Sadness

| Sadness scale |                                      |
|---------------|--------------------------------------|
| 1             | I feel unhappy a lot of the time.    |
| 2             | I feel upset about things.           |
| 3             | I feel that I do things wrong a lot. |

|  |   |
|--|---|
| <b>Internal reliability</b>                          | The Sadness scale had high internal reliability for students in all grades, with Cronbach's alpha statistics ranging from .74 for Grade 4-5 students to .86 for Grade 10-12 students.   |
| <b>Convergent validity</b>                           | Scores on the Sadness scale correlated strongly with other theoretically similar scales including Worries ( $r = .69$ to $.78$ for students in different grades) and the Psychological distress scale for Year 10-12 students ( $r = .75$ ) |
| <b>Discriminant validity</b>                         | Scores on the Sadness scale showed a lower correlation with theoretically distinct scales from the Learning Readiness domain such as the Perseverance ( $r = -.32$ to $-.39$ ) and Engagement (flow) ( $r = -.20$ to $-.34$ ).              |
| <b>Sub-group differences by gender and age group</b> | Scores on the Sadness scale are sensitive to differences in age, with older students having higher mean scores on this scale than younger students. These age patterns are more pronounced in girls than boys.                              |

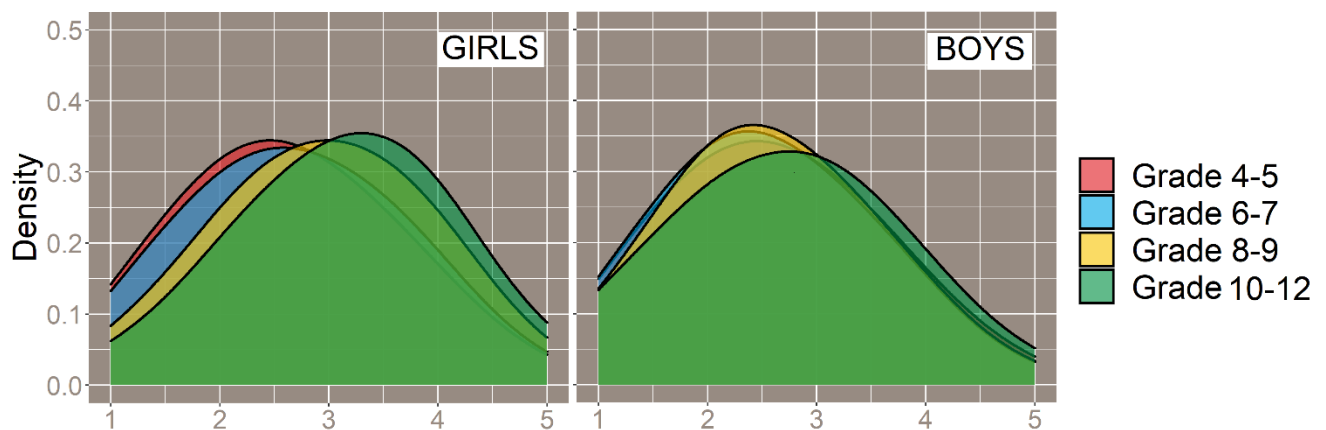


Figure 6. Distribution of scores on the WEC Sadness scale

## Worries

| Worries scale |   |
|---------------|---|
| 1             | I worry a lot about things at home.       |
| 2             | I worry a lot about things at school.     |
| 3             | I worry a lot about mistakes that I make. |
| 4             | I worry about things.                     |

|  |  |
|--|--|
| <b>Internal reliability</b>                          | The Worries scale had high internal reliability for students in all grades, with Cronbach's alpha statistics ranging from .82 for Grade 4-5 students to .87 for Grade 10-12 students.  |
| <b>Convergent validity</b>                           | Scores on the Worries scale correlated strongly with other theoretically similar scales including Sadness ( $r = .69$ to $.78$ for students in different grades) and the Psychological distress scale for Year 10-12 students ( $r = .66$ )                                |
| <b>Discriminant validity</b>                         | Scores on the Worries scale showed a lower correlation with theoretically distinct scales from the Learning Readiness domain such as Academic self-concept ( $r = -.18$ to $-.32$ ), Perseverance ( $r = -.21$ to $-.29$ ) and Engagement (flow) ( $r = -.13$ to $-.25$ ). |
| <b>Sub-group differences by gender and age group</b> | Scores on the Worries scale are sensitive to differences in age, with older students having higher mean scores on this scale than younger students. These age patterns are much more pronounced in girls than boys.  |

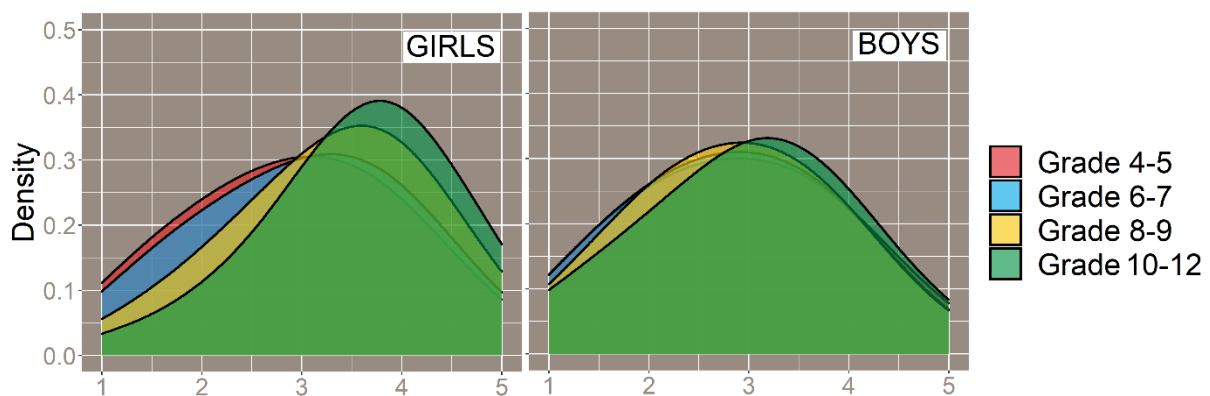


Figure 7. Distribution of scores on the WEC Worries scale

## Happiness

| Happiness scale |                       |
|-----------------|-----------------------|
| 1               | I feel happy.         |
| 2               | I have a lot of fun.  |
| 3               | I love life.          |
| 4               | I am cheerful person. |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Happiness scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.87 in Grade 10-12 students) than younger students (.76 for Grade 4-5 students).   |
| <b>Convergent validity</b>                            | The Happiness scale correlated highly with other theoretically similar scales including Optimism ( $r = .70$ to $.79$ for students in different grades) and Life satisfaction ( $r = .68$ to $.76$ )                                  |
| <b>Discriminant validity</b>                          | The Happiness scale showed a lower correlation with theoretically distinct scales such as Academic self-concept ( $r = .42$ to $.50$ ), Perseverance ( $r = .48$ to $.50$ ) and Engagement (flow) ( $r = .38$ to $.46$ )              |
| <b>Sub-group differences by gender and year level</b> | Scores on the Happiness scale are sensitive to differences in age, with older students having lower mean scores on this scale than younger students, as expected. These age patterns are slightly more pronounced in girls than boys. |

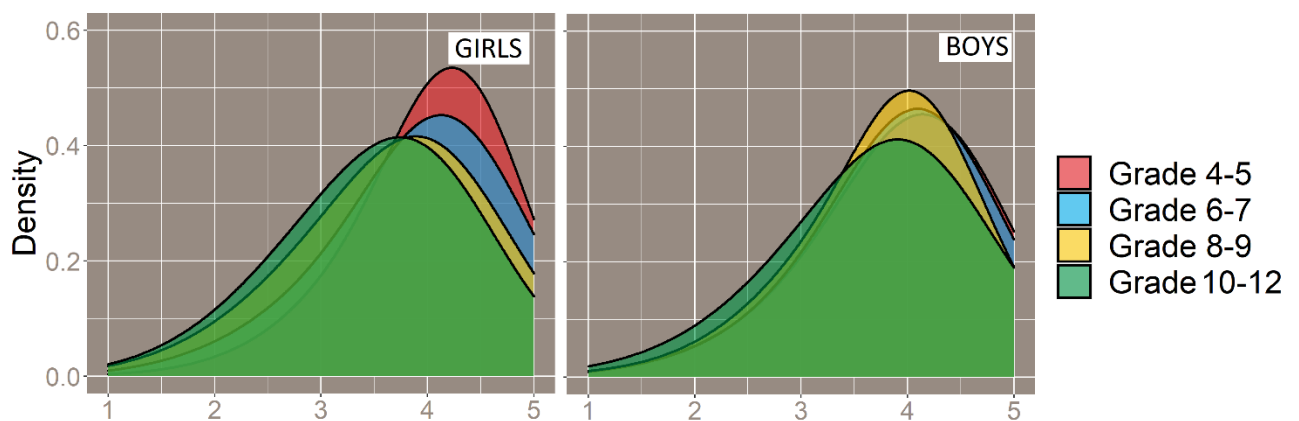


Figure 8. Distribution of scores on the WEC Happiness scale



## Emotion regulation

| Emotion regulation scale |  |
|--------------------------|--|
| 1                        | When I'm worried about something, I make myself think about it in a different way and that helps me feel better. |
| 2                        | When I want to feel happier about something, I change the way I'm thinking about it.                             |
| 3                        | When I want to feel less bad (e.g. sad, angry or worried), I change the way I'm thinking about it.               |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Emotion regulation scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.90 in Grade 10-12 students) than younger students (.81 for Grade 4-5 students).   |
| <b>Convergent validity</b>                            | Higher scores on the Emotion regulation scale were associated with higher levels of Happiness ( $r = .48$ to $.55$ ) and Life satisfaction ( $r = .53$ to $.57$ ), and lower levels of Sadness ( $r = -.35$ to $-.47$ ) and Worries ( $r = -.27$ to $-.39$ ).  |
| <b>Discriminant validity</b>                          | Evidence for the discriminant validity of the scale was weaker than for other scales, with medium to large correlations observed with all other scale in younger students. The discriminant validity of this scale was clearer in Grade 10-12 students, with weak correlation observed with Perfectionistic concerns ( $r = -.11$ ), Friendship intimacy ( $r = .22$ ) and School connectedness ( $r = .24$ ). |
| <b>Sub-group differences by gender and year level</b> | Older students were slightly less likely than younger students to report using cognitive reappraisal strategies, with age differences more pronounced for girls than boys. While older students (particularly girls) experience higher levels of Sadness and Worries, these results suggest they are using cognitive reappraisal strategies less than younger students to help deal with emotions.             |

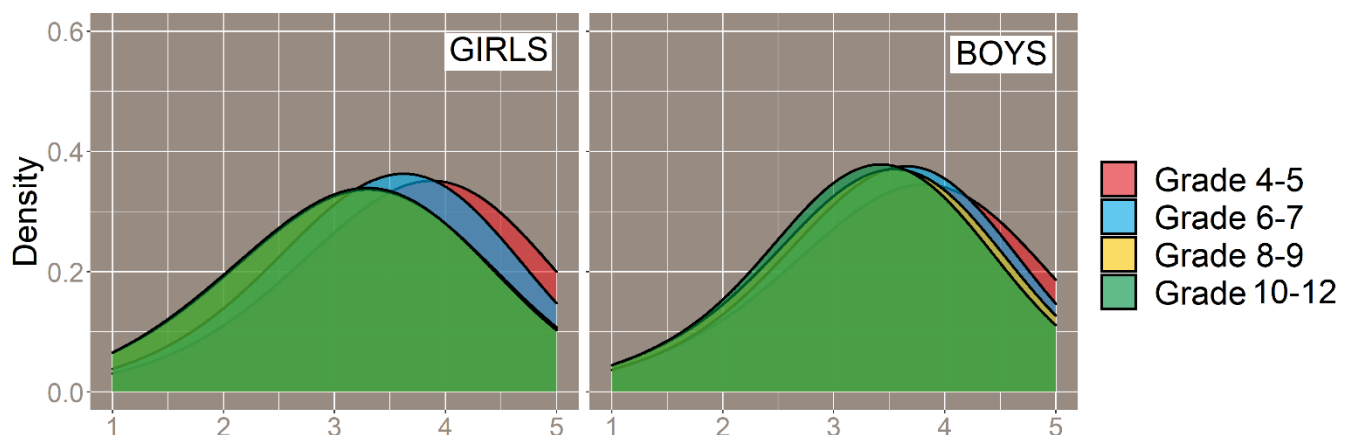


Figure 9. Distribution of scores on the WEC Emotion Regulation scale

## Psychological distress

| Psychological distress scale                           |
|--|
| During the last month about how often did you feel ... |
| ...nervous?  |
| ...hopeless?   |
| ...restless or fidgety?                                |
| ...so sad that nothing could cheer you up?             |
| ...that everything was an effort?                      |
| ...worthless?  |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Psychological distress scale was only measured for the Senior Years students (Grade 10-12) in the WEC, and the internal reliability was high in this age group (.89).   |
| <b>Convergent validity</b>                            | Scores on the Psychological distress scale correlated strongly with theoretically similar scales including Sadness ( $r = .75$ ) and Worries ( $r = .66$ ), and correlated in a large negative direction with Happiness ( $r = -.57$ ) and Life satisfaction ( $r = -.55$ ).  |
| <b>Discriminant validity</b>                          | Scores on the Psychological distress scale showed a lower correlation with theoretically distinct scales from the Learning Readiness domain such as Academic self-concept ( $r = -.31$ ), Perseverance ( $r = -.32$ ) and Engagement (flow) ( $r = -.19$ ).   |
| <b>Sub-group differences by gender and year level</b> | Given that this scale was only measured in Senior Years students, age effects were explored within a smaller age range (i.e. Year 10-12 rather than Year 4-12) so are likely to be less marked than for other Emotional Wellbeing scales. Older students had slightly higher levels of psychological distress and this pattern was more pronounced for boys. Girls had higher levels of distress than boys. |

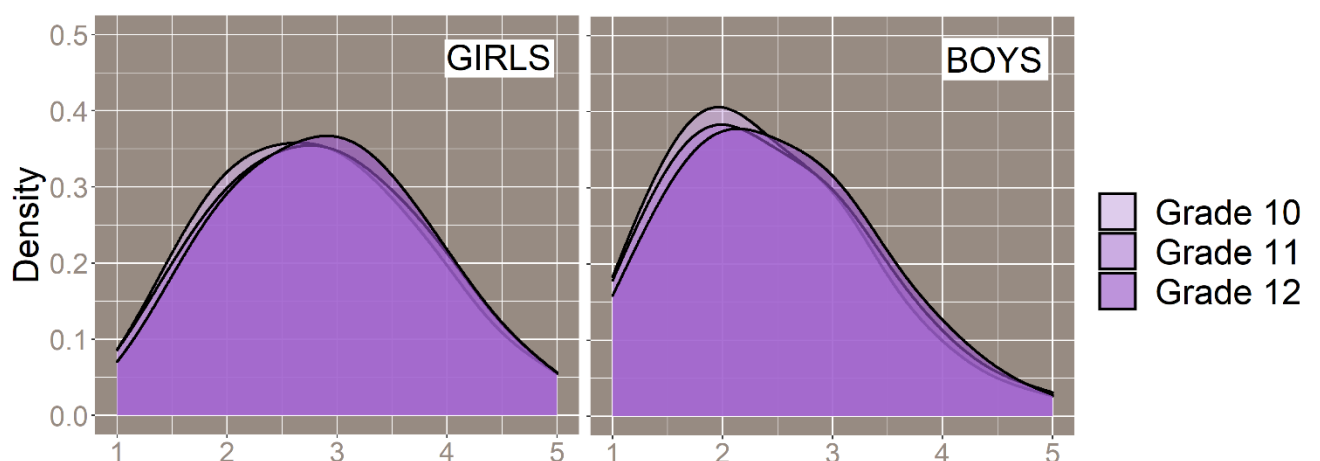


Figure 10. Distribution of scores on the WEC Psychological distress scale

## Resilience

| Resilience scale |   |
|------------------|---|
| 1                | I tend to bounce back quickly after hard times.               |
| 2                | I have a hard time making it through stressful events.*       |
| 3                | It does not take me long to recover from a stressful event.   |
| 4                | It is hard for me to snap back when something bad happens.*   |
| 5                | I usually come through difficult times with little trouble.   |
| 6                | I tend to take a long time to get over set-backs in my life.* |

Note. \* Reverse scored items

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Resilience scale had good internal reliability (.76) when measured in Senior Years students (Grade 10-12).   |
| <b>Convergent validity</b>                            | Scores on the Resilience scale correlated strongly with theoretically related scales, with higher levels of Resilience associated with lower levels of Sadness ( $r = -.54$ ), Worries ( $r = -.50$ ) and Psychological distress ( $r = -.52$ ). |
| <b>Discriminant validity</b>                          | Scores on the resilience scale showed a lower correlation with theoretically distinct scales from the Learning Readiness domain such as Academic self-concept ( $r = -.31$ ), Perseverance ( $r = -.27$ ) and Engagement (flow) ( $r = -.23$ ).  |
| <b>Sub-group differences by gender and year level</b> | There was no evidence of age differences in resilience for Senior Years students (Grade 10-12). Boys had slightly higher levels of resilience than girls.  |

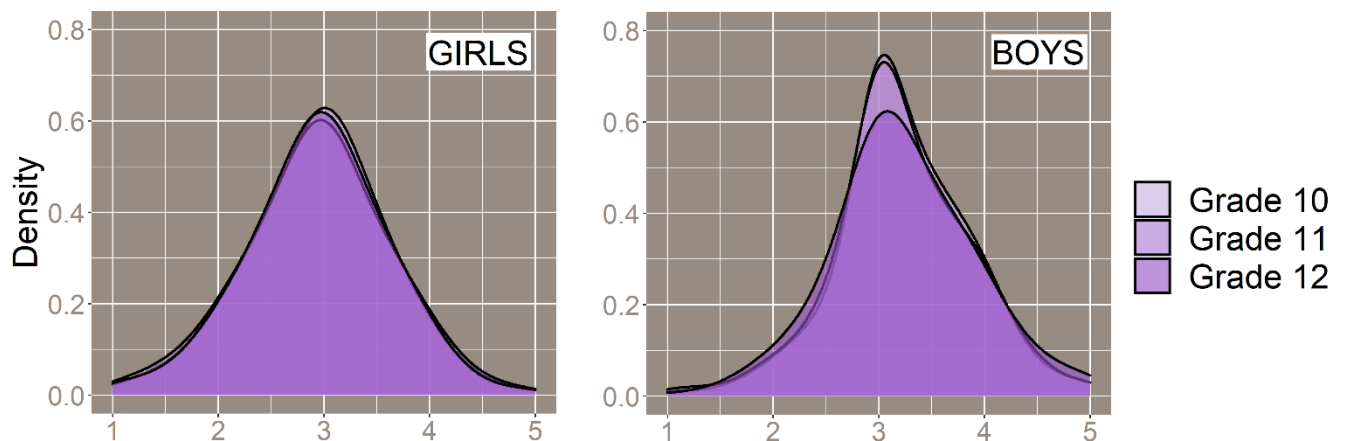


Figure 11. Distribution of scores on the WEC Resilience scale

## Engagement with School domain

### Connectedness to adults at school

| Connectedness to adults at school scale |  |
|---|--|
|   | At my school, there is a teacher or another adult... |
| 1                                       | ... who really cares about me.                       |
| 2                                       | ... who believes that I will be a success.           |
| 3                                       | ... who listens to me when I have something to say.  |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Connectedness to adults at school scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.89 in Grade 10-12 students) than younger students (.78 for Grade 4-5 students). |
| <b>Convergent validity</b>                            | The Connectedness to adults at school scale correlated highly with other theoretically similar scales including Emotional engagement with teachers ( $r = .47$ to $.53$ ), and School belonging ( $r = .40$ to $.45$ ).                                     |
| <b>Discriminant validity</b>                          | Scores on the Connectedness to adults at school scale showed a lower correlation with theoretically distinct scales including the Perseverance ( $r = .29$ to $.34$ ) and Engagement (flow) ( $r = .28$ to $.34$ ).   |
| <b>Sub-group differences by gender and year level</b> | Younger students reported higher levels of connectedness to adults at school than older students, with pronounced differences between primary school (Grade 4-7) and high school students (Grade 8 to 12), particularly with girls.                         |

