

MENTORING TO RE-ENGAGE AT-RISK YOUTH WITH THEIR EDUCATION FOR OUR FUTURE

#### RESEARCH TEAM

#### CHIEF INVESTIGATORS

PROFESSOR JOSEPH CIARROCHI | Australian Catholic University
PROFESSOR PHILLIP PARKER | Australian Catholic University
PROFESSOR RHONDA CRAVEN | Australian Catholic University
PROFESSOR RICHARD RYAN | Australian Catholic University
PROFESSOR DAVID EVANS | University of Sydney
DR CATHY LITTLE | University of Sydney
DR BALJINDER SAHDRA | Australian Catholic University
DR FABRI BLACKLOCK | University of New South Wales

#### PROJECT COORDINATOR & OFFICER

DR HEERA KO | Australian Catholic University MS NICOLA FILARDI | Australian Catholic University

#### PREPARED BY

PROFESSOR JOSEPH CIARROCHI & MS NICOLA FILARDI

#### **ENQUIRIES**

WELLBEING@ACU.EDU.AU | (02) 9701 4635 9/33 BERRY STREET, NORTH SYDNEY NSW 2060 AUSTRALIAN CATHOLIC UNIVERSITY LIMITED ABN 15 050 192 660 | CRICOS REGISTERED PROVIDER: 00004G

#### PRODUCED AND PUBLISHED BY

INSTITUTE FOR POSITIVE PSYCHOLOGY AND EDUCATION
AUSTRALIAN CATHOLIC UNIVERSITY
NORTH SYDNEY, NEW SOUTH WALES, 2060
PRINTED JULY 2021
© COPYRIGHT 2021

ISBN: 978-1-922325-05-1

#### CITATION AND GRANT INFORMATION

Ciarrochi, J., Filardi, N., Parker, P., Craven, R., Evans, D., Little, C., Sahdra, B., & Blacklock, F. (2021) *projectHOPE Online: Mentoring to re-engage at-risk youth with their education for our future.* (IPPE Report). Sydney: Institute for Positive Psychology and Education, Australian Catholic University.

ARC LP160100332: A RCT of an education reengagement program for at-risk youth.

2

**NOT FOR RESALE.** All material in this document is protected by copyright. Use of these materials including copying or resale may infringe copyright unless written permission has been obtained from the copyright owners. Enquiries should be made to the publisher.

### RESEARCH PARTNERS











#### WITH SPECIAL THANKS TO

We whole-heartedly thank the funding contributions of the ARC and the Rev Bill Crews Foundation. This project could not have touched the lives of many students who needed support without these significant contributions.

We thank school principals and parents for providing consent for your school or child to participate in our project. A combination of your faith in our program and the much-appreciated, weekly dedication of teacher liaisons were invaluable in making this project possible.

We thank all students for their participation, but especially the mentor students, who trusted their mentors and were willing to engage each week. It was a privilege and inspiration to get to know students with such perseverance despite disadvantage. You gave our team hope for the future.

We thank the Check & Connect mentors, who were selfless, empathetic, and worked within protocol to deliver optimum outcomes for all students.

Finally, we also thank the below organisations for their support.







# **CONTENTS**

| EXECUTIVE SUMMARY                   | 7  |
|-------------------------------------|----|
| ABOUT THE PROJECT                   | 13 |
| BACKGROUND                          | 13 |
| CHECK & CONNECT                     | 13 |
| COVID-19 AND THE MOVE TO ONLINE     | 14 |
| ONLINE SAFETY                       | 15 |
| PROJECT DESIGN                      | 15 |
| GROUPS                              | 15 |
| THE MENTOR                          | 17 |
| ADMINISTRATION                      | 17 |
| THE INTERVENTION                    | 18 |
| THE ENGAGEMENT AND WELLBEING SURVEY | 23 |
| ABOUT THE PARTICIPANTS              | 26 |
| PARTICIPATING SCHOOLS               | 26 |
| GENDER                              | 27 |
| AGE AND GRADE                       | 27 |
| ETHNICITY                           | 28 |

