**Positive Learners Mindset:
A new mental health framework for improving learning in the classroom**

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Abstract

Through our work in schools across Australia with students and educators using international
gold standard survey instruments, Resilient Youth Australia in collaboration with the
University of South Australia, have developed a 'Positive Learners Mindset' mental health
framework. The Positive Learners Mindset classifies students into one of four domains:
Anxious, Disengaged, Anxious & Disengaged, or Resilient (Ready to Learn).

<u>Background</u>

For the past seven years, Resilient Youth Australia (RYA), has been conducting a Resilience Survey with nearly 350,000 students aged 7-19y in more than 1,300 Australian schools.

Working in collaboration with a team from the University of South Australia, led by Professor Kurt Lushington and Professor Jill Dorrian, and including John Hendry (OAM Education), psychometric analyses were conducted with RYA's full mental health dataset.

We concluded:

   i.   that the two factors of 'anxiety' and 'disengagement' may be useful for communicating mental health findings by gender at a cohort level to educators and schools;

   ii.   that the concept of a 'Positive Learners Mindset', i.e. differentiated from an Anxious, Disengaged, or Anxious & Disengaged Mindset, provides a clear model for practically addressing impediments to learning in the classroom context.

John Hendry has worked in schools for more than 40 years in senior roles including Deputy Principal and Director of Wellbeing. This lifetime of experience in the educational setting has informed a deep practical understanding the importance of student mental health as a determinant of learning engagement. Specifically, in relation to a 'Positive Learners Mindset' mental health framework and its constituent four domains - Anxious, Disengaged, Anxious & Disengaged, or Resilient (Ready to Learn) – we propose the following:

i.   The 'Anxious Mindset' as an impediment to learning

The Anxious Mindset is where students habitually freeze in the face of new challenges. Their levels of arousal overwhelm and panic them, and they shy away from new experiences and opportunities for learning. Experiencing anxiety at these levels interferes with memory functioning and thinking.

Observable Anxious Mindset indicators might include:

- feeling hopeless;
- finding active listening difficult;
- reluctance to attempt challenging tasks;
- freezing in the face of new challenges;
- not knowing where to start;
- feeling incapacitated;
- seeing mistakes as personal failings;
- blaming self for difficulties;
- feeling ashamed and worried;
- using energy to focus on other people;
- sleeping less;
- having fragile resilience;
- too much reliance on other people for support;
- worrying about what others might do;
- feeling helpless;
- seeking reassurance from others.

ii.   The 'Disengaged Mindset' as an impediment to learning

The Disengaged Mindset includes students who are escapees from the demands of school. Disengaged students respond habitually to challenges with fight or flight. They may distract, question the validity of the work, get angry, distant or incommunicative, become disengaged and may also distract others. Disengaged students may adversely affect other students or impact their motivation.

Observable Disengaged Mindset indicators might include:

- feeling hopeless;
- finding active listening difficult;
- giving up easily;
- shutting down;
- avoiding, procrastinating or distracting when confronted with a challenge;
- seeing mistakes as not worth replicating;
- blaming others for difficulties;
- feeling ashamed;
- focusing on escaping;
- being overly wary, vigilant;
- sleeping too long;
- being up late playing computer games;
- being fragile in a crisis;
- unable to rely on others;
- overly self-reliant in making decisions alone;
- being reluctant to seek help from others;
- avoiding feedback;
- feeling judged and threatened.

iii.   Why are students with a Positive Learners Mindset 'Ready to Learn'?

A Positive Learner's Mindset requires a positive, trusting relationship between teacher and student. This is the art of great teaching: to reframe tasks, create support that overrides fear, develop a sense of success, encourage the mastery of tasks. The presence of a Positive Learners Mindset increases engagement in learning, motivation and academic success. It relates to how students see themselves and how others view them as they attempt new tasks, make mistakes and learn new skills. In this way, a positive learners Mindset relates directly to the cultures in both classrooms and schools.

Observable Resilient Mindset indicators might include:

- feeling hopeful;
- engaging in active listening;
- having a go, and persisting;
- resolving stress through support;
- seeing mistakes as necessary for learning;
- not engaging in blaming and shaming;
- able to concentrate effectively;
- sleeping well and using energy wisely;
- able to overcome challenges and upsets;
- able to make independent decisions and seek input of others when useful;
- seeking feedback in order to improve.