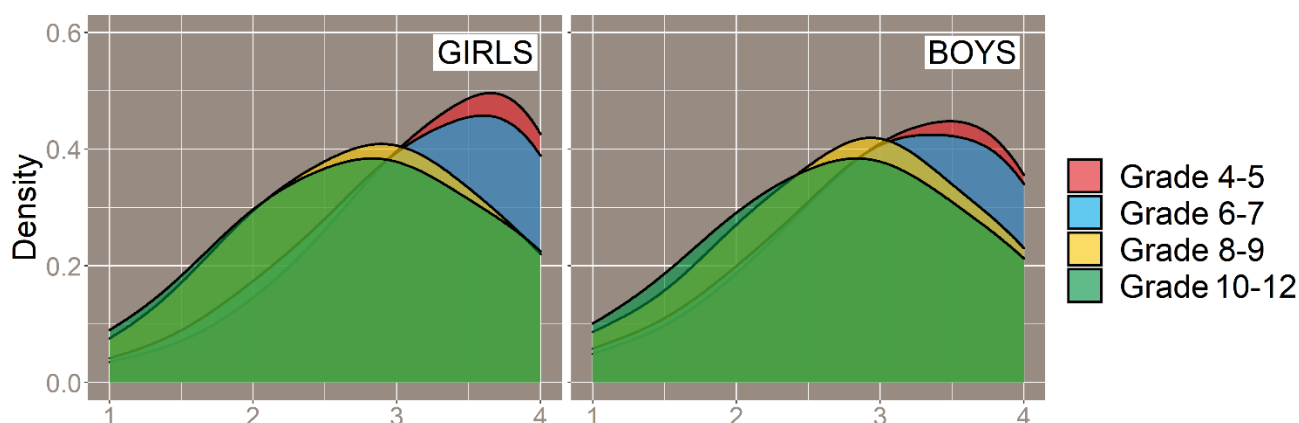


Figure 12. Distribution of scores on the WEC Connectedness to adults at school scale

## School climate

| School climate scale |  |
|----------------------|--|
| 1                    | Teachers and students treat each other with respect in this school.    |
| 2                    | People care about each other in this school.                           |
| 3                    | Students in this school help each other, even if they are not friends. |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The School climate scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.84 in Grade 10-12 students) than younger students (.80 for Grade 4-5 students). |
| <b>Convergent validity</b>                            | The School climate scale correlated highly with other theoretically similar scales, in particular the School belonging scale ( $r = .60$ to $.65$ ).   |
| <b>Discriminant validity</b>                          | Scores on the School climate scale showed a lower correlation with theoretically distinct scales including the Perseverance ( $r = .31$ to $.38$ ) and Engagement (flow) ( $r = .33$ to $.39$ ).   |
| <b>Sub-group differences by gender and year level</b> | Older students reported that their school had a less positive climate than the younger students did, while scores did not differ considerably between boys and girls.  |

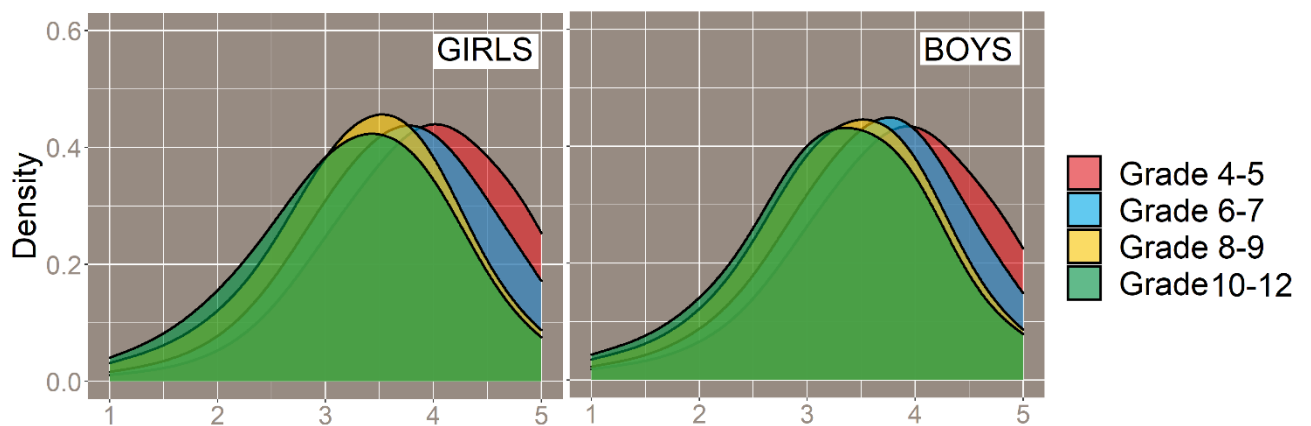


Figure 13. Distribution of scores on the WEC School Climate scale

## School belonging

| School belonging scale |  |
|------------------------|--|
| 1                      | I feel like I belong in this school.       |
| 2                      | I feel like I am important to this school. |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The School belonging scale had high internal reliability for students in all grades, ranging from .82 to .85.  |
| <b>Convergent validity</b>                            | The School belonging scale correlated highly with other theoretically similar scales, in particular the School climate scale ( $r = .60$ to $.65$ ).   |
| <b>Discriminant validity</b>                          | Scores on the School belonging scale showed a lower correlation with theoretically distinct scales such as the Perseverance ( $r = .36$ to $.44$ ) and Engagement (flow) scales ( $r = .39$ to $.46$ ).                    |
| <b>Sub-group differences by gender and year level</b> | Younger students reported higher levels of School belonging than older students, with pronounced differences between primary school (Grade 4-7) and high school students (Grade 8 to 12). Scores did not differ by gender. |

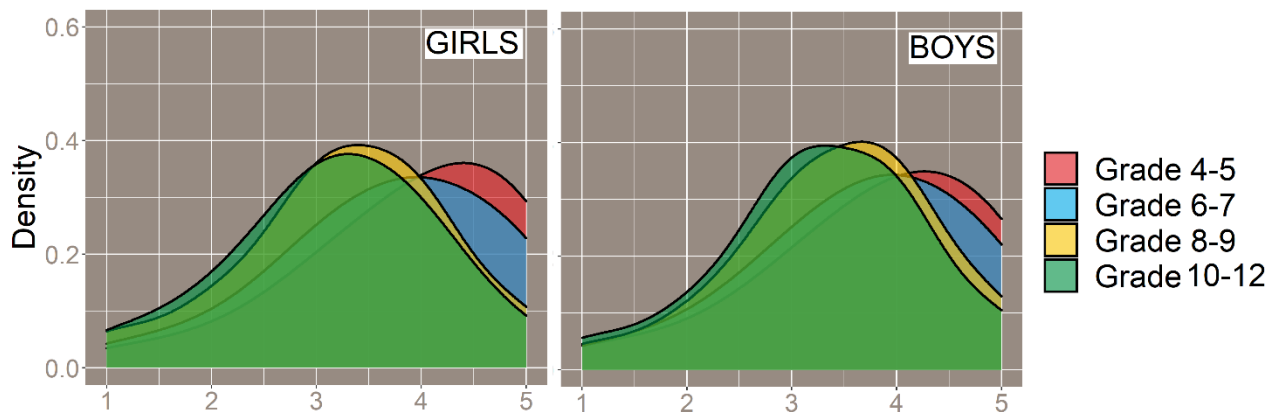


Figure 14. Distribution of scores on the WEC School belonging scale

## Peer belonging

| Peer belonging scale |  |
|----------------------|--|
| 1                    | I feel part of a group of friends that do things together.           |
| 2                    | I feel that I usually fit in with other kids <sup>9</sup> around me. |
| 3                    | When I am with other kids my age, I feel I belong.                   |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Peer belonging scale had high internal reliability for students in all grades, ranging from .82 to .87.   |
| <b>Convergent validity</b>                            | The Peer belonging scale correlated highly with other theoretically similar scales, particularly the Friendship intimacy scale ( $r = .52$ to $.54$ ).  |
| <b>Discriminant validity</b>                          | Scores on the Peer belonging scale showed a lower correlation with theoretically distinct scales such as the Perseverance ( $r = .30$ to $.36$ ) and Engagement (Flow) scales ( $r = .34$ to $.41$ ). |
| <b>Sub-group differences by gender and year level</b> | Younger students reported higher levels of Peer belonging than older students, with similar patterns observed for boys and girls.   |

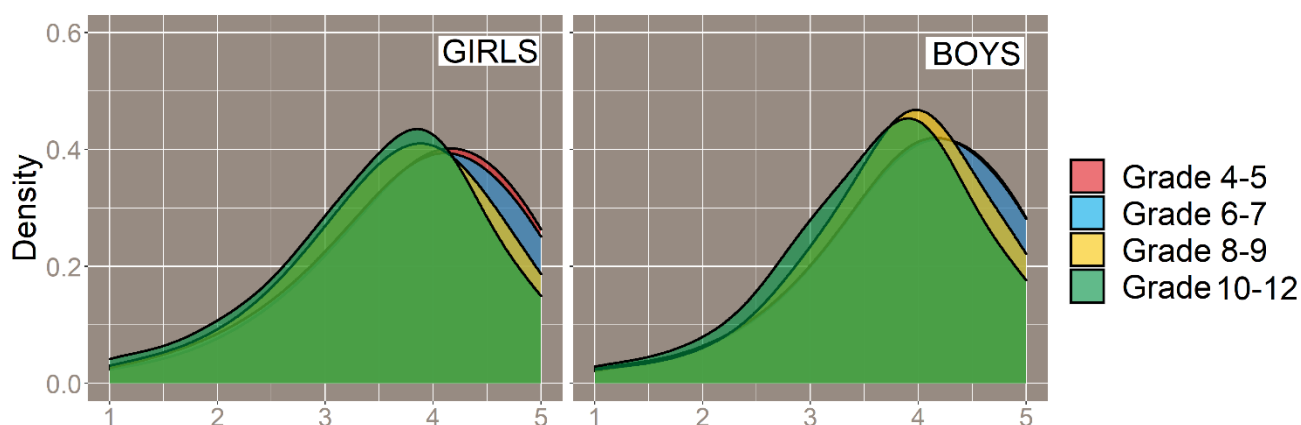


Figure 15. Distribution of scores on the WEC Peer belonging scale

<sup>9</sup> While the language “kids” works well for younger students, a different term such as “students” or “peers” might be better for high school students, particularly students in Grades 10-12.

## Friendship intimacy

| Friendship intimacy scale |  |
|---------------------------|--|
| 1                         | I have at least one really good friend I can talk to when something is bothering me. |
| 2                         | I have a friend I can tell everything to.  |
| 3                         | There is somebody my age who really understands me.                                  |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Friendship intimacy scale had high internal reliability for students in all grades, ranging from .82 to .90.   |
| <b>Convergent validity</b>                            | The Friendship intimacy scale correlated highly with other theoretically similar scales, in particular the Peer belonging scale ( $r = .52$ to $.54$ ).  |
| <b>Discriminant validity</b>                          | Scores on the Friendship Intimacy scale showed a lower correlation with theoretically distinct scales such as the Perseverance ( $r = .21$ to $.26$ ) and Engagement (flow) scales ( $r = .25$ to $.32$ ).   |
| <b>Sub-group differences by gender and year level</b> | This scale was skewed to the left with most students, particularly girls, reporting high levels of friendship intimacy. Boys showed a decrease in friendship intimacy with age, with slightly lower mean scores for high school students than primary school students. |

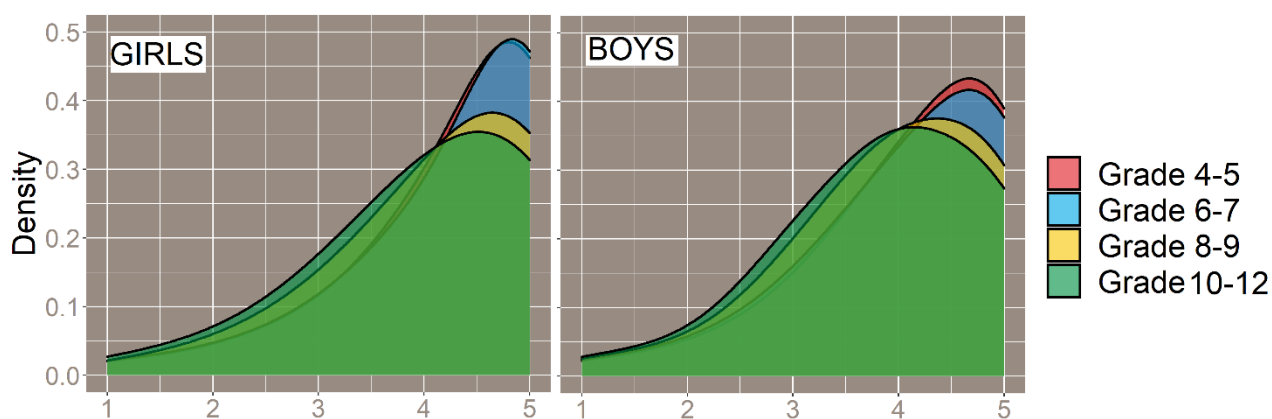


Figure 16. Distribution of scores on the WEC Friendship intimacy scale



## Emotional engagement with teachers

| Emotional engagement with teachers scale |   |
|--|---|
| 1  | I get along well with most of my teachers.                |
| 2  | Most of my teachers are interested in my wellbeing.       |
| 3  | Most of my teachers really listen to what I have to say.  |
| 4  | If I need extra help, I will receive it from my teachers. |
| 5  | Most of my teachers treat me fairly.                      |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Emotional engagement with teachers scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.89 in Grade 10-12 students) than younger students (.83 for Grade 4-5 students).       |
| <b>Convergent validity</b>                            | The Emotional engagement with teachers scale correlated highly with other theoretically similar scales, in particular the Connectedness to adults at school scale ( $r = .47$ to $.53$ ).  |
| <b>Discriminant validity</b>                          | Scores on the Emotional engagement with teachers scale showed a lower correlation with theoretically distinct scales including the Perseverance ( $r = .37$ to $.46$ ) and Engagement (flow) ( $r = .35$ to $.45$ ).   |
| <b>Sub-group differences by gender and year level</b> | Younger students reported higher levels of Emotional engagement with teachers than older students, with pronounced differences between primary school (Grade 4-7) and high school students (Grade 8 to 12). Similar patterns were observed between boys and girls. |

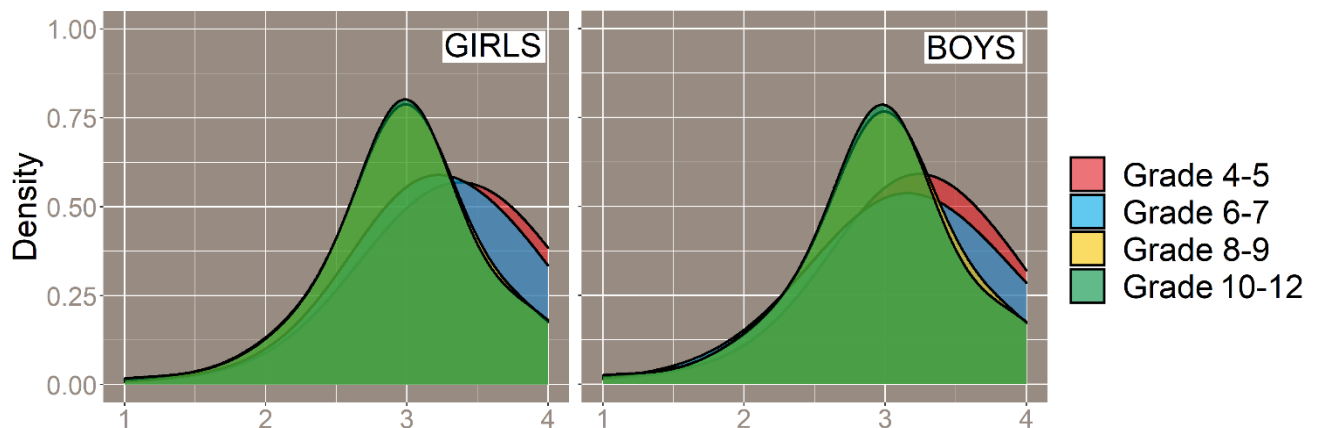


Figure 17. Distribution of scores on the WEC Emotional engagement with teachers scale

## Cognitive engagement

| Cognitive engagement scale |  |
|----------------------------|--|
| 1                          | I work hard on learning.                                 |
| 2                          | When I found something hard I tried another way.         |
| 3                          | I take a lot of care with what I do.                     |
| 4                          | No matter who you are, you can change your intelligence. |
| 5                          | I am excited to come up with new things.                 |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Cognitive engagement scale had high internal reliability for students in all grades, ranging from .84 to .88.   |
| <b>Convergent validity</b>                            | The Cognitive engagement scale correlated highly with other theoretically similar scales, including the Academic self-concept scale ( $r = .63$ to $.70$ ) and Perseverance ( $r = .62$ to $.71$ ).   |
| <b>Discriminant validity</b>                          | Scores on the Cognitive engagement scale showed a lower correlation with theoretically distinct scales, including the Sadness ( $r = -.29$ to $-.43$ ), Worries ( $r = -.16$ to $-.31$ ), and Psychological distress scales ( $r = -.26$ ). |
| <b>Sub-group differences by gender and year level</b> | Older students reported lower levels of Cognitive engagement than younger students, with a clear decrease in engagement for students in each successively older age group. Similar patterns were observed between boys and girls.           |

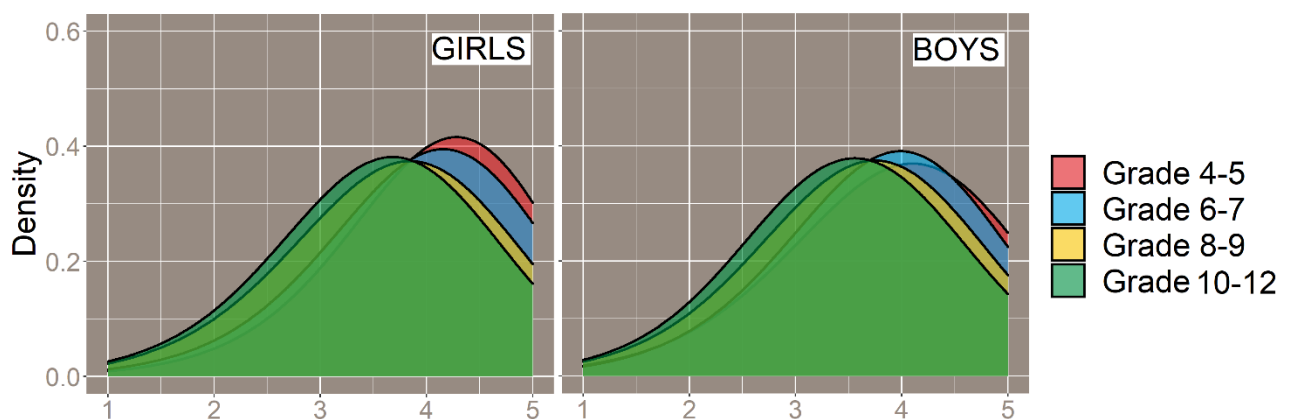


Figure 18. Distribution of scores on the WEC Cognitive engagement scale

## Learning Readiness domain

### Academic self-concept

| Academic self-concept scale |   |
|-----------------------------|---|
| 1                           | I am certain I can learn the skills taught in school this year.   |
| 2                           | If I have enough time, I can do a good job on all my school work. |
| 3                           | Even if the work in school is hard, I can learn it.               |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Academic self-concept scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.85 in Grade 10-12 students) than younger students (.80 for Grade 4-5 students). |
| <b>Convergent validity</b>                            | The Academic self-concept scale correlated highly with other theoretically similar scales, including the Academic self-efficacy scale ( $r = .64$ ) and the Cognitive engagement scale ( $r = .63$ to $.70$ ).                                  |
| <b>Discriminant validity</b>                          | Scores on the Academic self-concept scale showed a lower correlation with theoretically distinct scales, including the Sadness ( $r = -.30$ to $-.42$ ), Worries ( $r = -.18$ to $-.32$ ), and Psychological distress scales ( $r = -.31$ ).    |
| <b>Sub-group differences by gender and year level</b> | Older students reported lower levels of academic self-concept than younger students, with a clear decrease in engagement for students in each successively older age group. Similar patterns were observed between boys and girls.              |