| REL  | LIGIOUS BELIEFS                         | 28  |
|------|---|-----|
| REL  | _ATIONSHIP STATUS OF BIOLOGICAL PARENTS | 29  |
| PAF  | RENTAL OCCUPATION                       | 30  |
| F    | ATHER'S OCCUPATION                      | 30  |
| М    | IOTHER'S OCCUPATION                     | 30  |
| WEE  | EKLY MENTOR SESSIONS                    | 32  |
| STL  | JDENT ATTENDANCE TO THE MENTOR SESSION  | 32  |
| PRO  | OBLEM SOLVING AREAS                     | 33  |
| STF  | RATEGIES IMPLEMENTED                    | 36  |
| VAI  | LUE EXPLORATION                         | 40  |
| ENG  | AGEMENT OUTCOMES                        | 42  |
| STL  | JDENT'S WEEKLY ENGAGEMENT (OBJECTIVE)   | 42  |
| STL  | JDENT'S WEEKLY ENGAGEMENT (SUBJECTIVE)  | 44  |
| SUR' | VEY OUTCOMES                            | 46  |
| TOT  | TAL SCORE                               | 46  |
| SUE  | BSCALE SCORES                           | .47 |
| G    | ENERAL HEALTH                           | .47 |
| Н    | OPE                                     | .47 |
| D    | IFFICULTY IN EMOTION REGULATION         | 49  |

| EMOTIONAL WELLBEING                 | 50 |
|-------------------------------------|----|
| BRIEF STUDENT SUPPORT SCALE         | 51 |
| SCHOOL REPORT OUTCOMES              | 53 |
| CHANGES IN STUDENT PLANS            | 55 |
| PLANS FOR THE YEAR AFTER GRADUATION | 55 |
| THE STUDENT'S PLAN                  | 55 |
| INFLUENCE OF OTHERS                 | 56 |
| CHANGES IN STUDENT GOALS            | 57 |
| NUMBER OF GOALS SET                 | 57 |
| TYPES OF GOALS SET                  | 57 |
| APPENDIX A                          | 60 |
| GENERAL GROUP RESULTS               | 60 |
| GENERAL HEALTH                      | 60 |
| HOPE                                | 61 |
| EMOTIONAL WELLBEING                 | 63 |
| BRIEF STUDENT SUPPORT SCALE         | 64 |
| APPENDIX B                          | 65 |
| REPEATED MEASURES ANOVA RESULTS     | 65 |

## **EXECUTIVE SUMMARY**

ABOUT THE PROJECT. Low school engagement is a major Australian problem. A recent report suggests that 26% of Australian youth do not attain a year 12 or Certificate III equivalent by age 19, often for preventable reasons. About 10% are subsequently not in employment, education, or training at age 24.1 Youth that drop out experience higher rates of unemployment, receive lower earnings, depend more on social services, contribute less taxes, and have worse health outcomes and lower life expectancies.<sup>2</sup> Disengagement indices (e.g., poor attendance, grades, and suspension from school) are also associated with an increased risk of serious violent crime and problematic alcohol use.3 Tackling student disengagement is therefore important for our future.

Seeking to address student engagement, we adapted a US intervention model, Check & Connect,4 to suit a New South Wales (NSW) secondary school climate during COVID-19. Our intervention provided disadvantaged youth students with one-to-one, weekly mentoring sessions structured upon the

<sup>&</sup>lt;sup>1</sup> Lamb, S, Jackson, J, Walstab, A & Huo, S (2015), Educational opportunity in Australia 2015: Who succeeds and who misses out, Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute, Melbourne:

<sup>&</sup>lt;sup>2</sup> Hollands, F. et al. (2014) Cost-Effectiveness Analysis in Practice: Interventions to Improve High School Completion. Educational Evaluation and Policy Analysis. 36, 307-326.

<sup>&</sup>lt;sup>3</sup> Henry, K.L., Knight, K. E. & Thornberry & T. P. School (2012) School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. J. Youth Adolesc. 41, 156-166.