To exemplify: the resilient 'Positive Learner' is characteristically hopeful, meaning that their belief in themselves is not punctured in or by the learning process. Disengaged and Anxious learners more typically lack belief in themselves as learners and consequently may lack hope ("feel hopeless"). For these young people the feeling of hopelessness is compounded by each mistake to the extent that they protect themselves by disengaging ("I'm not going to do that, you can't make me") or defend themselves through anxiety ("I'm no good at that, I can't"). For this reason, John Hendry describes building resilience as the 'restoration of hope', i.e. where feeling hopeful indicates a resilient 'ready to learn' mindset.

<u>The concept of the Positive Learners Mindset</u>

The concept of the Positive Learners Mindset proposes a positive mental health score on both factors: 'anxiety' and 'disengagement'. Low levels of anxiousness and low levels of disengagement characterise normal/positive mental health, that is, Resilient or 'Ready to Learn', conceptualised as 'a 'Positive Learners Mindset'.

Concomitantly, it is proposed that a low mental health score on one or both of these factors indicates a departure from positive mental health and from a Positive Learners Mindset. By classifying a respondent's scores on both factors into a binary classification of low scores or high scores, mental health data is broken down into an easy-to-interpret visual representation of resilience advantageous for effective communication to educators and schools (Figure 1).
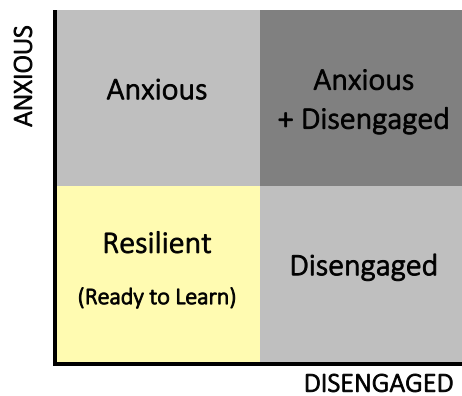

Figure 1. *Quadrant table to represent mental health scores for anxiety factor (vertical axis) and disengaged factor (horizontal axis), whereby good mental health scores on both factors would fall into the bottom-left Resilient (Ready to Learn) quadrant, and lower mental health scores on both factors would fall into the top-right 'Anxious and Disengaged' quadrant. The top-left quadrant represents respondents with high anxiousness but low disengagement scores, while the bottom-right quadrant represents respondents with high disengagement but low anxiousness scores.*

By using these four domains to communicate mental health scores, mental health data can be communicated clearly, and the proportion of respondents within a given class, grade cohort, school, or larger population that fall into a given quadrant can easily be identified. (A description of the scales and thresholds used to calculate the Positive Learners Mindset can be found in the Appendix).