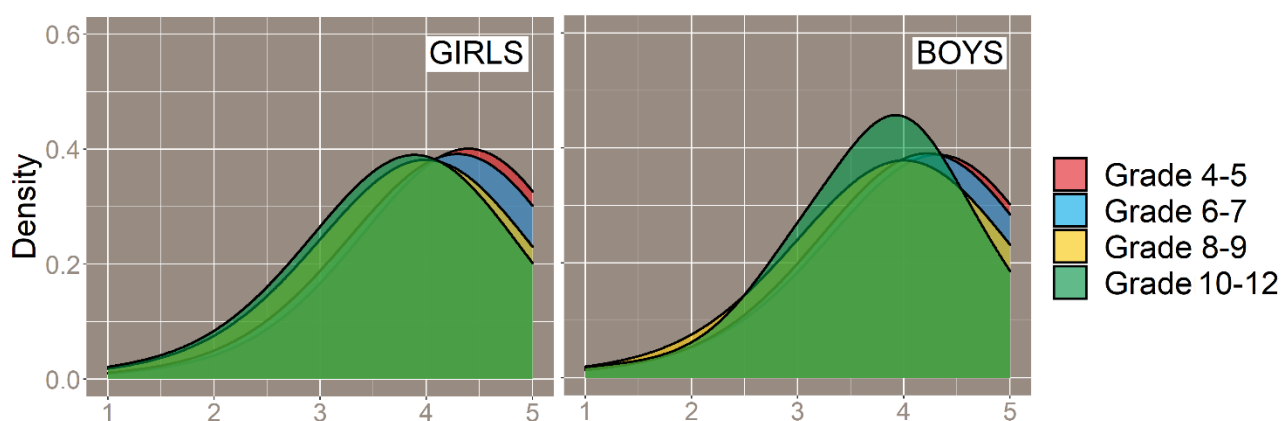


Figure 19. Distribution of scores on the WEC Academic self-concept scale

## Perseverance

| Perseverance scale |  |
|--------------------|--|
| 1                  | I keep at my schoolwork until I'm done with it.          |
| 2                  | I finish whatever I begin.                               |
| 3                  | Once I make a plan to get something done, I stick to it. |
| 4                  | I am a hard worker.                                      |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Perseverance scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.83 in Grade 8-9 students) than younger students (.74 for Grade 4-5 students). |
| <b>Convergent validity</b>                            | The Perseverance scale correlated highly with other theoretically similar scales, particularly the Cognitive Engagement scale ( $r = .62$ to $.71$ ), and Academic self-concept ( $r = .52$ to $.66$ ).                              |
| <b>Discriminant validity</b>                          | Scores on the Perseverance scale showed a lower correlation with theoretically distinct scales including the Sadness ( $r = -.32$ to $-.39$ ) and Worries scales ( $r = -.21$ to $-.29$ ).   |
| <b>Sub-group differences by gender and year level</b> | Small differences in perseverance were observed in girls, with older students showing lower levels of perseverance. The same pattern was observed for males but these effects were less pronounced.                                  |

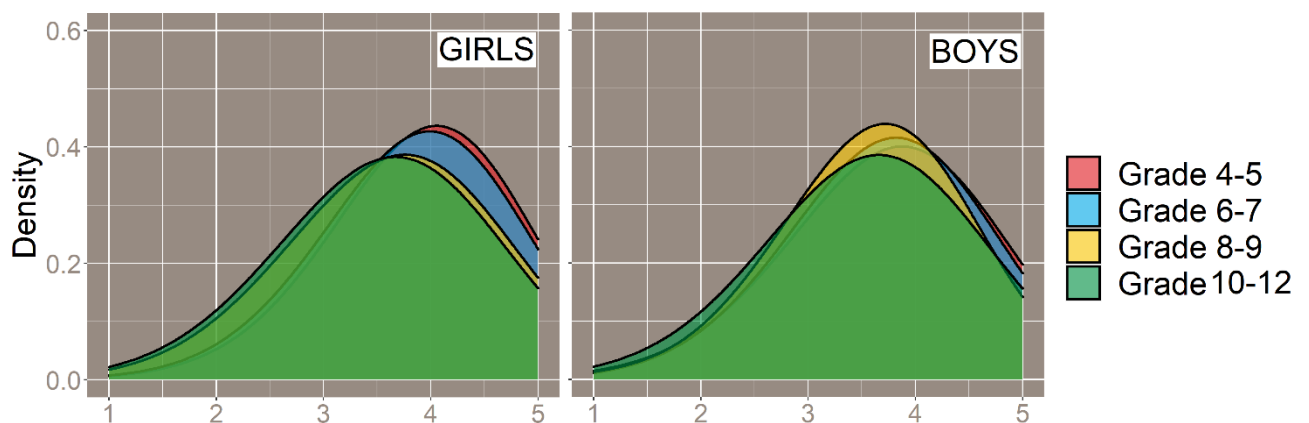


Figure 20. Distribution of scores on the WEC Perseverance scale

## Engagement (flow)

### Engagement (flow) scale

- 1 When I do an activity, I enjoy it so much that I lose track of time.
- 2 I get completely absorbed in what I am doing.
- 3 I get so involved in activities that I forget about everything else.
- 4 When I am learning something new, I lose track of how much time as passed.

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Engagement (flow) scale had high internal reliability for students in all grades, with slightly higher Cronbach's alpha statistics for older students (.88 in Grade 10-12 students) than younger students (.80 for Grade 4-5 students). |
| <b>Convergent validity</b>                            | The Engagement (flow) scale correlated highly with other theoretically similar scales, in particularly the Cognitive Engagement scale ( $r = .49$ to $.57$ ), and Academic self-concept ( $r = .41$ to $.50$ ).                             |
| <b>Discriminant validity</b>                          | Scores on the Engagement (flow) scale showed a lower correlation with theoretically distinct scales including the Sadness ( $r = -.20$ to $-.34$ ) and Worries scale ( $r = -.13$ to $-.25$ ).  |
| <b>Sub-group differences by gender and year level</b> | There was minimal evidence of age differences in Engagement (flow). Boys had slightly higher levels of Engagement (flow) than girls   |

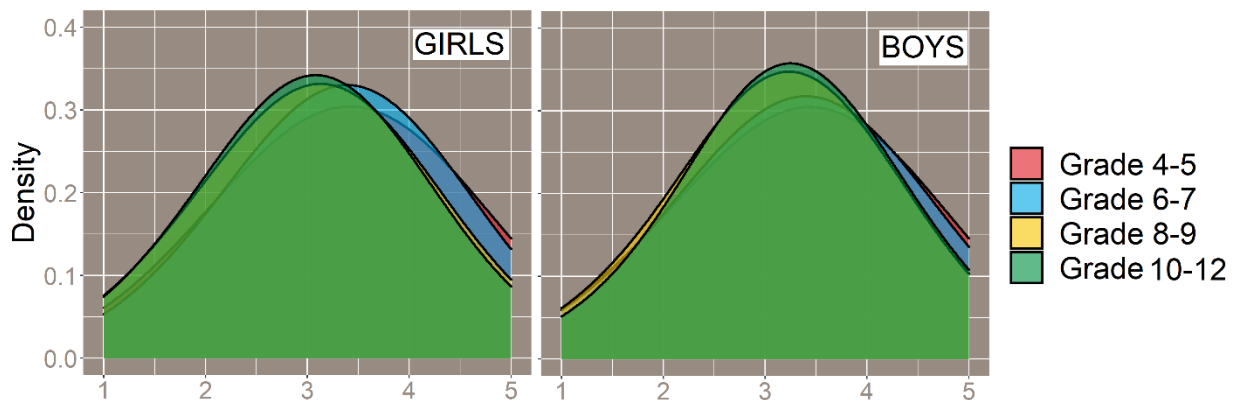


Figure 21. Distribution of scores on the WEC Engagement (flow) scale

## Academic self-efficacy (Learning practices)

### Academic self-efficacy scale

- 1 I can finish my homework assignments by the deadlines.
- 2 I can get myself to study when there are other interesting things to do.
- 3 I can always concentrate on school subjects during class.
- 4 I can take good notes during school lessons.
- 5 I can plan my schoolwork for the day.
- 6 I can organise my schoolwork.
- 7 I can remember information presented in class and textbooks.
- 8 I can get myself to do schoolwork.
- 9 I can arrange a place to study without distractions.

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Academic self-efficacy scale, measured for Grade 10-12 students only, had high internal reliability (.91).   |
| <b>Convergent validity</b>                            | The Academic self-efficacy scale correlated highly with other theoretically similar scales, including the Cognitive Engagement scale ( $r = .73$ ), Academic self-concept ( $r = .64$ ), and Perseverance ( $r = .66$ ). |
| <b>Discriminant validity</b>                          | Scores on the Academic self-efficacy scale showed a lower correlation with theoretically distinct scales including Sadness ( $r = -.32$ ), Worries scale ( $r = -.21$ ) and Psychological distress ( $r = -.31$ ).       |
| <b>Sub-group differences by gender and year level</b> | There was no evidence of age or gender differences in Academic self-efficacy for Senior Years students (Grade 10-12).  |

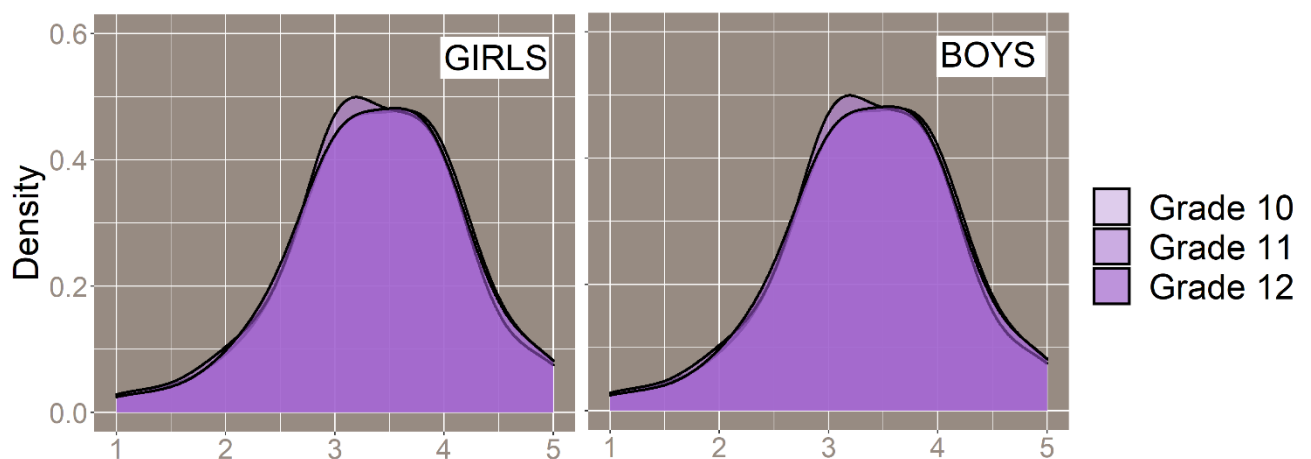


Figure 22. Distribution of scores on the WEC Academic self-efficacy scale

## Perfectionistic striving (Expectations for success)

| Perfectionistic striving scale |  |
|--------------------------------|--|
| 1                              | I have high expectations for myself.           |
| 2                              | I set very high standards for myself.          |
| 3                              | I have a strong need to strive for excellence. |
| 4                              | I expect the best from myself.                 |

|   |  |
|---|--|
| <b>Internal reliability</b>                           | The Perfectionistic striving scale had high internal reliability in the Senior Years students (.88).   |
| <b>Convergent validity</b>                            | Scores on the Perfectionistic striving scale correlated highly with other theoretically similar scales, including the Cognitive engagement ( $r = .59$ ), Academic self-concept ( $r = .47$ ) and Academic self-efficacy scales ( $r = .57$ ).   |
| <b>Discriminant validity</b>                          | While high levels of Perfectionistic concerns have been linked with a range of negative mental health outcomes, there is conjecture in the literature about whether high levels of perfectionistic strivings are problematic. In the current sample, scores on the Perfectionistic striving scale showed a weak correlation with Sadness ( $r = -.17$ ), Worries ( $r = -.02$ ) and Psychological distress ( $r = -.13$ ). |
| <b>Sub-group differences by gender and year level</b> | There was no evidence of age or gender differences in Perfectionistic striving for Senior Years students (Grade 10-12).  |

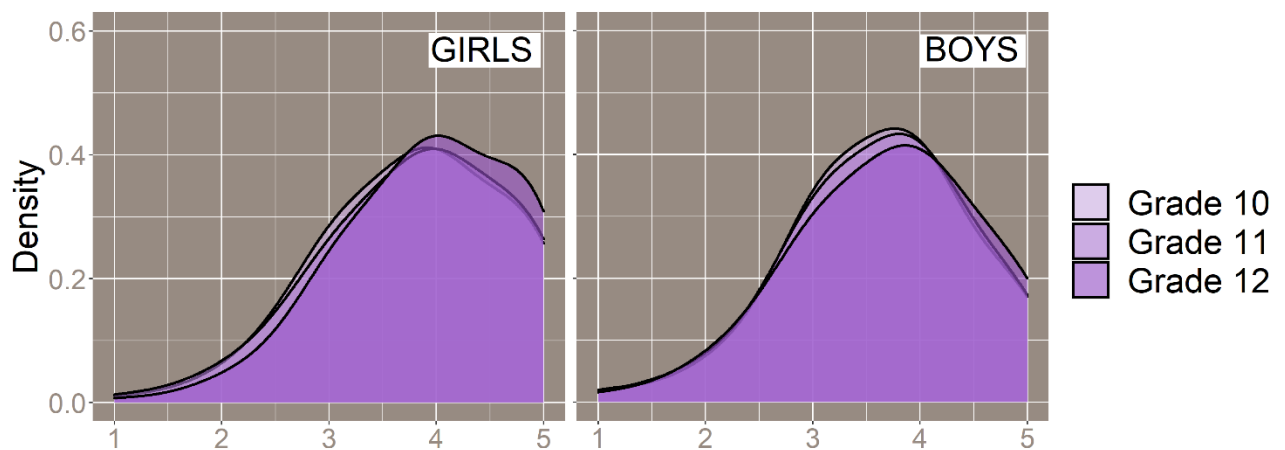


Figure 23. Distribution of scores on the WEC Perfectionistic striving scale

## Perfectionistic concerns (Meeting expectations)

| Perfectionistic concerns scale |  |
|--------------------------------|--|
| 1                              | Doing my best never seems to be enough.  |
| 2                              | I often feel disappointed after completing a task because I knew I could have done better. |
| 3                              | My performance rarely measures up to my standards.   |
| 4                              | I am hardly ever satisfied with my performance.  |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Perfectionistic concerns scale had high internal reliability in the Senior Years students (.80).  |
| <b>Convergent validity</b>                            | High levels of perfectionistic concerns have been linked with a range of negative mental health outcomes in the literature. Consistent patterns were observed in the Senior Years students, with higher level of perfectionistic concerns associated with higher scores on the sadness ( $r = .43$ ), worries ( $r = .42$ ), and psychological distress scales ( $r = .45$ ). |
| <b>Discriminant validity</b>                          | Scores on the Perfectionistic concerns scale showed a lower correlation with theoretically distinct scales from the Engagement with School domain including Connectedness to adults at school ( $r = -.09$ ), School climate ( $r = -.05$ ), and School belonging ( $r = -.16$ ).   |
| <b>Sub-group differences by gender and year level</b> | There was a slight increase in Perfectionistic concerns with age in girls, but no age effects were evident for boys in the Senior Years (Grade 10-12).  |

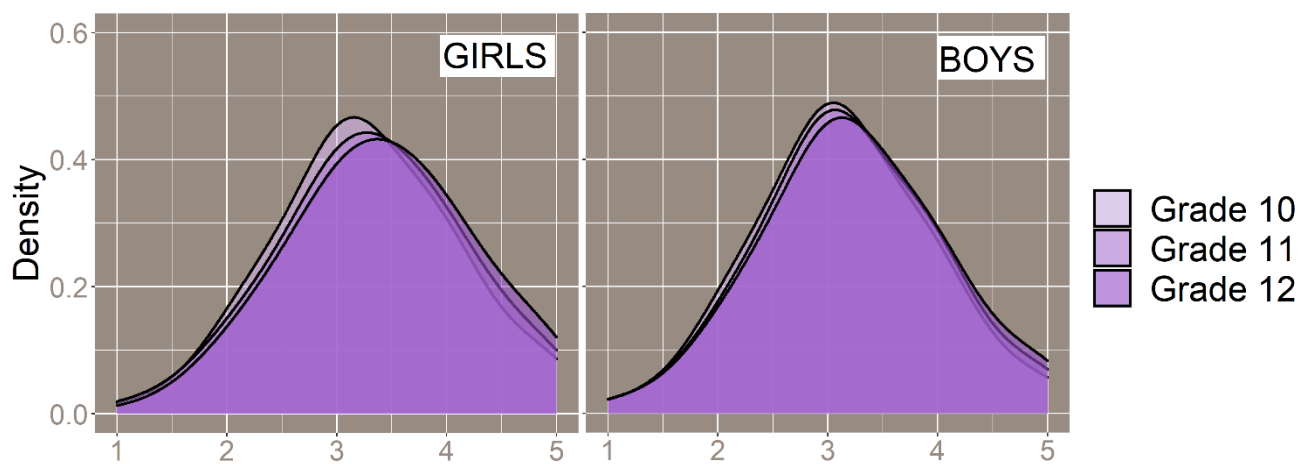


Figure 24. Distribution of scores on the WEC Perfectionistic concerns scale



## Hope – agency (Motivation to achieve goals)

| Hope - agency scale |   |
|---------------------|---|
| 1                   | I actively pursue my goals.                               |
| 2                   | My past experiences have prepared me well for the future. |
| 3                   | I've been pretty successful in my life.                   |
| 4                   | I meet the goals I set for myself.                        |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Hope (agency) scale had high internal reliability in the Senior Years students (.82).   |
| <b>Convergent validity</b>                            | The Hope (agency) scale correlated highly with other theoretically similar scales, including Life satisfaction ( $r = .64$ ), Optimism ( $r = .31$ ), Cognitive engagement ( $r = .61$ ), and Perseverance ( $r = .63$ ).   |
| <b>Discriminant validity</b>                          | Scores on the Hope - agency scale showed a lower correlation with theoretically distinct scales such as those from the Engagement with School domain, including Connectedness with adults at school ( $r = .35$ ), School climate ( $r = .35$ ) and Peer belonging ( $r = .44$ ). |
| <b>Sub-group differences by gender and year level</b> | There was no evidence of age or gender differences in Hope - agency for Senior Years students (Grade 10-12).  |

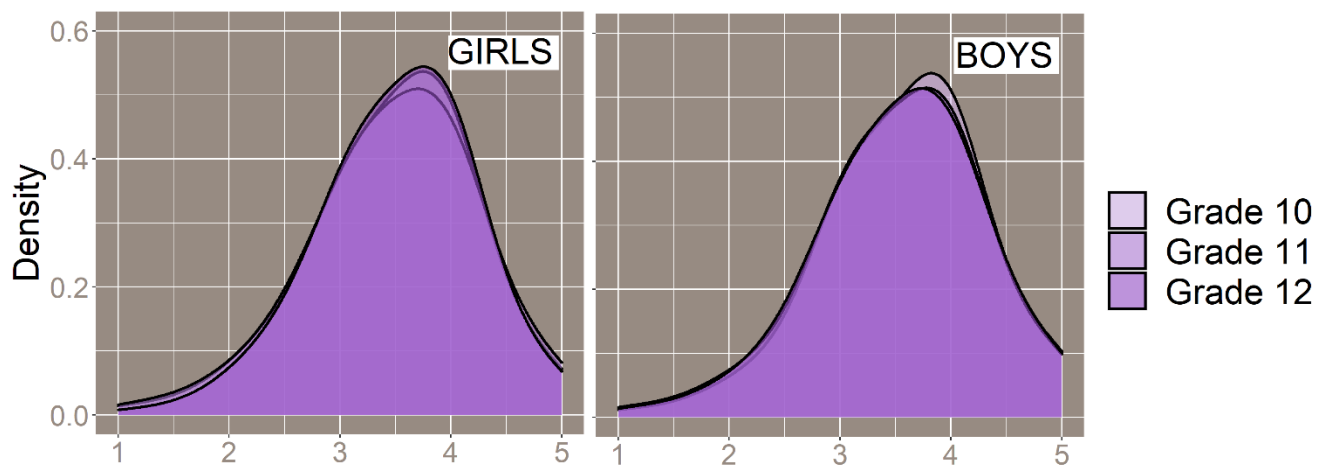


Figure 25. Distribution of scores on the WEC Hope (agency) scale

## Hope – pathways (Future goal planning)

| Hope - pathways scale |   |
|-----------------------|---|
| 1                     | I can think of many ways to get myself out of trouble.                        |
| 2                     | There are lots of ways around any problem.                                    |
| 3                     | I can think of many ways to get the things in life that are important to me.  |
| 4                     | Even when others get discouraged, I know I can find a way to solve a problem. |

|   |   |
|---|---|
| <b>Internal reliability</b>                           | The Hope (pathways) scale had high internal reliability in the Senior Years students (.74).   |
| <b>Convergent validity</b>                            | The Hope (pathways) scale correlated highly with other theoretically similar scales, including the Hope - agency scale ( $r = .64$ ), Optimism ( $r = .50$ ), and Happiness ( $r = .50$ ).  |
| <b>Discriminant validity</b>                          | Scores on the Hope - pathways scale showed a lower correlation with theoretically distinct scales such as those from the Engagement with School domain, including Connectedness with adults at school ( $r = .26$ ), School climate ( $r = .27$ ) and Peer belonging ( $r = .37$ ). |
| <b>Sub-group differences by gender and year level</b> | There was no evidence of age or gender differences in Hope (pathways) for Senior Years students (Grade 10-12).  |

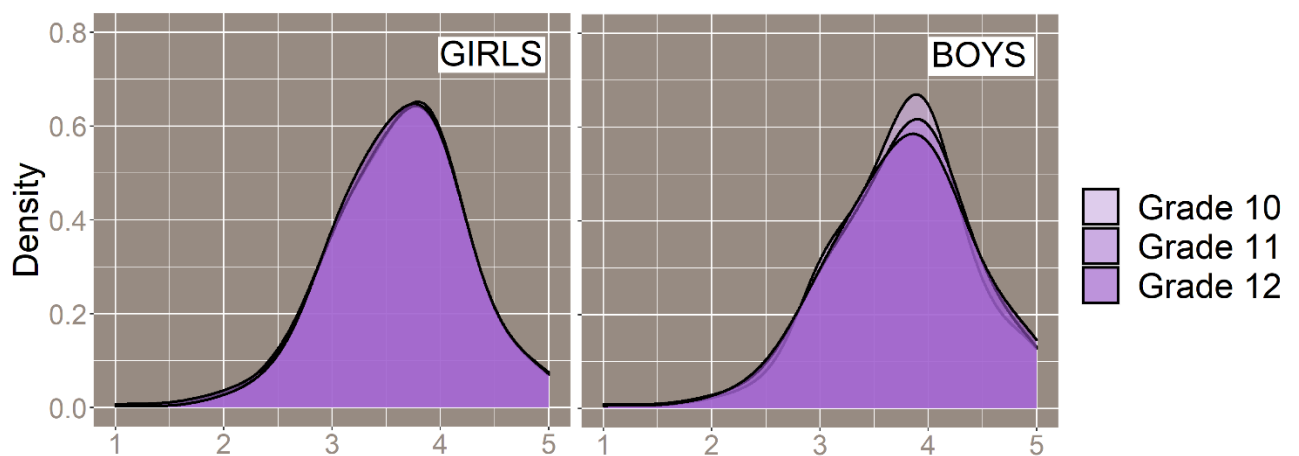


Figure 26. Distribution of scores on the WEC Hope (pathways) scale

## 5. Summary of findings

For each of the multi-item scales, we explored four different types of reliability/validity. Table 10 presents a summary of the psychometric properties of each of the scales against these four different criteria.

|  |  |
|--|--|
| Internal reliability   | <b>Do the items within each scale measure the same construct?</b>  |
| Convergent validity  | <b>Are scores on this scale associated with scores on other scales that they theoretically should be associated with?</b>  |
| Discriminant validity  | <b>Do scores on this scale show weak associations with scores on other scales that they are theoretically not expected to be strongly associated with?</b>                     |
| Sub-group differences in scale scores by gender and year level | <b>Are differences in scores between sub-groups consistent with theoretical expectations? Is the scale sensitive to differences that occur as children mature and develop?</b> |

All scales had good internal reliability, for students across all grades, and all had good convergent and divergent validity. Most scales showed differences between males and females and/or grade level, suggesting that the scales are sensitive to known gender differences and/or differences that occur as children mature and develop. Importantly, scales that are sensitive to these known differences between sub-groups of children are likely to also be sensitive to increase and decreases in wellbeing for individual children as a result of changes in policies and practices within schools and education systems.