<sup>&</sup>lt;sup>4</sup> Christenson, S. L., Thurlow, M. L., Sinclair, M. F., Lehr, C. A., Kaibel, C. M., Reschly, A. L., Mavis, A., & Pohl, A. (2008). Check & Connect: A comprehensive student engagement intervention manual. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

Check & Connect framework. Sessions ran for 15–20 minutes. Each student was assigned a post-graduate qualified mentor who met with them once a week via a recorded Zoom session over 10 weeks. We innovated an online design due to social distancing requirements and a restriction to nonessential visitors across some schools.

ABOUT THE PARTICIPANTS. Mentoring participants were 27 males, 20 females and 2 non-binary students. Control participants who did not receive the intervention were 26 males, 21 females and 2 non-binary students. These students met the criteria for Tier 2 'at-risk' students on the Positive Behaviour for Learning (NSW Government) framework and/or had scored below average on their most recent NAPLAN test. They were in grades 7-10.

ENGAGEMENT OUTCOMES. The quantitative data collected across the weekly mentoring sessions revealed a statistically significant increase in mentor student reports of:

- Caring about their school, and
- Homework completion.

Additionally, mentor students showed general increases in:

- Willingness to learn,
- Happiness to be at school, and
- Working hard to do well in school.

Students also showed statistically significant improvements in affective, behavioural, cognitive, and academic engagement using the rating system within the Check & Connect intervention. This includes improvements in relationships, feeling supported, attendance, academics, as well as a reduction in negative incident involvement.

SURVEY OUTCOMES. Mentor students made a statistically significant improvement to their overall Engagement and Wellbeing score while control students saw no difference. Subscales showed that:

- Mentor student hope remained constant over time while control student hope dropped,
- Mentor student ability to regulate emotions remained constant over time while control student ability lessened,
- Mentor student general emotional wellbeing increased while control students remained stable, and
- Mentor student perceived support from teachers, classmates, parents, and close friends remained stable, while control student perception of support lessened to a statistically significant extent.

SCHOOL REPORT OUTCOMES. School report data from Semester 1 and Semester 2 (intervention administered during Semester 2) were analysed across the core curriculum subjects of English, Mathematics and Science. Data indicated an increase in learning effort by the Mentor Group in Mathematics

and Science by end of Semester 2. This was unlike the Control students who saw a decrease in their effort across all three subjects.

CHANGES IN STUDENT GOALS. The motivation to set goals displays hope and planning for the future. Mentor students saw an increase in goal setting by the end of the intervention, while control student goal setting decreased over time. Importantly, the mentor students saw a larger increase in academic goal setting and behavioural goal setting than their control peers. This may indicate some gain of insight and motivation for mentor students to engage with their education over the course of the intervention.

CHANGES IN STUDENT PLANS. Highlighting heightened engagement, the mentor group saw an increase in planning to complete a form of tertiary or post-HSC education. Also, there was a decrease in the number of mentor students wishing to directly seek employment after school, and of those who were unsure of their after-school plans. The control students remained relatively the same across the period.

into the perspectives of students who cannot often share their experience. This may be due to various demands on teachers in the classroom, or a student's inability to identify, regulate or healthily express their emotions. Mentor students verbally reported frustration, irritability, or anger in situations where they had failed to assert themselves positively. For these students, exerting

negative behaviours to commit to the negative stereotype they felt was placed upon them was often easier than trying to correct poor habits without support.

The findings suggest that projectHOPE Online benefited students' wellbeing and school engagement. Future research is needed to further evaluate online program delivery to help improve school engagement of disadvantaged youth more efficiently throughout NSW, especially in rural and remote areas where such support is not often readily accessible.

We obtained significant improvements in a highly condensed and timeefficient intervention. The program put minimal burden on schools, teachers,
and parents. It also minimised burden on mentors, as they did not have to
travel to and between schools, and they could effectively achieve positive
outcomes in only 15 minutes of online mentoring per student per week.

Future research should investigate if a longer intervention would have
added benefit, but the present finding suggests that even a brief
intervention can have a positive effect on school engagement and
wellbeing.

To give the statistics presented in this report more of a concrete context, we display messages from participating mentor and control student surveys that suggest investing in such research would not go astray. It is clear that these students are also ready and willing to invest in themselves.

"I would like to learn more about the person I want to be and how I can achieve that."