For example, Figure 2 represents Australia-wide mental health data collected by RYA from 63,152 students aged 7-19y in 2019. From this figure it is evident that, overall, 55 % of surveyed students were classified as having a Positive Learners Mindset (being Resilient and Ready to Learn and neither anxious or disengaged), 20% were anxious, 11% were disengaged, and 13% were both anxious and disengaged. These percentage of student who fall into each quadrant are shown on Figure 2 below.
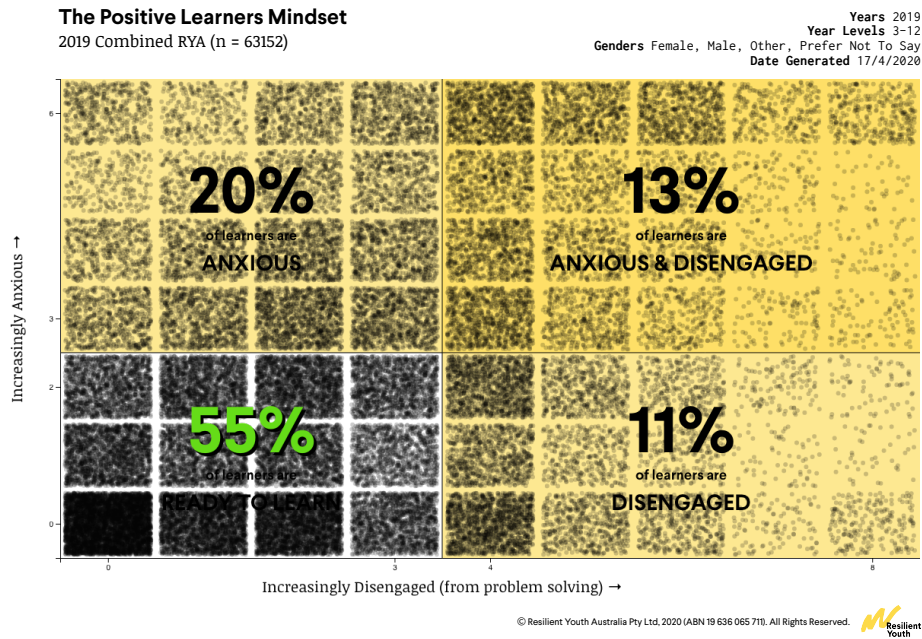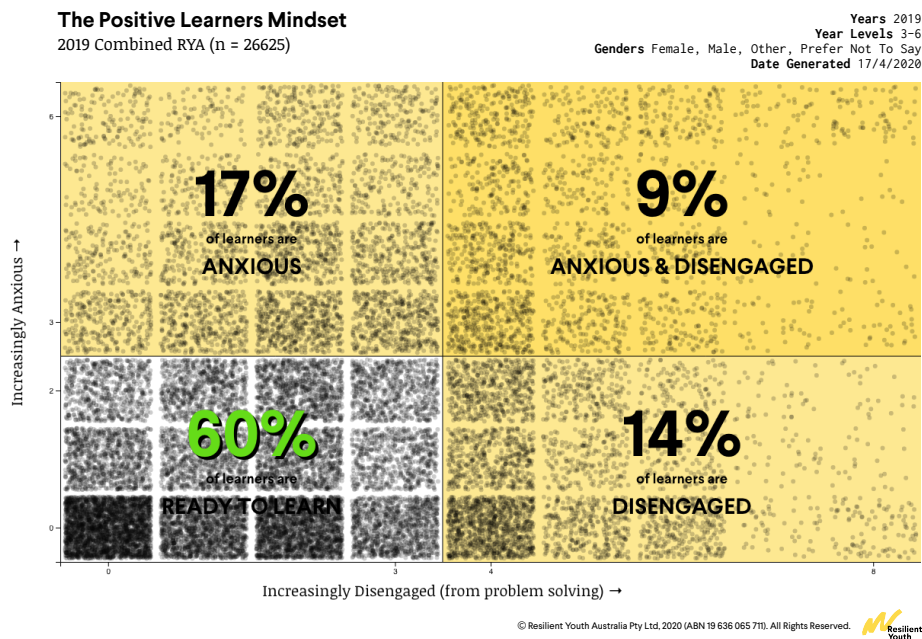

Figure 2.

Figure 3.

Figure 3. *above represents Australia-wide mental health data collected by RYA from 26,625 primary school students aged 7-11y in 2019. From this figure it is evident that, overall, 60% of surveyed primary school students were classified as having a Positive Learners Mindset (being Resilient and Ready to Learn and neither anxious or disengaged), 17% were anxious, 14% were disengaged, and 9% were both anxious and disengaged. These percentage of student who fall into each quadrant are shown on Figure 3. above.*
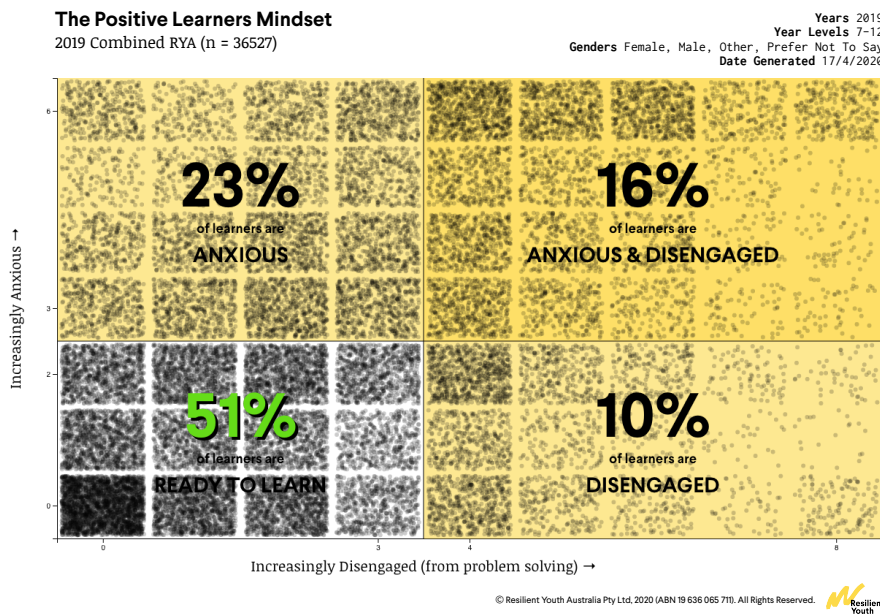