Two scales that were collected for children in Grades 4 to 12 showed limited evidence for differences between males and females and/or children of different ages, suggesting they may not be as sensitive to detecting changes over time.

- *Friendship intimacy*
  - This scale is highly skewed towards high levels of Friendship intimacy, especially for girls, which means that it is likely to be difficult to detect improvements over time with this scale.
- *Engagement (flow)*
  - This scale is normally distributed with a lot of variation between students but there is limited evidence of any gender or grade level differences. Theoretically similar scales such as Cognitive engagement and Academic self-concept show quite clear patterns of lower engagement and self-concept with increasing age.

**Table 10. Summary of psychometric findings**

| Scale                              | Internal reliability | Convergent/<br>divergent validity | Gender and/or<br>grade effects |
|------------------------------------|----------------------|-----------------------------------|--------------------------------|
| <b>Emotional Wellbeing</b>         |                      |                                   |                                |
| Life satisfaction                  | ✓                    | ✓                                 | ✓                              |
| Sadness                            | ✓                    | ✓                                 | ✓                              |
| Worries                            | ✓                    | ✓                                 | ✓                              |
| Optimism                           | ✓                    | ✓                                 | ✓                              |
| Happiness                          | ✓                    | ✓                                 | ✓                              |
| Emotion regulation                 | ✓                    | ✓                                 | ✓                              |
| Psychological distress (*)         | ✓                    | ✓                                 | ✓                              |
| Resilience (*)                     | ✓                    | ✓                                 | !                              |
| <b>Engagement with School</b>      |                      |                                   |                                |
| Connectedness to adults at school  | ✓                    | ✓                                 | ✓                              |
| Important adults at school         | ✓                    | ✓                                 | ✓                              |
| School climate                     | ✓                    | ✓                                 | ✓                              |
| School belonging                   | ✓                    | ✓                                 | ✓                              |
| Peer belonging                     | ✓                    | ✓                                 | ✓                              |
| Friendship intimacy                | ✓                    | ✓                                 | !                              |
| Emotional engagement with teachers | ✓                    | ✓                                 | ✓                              |
| Cognitive engagement               | ✓                    | ✓                                 | ✓                              |
| <b>Learning Readiness</b>          |                      |                                   |                                |
| Academic self-concept              | ✓                    | ✓                                 | ✓                              |
| Perseverance                       | ✓                    | ✓                                 | ✓                              |
| Engagement (flow)                  | ✓                    | ✓                                 | !                              |
| Academic self-efficacy (*)         | ✓                    | ✓                                 | !                              |
| Perfectionistic striving (*)       | ✓                    | ✓                                 | !                              |
| Perfectionistic concerns (*)       | ✓                    | ✓                                 | ✓                              |
| Hope - agency (*)                  | ✓                    | ✓                                 | !                              |
| Hope - pathways (*)                | ✓                    | ✓                                 | !                              |

Note. (\*) These scales have been validated with Grade 10-12 students. It is unknown whether they have good psychometric properties with Grade 4 to 9 students.

Several other scales showed limited evidence of differences between males and females and/or children of different ages. These are highlighted in purple in Table 10. However, given that these scale were only measured in Senior Years students, age effects could only be observed within a small age range (i.e. Year 10-12 rather than Year 4-12) so it is not surprising that these effects were less marked than for other scales measured for all children. As such, we do not consider these scales to be problematic from a psychometric analysis perspective.

While the psychometric analyses focus on the multi-item scales, we explored the frequencies of all single items (e.g. cyberbullying, skipping breakfast, sleep quality) by gender and grade level, and no unusual age or gender patterns were identified.

In summary, the psychometric analyses of the 2019 WEC survey suggest all items and scales function well, with some small issues identified with the Friendship intimacy and Engagement (flow) scales. It is important to note that some of the scales were only administered to the Senior Years students (Grade 10 to 12), and as such we do not know whether they have good psychometric properties for younger students or not.

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## Emotional Wellbeing

**Table 11. Emotional Wellbeing constructs in the WEC (2014-2019)**

|                        | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------------------------|------|------|------|------|------|------|
| Life satisfaction      | X    | X    | X    | X    | X    | X    |
| Sadness                | X    | X    | X    | X    | X    | X    |
| Worries                | X    | X    | X    | x    | x    | x    |
| Optimism               | X    | X    | X    | X    | X    | X    |
| Empathy                | X    | X    | --   | --   | --   | --   |
| Self esteem            | X    | X    | --   | --   | --   | --   |
| Pro-social behaviour   | X    | X    | --   | --   | --   | --   |
| Happiness              | --   | --   | X    | X    | X    | X    |
| Emotion regulation     | --   | --   | X    | X    | X    | X    |
| Psychological distress | --   | --   | --   | --   | --   | X    |
| Resilience             | --   | --   | --   | --   | --   | X    |

### KEY

|  |
|--|
| Construct measured in all cycles (2014-2019)                         |
| Construct removed from survey prior to 2019                          |
| Construct measured from 2016-2019                                    |
| Construct measured for Senior Years students (Grade 10-12) from 2019 |

Over the next few pages, information is provided about each of these constructs including:

- Collection cycles
- Student grade levels who participated in WEC each collection cycle
- Items and response options, including any changes over time
- Additional notes, including why items/scales were changed over time

For information on the source of all items and scales, please contact the SA Department for Education who have a full list of original authors for all measures.

## Multi-item scales

### Life satisfaction

| Collection cycles and grade levels  |  |  |
|---|--|--|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019   |  |
| Grade levels  | Grade 4 to 5   | 2017, 2018, 2019   |
|   | Grade 6 to 9   | 2014, 2015, 2016, 2017, 2018, 2019   |
|   | Grade 10 to 12   | 2019   |
| Items and response options  |  |  |
|   | 2014-2017  | 2018-2019 <sup>2</sup>   |
| <p>In most ways my life is close to the way I would want it to be.</p> <p>The things in my life are excellent.</p> <p>I am happy with my life.</p> <p>So far I have gotten the important things I want in life.</p> <p>If I could live my life over again, I would have it the same way.</p>  | <p>1 = disagree a lot</p> <p>2 = disagree a little</p> <p>3 = don't agree or disagree</p> <p>4 = agree a little</p> <p>5 = agree a lot</p> | <p>1 = Strongly disagree</p> <p>2 = Disagree</p> <p>3 = Don't agree or disagree</p> <p>4 = Agree</p> <p>5 = Strongly agree</p> |
| Notes   |  |  |
| <p><sup>1</sup> This scale is labelled "Satisfaction with life" in the WEC school reports</p> <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |  |  |

## Optimism

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, (...) <sup>2</sup> , 2017, 2018, 2019   |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, (...), 2017, 2018, 2019   |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2015, 2017   | 2018-2019 <sup>3</sup>  |
| I have more good times than bad times.<br>I believe more good things than bad things will happen to me.<br>I start most days thinking I will have a good day.   | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> In 2016, a different optimism scale (4-item EPOCH scale) was included in the WEC (see below for details). However, feedback from schools suggested that students had trouble with some of the wording of items, including the word "optimistic", and as such the 3-item scale described above was re-introduced to the WEC from 2017 onwards.</p> <p><sup>3</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |



| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2016  |
| Grade levels   | Grade 6 to 9<br>2016  |
| Items and response options   |   |
|  | 2016 <sup>1</sup>   |
| I am optimistic about my future  | 1 = almost never<br>2 = sometimes<br>3 = often<br>4 = very often<br>5 = almost always                                 |
| In uncertain times, I expect the best<br>I think good things are going to happen to me<br>I believe that things will work out, no matter how difficult they seem   | 1 = not at all like me<br>2 = a little like me<br>3 = somewhat like me<br>4 = mostly like me<br>5 = very much like me |
| Notes  |   |
| <sup>1</sup> Following feedback from students that they had trouble with some of the items wording, including the word “optimistic”, the original 3-item scale (described above) was re-introduced to the WEC from 2017 onwards. |   |

*Sadness*

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2017   | 2018-2019 <sup>2</sup>  |
| I feel unhappy a lot of the time.<br>I feel upset about things.<br>I feel that I do things wrong a lot.   | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

## Worries

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2014, 2015  |
| Grade levels   | Grade 6 to 9<br>2014, 2015  |
| Items and response options   |   |
|  | 2014-2015 <sup>2</sup>  |
| I worry about what other kids might be saying about me.<br>I worry a lot that other people might not like me.<br>I worry about being teased  | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot |
| Notes  |   |
| <sup>2</sup> In 2016, this scale was replaced with a broader worries scale that focuses on worries at school and home (see below for details) rather than worries about peer relationships specifically. |   |

| Collection cycles and grade levels   |   |   |
|--|---|---|
| Collection cycles  | 2016, 2017, 2018, 2019  |   |
| Grade levels   | Grade 4 to 5  | 2017, 2018, 2019  |
|  | Grade 6 to 9  | 2016, 2017, 2018, 2019  |
|  | Grade 10 to 12  | 2019  |
| Items and response options   |   |   |
|  | 2016-2017   | 2018-2019 <sup>2</sup>  |
| I worry a lot about things at home<br>I worry a lot about things at school<br>I worry a lot about mistakes that I make<br>I worry about things   | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes  |   |   |
| <p><sup>1</sup> In 2016, a small pilot was conducted where students completed some newly created worries items as well as some items from the <i>Spence Anxiety Scale</i> (see Gregory, Fairweather-Schmidt &amp; Brinkman, 2016). Following psychometric testing, the four item scale above was selected for use in subsequent cycles of the WEC.</p> <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

## Empathy

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2014, 2015  |
| Grade levels   | Grade 6 to 9<br>2014, 2015  |
| Items and response options   |   |
|  | 2014-2015 <sup>2</sup>  |
| I feel sorry for other kids who don't have the things that I have.<br>When I see someone being treated mean it bothers me.<br>I am a person who cares about the feelings of others.  | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot |
| Notes  |   |
| <p><sup>2</sup> The Empathy scale was removed from the student wellbeing instrument in 2016 due to a lack of variability in student's responses, particularly for girls, with the majority of students agreeing a little or a lot with all three items (see Gregory &amp; Brinkman, 2015; Gregory et al., 2019, for more details).</p> |   |

## Self-esteem

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2014, 2015  |
| Grade levels   | Grade 6 to 9<br>2014, 2015  |
| Items and response options   |   |
|  | 2014-2015 <sup>2</sup>  |
| In general, I like being the way I am<br>Overall, I have a lot to be proud of<br>A lot of things about me are good   | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot |
| Notes  |   |
| <p><sup>2</sup> The Self-esteem scale was removed from the student wellbeing instrument in 2016. The main reasons for the removal were (1) a lack of variability in scores, particularly in primary school students, (2) a lack of research evidence for the efficacy of universal population wide programs to modify self-esteem during the middle years, and (3) a desire from schools to reduce the length of the survey instrument (see Gregory &amp; Brinkman, 2015, for more details).</p> |   |

*Pro-social behaviour*

| Collection cycles and grade levels  |   |
|---|---|
| Collection cycles   | 2014, 2015  |
| Grade levels  | Grade 6 to 9<br>2014, 2015  |
| Items and response options  |   |
|   | 2014-2015 <sup>2</sup>  |
| Since the start of this school year, I cheered someone up who was feeling sad<br>Since the start of this school year, I helped someone who was being picked on<br>Since the start of this school year, I helped someone who was hurt  | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot |
| Notes   |   |
| <p><sup>2</sup> The Pro-social behaviour scale was removed from the student wellbeing instrument in 2016. The main reasons for the removal was to reduce the length of the survey instrument. These items focused whether children have exhibited specific pro-social behaviours "since the start of the year", and there was also some concern that some children might not have had an opportunity to exhibit these behaviours, particularly if the WEC was conducted early in the school year, even if they had good pro-social skills (see Gregory &amp; Brinkman, 2015, for more details).</p> |   |

## Happiness

| Collection cycles and grade levels   |   |   |
|--|---|---|
| Collection cycles  | 2016 <sup>1</sup> , 2017, 2018, 2019  |   |
| Grade levels   | Grade 4 to 5  | 2017, 2018, 2019  |
|  | Grade 6 to 9  | 2016, 2017, 2018, 2019  |
|  | Grade 10 to 12  | 2019  |
| Items and response options   |   |   |
|  | 2016-2017   | 2018-2019 <sup>2</sup>  |
| I feel happy<br>I have a lot of fun<br>I love life   | 1 = almost never<br>2 = sometimes<br>3 = often<br>4 = very often<br>5 = almost always                                 | 1 = None of the time<br>2 = A little of the time<br>3 = Some of the time<br>4 = Most of the time<br>5 = All of the time |
| I am a cheerful person   | 1 = not at all like me<br>2 = a little like me<br>3 = somewhat like me<br>4 = mostly like me<br>5 = very much like me | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree                 |
| Notes  |   |   |
| <p><sup>1</sup> The happiness scale was added in 2016 after the review of the social and emotional wellbeing domains noted that the WEC was missing a measure of positive affect, one of the key constructs within subjective wellbeing theories (see Diener, 1994; Diener, Eunkook, Richards, &amp; Smith, 1999).</p> <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |



## Emotion regulation

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2016 <sup>2</sup> , 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2016-2017   | 2018-2019 <sup>4</sup>  |
| When I want to feel happier, I think about something different  | 1 = Strongly disagree<br>2 = Disagree<br>3 = Half and half<br>4 = Agree<br>5 = Strongly agree | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| When I want to feel less bad (e.g. sad, angry or worried), I think about something different  |   |   |
| When I'm worried about something, I make myself think about it in a different way and that helps me feel better (***) <sup>3</sup>  |   |   |
| When I want to feel happier about something, I change the way I'm thinking about it (***)   |   |   |
| I control my feelings about things by changing the way I'm thinking about them  |   |   |
| When I want to feel less bad (e.g. sad, angry or worried), I change the way I'm thinking about it (***)   |   |   |
| Notes   |   |   |
| <p><sup>1</sup> This scale is labelled "Emotion regulation" in the WEC school reports</p> <p><sup>3</sup> After the 2016 WEC, several students commented that the items in the cognitive reappraisal scale were very repetitive. Exploratory factor analyses established that the six items measured a unitary factor, and the three items with the highest loadings (***) were selected to form a new short form of the scale. Psychometric testing suggested that the 3-item scale retained good internal consistency, similar correlations with other WEC scales, and similar associations with gender and age to the 6-item scale. The 6-item scale was replaced with the 3-item scale from 2017 onwards.</p> <p><sup>4</sup> Following feedback from some students and teachers that the survey was confusing to complete, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

*Psychological distress*

| Collection cycles and grade levels  |   |
|---|---|
| Collection cycles   | 2019  |
| Grade levels  | Grade 10 to 12 2019   |
| Items and response options  |   |
|   | 2019 <sup>3</sup>   |
| During the last month about how often did you feel ...<br>...nervous?<br>...hopeless?<br>...restless or fidgety?<br>...so sad <sup>2</sup> that nothing could cheer you up?<br>...that everything was an effort?<br>...worthless?   | 1 = none of the time<br>2 = a little of the time<br>3 = some of the time<br>4 = most of the time<br>5 = all of the time |
| Notes   |   |
| <p><sup>1</sup> This scale is labelled “Distress” in the WEC school reports</p> <p><sup>2</sup> This item is sometimes worded “so sad” and other times “so depressed” in different versions of the Psychological distress scale. The wording “so sad” has been used in the WEC for consistency and comparability with the large scale Mission Australia Youth Survey, and for simplification of language.</p> <p><sup>3</sup> The psychological/emotional distress scale added to the WEC in 2019 for Senior Years student (Grade 10 to 12), following the piloting and psychometric testing of the scale with South Australian students in 2018.</p> |   |

## Resilience

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2019  |
| Grade levels   | Grade 10 to 12 2019   |
| Items and response options   |   |
|  | 2019 <sup>1</sup>   |
| I tend to bounce back quickly after hard times.<br>I have a hard time making it through stressful events (R). <sup>2</sup><br>It does not take me long to recover from a stressful event.<br>It is hard for me to snap back when something bad happens (R).<br>I usually come through difficult times with little trouble.<br>I tend to take a long time to get over set-backs in my life (R). | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes  |   |
| <sup>1</sup> The Resilience scale was added to the WEC in 2019 for Senior Years student (Grade 10 to 12), following the piloting and psychometric testing of the scale with South Australian students in 2018.<br><br><sup>2</sup> Reverse coded items are denoted by (R).   |   |

## Engagement with school

**Table 12. Engagement with School constructs in the WEC (2014-2019)**

|                                      | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------------|------|------|------|------|------|------|
| Connectedness to adults at school    | X    | X    | X    | X    | X    | X    |
| Important adults at school           | X    | X    | X    | X    | X    | X    |
| School climate                       | X    | X    | X    | X    | X    | X    |
| School belonging                     | X    | X    | X    | X    | X    | X    |
| Peer belonging                       | X    | X    | X    | X    | X    | X    |
| Friendship intimacy                  | X    | X    | X    | X    | X    | X    |
| Bullying                             | X    | X    | X    | X    | X    | X    |
| Connectedness to adults at home      | X    | X    | --   | --   | --   | --   |
| Connectedness to adults in community | X    | X    | --   | --   | --   | --   |
| Emotional engagement with teachers   | --   | --   | X    | X    | X    | X    |
| Cognitive engagement                 | --   | --   | X    | X    | X    | X    |

### KEY

|  |
|--|
| Construct measured in all cycles (2014-2019)                         |
| Construct removed from survey prior to 2019                          |
| Construct measured from 2016-2019                                    |
| Construct measured for Senior Years students (Grade 10-12) from 2019 |

Over the next few pages, information is provided about each of these constructs including:

- Collection cycles
- Student grade levels who participated in WEC each collection cycle
- Items and response options, including any changes over time
- Additional notes, including why items/scales were changed over time

For information on the source of all items and scales, please contact the SA Department for Education who have a full list of original authors for all measures.