- Mentor student

"I want to not be embarrassed to ask for help."

- Control student

"I want to make my parents proud."

- Mentor student

"It would be nice if I could be prouder of myself."

- Control student

"I want to leave school properly educated and have the academic and life skills to be able to pursue any job I want."

- Mentor student

Professor Joseph Ciarrochi

Joseph Ciarrocki

Lead Chief Investigator

# ABOUT THE PROJECT

#### **BACKGROUND**

Low school engagement is a major Australian problem. A recent report suggests that 26% of Australian youth do not attain a year 12 or Certificate III equivalent by age 19, often for preventable reasons. About 10% are subsequently not in employment, education, or training at age 24.5 Youth that drop out experience higher rates of unemployment, receive lower earnings, depend more on social services, contribute less taxes, and have worse health outcomes and lower life expectancies. Disengagement indices (e.g., poor attendance, grades, and suspension from school) are also associated with an increased risk of serious violent crime and problematic alcohol use. Tackling student disengagement is therefore important for the future.

#### **CHECK & CONNECT**

Students are made to feel in control of their own behaviour surrounding their education by taking part in the Check & Connect program.<sup>8</sup> In this

<sup>&</sup>lt;sup>5</sup> Lamb, S, Jackson, J, Walstab, A & Huo, S (2015), Educational opportunity in Australia 2015: Who succeeds and who misses out, Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute.

Mitchell Institute

<sup>&</sup>lt;sup>6</sup> Hollands, F. et al. (2014) Cost-Effectiveness Analysis in Practice: Interventions to Improve High School Completion. *Educational Evaluation and Policy Analysis*. 36, 307-326.

<sup>&</sup>lt;sup>7</sup> Henry, K.L., Knight, K. E. & Thornberry & T. P. School (2012) School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *J. Youth Adolesc.* 41, 156-166.

<sup>&</sup>lt;sup>8</sup> Christenson, S. L., Thurlow, M. L., Sinclair, M. F., Lehr, C. A., Kaibel, C. M., Reschly, A. L., Mavis, A., & Pohl, A. (2008). *Check & Connect: A comprehensive student engagement intervention manual*. Minneapolis, MN: University of Minnesota, Institute on Community Integration.

program, each student is assigned a mentor that 'Checks' in on alterable performance variables to track student progress. Alterable performance variables include attendance, suspension, attitude, behaviour, homework, and academic achievement. The mentor then 'Connects' with the student. The pair actively develop problem solving and other skills to overcome roadblocks effecting these performance variables each week. Often mentors will explore relationships with teachers, family, and peers which may be affecting their school engagement. Students are encouraged to persist during adversity. They see benefit from having an independent adult listen to emotional and intellectual feelings surrounding their education. Check & Connect was designed in the United States and was intended to be a face-to-face program running for an entire school year. ARC grant LP160100332 allowed us to adapt the program for use in Australian low socio-economic secondary school populations.

#### COVID-19 AND THE MOVE TO ONLINE

COVID-19 prevented our intended implementation of the face-to-face Check & Connect program in NSW secondary schools. The program initially ran at three secondary schools in Sydney's inner west, however restrictions and lockdown resulted in a move to distance education. Adapting to new social standards and time limitations, we tailored the program to be extremely brief and administered online. This was important to us to ensure that the disadvantaged were not further disadvantaged by the negative effect that

COVID-19 had on many. Moving to an online platform meant that our previous access to students could be tripled to nine schools across the state. The use of recorded Zoom sessions allowed interaction with youth who would have previously missed out on our program due to lack of resourcing to travel. The move to online also allowed for greater efficiency in scheduling mentor sessions. For example, a mentor could support a student in the Central Coast before conducting a session in Sydney without needing to travel.

#### **ONLINE SAFETY**

Protocols were created to ensure safety standards for students during mentor sessions. Automatic recordings of mentor sessions were uploaded to an independent cloud managed by an IT team at the Australian Catholic University. Recordings were inaccessible to the Research Team and mentors. Students needed to be on school campus to log in to their mentor session. Students were supervised by a liaison teacher from outside a room, often with clear glass depending on school resourcing. Having a teacher nearby allowed for speedy alleviation of any technical difficulty and acted as a deterrence to any misconduct. These practices were approved by SERAP NSW (2017340) and the ACU Research Ethics Committee (2019–99H).