The Positive Learners Mindset
2019 Combined RYA (n = 36527)

Years 2019
Year Levels 7-12
Genders Female, Male, Other, Prefer Not To Say
Date Generated 17/4/2020

23% of learners are ANXIOUS

16% of learners are ANXIOUS & DISENGAGED

51% of learners are READY TO LEARN

10% of learners are DISENGAGED

Increasingly Anxious →

Increasingly Disengaged (from problem solving) →

Figure 4

Figure 4. above represents Australia-wide mental health data collected by RYA from 36,527 secondary school students aged 12-19y in 2019. From this figure it is evident that, overall, 51% of surveyed secondary school students were classified as having a Positive Learners Mindset (being Resilient and Ready to Learn and neither anxious or disengaged), 23% were anxious, 10% were disengaged, and 16% were both anxious and disengaged. These percentage of student who fall into each quadrant are shown on Figure 4. above.

Application of the Positive Learners Mindset

The Positive Learners Mindset framework allows for effective communication regarding the mental health of students and gives educators key areas to target interventions in their schools.

Having a clear snapshot of the mindset of students is particularly important as positive associations between mental health (a 'Positive Learners Mindset') and school performance are well-established (DeSocio & Hootman, 2004). Therefore, in a classroom and school setting, to know what percentage of your students fall into each quadrant (the four domains of mental health; Figure 2) can provide valuable, practical insight for both teachers and schools in efforts to improve learning outcomes.

Further analysis of the Resilience Survey dataset found that students who fell within the Positive Learners Mindset 'Resilient Ready to Learn' domain were more likely to report caring about school, doing homework, enjoying learning and reading, trying to learn new things and being eager to do well in school in comparison to those in the Anxious & Disengaged domain, who more frequently reported lower educational engagement.