## Multi-item scales

### *Connectedness to adults at school*

| Collection cycles and grade levels   |  |
|--|--|
| Collection cycles  | 2014, 2015, 2016, 2017, 2018, 2019   |
| Grade levels   | Grade 4 to 5 2017, 2018, 2019  |
|  | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019  |
|  | Grade 10 to 12 2019  |
| Items and response options   |  |
|  | 2014-2019  |
| At my school, there is a teacher or another adult...<br>... who really cares about me<br>... who believes that I will be a success<br>... who listens to me when I have something to say | 1 = Not at all true<br>2 = A little true<br>3 = Pretty much true<br>4 = Very much true |
| Notes  |  |
|  |  |

*School climate*

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2017   | 2018-2019 <sup>2</sup>  |
| Teachers and students treat each other with respect in this school.<br>People care about each other in this School.<br>Students in this school help each other, even if they are not friends.   | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

*School belonging*

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2017   | 2018-2019 <sup>2</sup>  |
| I feel like I belong in this school.<br>I feel like I am important to this school.  | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

Peer belonging

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2017   | 2018-2019 <sup>2</sup>  |
| I feel part of a group of friends that do things together.<br>I feel that I usually fit in with other kids around me.<br>When I am with other kids my age, I feel I belong.   | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |



*Friendship intimacy*

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2017   | 2018-2019 <sup>2</sup>  |
| I have at least one really good friend I can talk to when something is bothering me.<br>I have a friend I can tell everything to.<br>There is somebody my age who really understands me.  | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

*Connectedness to adults at home*

| Collection cycles and grade levels  |  |
|---|--|
| Collection cycles   | 2014, 2015   |
| Grade levels  | Grade 6 to 9<br>2014, 2015   |
| Items and response options  |  |
|   | 2014-2015 <sup>2</sup>   |
| In my home, there is a parent or another adult...<br>... who believes that I will be a success.<br>... who listens to me when I have something to say.<br>... who I can talk to about my problems.  | 1 = Not at all true<br>2 = A little true<br>3 = Pretty much true<br>4 = Very much true |
| Notes   |  |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |  |

*Connectedness to adults in the community*

| Collection cycles and grade levels   |  |
|--|--|
| Collection cycles  | 2014, 2015   |
| Grade levels   | Grade 6 to 9<br>2014, 2015   |
| Items and response options   |  |
|  | 2014-2015 <sup>2</sup>   |
| In my suburb/neighbourhood/community (not from your school or family), there is an adult...<br>... who really cares about me.<br>... who believes that I will be a success.<br>... who listens to me when I have something to say. | 1 = Not at all true<br>2 = A little true<br>3 = Pretty much true<br>4 = Very much true |
| Notes  |  |
| <sup>2</sup> The Connectedness to adults at home scale was removed from the student wellbeing instrument in 2016. The main reason for the removal was to reduce the length of the survey instrument.                               |  |

## Emotional engagement with teachers

| Collection cycles and grade levels  |  |
|---|--|
| Collection cycles   | 2016, 2017, 2018, 2019   |
| Grade levels  | Grade 4 to 5 2017, 2018, 2019  |
|   | Grade 6 to 9 2016, 2017, 2018, 2019                                      |
|   | Grade 10 to 12 2019  |
| Items and response options  |  |
|   | 2016-2019  |
| I get along well with most of my teachers.<br>Most of my teachers are interesting in my wellbeing.<br>Most of my teachers really listen to what I have to say.<br>If I need extra help, I will receive it from my teachers.<br>Most of my teachers treat me fairly.   | 1 = Strongly disagree<br>2 = Disagree<br>3 = Agree<br>4 = Strongly agree |
| Notes   |  |
| <p><sup>1</sup> Student engagement is a multi-faceted construct consisting of three key domains: <u>emotional engagement</u> with teachers and school, <u>behavioural engagement</u> in academic and social activities school, and complying with behavioural expectations and <u>cognitive engagement</u> in learning and academic endeavours (Fredricks et al., 2004). In 2016, a small pilot study was conducted where students completed a range of different student engagement scales, with the goal of adding new student engagement scales where gaps existed in the WEC. Emotional engagement with the school was already measured in the WEC with the <i>School climate and School belonging</i> scales. The PISA School Engagement items measured a different latent factor - <i>Emotional Engagement with teachers</i> – which was distinct from both the school climate/belonging scales and the <i>Connectedness to adults at school</i> scale. Following psychometric testing of these scales, the five item scale above was selected for use in subsequent cycles of the WEC (see Gregory, Fairweather-Schmidt &amp; Brinkman, 2016).</p> |  |

## Cognitive engagement

| Collection cycles and grade levels   |  |   |
|--|--|---|
| Collection cycles  | 2016, 2017, 2018, 2019   |   |
| Grade levels   | Grade 4 to 5   | 2017, 2018, 2019  |
|  | Grade 6 to 9   | 2016, 2017, 2018, 2019  |
|  | Grade 10 to 12   | 2019  |
| Items and response options   |  |   |
|  | 2016-2017  | 2018-2019   |
| I work hard on learning.<br>When I found something hard I tried another way.<br>I take a lot of care with what I do.<br>No matter who you are, you can change your intelligence.<br>I am excited to come up with new things.   | 1 = Never<br>2 = Rarely<br>3 = Sometimes<br>4 = Most of the time<br>5 = Always | 1 = None of the time<br>2 = A little of the time<br>3 = Some of the time<br>4 = Most of the time<br>5 = All of the time |
| Notes  |  |   |
| <p><sup>1</sup> Student engagement is a multi-faceted construct consisting of three key domains: <u>emotional engagement</u> with teachers and school, <u>behavioural engagement</u> in academic and social activities school, and complying with behavioural expectations and <u>cognitive engagement</u> in learning and academic endeavours (Fredricks et al., 2004). In 2016, a small pilot study was conducted where students completed a range of different student engagement scales, with the goal of adding new student engagement scales where gaps existed in the WEC. A new cognitive engagement scale was created using five of the 12 items from the cognitive engagement sub-scale from the Teaching for Effective Learning (TfEL) School Engagement survey (created by the SA Department for Education). Following psychometric testing of these scales, the five item scale above was selected for use in subsequent cycles of the WEC (see Gregory, Fairweather-Schmidt &amp; Brinkman, 2016).</p> <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |  |   |

## Single items

### *Important adults at school*

| Collection cycles and grade levels                            |   |
|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019              |
| Grade levels  | Grade 4 to 5 2017, 2018, 2019                   |
|   | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019 |
|   | Grade 10 to 12 2019                             |
| Items and response options                                    |   |
|   | 2014-2017                                       |
| Are there any adults who are important to you at your school? | 1 = Yes<br>0 = No                               |

## Bullying

| Collection cycles and grade levels  |  |
|---|--|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019   |
| Grade levels  | Grade 4 to 5 2017, 2018, 2019  |
|   | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12 2019  |
| Items and response options  |  |
| This school year, how often have you been bullied by other students in the following ways?  | 2014-2019  |
| <u>Physical Bullying</u> (for example, someone hit, shoved or kicked you, spat at you, beat you up, or damaged or took your things without permission)  | 1 = Not at all this school year<br>2 = Once or a few times<br>3 = About every month<br>4 = About every week<br>5 = Many times a week |
| <u>Verbal Bullying</u> (for example, someone called you names, teased, humiliated, threatened you, or made you do things you didn't want to do).  |  |
| <u>Social Bullying</u> (for example, someone left you out, excluded you, gossiped and spread rumours about you, or made you look foolish).  |  |
| <u>Cyberbullying</u> (for example, someone used the computer or text messages to exclude, threaten, humiliate you, or to hurt your feelings)  |  |
| Notes   |  |
| <p><sup>1</sup> These four items can be combined together to create a scale score. However, different types of bullying do not necessarily co-occur for students, and may be differentially related to mental health, wellbeing and academic outcomes. The frequency of each different type of bullying (rather than a combination) is presented in the WEC school reports. In the psychometric analysis section, the individual items are explored rather than a 4-item scale.</p> |  |

## Learning Readiness

**Table 13. Learning Readiness constructs in the WEC (2014-2019)**

|   | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|------|------|------|------|------|------|
| Academic self-concept                               | X    | X    | X    | X    | X    | X    |
| Perseverance  | X    | X    | X    | X    | X    | X    |
| Engagement (flow)                                   | ---  | X    | X    | X    | X    | X    |
| Academic self-efficacy (Learning practices)         | --   | --   | --   | --   | --   | X    |
| Perfectionistic striving (Expectations for success) | --   | --   | --   | --   | --   | X    |
| Perfectionistic concerns (Meeting expectations)     | --   | --   | --   | --   | --   | X    |
| Hope - agency (Motivation to achieve goals)         | --   | --   | --   | --   | --   | X    |
| Hope - pathways (Future goal planning)              | --   | --   | --   | --   | --   | X    |
| Feelings about the future                           | --   | --   | --   | --   | --   | X    |
| Feelings about after school study/work              | --   | --   | --   | --   | --   | X    |

### KEY

|  |
|--|
| Construct measured in all cycles (2014-2019)                         |
| Construct removed from survey prior to 2019                          |
| Construct measured from 2016-2019                                    |
| Construct measured for Senior Years students (Grade 10-12) from 2019 |

Over the next few pages, information is provided about each of these constructs including:

- Collection cycles
- Student grade levels who participated in WEC each collection cycle
- Items and response options, including any changes over time
- Additional notes, including why items/scales were changed over time

For information on the source of all items and scales, please contact the SA Department for Education who have a full list of original authors for all measures.



## Multi-item scales

### *Academic self-concept*

| Collection cycles and grade levels  |   |   |
|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |
| Grade levels  | Grade 4 to 5  | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |
|   | Grade 10 to 12  | 2019  |
| Items and response options  |   |   |
|   | 2014-2017   | 2018-2019 <sup>2</sup>  |
| I am certain I can learn the skills taught in school this year<br>If I have enough time, I can do a good job on all my school work<br>Even if the work in school is hard, I can learn it  | 1 = disagree a lot<br>2 = disagree a little<br>3 = don't agree or disagree<br>4 = agree a little<br>5 = agree a lot | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |   |
| <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |

## Perseverance

| Collection cycles and grade levels  |   |   |   |
|---|---|---|---|
| Collection cycles   | 2014, 2015, 2016, 2017, 2018, 2019  |   |   |
| Grade levels  | Grade 4 to 5  |   | 2017, 2018, 2019  |
|   | Grade 6 to 9  | 2014, 2015, 2016, 2017, 2018, 2019  |   |
|   | Grade 10 to 12  |   | 2019  |
| Items and response options  |   |   |   |
|   | 2014-2015 <sup>1</sup>  | 2016-2017   | 2018-2019 <sup>2</sup>  |
| I keep at my schoolwork until I'm done with it.<br>I finish whatever I begin.   | 1 = almost never<br>2 = sometimes<br>3 = often<br>4 = very often<br>5 = almost always | 1 = almost never<br>2 = sometimes<br>3 = often<br>4 = very often<br>5 = almost always                                 | 1 = None of the time<br>2 = A little of the time<br>3 = Some of the time<br>4 = Most of the time<br>5 = All of the time |
| Once I make a plan to get something done, I stick to it.<br>I am a hard worker.   |   | 1 = not at all like me<br>2 = a little like me<br>3 = somewhat like me<br>4 = mostly like me<br>5 = very much like me | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree                 |
| I feel a sense of accomplishment from what I do (2014-2015 only)  |   |   |   |
| Notes   |   |   |   |
| <p><sup>1</sup> The EPOCH Measure of Adolescent Wellbeing was still being finalised in 2014 and 2015, with respect to (1) the number of items and (2) the response options. In the original version of EPOCH, the perseverance scale included a fifth item ("I feel a sense of accomplishment from what I do"). The 5-item scale was used in 2014 and 2015, and the final 4-item scale (shown above) was used from 2016 onwards. In earlier versions of EPOCH, all items were answered using the response options (1=almost never to 5 = almost always). These response options were used in the WEC in 2014 and 2015 for the perseverance items. In the final version of the EPOCH, two different response scales were used depending on whether the item asked about a fixed view of one's self (e.g. "I am a hard worker"; 1 = not at all like me to 5 = very much like me) or a behaviour exhibited with varying levels of frequency (e.g. "I finish whatever I begin"; 1 = almost never to 5 = almost always). These response options were used in the WEC in 2016 and 2017.</p> <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |   |

## Engagement (flow)

| Collection cycles and grade levels   |   |   |   |
|--|---|---|---|
| Collection cycles  | 2015, 2016, 2017, 2018, 2019  |   |   |
| Grade levels   | Grade 4 to 5  |   | 2017, 2018, 2019  |
|  | Grade 6 to 9  |   | 2015, 2016, 2017, 2018, 2019  |
|  | Grade 10 to 12  |   | 2019  |
| Items and response options   |   |   |   |
|  | 2015 <sup>1</sup>   | 2016-2017   | 2018-2019 <sup>2</sup>  |
| When I do an activity, I enjoy it so much that I lose track of time I get completely absorbed in what I am doing I get so involved in activities that I forget about everything else   | 1 = almost never<br>2 = sometimes<br>3 = often<br>4 = very often<br>5 = almost always | 1 = almost never<br>2 = sometimes<br>3 = often<br>4 = very often<br>5 = almost always                                 | 1 = None of the time<br>2 = A little of the time<br>3 = Some of the time<br>4 = Most of the time<br>5 = All of the time |
| When I am learning something new, I lose track of how much time as passed  |   | 1 = not at all like me<br>2 = a little like me<br>3 = somewhat like me<br>4 = mostly like me<br>5 = very much like me | 1 = not at all like me<br>2 = a little like me<br>3 = somewhat like me<br>4 = mostly like me<br>5 = very much like me   |
| Notes  |   |   |   |
| <p><sup>1</sup> In earlier versions of EPOCH, all items were answered using the response options (1=almost never to 5 = almost always). These response options were used in the WEC in 2015 for the engagement items. In the final version of the EPOCH, two different response scales were used depending on whether the item asked about a fixed view of one's self or a behaviour exhibited with varying levels of frequency. These response options were used in the WEC in 2016 and 2017.</p> <p><sup>2</sup> Following feedback from some students and teachers that the survey was confusing to complete because of the range of different response options used across the survey, a decision was made by the Department for Education to change the response options for many scales in the WEC. These new response options were used for all students who participated in the 2018 and 2019 WEC.</p> |   |   |   |

*Academic self-efficacy (Learning practices)*

| Collection cycles and grade levels  |   |
|---|---|
| Collection cycles   | 2019  |
| Grade levels  | Grade 10 to 12 2019   |
| Items and response options  |   |
|   | 2019 <sup>1</sup>   |
| I can finish my homework assignments by the deadlines.  | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| I can get myself to study when there are other interesting things to do.  |   |
| I can always concentrate on school subjects during class.   |   |
| I can take good notes during school lessons.  |   |
| I can plan my schoolwork for the day.   |   |
| I can organise my schoolwork.   |   |
| I can remember information presented in class and textbooks.  |   |
| I can get myself to do schoolwork.  |   |
| I can arrange a place to study without distractions <sup>2</sup> .  |   |
| Notes   |   |
| <sup>1</sup> This scale is labelled "Learning practices" in the WEC school reports  |   |
| <sup>2</sup> The final item was not collected in 2019 because of a problem with the online data collection system. As such, the scale was calculated using 8 items in 2019, but the full 9-item scale will be used in the 2020 WEC and in future waves of the collection. |   |

*Perfectionistic strivings (Expectations for success)*

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2019  |
| Grade levels   | Grade 10 to 12 2019   |
| Items and response options   |   |
|  | 2019 <sup>1</sup>   |
| I have high expectations for myself<br>I set very high standards for myself<br>I have a strong need to strive for excellence<br>I expect the best from myself  | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes  |   |
| <p><sup>1</sup> Perfectionism is thought to involve two different dimensions (1) <u>perfectionistic strivings</u> - setting high personal standards for oneself and (2) perfectionistic concerns – excessive self-criticisms about reaching or maintaining these standards (Stoeber &amp; Otto, 2006). While high levels of perfectionistic concerns are associated with a range of negative mental health outcomes, there is some conjecture in the literature about whether high levels of perfectionistic strivings are always problematic. For instance, high perfectionistic strivings and low perfectionistic concerns (often labelled “healthy perfectionism”) has been shown to be associated with a range of positive outcomes (Stoeber &amp; Otto, 2006). As such, both perfectionistic strivings and perfectionistic concerns scales are measured in the WEC.</p> <p><sup>2</sup> This scale is labelled “Expectations for success” in the WEC school reports</p> |   |

*Perfectionistic concerns (Meeting expectations)*

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2019  |
| Grade levels   | Grade 10 to 12 2019   |
| Items and response options   |   |
|  | 2019 <sup>1</sup>   |
| Doing my best never seems to be enough<br>I often feel disappointed after completing a task because I knew I could have done better<br>My performance rarely measures up to my standards<br>I am hardly ever satisfied with my performance   | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes  |   |
| <p><sup>1</sup> Perfectionism is thought to involve two different dimensions (1) perfectionistic strivings - setting high personal standards for oneself and (2) <u>perfectionistic concerns</u> – excessive self-criticisms about reaching or maintaining these standards (Stoeber &amp; Otto, 2006). While high levels of perfectionistic concerns are associated with a range of negative mental health outcomes, there is some conjecture in the literature about whether high levels of perfectionistic strivings are always problematic. For instance, high perfectionistic strivings and low perfectionistic concerns (often labelled “healthy perfectionism”) has been shown to be associated with a range of positive outcomes (Stoeber &amp; Otto, 2006). As such, both perfectionistic strivings and perfectionistic concerns scales are measured in the WEC.</p> <p><sup>2</sup> This scale is labelled “Meeting expectations” in the WEC school reports</p> |   |

*Hope – agency (Motivation to achieve goals)*

| Collection cycles and grade levels  |   |
|---|---|
| Collection cycles   | 2019  |
| Grade levels  | Grade 10 to 12 2019   |
| Items and response options  |   |
|   | 2019 <sup>1</sup>   |
| I actively pursue my goals<br>My past experiences have prepared me well for the future<br>I've been pretty successful in my life<br>I meet the goals I set for myself   | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |
| <sup>1</sup> The concept of hope has been conceptualised as having both <u>agency</u> (goal-directed determination and confidence to achieve one's goals), and pathways (beliefs about ability to plan and achieve future goals). |   |
| <sup>2</sup> This scale is labelled "Motivation to achieve goals" in the WEC school reports   |   |

*Hope – pathways (Future goal planning)*

| Collection cycles and grade levels  |   |
|---|---|
| Collection cycles   | 2019  |
| Grade levels  | Grade 10 to 12 2019   |
| Items and response options  |   |
|   | 2019 <sup>1</sup>   |
| I can think of many ways to get myself out of trouble<br>There are lots of ways around any problem<br>I can think of many ways to get the things in life that are important to me<br>Even when others get discouraged, I know I can find a way to solve a problem | 1 = Strongly disagree<br>2 = Disagree<br>3 = Don't agree or disagree<br>4 = Agree<br>5 = Strongly agree |
| Notes   |   |
| <sup>1</sup> The concept of hope has been conceptualised as having both agency (goal-directed determination and confidence to achieve one's goals), and <u>pathways</u> (beliefs about ability to plan and achieve future goals).                                 |   |
| <sup>2</sup> This scale is labelled "Future goal planning" in the WEC school reports  |   |



## Single items

### *Feelings about post school study/work*

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2019  |
| Grade levels   | Grade 10 to 12 2019   |
| Items and response options   |   |
|  | 2019  |
| How confident are you in your ability to achieve your study/work goals after school? | 1 = Not at all confident<br>2 = Slightly confident<br>3 = Somewhat confident<br>4 = Very confident<br>5 = Extremely confident |

### *Feelings about the future*

| Collection cycles and grade levels                                    |  |
|---|--|
| Collection cycles   | 2019   |
| Grade levels  | Grade 10 to 12 2019  |
| Items and response options  |  |
|   | 2019   |
| How would you describe your feelings when you think about the future? | 1 = Very negative<br>2 = Negative<br>3 = Neither positive or negative<br>4 = Positive<br>5 = Very positive |

## Health and Wellbeing out of School

**Table 14. Health and Wellbeing out of School constructs in the WEC (2014-2019)**

|   | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|------|------|------|------|------|------|
| Physical health                               | X    | X    | X    | X    | X    | X    |
| Breakfast                                     | X    | X    | X    | X    | X    | X    |
| Sleep   | X    | X    | X    | X    | X    | X    |
| After school activities                       | X    | X    | X    | X    | X    | X    |
| Barriers to attending after school activities | X    | X    | X    | X    | X    | X    |
| Body image                                    | X    | X    | X    | X    | X    | --   |
| Electronic device use before sleep            | --   | --   | --   | --   | --   | X    |

### KEY

|  |
|--|
| Construct measured in all cycles (2014-2019) |
| Construct removed from survey prior to 2019  |
| Construct first measured in 2019             |

Over the next few pages, information is provided about each of these constructs including:

- Collection cycles
- Student grade levels who participated in WEC each collection cycle
- Items and response options, including any changes over time
- Additional notes, including why items/scales were changed over time

For information on the source of all items and scales, please contact the SA Department for Education who have a full list of original authors for all measures.