#### PROJECT DESIGN

#### **GROUPS**

This project was designed as an intervention study. It involved the administration of an adapted Check & Connect (US) mentoring intervention

program to a group of Australian students. The effect of the intervention was compared to a control group

Students in these groups were rated as eligible for requiring Tier 2 support per the NSW Department for Education's Positive Behaviour for Learning (PBL) framework. These students displayed behaviours that could be targeted by the intervention, such as negative attitude, withdrawal from peers, or behavioural problems. Students who had diagnoses of severe mental illness or specific learning difficulties were not predicted to benefit from this program and so were excluded (e.g. Tier 1 students).

Due to the significant disruption to schools, we found that principals and liaisons were unable to support the intended within-school Randomised Control Trial component of the study, as they felt that they needed as much help as possible with their Tier 2 students in the current education climate. Due to the very low expression of interest to our large recruitment outreach (N > 200 schools), the research decision was made to select a control participant only school to serve as a comparison to keep parties interested in participation. The principal of the Control Group school was happy to assist as they did not have the resources to accommodate mentoring at the time of the project, and they saw sufficient benefit in being provided a longitudinal track of student wellbeing across two time points. Three students from non-control schools who received parental consent to participate in the mentoring program, but who chose not to commence the intervention, were also added to the Control Group.

Additionally, as a thank you to schools for agreeing to participate in the program during such a demanding time, we added a third group to the study: the General Group. This group was comprised of students not requiring targeted support (PBL Tier 3) and who were not struggling academically in Mathematics or English. The number of General Group students at each school was equal or lesser to the size of their Mentor Group. These students acted as a valuable indicator of how general student wellbeing was travelling upon returning from online learning to on campus life. The means of the students in the General Group are presented separately in Appendix A of this report. However, they will not be analysed in assessing the success of the intervention within the report.

#### THE MENTOR

Mentors were tertiary qualified individuals who underwent theoretical and practical training based on a Guidebook created by the Research Team. Training regarded confidentiality, duty of care, mandatory reporting, and responses to student misconduct or confessions of harm. Included in the Guidebook were pre-established Check & Connect issue and intervention guidelines to respond to common problems, which mentors became well versed.

#### **ADMINISTRATION**

Due to some school related disruptions and protocol implementations in the lead up to planned commencement, the project ran on two timelines with

approximately half of our schools commencing one-week prior to the remaining recruited schools. Those in the second timeline were affected by school closure or requested more time to gather participant consent forms. The project ran from mid-Term 3 2020 to mid-Term 4 2020 for all schools and the program structure is visualised in Table 1 below. Each student was allocated a 25-minute block of time each week to attend mentoring. Students took a two-week break from mentoring during the Term 3 school

holidays.

Table 1. Program timeline.

| GROUP   | INITIAL                                       | MENTORING INTERVENTION WEEKS |                    |   |   |   |   |                  |                  | FINAL   |    |      |
|---------|---|------------------------------|--------------------|---|---|---|---|------------------|------------------|---|----|------|
|         | WEEK  | 1                            | 2                  | 3 | 4 | 5 | 6 | 7                | 8                | 9   | 10 | WEEK |
| MENTOR  | SURVEY TIME 1 + INFORMAL CHECK-IN WITH MENTOR |                              | MENTORING RECEIVED |   |   |   |   |                  |                  | SURVEY TIME 2 + INFORMAL CHECK-IN WITH MENTOR |    |      |
| CONTROL | SURVEY<br>TIME 1                              |                              | NIL                |   |   |   |   |                  | SURVEY<br>TIME 2 |   |    |      |
| GENERAL | SURVEY<br>TIME 1                              | NIL                          |                    |   |   |   |   | SURVEY<br>TIME 2 |                  |   |    |      |

#### THE INTERVENTION

The intervention was designed to reflect Check & Connect within an Australian secondary school environment. As such, the main aim of the mentoring session was to encourage the student to attend school consistently.