In short, students in the 'Resilient' domain of the Positive Learners Mindset graph can be characterised as 'Ready to Learn' or 'locked onto learning'. In addition, students who fell within the 'Resilient Ready to Learn' domain reported less frequent experiences of being bullied at school or being bullied online compared to those in the Anxious & Disengaged domain (Figure 5 below).
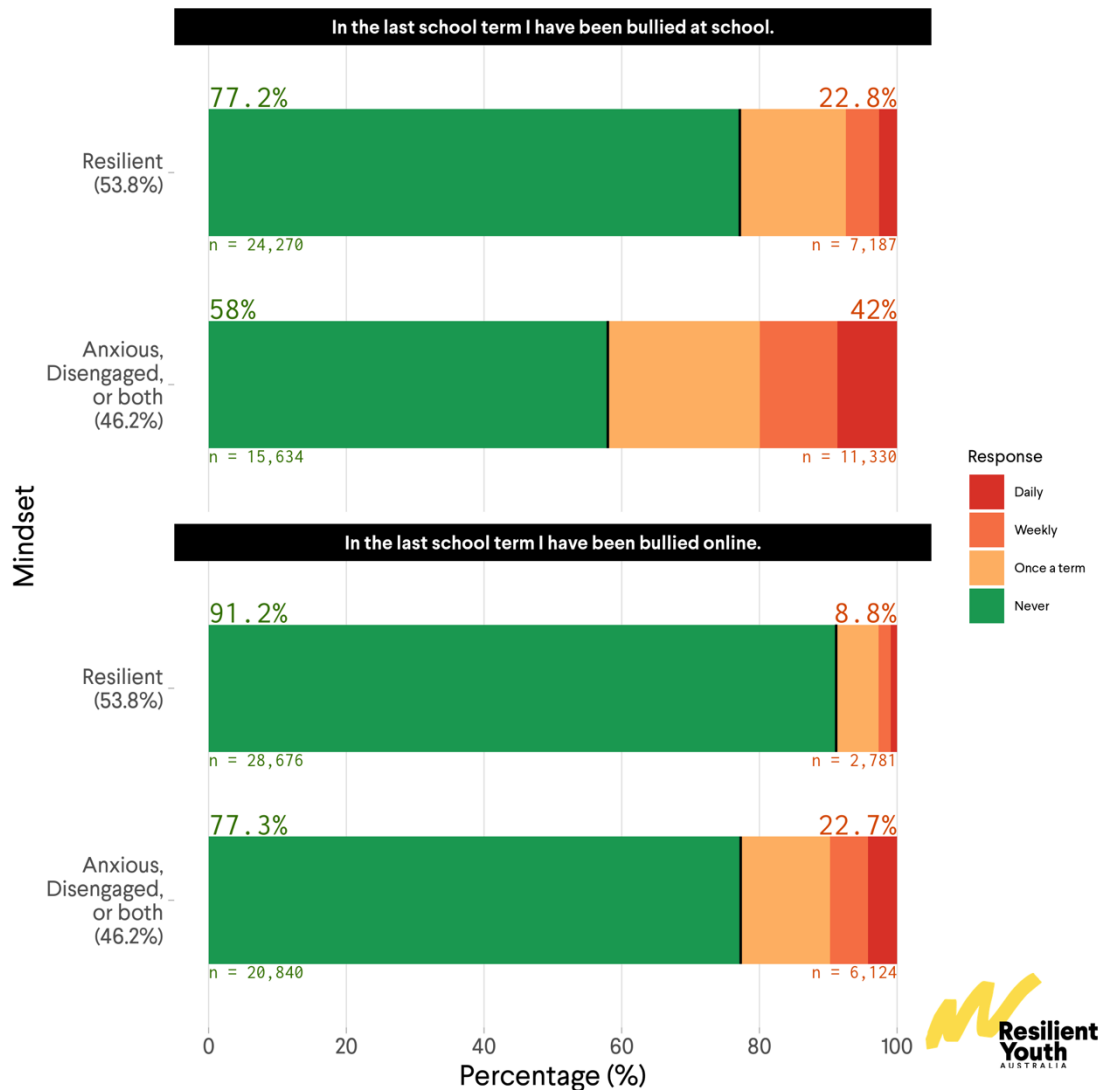
Figure 5.

Figure 5. *above:* <u>*Top panel*</u>*: graphs show percentage of Resilience Survey respondents within the 'Resilient Ready to Learn' domain who reported never being bullied at school recently (green bars top panel) as compared to respondents within the 'Anxious, Disengaged or both' domains (red bars top panel) ie: 22.8% of students who report being resilient also report being bullied at school once a term, weekly, or daily; whereas, 42% of students who report being Anxious, Disengaged or both report being bullied at school once a term, weekly, or daily.* <u>*Bottom panel*</u>*: 8.8% of students who report being resilient also report being bullied online once a term weekly, or daily; whereas, 22.7% of students who report being Anxious, Disengaged or both also report being bullied at school once a term weekly, or daily.*