## Single items

### Physical health

| Collection cycles and grade levels              |   |
|---|---|
| Collection cycles                               | 2014, 2015, 2016, 2017, 2018, 2019                |
| Grade levels                                    | Grade 4 to 5 2017, 2018, 2019                     |
|   | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019   |
|   | Grade 10 to 12 2019                               |
| Items and response options                      |   |
|   | 2014-2019   |
| In general, how would you describe your health? | 1 = Poor<br>2 = Fair<br>3 = Good<br>4 = Excellent |

### Breakfast

| Collection cycles and grade levels |   |
|------------------------------------|---|
| Collection cycles                  | 2014, 2015, 2016, 2017, 2018, 2019  |
| Grade levels                       | Grade 4 to 5 2017, 2018, 2019   |
|                                    | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019   |
|                                    | Grade 10 to 12 2019   |
| Items and response options         |   |
|                                    | 2014-2019   |
| How often do you eat breakfast?    | 1 = Never<br>2 = Once a week<br>3 = 2 times a week<br>4 = 3 times a week<br>5 = 4 times a week<br>6 = 5 times a week<br>7 = 6 times a week<br>8 = Every day |

*Sleep*

| Collection cycles and grade levels         |   |
|--|---|
| Collection cycles                          | 2014, 2015, 2016, 2017, 2018, 2019  |
| Grade levels                               | Grade 4 to 5 2017, 2018, 2019   |
|  | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019   |
|  | Grade 10 to 12 2019   |
| Items and response options                 |   |
|  | 2014-2019   |
| How often do you get a good night's sleep? | 1 = Never<br>2 = Once a week<br>3 = 2 times a week<br>4 = 3 times a week<br>5 = 4 times a week<br>6 = 5 times a week<br>7 = 6 times a week<br>8 = Every day |

*Body image*

| Collection cycles and grade levels   |  |
|--|--|
| Collection cycles  | 2014, 2015, 2016, 2017, 2018 <sup>2</sup>  |
| Grade levels   | Grade 4 to 5 2017, 2018  |
|  | Grade 6 to 9 2014, 2015, 2016, 2017, 2018  |
|  | Grade 10 to 12 -   |
| Items and response options   |  |
|  | 2014-2018  |
| How do you rate your body weight?  | 1 = Very underweight<br>2 = Slightly underweight<br>3 = About the right weight<br>4 = Slightly overweight<br>5 = Very overweight |
| Notes  |  |
| <sup>2</sup> This item was removed prior to the 2019 WEC collection following concerns expressed by some teachers and schools that the item was too sensitive and might cause students distress. |  |

*Electronic device use before sleep*

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2019 <sup>1</sup>   |
| Grade levels   | Grade 4 to 5 2019   |
|  | Grade 6 to 9 2019   |
|  | Grade 10 to 12 2019   |
| Items and response options   |   |
|  | 2019  |
| How often in the hour before you go to sleep, do you use an electronic device (for example mobile phone, iPad, tablet, PC, game console, TV, music player)?                    | 1 = Never<br>2 = Once a week<br>3 = 2 times a week<br>4 = 3 times a week<br>5 = 4 times a week<br>6 = 5 times a week<br>7 = 6 times a week<br>8 = Every day |
| Notes  |   |
| <sup>1</sup> This item on electronic device use before bed was developed and tested during the Senior Years Trial in 2018, and then added to the WEC for all students in 2019. |   |

## After school activities

| Collection cycles and grade levels   |  |   |
|--|--|---|
| Collection cycles  | 2014, 2015, 2016, 2017, 2018, 2019   |   |
| Grade levels   | Grade 4 to 5   | 2017, 2018, 2019  |
|  | Grade 6 to 9   | 2014, 2015, 2016, 2017, 2018, 2019  |
|  | Grade 10 to 12 <sup>1</sup>  | -   |
| Items and response options   |  |   |
|  | 2014-2019  |   |
| (a) Do organised individual or team sports (for example, basketball, swimming, cricket, football, netball, dancing, or something else)?      | <b>Question 1</b><br>During the last week after school (3-6pm), how many days did you ...<br><br>Never<br>Once a week<br>2 times a week<br>3 times a week<br>4 times a week<br>5 times a week<br>6 times a week<br>Every day | <b>Question 2</b><br>About how much time did you usually spend doing the activity on one of those days?<br><br>Less than 30 minutes<br>30 minutes to 1 hour<br>1-2 hours<br>2 or more hours |
| (b) Go to an after school care program (in my school or someplace else)?   |  |   |
| (c) Do homework, and/or participate in educational lessons or activities (for example, tutoring, maths, language school, or something else)? |  |   |
| (d) Watch TV (including Netflix, YouTube or DVDs)?   |  |   |
| (e) Play video or computer games (for example, Play Station, Xbox, multi-user online games)?   |  |   |
| (f) Use a phone or the internet to text or chat with friends and/or go on social networking sites like Facebook, Instagram, or Snapchat?     |  |   |
| (g) Read for fun   |  |   |
| (h) Do household chores (for example, clean your room, wash the dishes, feed a pet, work on the farm, or something else)?                    |  |   |
| (i) Do music lessons or practice a musical instrument (for example, drums, guitar, violin, piano, singing or something else)?                |  |   |
| (j) Do arts & crafts (including painting, drawing, or something else)?   |  |   |
| (k) Hang out with friends?   |  |   |
| (l) Participate in youth organisations (for example, Scouts, Girl Guides, Boys and Girls Clubs, or something else)?                          |  |   |
| Notes  |  |   |
| <sup>1</sup> This question was not asked for Senior Years students (Grade 10-12).  |  |   |

*Barriers to participating in after school activities*

| Collection cycles and grade levels   |   |
|--|---|
| Collection cycles  | 2014, 2015, 2016, 2017, 2018, 2019              |
| Grade levels   | Grade 4 to 5 2017, 2018, 2019                   |
|  | Grade 6 to 9 2014, 2015, 2016, 2017, 2018, 2019 |
|  | Grade 10 to 12 <sup>1</sup> -                   |
| Items and response options   |   |
| Think about what you <u>want</u> to do after school from 3-6pm. Is there anything that stops you from participating in the activities that you want to participate in after school? If yes, please tick all the things that stop you.  | 2014-2019                                       |
| I have to go straight home.<br>It is too difficult to get there.<br>The activity that I want is not offered.<br>The schedule does not fit the times that I can attend.<br>It's not safe for me to go.<br>I have too much homework to do.<br>My parents do not approve<br>It costs too much<br>I need to take care of brothers or sisters or do other things at home.<br>I am afraid I will not be good enough in that activity.<br>I'm too busy.<br>I don't know what is available.<br>None of my friends are interested or want to go<br>Other, please describe | 1 = Yes<br>0 = No                               |
| Notes  |   |
| <sup>1</sup> This question was not asked for Senior Years students (Grade 10-12).  |   |



## 8. Appendix 2: School-level participation rates for the WEC each year

**Table 15. School-level participation rates by calendar year and school sector**

|             | Participated <sup>1</sup> | Eligible <sup>2</sup> | Participation rate (%) |
|-------------|---------------------------|-----------------------|------------------------|
| <b>2014</b> | <b>189</b>                | <b>721</b>            | <b>26%</b>             |
| Government  | 153                       | 525                   | 29%                    |
| Catholic    | 26                        | 103                   | 25%                    |
| Independent | 10                        | 93                    | 11%                    |
| <b>2015</b> | <b>366</b>                | <b>719</b>            | <b>51%</b>             |
| Government  | 337                       | 522                   | 65%                    |
| Catholic    | 17                        | 103                   | 17%                    |
| Independent | 12                        | 94                    | 13%                    |
| <b>2016</b> | <b>500</b>                | <b>717</b>            | <b>70%</b>             |
| Government  | 466                       | 518                   | 90%                    |
| Catholic    | 26                        | 103                   | 25%                    |
| Independent | 8                         | 96                    | 8%                     |
| <b>2017</b> | <b>498</b>                | <b>714</b>            | <b>70%</b>             |
| Government  | 460                       | 513                   | 90%                    |
| Catholic    | 20                        | 103                   | 19%                    |
| Independent | 18                        | 98                    | 18%                    |
| <b>2018</b> | <b>523</b>                | <b>716</b>            | <b>73%</b>             |
| Government  | 475                       | 512                   | 93%                    |
| Catholic    | 30                        | 102                   | 29%                    |
| Independent | 18                        | 102                   | 18%                    |
| <b>2019</b> | <b>526</b>                | <b>715</b>            | <b>74%</b>             |
| Government  | 453                       | 511                   | 89%                    |
| Catholic    | 53                        | 101                   | 52%                    |
| Independent | 20                        | 103                   | 19%                    |

Source notes. <sup>1</sup> Information was provided by the SA Department for Education. <sup>2</sup> All schools in the state were considered eligible. Figures were provided by the SA Department for Education who sourced them from ABS Schools Australia 2019, 4221.0, Table 35b, Number of All Schools by States and Territories, Affiliation and School type, 2010-2019.

## 9. Appendix 3: Timing of the WEC each year

Between 2014 and 2018, the WEC collection was conducted in the second half of the year (August to November) with some variation in timing between the different calendar years. In 2014, the WEC collection was conducted in Term 4 with schools receiving their school reports early in 2015. In 2015, the WEC collection was moved forward and scheduled for Term 3 (Aug/Sept) so that schools would receive school reports in Term 4 to be used in their end of year review and to inform planning for the upcoming year.

In 2019, a decision was made to shift the WEC collection to Term 1 (March/April), with school reports delivered in May/June to provide schools information about the wellbeing of their students earlier in the year to assist in planning.

**Table 16. Timing of SA WEC collection by calendar year**

|      | Term   | Months      |
|------|--------|-------------|
| 2014 | Term 4 | Oct/Nov     |
| 2015 | Term 3 | Aug/Sept    |
| 2016 | Term 4 | Oct/Nov     |
| 2017 | Term 3 | July/August |
| 2018 | Term 3 | July/August |
| 2019 | Term 1 | March/April |

## Internal reliability

Table 17. Internal reliability (Cronbach's alpha) for all scales (n = 92,825)

|                                    | Grade level  |              |              |                | Gender |       |
|------------------------------------|--------------|--------------|--------------|----------------|--------|-------|
|                                    | Grade<br>4-5 | Grade<br>6-7 | Grade<br>8-9 | Grade<br>10-12 | Boys   | Girls |
| <b>Emotional Wellbeing</b>         |              |              |              |                |        |       |
| Life Satisfaction                  | .84          | .88          | .89          | .89            | .87    | .89   |
| Optimism                           | .75          | .80          | .83          | .82            | .80    | .81   |
| Sadness                            | .74          | .79          | .82          | .86            | .79    | .81   |
| Worries                            | .82          | .84          | .86          | .87            | .84    | .84   |
| Happiness                          | .76          | .83          | .86          | .87            | .83    | .85   |
| Emotion regulation                 | .81          | .87          | .89          | .90            | .86    | .88   |
| Psychological distress             | -            | -            | -            | .89            | .88    | .88   |
| Resilience                         | -            | -            | -            | .76            | .73    | .77   |
| <b>Engagement with School</b>      |              |              |              |                |        |       |
| Connectedness to adults at school  | .78          | .84          | .86          | .89            | .84    | .86   |
| School climate                     | .80          | .82          | .83          | .84            | .83    | .84   |
| School belonging                   | .82          | .85          | .84          | .84            | .82    | .87   |
| Peer belonging                     | .82          | .85          | .86          | .87            | .85    | .85   |
| Friendship intimacy                | .82          | .87          | .89          | .90            | .85    | .88   |
| Emotional engagement with teachers | .83          | .86          | .87          | .89            | .86    | .87   |
| Cognitive engagement               | .84          | .86          | .88          | .87            | .87    | .87   |
| <b>Learning Readiness</b>          |              |              |              |                |        |       |
| Academic self-concept              | .80          | .82          | .85          | .85            | .84    | .84   |
| Perseverance                       | .74          | .80          | .83          | .82            | .79    | .81   |
| Engagement (flow)                  | .80          | .85          | .88          | .88            | .84    | .86   |
| Academic self-efficacy             | -            | -            | -            | .91            | .92    | .91   |
| Perfectionistic striving           | -            | -            | -            | .88            | .88    | .88   |
| Perfectionistic concerns           | -            | -            | -            | .80            | .79    | .81   |
| Hope – agency                      | -            | -            | -            | .82            | .83    | .81   |
| Hope – pathways                    | -            | -            | -            | .74            | .76    | .71   |

## Correlations between WEC scales

Table 18. Correlation matrix for all WEC scales (Year 4 and 5 students; n = 25,134)

|                                       | 1    | 2    | 3    | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
|---------------------------------------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>Emotional Wellbeing</b>            |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 1 Life Satisfaction                   |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2 Optimism                            | .71  |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3 Sadness                             | -.48 | -.50 |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 4 Worries                             | -.36 | -.38 | .69  |      |     |     |     |     |     |     |     |     |     |     |     |
| 5 Happiness                           | .68  | .70  | -.48 | -.35 |     |     |     |     |     |     |     |     |     |     |     |
| 6 Emotion regulation                  | .56  | .59  | -.35 | -.27 | .52 |     |     |     |     |     |     |     |     |     |     |
| <b>Engagement with School</b>         |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 7 Connectedness to adults at school   | .35  | .37  | -.24 | -.18 | .37 | .30 |     |     |     |     |     |     |     |     |     |
| 8 School climate                      | .45  | .46  | -.29 | -.23 | .45 | .43 | .35 |     |     |     |     |     |     |     |     |
| 9 School belonging                    | .53  | .54  | -.41 | -.32 | .54 | .45 | .40 | .60 |     |     |     |     |     |     |     |
| 10 Peer belonging                     | .51  | .53  | -.40 | -.32 | .52 | .44 | .35 | .52 | .63 |     |     |     |     |     |     |
| 11 Friendship intimacy                | .36  | .36  | -.23 | -.17 | .36 | .31 | .27 | .35 | .42 | .54 |     |     |     |     |     |
| 12 Emotional engagement with teachers | .47  | .49  | -.30 | -.23 | .47 | .43 | .47 | .56 | .58 | .48 | .37 |     |     |     |     |
| 13 Cognitive engagement               | .48  | .51  | -.35 | -.24 | .52 | .49 | .39 | .45 | .50 | .47 | .39 | .54 |     |     |     |
| <b>Learning Readiness</b>             |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 14 Academic self-concept              | .49  | .52  | -.34 | -.26 | .48 | .48 | .38 | .53 | .59 | .51 | .38 | .60 | .66 |     |     |
| 15 Perseverance                       | .43  | .46  | -.32 | -.24 | .48 | .42 | .30 | .33 | .36 | .34 | .26 | .42 | .62 | .53 |     |
| 16 Engagement (flow)                  | .37  | .38  | -.20 | -.13 | .38 | .38 | .28 | .34 | .39 | .40 | .32 | .39 | .49 | .42 | .32 |

**Table 19. Correlation matrix for all WEC scales (Year 6 and 7 students; n = 24,428)**

|                                       | 1    | 2    | 3    | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
|---------------------------------------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>Emotional Wellbeing</b>            |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 1 Life Satisfaction                   |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2 Optimism                            | .76  |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3 Sadness                             | -.62 | -.64 |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 4 Worries                             | -.49 | -.50 | .74  |      |     |     |     |     |     |     |     |     |     |     |     |
| 5 Happiness                           | .73  | .76  | -.62 | -.48 |     |     |     |     |     |     |     |     |     |     |     |
| 6 Emotion regulation                  | .56  | .61  | -.46 | -.38 | .55 |     |     |     |     |     |     |     |     |     |     |
| <b>Engagement with School</b>         |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 7 Connectedness to adults at school   | .38  | .39  | -.30 | -.22 | .39 | .31 |     |     |     |     |     |     |     |     |     |
| 8 School climate                      | .46  | .48  | -.37 | -.31 | .46 | .43 | .38 |     |     |     |     |     |     |     |     |
| 9 School belonging                    | .58  | .60  | -.52 | -.42 | .60 | .47 | .45 | .61 |     |     |     |     |     |     |     |
| 10 Peer belonging                     | .53  | .56  | -.49 | -.41 | .57 | .44 | .35 | .50 | .65 |     |     |     |     |     |     |
| 11 Friendship intimacy                | .35  | .36  | -.27 | -.20 | .38 | .30 | .28 | .33 | .40 | .52 |     |     |     |     |     |
| 12 Emotional engagement with teachers | .48  | .50  | -.40 | -.31 | .49 | .43 | .53 | .57 | .60 | .46 | .35 |     |     |     |     |
| 13 Cognitive engagement               | .51  | .55  | -.43 | -.31 | .54 | .51 | .41 | .45 | .51 | .45 | .35 | .54 |     |     |     |
| <b>Learning Readiness</b>             |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 14 Academic self-concept              | .50  | .54  | -.42 | -.32 | .50 | .47 | .41 | .51 | .59 | .48 | .34 | .59 | .69 |     |     |
| 15 Perseverance                       | .45  | .48  | -.39 | -.29 | .48 | .44 | .32 | .35 | .39 | .35 | .25 | .44 | .68 | .58 |     |
| 16 Engagement (flow)                  | .43  | .46  | -.32 | -.23 | .45 | .45 | .33 | .39 | .45 | .41 | .32 | .45 | .57 | .50 | .42 |

**Table 20. Correlation matrix for all WEC scales (Year 8 and 9 students; n = 20,699)**

|                                       | 1    | 2    | 3    | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
|---------------------------------------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>Emotional Wellbeing</b>            |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 1 Life Satisfaction                   |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 2 Optimism                            | .79  |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 3 Sadness                             | -.65 | -.66 |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 4 Worries                             | -.52 | -.52 | .77  |      |     |     |     |     |     |     |     |     |     |     |     |
| 5 Happiness                           | .76  | .79  | -.64 | -.49 |     |     |     |     |     |     |     |     |     |     |     |
| 6 Emotion regulation                  | .57  | .60  | -.47 | -.39 | .55 |     |     |     |     |     |     |     |     |     |     |
| <b>Engagement with School</b>         |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 7 Connectedness to adults at school   | .39  | .38  | -.29 | -.22 | .38 | .31 |     |     |     |     |     |     |     |     |     |
| 8 School climate                      | .46  | .46  | -.36 | -.29 | .45 | .40 | .38 |     |     |     |     |     |     |     |     |
| 9 School belonging                    | .60  | .60  | -.53 | -.43 | .59 | .49 | .44 | .64 |     |     |     |     |     |     |     |
| 10 Peer belonging                     | .53  | .55  | -.47 | -.38 | .57 | .42 | .33 | .46 | .63 |     |     |     |     |     |     |
| 11 Friendship intimacy                | .34  | .36  | -.24 | -.16 | .37 | .26 | .28 | .29 | .38 | .54 |     |     |     |     |     |
| 12 Emotional engagement with teachers | .47  | .47  | -.36 | -.27 | .46 | .40 | .53 | .57 | .56 | .41 | .30 |     |     |     |     |
| 13 Cognitive engagement               | .52  | .53  | -.39 | -.26 | .52 | .51 | .41 | .46 | .51 | .43 | .31 | .55 |     |     |     |
| <b>Learning Readiness</b>             |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |
| 14 Academic self-concept              | .50  | .51  | -.39 | -.29 | .48 | .45 | .41 | .50 | .58 | .45 | .31 | .60 | .70 |     |     |
| 15 Perseverance                       | .49  | .51  | -.38 | -.27 | .50 | .45 | .34 | .38 | .43 | .36 | .24 | .46 | .71 | .61 |     |
| 16 Engagement (flow)                  | .45  | .46  | -.34 | -.25 | .46 | .45 | .34 | .39 | .46 | .39 | .30 | .43 | .57 | .47 | .45 |

**Table 21. Correlation matrix for all WEC scales (Year 10, 11 and 12 students; n = 22,554)**

|                               | 1                   | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19  | 20   | 21  | 22   |     |
|-------------------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|
| <b>Emotional Wellbeing</b>    |                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 1                             | Life Satisfaction   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 2                             | Optimism            | .76  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 3                             | Sadness             | -.60 | -.59 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 4                             | Worries             | -.48 | -.44 | .78  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 5                             | Happiness           | .69  | .72  | -.59 | -.45 |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 6                             | Emot. regulation    | .53  | .55  | -.39 | -.29 | .48  |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 7                             | Psyc. distress      | -.55 | -.55 | .75  | .66  | -.57 | -.35 |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 8                             | Resilience          | .45  | .47  | -.54 | -.50 | .46  | .39  | -.52 |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| <b>Engagement with School</b> |                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 9                             | School connect      | .32  | .33  | -.19 | -.11 | .31  | .24  | -.19 | .15  |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 10                            | School climate      | .38  | .38  | -.25 | -.19 | .36  | .34  | -.23 | .22  | .34  |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 11                            | School belonging    | .52  | .51  | -.41 | -.32 | .52  | .39  | -.38 | .32  | .42  | .65  |      |      |      |      |      |      |      |     |      |     |      |     |
| 12                            | Peer belonging      | .49  | .50  | -.40 | -.31 | .53  | .37  | -.37 | .33  | .29  | .41  | .58  |      |      |      |      |      |      |     |      |     |      |     |
| 13                            | Friendships         | .31  | .32  | -.19 | -.10 | .34  | .22  | -.17 | .13  | .29  | .24  | .34  | .54  |      |      |      |      |      |     |      |     |      |     |
| 14                            | Emot. eng. teach    | .37  | .38  | -.23 | -.14 | .36  | .30  | -.24 | .21  | .53  | .53  | .53  | .35  | .28  |      |      |      |      |     |      |     |      |     |
| 15                            | Cognitive engage.   | .47  | .49  | -.29 | -.16 | .45  | .46  | -.26 | .27  | .38  | .39  | .46  | .37  | .30  | .47  |      |      |      |     |      |     |      |     |
| <b>Learning Readiness</b>     |                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |      |     |      |     |
| 16                            | Acad. selfconcept   | .44  | .46  | -.30 | -.18 | .42  | .39  | -.31 | .31  | .40  | .49  | .57  | .41  | .31  | .57  | .63  |      |      |     |      |     |      |     |
| 17                            | Perseverance        | .45  | .44  | -.33 | -.21 | .48  | .38  | -.32 | .27  | .29  | .31  | .38  | .30  | .21  | .37  | .63  | .52  |      |     |      |     |      |     |
| 18                            | Engage. (flow)      | .39  | .41  | -.25 | -.17 | .41  | .38  | -.19 | .23  | .29  | .33  | .40  | .34  | .25  | .35  | .53  | .41  | .36  |     |      |     |      |     |
| 19                            | Acad. self-efficacy | .48  | .48  | -.32 | -.21 | .43  | .43  | -.31 | .29  | .34  | .42  | .47  | .38  | .27  | .48  | .73  | .64  | .66  | .43 |      |     |      |     |
| 20                            | Perfectionistic S   | .34  | .37  | -.17 | -.02 | .35  | .30  | -.13 | .16  | .28  | .25  | .32  | .25  | .21  | .34  | .59  | .47  | .57  | .32 | .53  |     |      |     |
| 21                            | Perfectionistic C   | -.25 | -.24 | .43  | .42  | -.23 | -.11 | .45  | -.34 | -.09 | -.05 | -.16 | -.15 | -.05 | -.07 | -.03 | -.09 | -.06 | .01 | -.06 | .25 |      |     |
| 22                            | Hope – agency       | .64  | .62  | -.45 | -.32 | .60  | .49  | -.41 | .41  | .35  | .35  | .49  | .44  | .30  | .39  | .61  | .53  | .63  | .43 | .59  | .56 | -.14 |     |
| 23                            | Hope – pathways     | .46  | .50  | -.32 | -.23 | .50  | .45  | -.29 | .41  | .26  | .27  | .36  | .37  | .26  | .31  | .48  | .43  | .42  | .38 | .41  | .40 | -.03 | .64 |

Note. 6 = Emotion regulation; 7 = Psychological distress; 9 = Connectedness to adults at school; 14 = Emotional engagement with teachers; 15 = Cognitive engagement; 16 = Academic self-concept; 18 = Engagement (flow); 19 = Academic self-efficacy; 20 = Perfectionistic Striving; 21 = Perfectionistic Concerns.