From there the mentoring intervention targeted the following alterable predictors to further increase school engagement:

- Attendance
- Suspension
- Attitude towards school (schoolwork, teachers, and peers)
- Extracurricular participation (tutoring, sports, academic clubs)
- Behaviour in class, on the playground and in public while in school uniform
- Homework
- Grade accrual

The intervention was designed so that a student received a 15-minute mentoring session each week. Sessions were scheduled with a 5-minute buffer either side to account for technical difficulties, late arrivals, and necessary post-session data entry by the mentor. The sessions were completed using unique recurring, password protected Zoom meetings. Students would log on at their assigned time under the direction of their teacher, and their mentor would be waiting online to commence session. Sessions were automatically recorded for child-protection purposes and these recordings were uploaded to a private ACU cloud to be accessed only by an ACU staff member separate to the Research Team in the case of student, guardian, or parent complaint, or ACU Research Ethics and Integrity team review for quality assurance purposes.

Sessions were consistently structured for every student each week by using a standardised online note-taking form using the online Qualtrics platform. The note-form was a predominantly click-box form to collect quantifiable data, with a text entry section to type in more specific information such as issue discussed, and strategies provided.

#### CHECK

Our 'Check' data was collected by the mentor asking the structured questions in Table 2 below. The answers to these questions often highlight a pattern of behaviour or a problem area which the mentor can easily identify and ask further questions to problem solve in parts of the session that follow.

Table 2. Check items used to track quantitative data.

| STEM  | ITEM  | INSIGHT             |  |  |  |
|---|---|---------------------|--|--|--|
|   | AWAY WITH PARENT APPROVAL?                                      | ATTENDANCE          |  |  |  |
| LAST WEEK   | AWAY WITHOUT PARENT APPROVAL?                                   |                     |  |  |  |
| WHAT DAYS WERE YOU  | LATE TO SCHOOL?   |                     |  |  |  |
| WERE 100  | SUSPENDED (IN-SCHOOL)?  | ATTENDANCE &        |  |  |  |
|   | SUSPENDED (OUT-OF-SCHOOL)?                                      | NEGATIVE INCIDENTS  |  |  |  |
| LAST WEEK<br>WHAT DAYS<br>DID YOU                               | RECEIVE DETENTION?  | NEGATIVE INCIDENTS  |  |  |  |
| DID YOU SKIP A CLASS? WHICH CLASSES DID YOU  LAST WEEK HOW MANY |   | POTENTIAL STRUGGLES |  |  |  |
| TIMES   | WERE YOU LATE TO A CLASS? WHICH CLASSES WERE YOU LATE TO?       | CAUSING AVOIDANCE   |  |  |  |
| LAST WEEK<br>DID YOU  | RECEIVE ANY TUTORING? FOR WHICH SUBJECT AND FOR HOW MANY HOURS? | EXTRA ENGAGEMENT    |  |  |  |

As a final part of this section the student was asked six items from the Behavioural Emotional Cognitive School Engagement Scale (Items 2, 5, 7, 8, 11 & 12)<sup>9</sup>. We adapted the scale so that students responded out loud with a number from 1 to 4, where 1 was equal to 'Never' and 4 equalled 'Always.' To calculate progress on subjective engagement, we averaged student scores from the first half of their attended sessions and compared it to their average score from the second half of their attended sessions.

#### **CONNECT**

Mentors identified alterable predictors or challenges for the student from the Check data and worked to address these issues with the student as a priority. The mentor was trained to ask open-ended questions to find out more about the student's week and any issues they may want to work on if no predictors are made obvious initially. Otherwise, the mentor could move on to work on goal setting and planning for the week or term ahead. In either case the mentor worked with the student, applying strategies based off those in the Check & Connect program, teaching basic psychoeducational skills and finding solutions to practice goals to work toward in the following week.

The mentor tracked each issue and strategy in the online note taking form. Mentors are trained not to overwhelm students with strategies and skills.