Figure 6 below shows the percentage of Resilience Survey respondents within the 'Resilient Ready to Learn' domain who reported 'Always or Almost Always' in each of four aspects of learning engagement: "I care about my school", "I do my homework", "l enjoy learning new things at school", and "I read for fun" as compared to respondents within the 'Anxious, Disengaged or both' domain. In each instance, students in the 'Resilient Ready to Learn' domain reported higher levels of each of these four aspects of learning engagement, confirming the impact of mental health on learning.
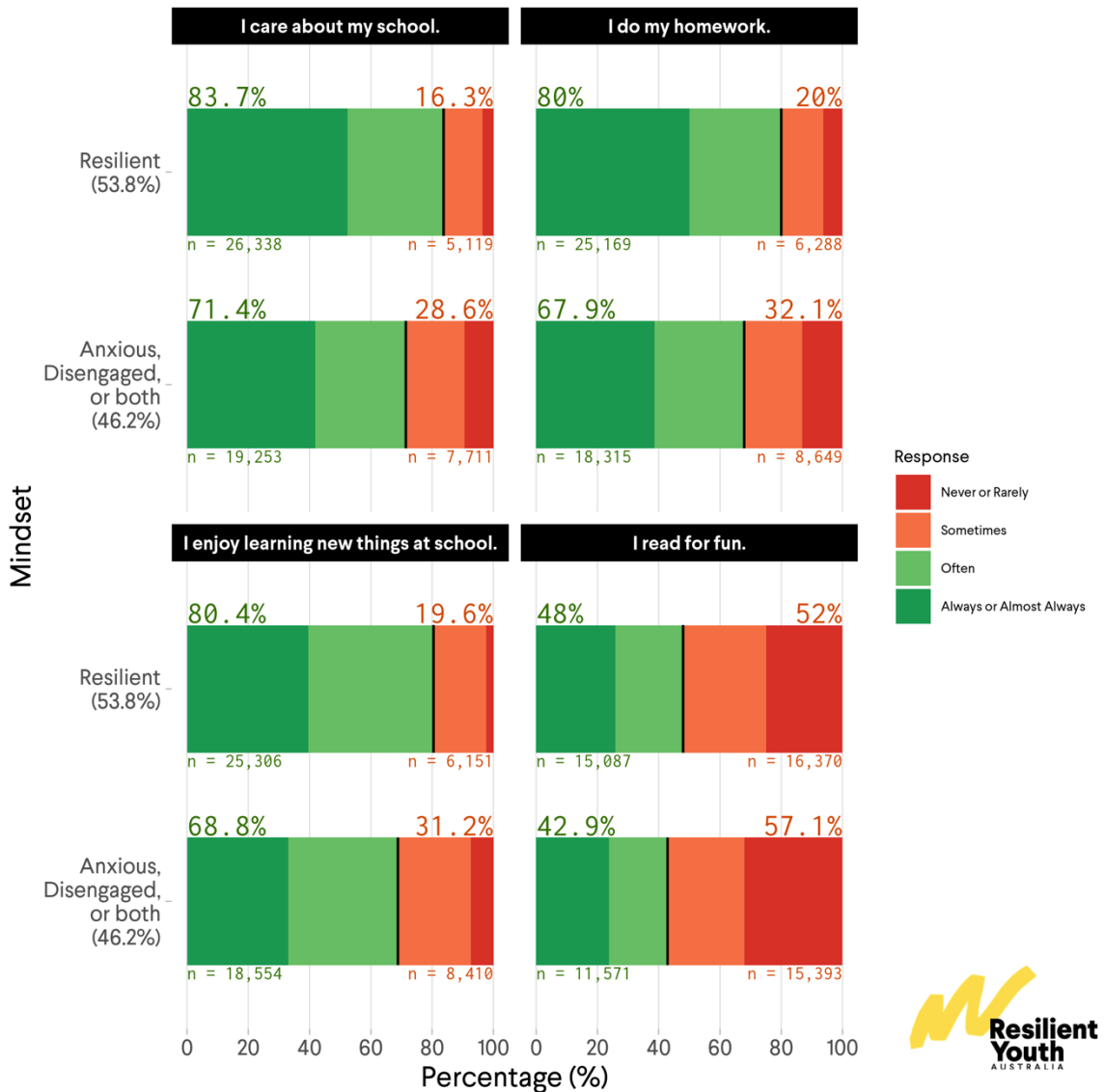

Figure 6. The top left panel of these four graphs shows the percentage of Resilience Survey respondents within the 'Resilient Ready to Learn' domain who reported 'I care about school' (green bars top left panel) as compared to respondents within the 'Anxious, Disengaged or both' domains (red bars top panel) ie: 83.7% of students who report being resilient also report caring about school 'Always or Almost Always' whereas, 71.4 % of students who report being 'Anxious, Disengaged or both' report caring about school 'Always or Almost Always'. In the same way, other quadrants report "I do my homework", "l enjoy learning new things at school" and "I read for fun."

Conclusion

The 'Positive Learners Mindset' classifies students into one of four domains: Anxious, Disengaged, Anxious & Disengaged, or Resilient (Ready to Learn). This provides educators with a clear evidence-based snapshot of the proportion of their cohort of students whose learning is impacted by anxiety and disengagement (mental health).

The 'Positive Learners Mindset' data shows that those who have good mental health report a more positive school experience and are more likely to engage positively in learning (even though it is not possible to determine the direction of these relationships).

By providing this information on a district level, education authorities are able target schools, genders and year levels where learning and learning outcomes are being most adversely impacted, develop and implement preventative action strategies, and monitor trends over time.