## Mean and SD for all WEC scales

**Table 22. Mean and SD of WEC Emotional Wellbeing scales (n = 92,825)**

| Sample              | N             | Life satisfaction  | Optimism           | Sadness            | Worries            | Happiness          | Emotion regulation |
|---------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>Total sample</b> |               |                    |                    |                    |                    |                    |                    |
| Grade 4-5           | 25,134        | 3.85 (0.84)        | 3.91 (0.84)        | 2.61 (0.97)        | 2.90 (1.05)        | 3.99 (0.69)        | 3.65 (0.90)        |
| Grade 6-7           | 24,428        | 3.75 (0.87)        | 3.82 (0.84)        | 2.63 (0.96)        | 2.93 (1.04)        | 3.93 (0.72)        | 3.47 (0.91)        |
| Grade 8-9           | 20,699        | 3.51 (0.88)        | 3.61 (0.86)        | 2.78 (0.95)        | 3.10 (1.02)        | 3.75 (0.76)        | 3.28 (0.91)        |
| Grade 10-12         | 22,554        | 3.30 (0.89)        | 3.51 (0.87)        | 2.94 (1.00)        | 3.30 (1.01)        | 3.63 (0.78)        | 3.24 (0.90)        |
| <b>All students</b> | <b>92,825</b> | <b>3.61 (0.89)</b> | <b>3.72 (0.87)</b> | <b>2.73 (0.98)</b> | <b>3.05 (1.04)</b> | <b>3.83 (0.75)</b> | <b>3.42 (0.92)</b> |
| <b>Girls</b>        |               |                    |                    |                    |                    |                    |                    |
| Grade 4-5           | 12,399        | 3.85 (0.84)        | 3.95 (0.81)        | 2.63 (0.97)        | 2.94 (1.05)        | 4.04 (0.66)        | 3.68 (0.89)        |
| Grade 6-7           | 12,427        | 3.71 (0.89)        | 3.80 (0.85)        | 2.70 (0.98)        | 3.03 (1.05)        | 3.93 (0.73)        | 3.46 (0.92)        |
| Grade 8-9           | 10,600        | 3.42 (0.90)        | 3.53 (0.86)        | 2.96 (0.95)        | 3.32 (0.98)        | 3.69 (0.77)        | 3.19 (0.91)        |
| Grade 10-12         | 11,928        | 3.20 (0.89)        | 3.44 (0.85)        | 3.14 (0.95)        | 3.57 (0.92)        | 3.55 (0.76)        | 3.17 (0.90)        |
| <b>All girls</b>    | <b>47,354</b> | <b>3.55 (0.91)</b> | <b>3.69 (0.87)</b> | <b>2.85 (0.98)</b> | <b>3.21 (1.04)</b> | <b>3.80 (0.75)</b> | <b>3.38 (0.93)</b> |
| <b>Boys</b>         |               |                    |                    |                    |                    |                    |                    |
| Grade 4-5           | 12,735        | 3.84 (0.84)        | 3.87 (0.86)        | 2.60 (0.96)        | 2.86 (1.05)        | 3.94 (0.72)        | 3.61 (0.91)        |
| Grade 6-7           | 12,011        | 3.80 (0.84)        | 3.84 (0.84)        | 2.55 (0.94)        | 2.83 (1.03)        | 3.92 (0.70)        | 3.48 (0.90)        |
| Grade 8-9           | 10,099        | 3.62 (0.85)        | 3.69 (0.85)        | 2.59 (0.92)        | 2.87 (1.00)        | 3.81 (0.74)        | 3.38 (0.90)        |
| Grade 10-12         | 10,626        | 3.40 (0.88)        | 3.59 (0.88)        | 2.71 (1.00)        | 2.99 (1.02)        | 3.72 (0.79)        | 3.32 (0.88)        |
| <b>All boys</b>     | <b>45,471</b> | <b>3.68 (0.87)</b> | <b>3.75 (0.86)</b> | <b>2.61 (0.96)</b> | <b>2.88 (1.03)</b> | <b>3.86 (0.74)</b> | <b>3.46 (0.9)</b>  |



**Table 23. Mean and SD of WEC Engagement with School scales (n = 92,825)**

| Sample              | N             | Connectedness<br>to adults at<br>school | School<br>climate  | School<br>belonging | Peer<br>belonging  | Friendship<br>intimacy | Emotional<br>engagement<br>with teachers | Cognitive<br>engagement |
|---------------------|---------------|---|--------------------|---------------------|--------------------|------------------------|--|-------------------------|
| Total sample        |               |   |                    |                     |                    |                        |  |                         |
| Grade 4-5           | 25,134        | 3.15 (0.77)                             | 3.83 (0.83)        | 3.84 (1.04)         | 3.89 (0.91)        | 4.21 (0.94)            | 3.26 (0.54)                              | 4.01 (0.77)             |
| Grade 6-7           | 24,428        | 3.09 (0.79)                             | 3.63 (0.83)        | 3.67 (1.04)         | 3.87 (0.92)        | 4.21 (0.95)            | 3.18 (0.54)                              | 3.91 (0.76)             |
| Grade 8-9           | 20,699        | 2.79 (0.82)                             | 3.36 (0.83)        | 3.35 (0.97)         | 3.73 (0.89)        | 4.08 (0.96)            | 2.99 (0.54)                              | 3.68 (0.79)             |
| Grade 10-12         | 22,554        | 2.75 (0.85)                             | 3.27 (0.86)        | 3.24 (0.96)         | 3.59 (0.92)        | 3.98 (0.99)            | 2.98 (0.55)                              | 3.55 (0.78)             |
| <b>All students</b> | <b>92,825</b> | <b>2.96 (0.82)</b>                      | <b>3.54 (0.87)</b> | <b>3.54 (1.03)</b>  | <b>3.78 (0.92)</b> | <b>4.13 (0.96)</b>     | <b>3.11 (0.56)</b>                       | <b>3.80 (0.80)</b>      |
| Girls               |               |   |                    |                     |                    |                        |  |                         |
| Grade 4-5           | 12,399        | 3.22 (0.74)                             | 3.88 (0.81)        | 3.89 (1.03)         | 3.85 (0.92)        | 4.29 (0.93)            | 3.32 (0.51)                              | 4.09 (0.73)             |
| Grade 6-7           | 12,427        | 3.15 (0.77)                             | 3.67 (0.82)        | 3.68 (1.04)         | 3.81 (0.93)        | 4.30 (0.94)            | 3.23 (0.53)                              | 3.99 (0.75)             |
| Grade 8-9           | 10,600        | 2.79 (0.80)                             | 3.37 (0.83)        | 3.28 (0.98)         | 3.66 (0.91)        | 4.19 (0.95)            | 3.00 (0.52)                              | 3.71 (0.79)             |
| Grade 10-12         | 11,928        | 2.77 (0.85)                             | 3.26 (0.85)        | 3.18 (0.97)         | 3.53 (0.94)        | 4.07 (0.99)            | 2.99 (0.54)                              | 3.58 (0.79)             |
| <b>All girls</b>    | <b>47,354</b> | <b>2.99 (0.82)</b>                      | <b>3.55 (0.86)</b> | <b>3.52 (1.05)</b>  | <b>3.72 (0.93)</b> | <b>4.21 (0.96)</b>     | <b>3.14 (0.54)</b>                       | <b>3.85 (0.79)</b>      |
| Boys                |               |   |                    |                     |                    |                        |  |                         |
| Grade 4-5           | 12,735        | 3.08 (0.78)                             | 3.78 (0.85)        | 3.79 (1.05)         | 3.92 (0.91)        | 4.14 (0.94)            | 3.19 (0.55)                              | 3.92 (0.80)             |
| Grade 6-7           | 12,011        | 3.04 (0.81)                             | 3.59 (0.84)        | 3.66 (1.03)         | 3.92 (0.89)        | 4.11 (0.96)            | 3.13 (0.55)                              | 3.84 (0.77)             |
| Grade 8-9           | 10,099        | 2.80 (0.83)                             | 3.36 (0.84)        | 3.42 (0.95)         | 3.81 (0.86)        | 3.97 (0.96)            | 2.97 (0.56)                              | 3.64 (0.79)             |
| Grade 10-12         | 10,626        | 2.73 (0.86)                             | 3.27 (0.87)        | 3.30 (0.95)         | 3.66 (0.89)        | 3.87 (0.97)            | 2.96 (0.56)                              | 3.50 (0.78)             |
| <b>All boys</b>     | <b>45,471</b> | <b>2.92 (0.83)</b>                      | <b>3.52 (0.87)</b> | <b>3.56 (1.02)</b>  | <b>3.84 (0.89)</b> | <b>4.03 (0.96)</b>     | <b>3.07 (0.56)</b>                       | <b>3.74 (0.8)</b>       |

**Table 24. Mean and SD of WEC Learning Readiness scales (n = 92,825)**

| Sample              | N             | Academic self-concept | Perseverance       | Engagement (flow)  |
|---------------------|---------------|-----------------------|--------------------|--------------------|
| Total sample        |               |                       |                    |                    |
| Grade 4-5           | 25,134        | 4.15 (0.79)           | 3.84 (0.71)        | 3.36 (0.93)        |
| Grade 6-7           | 24,428        | 4.09 (0.78)           | 3.81 (0.69)        | 3.33 (0.88)        |
| Grade 8-9           | 20,699        | 3.87 (0.80)           | 3.63 (0.73)        | 3.13 (0.87)        |
| Grade 10-12         | 22,554        | 3.76 (0.80)           | 3.58 (0.75)        | 3.15 (0.86)        |
| <b>All students</b> | <b>92,825</b> | <b>3.98 (0.81)</b>    | <b>3.72 (0.73)</b> | <b>3.25 (0.89)</b> |
| Girls               |               |                       |                    |                    |
| Grade 4-5           | 12,399        | 4.21 (0.75)           | 3.94 (0.67)        | 3.35 (0.92)        |
| Grade 6-7           | 12,427        | 4.12 (0.77)           | 3.88 (0.68)        | 3.33 (0.87)        |
| Grade 8-9           | 10,600        | 3.87 (0.80)           | 3.66 (0.73)        | 3.09 (0.86)        |
| Grade 10-12         | 11,928        | 3.76 (0.79)           | 3.57 (0.76)        | 3.06 (0.84)        |
| <b>All girls</b>    | <b>47,354</b> | <b>4.00 (0.80)</b>    | <b>3.77 (0.73)</b> | <b>3.21 (0.88)</b> |
| Boys                |               |                       |                    |                    |
| Grade 4-5           | 12,735        | 4.10 (0.82)           | 3.75 (0.73)        | 3.36 (0.93)        |
| Grade 6-7           | 12,011        | 4.06 (0.78)           | 3.73 (0.70)        | 3.32 (0.90)        |
| Grade 8-9           | 10,099        | 3.87 (0.81)           | 3.61 (0.73)        | 3.18 (0.89)        |
| Grade 10-12         | 10,626        | 3.75 (0.81)           | 3.58 (0.74)        | 3.25 (0.86)        |
| <b>All boys</b>     | <b>45,471</b> | <b>3.96 (0.82)</b>    | <b>3.67 (0.73)</b> | <b>3.28 (0.90)</b> |

**Table 25. Mean and SD of WEC scales (Senior Years students; n = 22,554)**

| Sample                      | N             | Psychological<br>distress | Resilience         | Academic<br>self-efficacy | Perfectionistic<br>strivings | Perfectionistic<br>concerns | Hope<br>(agency)   | Hope<br>(pathways) |
|-----------------------------|---------------|---------------------------|--------------------|---------------------------|------------------------------|-----------------------------|--------------------|--------------------|
| Total sample                |               |                           |                    |                           |                              |                             |                    |                    |
| Grade 10                    | 9,001         | 2.60 (0.95)               | 3.09 (0.66)        | 3.42 (0.78)               | 3.71 (0.85)                  | 3.21 (0.81)                 | 3.53 (0.73)        | 3.68 (0.63)        |
| Grade 11                    | 7,512         | 2.65 (0.97)               | 3.07 (0.69)        | 3.40 (0.78)               | 3.73 (0.86)                  | 3.26 (0.83)                 | 3.51 (0.75)        | 3.68 (0.65)        |
| Grade 12                    | 6,041         | 2.72 (0.94)               | 3.07 (0.68)        | 3.44 (0.75)               | 3.82 (0.84)                  | 3.34 (0.83)                 | 3.53 (0.71)        | 3.69 (0.63)        |
| <b>Grade 10-12 students</b> | <b>22,554</b> | <b>2.65 (0.96)</b>        | <b>3.08 (0.67)</b> | <b>3.42 (0.77)</b>        | <b>3.75 (0.85)</b>           | <b>3.26 (0.82)</b>          | <b>3.53 (0.73)</b> | <b>3.68 (0.64)</b> |
| Girls                       |               |                           |                    |                           |                              |                             |                    |                    |
| Grade 10                    | 4,645         | 2.81 (0.95)               | 2.95 (0.66)        | 3.45 (0.77)               | 3.80 (0.85)                  | 3.27 (0.82)                 | 3.49 (0.73)        | 3.62 (0.61)        |
| Grade 11                    | 3,911         | 2.85 (0.95)               | 2.94 (0.69)        | 3.45 (0.78)               | 3.82 (0.87)                  | 3.33 (0.84)                 | 3.49 (0.75)        | 3.61 (0.63)        |
| Grade 12                    | 3,372         | 2.90 (0.92)               | 2.94 (0.66)        | 3.48 (0.72)               | 3.92 (0.81)                  | 3.42 (0.83)                 | 3.52 (0.69)        | 3.63 (0.59)        |
| <b>Grade 10-12 girls</b>    | <b>11,928</b> | <b>2.85 (0.94)</b>        | <b>2.94 (0.67)</b> | <b>3.46 (0.76)</b>        | <b>3.84 (0.85)</b>           | <b>3.33 (0.83)</b>          | <b>3.50 (0.73)</b> | <b>3.62 (0.61)</b> |
| Boys                        |               |                           |                    |                           |                              |                             |                    |                    |
| Grade 10                    | 4,356         | 2.38 (0.91)               | 3.24 (0.63)        | 3.40 (0.79)               | 3.62 (0.84)                  | 3.14 (0.79)                 | 3.58 (0.73)        | 3.75 (0.64)        |
| Grade 11                    | 3,601         | 2.43 (0.93)               | 3.22 (0.65)        | 3.35 (0.79)               | 3.63 (0.84)                  | 3.19 (0.81)                 | 3.54 (0.75)        | 3.76 (0.66)        |
| Grade 12                    | 2,669         | 2.49 (0.92)               | 3.24 (0.67)        | 3.39 (0.78)               | 3.69 (0.86)                  | 3.24 (0.83)                 | 3.55 (0.74)        | 3.77 (0.66)        |
| <b>Grade 10-12 boys</b>     | <b>10,626</b> | <b>2.42 (0.92)</b>        | <b>3.23 (0.65)</b> | <b>3.38 (0.79)</b>        | <b>3.64 (0.85)</b>           | <b>3.18 (0.81)</b>          | <b>3.56 (0.74)</b> | <b>3.76 (0.65)</b> |

## Frequencies for all WEC single items

Table 26. Frequencies of single items in the Engagement with School domain (n = 92,825)

|  | Girls        |              |              |                | Boys         |              |              |                |
|--|--------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|
|  | Grade<br>4-5 | Grade<br>6-7 | Grade<br>8-9 | Grade<br>10-12 | Grade<br>4-5 | Grade<br>6-7 | Grade<br>8-9 | Grade<br>10-12 |
| <b>Are there any adults how are important to you at your school?</b> |              |              |              |                |              |              |              |                |
| Yes  | 81.2%        | 75.6%        | 50.4%        | 56.7%          | 65.8%        | 61.8%        | 42.2%        | 44.4%          |
| <b>Physical bullying</b>   |              |              |              |                |              |              |              |                |
| Not at all this school year  | 64.7%        | 75.1%        | 80.5%        | 85.8%          | 54.6%        | 62.7%        | 68.6%        | 74.1%          |
| Once or a few times  | 25.9%        | 19.7%        | 14.9%        | 9.5%           | 29.0%        | 26.6%        | 20.9%        | 14.2%          |
| About every month  | 3.8%         | 2.2%         | 2.1%         | 2.5%           | 7.0%         | 4.8%         | 4.7%         | 6.2%           |
| About every week   | 2.8%         | 1.6%         | 1.6%         | 1.5%           | 4.9%         | 3.6%         | 3.3%         | 2.9%           |
| Many times a week  | 2.8%         | 1.3%         | 0.9%         | 0.8%           | 4.6%         | 2.3%         | 2.4%         | 2.5%           |
| <b>Verbal bullying</b>   |              |              |              |                |              |              |              |                |
| Not at all this school year  | 51.5%        | 54.5%        | 57.5%        | 62.2%          | 48.2%        | 51.1%        | 54.4%        | 58.4%          |
| Once or a few times  | 32.5%        | 31.0%        | 28.2%        | 24.5%          | 30.0%        | 29.1%        | 26.8%        | 21.6%          |
| About every month  | 6.5%         | 5.7%         | 5.1%         | 6.2%           | 8.6%         | 7.4%         | 7.4%         | 8.9%           |
| About every week   | 5.0%         | 4.9%         | 5.2%         | 4.3%           | 6.8%         | 6.7%         | 6.2%         | 6.0%           |
| Many times a week  | 4.6%         | 3.9%         | 3.9%         | 2.8%           | 6.4%         | 5.6%         | 5.2%         | 5.2%           |
| <b>Social bullying</b>   |              |              |              |                |              |              |              |                |
| Not at all this school year  | 50.3%        | 53.4%        | 57.3%        | 56.6%          | 53.1%        | 59.8%        | 66.6%        | 65.9%          |
| Once or a few times  | 32.2%        | 30.7%        | 27.8%        | 27.2%          | 27.0%        | 24.8%        | 20.2%        | 17.2%          |
| About every month  | 7.1%         | 6.8%         | 6.4%         | 7.8%           | 8.8%         | 7.2%         | 6.3%         | 8.7%           |
| About every week   | 5.2%         | 4.9%         | 4.5%         | 4.8%           | 5.4%         | 4.4%         | 4.0%         | 4.6%           |
| Many times a week  | 5.3%         | 4.2%         | 3.9%         | 3.5%           | 5.7%         | 3.8%         | 3.0%         | 3.7%           |
| <b>Cyberbullying</b>   |              |              |              |                |              |              |              |                |
| Not at all this school year  | 83.1%        | 83.0%        | 79.0%        | 78.5%          | 77.3%        | 82.2%        | 81.5%        | 77.1%          |
| Once or a few times  | 10.8%        | 12.3%        | 13.8%        | 13.6%          | 11.7%        | 10.9%        | 10.4%        | 10.3%          |
| About every month  | 2.2%         | 2.0%         | 3.5%         | 4.2%           | 4.2%         | 3.2%         | 4.0%         | 6.6%           |
| About every week   | 1.6%         | 1.2%         | 2.0%         | 2.2%           | 2.9%         | 1.8%         | 2.2%         | 3.1%           |
| Many times a week  | 2.3%         | 1.6%         | 1.7%         | 1.6%           | 3.8%         | 1.9%         | 1.8%         | 2.8%           |