By providing this information on a on school level by cohort and gender, school leaders and classroom teachers are informed about the students in front of them, and are able to determine key actions to reduce anxiety and disengagement in their context, in order to improve overall student engagement with learning, learning outcomes for students, and school academic performance generally.

The 'Positive Learners Mindset' concept provides an easily interpreted framework for measuring, reporting and interrogating resilience and mental health data in young people. The ability to correlate these findings with other key indicators such as completing homework, enjoyment of learning, and caring about school and bullying provides educators who are actively working to improve student learning outcomes with invaluable insight.

References:

Behaviour-Brain-Body-Research-Centre at the University of South Australia: *www.unisa.edu.au/Education-Arts-and-Social-Sciences/Psychology-Social-Work-and-Social-Policy/Research/Research-Centres/Behaviour-Brain-Body-Research-Centre*/

Stephanie Centofanti, et al."Establishing norms for mental well-being in young people (7–19 years) using the General Health Questionnaire-12".

DeSocio, J., & Hootman, J. (2004). Children's mental health and school success. *The Journal of School Nursing*, *20*(4), 189-196.

Resilient Youth Australia Pty Ltd (ABN: 19 636 065 711): www.resilientyouth.org – Resilience Survey.

APPENDIX

The many ways students respond negatively to challenging situations fall into two broad classes: anxiety and disengagement. Suitably chosen thresholds allow students to be categorised by whether they are:

- **ANXIOUS** (but not disengaged),
- **DISENGAGED** from problem solving (but not anxious),
- both **ANXIOUS & DISENGAGED** from problem solving, or
- **READY TO LEARN** (neither anxious nor disengaged from problem solving).

The percentage of your students who fall into each quadrant are shown on the Positive Learners Mindset graph.

ANXIETY

RAW SCORE

A student's score for anxiety is given by how they scored on the shortened General Anxiety Disorder scale, or GAD-2, which consists of the following questions.

"Over the last 2 weeks, how often have you been bothered by the following problems?"

- **ph1** - Feeling nervous, anxious, or on edge.
- **ph2** - Not being able to stop or control worrying.

Both questions used the same Likert response scale. For the purposes of computing the overall anxiety score, responses are encoded as follows: NOT AT ALL 0; SEVERAL DAYS 1; MORE THAN HALF THE DAYS 2; NEARLY EVERY DAY 3.

The GAD-2 score is then calculated by anxiety: $=ph1+ph2$ giving a score between 0 and 6, inclusive.

THRESHOLD

Literature on the GAD-2 (see the paper linked below) suggests that a threshold of 3 provides acceptable sensitivity, specificity and discriminant validity to be used as a measure of depression, anxiety and general stress. As such, we classify students as anxious if anxiety≥3.

RELEVANT LITERATURE

1. Staples, Lauren G., et al. "Psychometric properties and clinical utility of brief measures of depression, anxiety, and general distress: The PHQ-2, GAD-2, and K-6." *General hospital psychiatry* 56 (2019): 13-18.

DISENGAGEMENT

RAW SCORE

A student's score for disengagement is given by how they scored on an adapted version of the Coping Strategies Index, or CSI, which consists of the following questions.

How often do you do the following when you have a problem?

- **cop1** - I avoid thinking or doing anything about the problem.
- **cop2** - I wish the problem would go away or somehow be over with.
- **cop3** - I criticise myself for what is happening.
- **cop4** - I spend more time alone.

All questions used the same Likert response scale. For the purposes of computing the overall disengagement score, responses are encoded as follows: NEVER OR RARELY 0; SOMETIMES 0; OFTEN 1; ALMOST ALWAYS 2.

The adapted CSI score is then calculated by disengagement: =cop1+cop2+cop3+cop4 giving a score between 0 and 8 inclusive.

THRESHOLD

Literature on CSI is sparser than for the GAD-2, and there is not a threshold that is widely agreed upon. We use a threshold of 4, classifying students as disengaged if disengagement$\geq$4. Intuitively, this means that in order to be classified as disengaged a student would need to be using at least either:

- two of the disengaged coping strategies 'Always or Almost Always', or
- two of the disengaged coping strategies 'Often' and one 'Always or Almost Always', or
- all four of the disengaged coping strategies 'Often'.