**Table 27. Frequencies of single items in Learning Readiness domain (n = 22,554)**

|   | Girls    |          |          | Boys     |          |          |
|---|----------|----------|----------|----------|----------|----------|
|   | Grade 10 | Grade 11 | Grade 12 | Grade 10 | Grade 11 | Grade 12 |
| <b>How confident are you in your ability to achieve your study/work goals after school?</b> |          |          |          |          |          |          |
| Not at all confident  | 8.0%     | 8.8%     | 7.6%     | 6.3%     | 7.7%     | 6.2%     |
| Slightly confident  | 16.0%    | 16.3%    | 14.8%    | 12.0%    | 13.4%    | 13.7%    |
| Somewhat confident  | 39.8%    | 40.0%    | 43.4%    | 38.7%    | 39.2%    | 39.4%    |
| Very confident  | 29.1%    | 27.0%    | 27.8%    | 31.9%    | 29.5%    | 29.8%    |
| Extremely confident   | 7.2%     | 8.0%     | 6.4%     | 11.1%    | 10.3%    | 10.8%    |
| <b>How would you describe your feelings when you think about the future?</b>                |          |          |          |          |          |          |
| Very negative   | 4.9%     | 6.1%     | 5.3%     | 3.6%     | 4.6%     | 4.5%     |
| Negative  | 8.6%     | 8.7%     | 8.9%     | 7.5%     | 8.3%     | 9.4%     |
| Neither positive or negative  | 29.4%    | 32.0%    | 32.2%    | 31.4%    | 30.8%    | 31.0%    |
| Positive  | 42.3%    | 39.7%    | 41.3%    | 41.5%    | 40.3%    | 38.9%    |
| Very positive   | 14.8%    | 13.5%    | 12.3%    | 15.9%    | 16.1%    | 16.2%    |

**Table 28. Frequencies of single items in Health and Wellbeing out of School domain (n = 92,825)**

|  | Girls |       |       |       | Boys  |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
|  | Grade | Grade | Grade | Grade | Grade | Grade | Grade | Grade |
|  | 4-5   | 6-7   | 8-9   | 10-12 | 4-5   | 6-7   | 8-9   | 10-12 |
| <b>In general, how would you describe your health?</b>                               |       |       |       |       |       |       |       |       |
| Poor   | 1.5%  | 2.9%  | 5.3%  | 8.3%  | 2.6%  | 2.8%  | 3.8%  | 6.1%  |
| Fair   | 9.7%  | 13.0% | 20.8% | 28.2% | 11.2% | 13.3% | 17.2% | 21.1% |
| Good   | 46.5% | 47.6% | 50.8% | 48.6% | 45.2% | 46.1% | 47.2% | 46.5% |
| Excellent  | 42.2% | 36.6% | 23.1% | 14.9% | 40.9% | 37.7% | 31.9% | 26.3% |
| <b>How often do you eat breakfast?</b>   |       |       |       |       |       |       |       |       |
| Never  | 3.6%  | 6.5%  | 13.7% | 17.4% | 4.2%  | 5.0%  | 8.9%  | 13.1% |
| Once a week  | 4.0%  | 6.4%  | 9.1%  | 10.7% | 4.0%  | 4.2%  | 5.0%  | 7.5%  |
| Twice a week   | 3.2%  | 5.4%  | 8.7%  | 9.6%  | 2.6%  | 3.5%  | 5.6%  | 7.2%  |
| 3 times a week   | 3.6%  | 5.3%  | 7.9%  | 8.1%  | 2.8%  | 4.0%  | 5.4%  | 6.7%  |
| 4 times a week   | 3.2%  | 4.9%  | 5.8%  | 6.1%  | 3.1%  | 4.6%  | 4.6%  | 5.9%  |
| 5 times a week   | 4.1%  | 5.9%  | 6.6%  | 7.0%  | 4.2%  | 6.2%  | 7.6%  | 7.3%  |
| 6 times a week   | 7.1%  | 8.2%  | 7.2%  | 5.1%  | 6.9%  | 7.2%  | 7.1%  | 5.5%  |
| Everyday   | 71.2% | 57.4% | 41.0% | 36.1% | 72.2% | 65.3% | 55.8% | 46.7% |
| <b>How often do you get a good night's sleep?</b>                                    |       |       |       |       |       |       |       |       |
| Never  | 6.5%  | 6.1%  | 8.2%  | 10.0% | 9.1%  | 6.1%  | 7.4%  | 9.4%  |
| Once a week  | 5.9%  | 5.7%  | 7.8%  | 10.1% | 7.0%  | 5.6%  | 6.5%  | 7.0%  |
| Twice a week   | 5.1%  | 6.4%  | 10.1% | 12.9% | 5.6%  | 6.4%  | 7.9%  | 11.3% |
| 3 times a week   | 6.2%  | 7.9%  | 12.0% | 15.1% | 7.5%  | 7.9%  | 9.7%  | 12.3% |
| 4 times a week   | 8.4%  | 10.8% | 13.2% | 14.9% | 8.5%  | 11.3% | 11.9% | 13.8% |
| 5 times a week   | 12.3% | 16.7% | 17.5% | 15.8% | 12.2% | 16.0% | 17.5% | 16.0% |
| 6 times a week   | 18.6% | 18.1% | 13.0% | 8.7%  | 15.5% | 16.6% | 13.5% | 9.3%  |
| Everyday   | 37.0% | 28.2% | 18.1% | 12.6% | 34.6% | 30.1% | 25.4% | 20.9% |
| <b>How often, in the hour before you go to bed, do you use an electronic device?</b> |       |       |       |       |       |       |       |       |
| Never  | 18.1% | 11.2% | 4.9%  | 3.3%  | 15.6% | 11.7% | 6.6%  | 4.0%  |
| Once a week  | 12.9% | 9.0%  | 4.0%  | 2.2%  | 9.8%  | 7.1%  | 3.9%  | 1.8%  |
| Twice a week   | 10.7% | 10.1% | 5.6%  | 3.4%  | 9.6%  | 9.4%  | 6.4%  | 3.1%  |
| 3 times a week   | 8.3%  | 8.4%  | 6.4%  | 4.3%  | 8.2%  | 8.8%  | 6.6%  | 4.9%  |
| 4 times a week   | 6.3%  | 7.1%  | 6.4%  | 4.3%  | 6.1%  | 6.9%  | 6.6%  | 5.4%  |
| 5 times a week   | 6.1%  | 7.3%  | 7.1%  | 5.7%  | 6.2%  | 7.2%  | 7.2%  | 6.5%  |
| 6 times a week   | 6.6%  | 7.2%  | 7.0%  | 5.5%  | 6.5%  | 6.8%  | 6.3%  | 5.5%  |
| Everyday   | 31.0% | 39.7% | 58.7% | 71.3% | 38.0% | 42.1% | 56.4% | 68.7% |

**Table 29. Frequencies of responses for after school activities item (n = 70,261)**

|  |                | Girls |       |       | Boys  |       |       |
|--|----------------|-------|-------|-------|-------|-------|-------|
|  |                | Grade | Grade | Grade | Grade | Grade | Grade |
|  |                | 4-5   | 6-7   | 8-9   | 4-5   | 6-7   | 8-9   |
| a) ...do organised individual or team sports (for example, basketball, swimming, cricket, football, netball, dancing, or something else)?      | Never          | 21.9% | 23.5% | 29.9% | 21.4% | 23.7% | 30.1% |
|  | Once a week    | 25.8% | 19.8% | 15.8% | 20.8% | 15.2% | 10.7% |
|  | Twice a week   | 19.3% | 20.5% | 19.6% | 18.3% | 18.9% | 17.1% |
|  | 3 times a week | 11.5% | 13.8% | 14.0% | 11.4% | 14.9% | 16.4% |
|  | 4 times a week | 8.3%  | 10.2% | 10.0% | 8.5%  | 10.4% | 11.2% |
|  | 5 times a week | 13.2% | 12.3% | 10.8% | 19.7% | 16.8% | 14.5% |
| b) ...go to an after school care program (in my school or someplace else)?   | Never          | 69.6% | 81.0% | 90.7% | 66.1% | 79.9% | 88.8% |
|  | Once a week    | 11.2% | 8.3%  | 4.7%  | 10.7% | 7.6%  | 3.6%  |
|  | Twice a week   | 6.3%  | 3.9%  | 2.0%  | 7.0%  | 3.8%  | 2.0%  |
|  | 3 times a week | 4.1%  | 2.3%  | 1.0%  | 4.9%  | 2.6%  | 1.6%  |
|  | 4 times a week | 3.1%  | 1.7%  | 0.5%  | 3.4%  | 2.1%  | 1.3%  |
|  | 5 times a week | 5.8%  | 2.8%  | 1.0%  | 7.8%  | 4.1%  | 2.7%  |
| c) ...do homework, and/or participate in educational lessons or activities (for example, tutoring, maths, language school, or something else)? | Never          | 19.0% | 20.4% | 16.0% | 20.6% | 22.7% | 20.9% |
|  | Once a week    | 15.3% | 14.7% | 11.3% | 14.8% | 15.0% | 13.7% |
|  | Twice a week   | 10.0% | 11.3% | 13.3% | 9.8%  | 11.6% | 15.2% |
|  | 3 times a week | 9.2%  | 12.0% | 17.4% | 9.8%  | 12.4% | 16.5% |
|  | 4 times a week | 12.3% | 12.6% | 13.8% | 12.4% | 12.0% | 11.6% |
|  | 5 times a week | 34.2% | 28.9% | 28.1% | 32.5% | 26.3% | 22.2% |
| d) ... watch TV (including watching videos or DVDs)?   | Never          | 3.9%  | 2.9%  | 3.0%  | 4.5%  | 3.3%  | 4.4%  |
|  | Once a week    | 9.9%  | 7.3%  | 6.8%  | 8.1%  | 5.6%  | 4.8%  |
|  | Twice a week   | 12.1% | 10.3% | 9.7%  | 9.2%  | 8.3%  | 7.5%  |
|  | 3 times a week | 12.6% | 13.4% | 13.9% | 11.1% | 11.8% | 11.8% |
|  | 4 times a week | 13.6% | 14.0% | 13.8% | 11.1% | 12.0% | 11.5% |
|  | 5 times a week | 47.8% | 52.2% | 52.8% | 56.0% | 59.1% | 60.1% |
| e) ... play video or computer games (for example, Game Boy, Play Station, Xbox, multi-user online games)?                                      | Never          | 36.4% | 44.5% | 58.2% | 11.4% | 10.4% | 11.4% |
|  | Once a week    | 17.7% | 17.2% | 15.4% | 10.8% | 8.9%  | 9.1%  |
|  | Twice a week   | 11.9% | 10.5% | 8.0%  | 13.4% | 13.5% | 13.1% |
|  | 3 times a week | 8.6%  | 8.1%  | 6.4%  | 13.1% | 14.8% | 15.3% |
|  | 4 times a week | 6.4%  | 4.9%  | 3.3%  | 10.4% | 11.1% | 10.9% |
|  | 5 times a week | 19.0% | 14.8% | 8.6%  | 40.9% | 41.2% | 40.2% |
| f) ...use a phone or the Internet to text or chat with friends and/or go on social networking sites like Facebook?                             | Never          | 49.4% | 23.6% | 5.0%  | 55.9% | 35.7% | 11.3% |
|  | Once a week    | 10.9% | 8.0%  | 3.0%  | 8.5%  | 8.1%  | 5.0%  |
|  | Twice a week   | 7.1%  | 6.9%  | 3.0%  | 6.1%  | 7.2%  | 5.4%  |
|  | 3 times a week | 6.6%  | 8.4%  | 4.9%  | 5.9%  | 8.2%  | 7.0%  |
|  | 4 times a week | 5.7%  | 8.1%  | 5.9%  | 4.9%  | 6.8%  | 7.5%  |
|  | 5 times a week | 20.3% | 45.1% | 78.2% | 18.7% | 34.2% | 63.9% |

|  |                | Girls |       |       | Boys  |       |       |
|--|----------------|-------|-------|-------|-------|-------|-------|
|  |                | Grade | Grade | Grade | Grade | Grade | Grade |
|  |                | 4-5   | 6-7   | 8-9   | 4-5   | 6-7   | 8-9   |
| g) ...read for fun?  | Never          | 10.3% | 17.3% | 37.8% | 19.0% | 27.4% | 51.2% |
|  | Once a week    | 12.6% | 15.7% | 18.1% | 13.8% | 15.8% | 15.5% |
|  | Twice a week   | 10.5% | 13.1% | 12.1% | 10.3% | 11.7% | 9.8%  |
|  | 3 times a week | 11.5% | 12.2% | 10.1% | 11.1% | 11.5% | 7.8%  |
|  | 4 times a week | 10.5% | 9.3%  | 5.9%  | 8.9%  | 7.9%  | 4.0%  |
|  | 5 times a week | 44.5% | 32.5% | 16.1% | 36.9% | 25.7% | 11.6% |
| h) ...do household chores<br>(for example, clean your<br>room, wash the dishes,<br>feed a pet, work on the<br>farm or something else)? | Never          | 8.3%  | 5.1%  | 4.9%  | 14.7% | 9.4%  | 8.5%  |
|  | Once a week    | 15.6% | 11.5% | 10.0% | 17.5% | 12.7% | 11.0% |
|  | Twice a week   | 13.8% | 13.6% | 14.8% | 13.8% | 13.9% | 14.1% |
|  | 3 times a week | 14.0% | 16.9% | 18.3% | 12.9% | 15.9% | 18.0% |
|  | 4 times a week | 10.9% | 11.2% | 11.2% | 9.3%  | 10.3% | 10.7% |
|  | 5 times a week | 37.3% | 41.8% | 40.9% | 31.9% | 37.8% | 37.6% |
| i) ...do music lessons or<br>practice a musical<br>instrument (for example,<br>drums, guitar, violin, piano<br>or something else)?     | Never          | 50.3% | 57.9% | 66.7% | 60.6% | 68.3% | 72.1% |
|  | Once a week    | 20.6% | 16.7% | 11.7% | 16.8% | 12.9% | 8.7%  |
|  | Twice a week   | 7.6%  | 7.0%  | 5.8%  | 5.7%  | 5.2%  | 4.9%  |
|  | 3 times a week | 5.5%  | 5.8%  | 5.1%  | 4.4%  | 4.2%  | 4.4%  |
|  | 4 times a week | 3.9%  | 3.5%  | 3.3%  | 3.2%  | 2.2%  | 2.8%  |
|  | 5 times a week | 12.1% | 9.1%  | 7.4%  | 9.2%  | 7.1%  | 7.1%  |
| j) ...do arts and crafts<br>(including painting,<br>drawing, or something<br>else)?  | Never          | 14.4% | 24.5% | 48.4% | 36.2% | 51.6% | 71.6% |
|  | Once a week    | 25.0% | 25.8% | 22.1% | 25.5% | 20.7% | 12.5% |
|  | Twice a week   | 16.6% | 16.0% | 11.0% | 12.1% | 10.3% | 5.8%  |
|  | 3 times a week | 13.2% | 12.3% | 8.1%  | 8.2%  | 7.0%  | 3.9%  |
|  | 4 times a week | 8.3%  | 6.3%  | 3.5%  | 4.8%  | 3.3%  | 1.9%  |
|  | 5 times a week | 22.5% | 15.0% | 7.0%  | 13.2% | 7.1%  | 4.3%  |
| k)...hang out with friends?  | Never          | 19.8% | 21.0% | 18.1% | 19.1% | 20.9% | 20.5% |
|  | Once a week    | 23.8% | 24.7% | 25.5% | 21.4% | 20.6% | 20.0% |
|  | Twice a week   | 11.5% | 14.8% | 18.6% | 10.3% | 13.7% | 17.5% |
|  | 3 times a week | 7.4%  | 9.4%  | 13.2% | 7.7%  | 10.5% | 13.4% |
|  | 4 times a week | 6.0%  | 5.3%  | 5.6%  | 6.3%  | 6.5%  | 7.1%  |
|  | 5 times a week | 31.6% | 24.8% | 19.0% | 35.2% | 27.8% | 21.5% |
| l) ...participate in Youth<br>organisations (for example,<br>Scouts, Girl Guides, Boys<br>and Girls Clubs, or<br>something else)?      | Never          | 79.7% | 85.3% | 87.8% | 77.2% | 84.4% | 84.8% |
|  | Once a week    | 10.5% | 9.5%  | 8.5%  | 9.6%  | 7.8%  | 8.5%  |
|  | Twice a week   | 3.4%  | 2.2%  | 1.7%  | 3.7%  | 2.6%  | 1.9%  |
|  | 3 times a week | 1.6%  | 1.1%  | 0.8%  | 2.6%  | 1.7%  | 1.4%  |
|  | 4 times a week | 1.3%  | 0.5%  | 0.4%  | 2.0%  | 1.0%  | 0.9%  |
|  | 5 times a week | 3.5%  | 1.4%  | 0.8%  | 4.9%  | 2.4%  | 2.5%  |



**Table 30. Frequencies of responses on barriers to after school activities (n = 70,261)**

|   | Girls        |              |              | Boys         |              |              |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
|   | Grade<br>4-5 | Grade<br>6-7 | Grade<br>8-9 | Grade<br>4-5 | Grade<br>6-7 | Grade<br>8-9 |
| Think about what you <u>want</u> to do after school from 3-6pm. Is there anything that stops you from participating in the activities that you want to participate in after school? If yes, please tick all the things that stop you. |              |              |              |              |              |              |
| I have to go straight home after school   | 40.7%        | 34.9%        | 33.0%        | 47.7%        | 44.1%        | 39.0%        |
| It is too difficult to get there.   | 11.1%        | 13.0%        | 21.4%        | 11.2%        | 9.7%         | 11.8%        |
| The activity that I want is not offered.  | 15.2%        | 12.5%        | 14.1%        | 19.0%        | 13.8%        | 12.8%        |
| The schedule does not fit the times that I can attend.  | 18.6%        | 22.4%        | 25.7%        | 17.9%        | 15.8%        | 15.1%        |
| It's not safe for me to go.   | 7.0%         | 4.1%         | 3.5%         | 9.7%         | 4.7%         | 2.7%         |
| I have too much homework to do.   | 15.6%        | 18.1%        | 36.1%        | 18.5%        | 15.5%        | 21.5%        |
| My parents do not approve.  | 12.5%        | 12.9%        | 13.2%        | 12.8%        | 11.1%        | 9.7%         |
| It costs too much.  | 18.0%        | 19.6%        | 23.0%        | 15.6%        | 11.6%        | 11.7%        |
| I need to take care of brothers or sisters or do other things at home.  | 18.9%        | 14.2%        | 13.9%        | 21.2%        | 14.1%        | 10.3%        |
| I am afraid I will not be good enough in that activity.   | 15.0%        | 16.5%        | 21.1%        | 14.0%        | 10.8%        | 9.7%         |
| I'm too busy  | 25.9%        | 27.0%        | 31.8%        | 25.6%        | 23.3%        | 23.0%        |
| I don't know what is available.   | 16.1%        | 14.6%        | 15.8%        | 18.5%        | 13.0%        | 12.0%        |
| None of my friends are interested or want to go.  | 13.6%        | 15.4%        | 21.4%        | 13.1%        | 12.4%        | 14.4%        |



## About the Fraser Mustard Centre

Working together to improve the development, education, health and wellbeing of young Australians, the Telethon Kids Institute and the South Australian Department for Education and Child Development have joined forces in a unique approach to research translation. The Fraser Mustard Centre collaboration aims to:

- Improve and promote the health and wellbeing of all children and young people in South Australia through the unique application of multidisciplinary research
- Help shift focus from the historical delineation between health and education services to an integrated approach with a focus on child development
- Build capacity amongst public sector staff and academic researchers to design, undertake and use research to improve the environments in which children live and the service systems which support families
- Attract funding for shared priorities for research that leads to improved developmental, education, health and wellbeing outcomes for children

The Fraser Mustard Centre brings forward-thinking policy makers and world class child health researchers. It reflects a shared view of policies and outcomes for children and young people. The Centre is a unique collaboration between two organisations passionate about making a difference.

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