One to two issues were to be addressed per week, with three being the

-

<sup>&</sup>lt;sup>9</sup> Li, Y., Lerner, R.M. (2013) Interrelations of Behavioral, Emotional, and Cognitive School Engagement in High School Students. *J Youth Adolescence* 42, 20–32. https://doi.org/10.1007/s10964-012-9857-5; Stefansson, Gestsdottir, Geldhof, Skulason & Lerner (2016) A Bifactor Model of School Engagement: Assessing General and Specific Aspects of Behavioral, Emotional and Cognitive Engagement among Adolescents. International Journal of Behavioral Development 40(5) 471–480.

maximum issues to be addressed, only for those students who appeared to be highly engaged and motivated in the session. The student was to leave the session only with strategies and tasks that they felt were achievable to implement and who had worked to problem solve collaboratively with their mentor.

#### TRACKING EXPLORED VALUES

Professor Ciarrochi's work finds importance in youth establishing their values and applying them to school and social settings to find meaning and connection.<sup>10</sup> Determining and reinforcing significant values can help adolescents manage emotions and develop positive relationships with friends and family.<sup>11</sup>

Table 3. List of values to be explored and reinforced across mentoring program.

# You can be successful You can be on time You can attend classes regularly You can complete schoolwork/assignments You can express frustration in a constructive manner You can stay in school You can be involved/belong You can graduate You can go to university/TAFE/get a job

\_

<sup>&</sup>lt;sup>10</sup> Gloster, A.T., Klotsche, J., Ciarrochi, J., Eifert, G., Sonntag, R., Wittchen, H.U., Hoyer, J. (2017). Increasing valued behaviors precedes reduction in suffering: Findings from a randomized controlled trial using ACT. *Behaviour Research and Therapy*, 64-71.

<sup>&</sup>lt;sup>11</sup> Hayes, L. & Ciarrochi, J. (2015). The Thriving Adolescent: Using Acceptance and Commitment Therapy and Positive Psychology to Help Teens Manage Emotions, Achieve Goals and Build Connection, *New Harbinger Publications*.

Values surrounding academic engagement and a prosperous future are also emphasised in Check & Connect. For that reason, mentors were asked to track school related values discussed each week, listed in Table 3 above. These values are encouraging in nature and could help reinforce school engagement. If explored, believed, and focused on, values could increase positive feelings surrounding being at school.

#### TRACKING WEEKLY ENGAGEMENT

After each student logged off from their session the mentor would finalise their online note form and complete a rating of the student's engagement using four subscales: academic engagement, behavioural engagement, cognitive engagement, and affective engagement. Each subscale had 4 criteria to meet. The maximum score for each subscale was 4, and the maximum score for the entire scale was 12. To calculate progress on mentor rated engagement, we averaged the student's scores from the first half of their attended sessions and compared it to their average scores from the second half of their attended sessions.

#### THE ENGAGEMENT AND WELLBEING SURVEY

This survey was compiled by the Research Team using items from existing and valid psychological assessments to measure school engagement and wellbeing across time points. This included items from the Dispositional

Trait Hope Scale<sup>12</sup>, Difficulties in Emotion Regulation Scale (DERS)<sup>13</sup>, General Health Questionnaire (GHQ-12)<sup>14</sup>, Child Development Supplement-II Subjective Wellbeing Scale,<sup>15</sup> and the Brief Student Support Scale.<sup>16</sup>

The Team also designed items to measure changes to plans for after graduation, and willingness and ability to set goals, which would display student hope for, and belief in achievement of, a successful future. These items asked students to provide what they plan to do the first year after leaving school, what their parents think they should do, and what they think their friends want to do. We also gave the opportunity for students to note up to three goals for the future. For each goal the student would rate whether it was personally important to them or to someone else, whether they would feel guilty, ashamed or anxious if they did not achieve the goal, or whether it would be fun and enjoyable to try and achieve the goal.<sup>17</sup>

The Engagement and Wellbeing Survey was administered to all groups in the week before school commencement of the mentoring intervention, and again in the week after the program. One week before the 10-week program

-

<sup>&</sup>lt;sup>12</sup> Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al. (1991). The will and the ways: Development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.

<sup>&</sup>lt;sup>13</sup> Hallion, L. S., Steinman, S. A., Tolin, D. F., & Diefenbach, G. J. (2018). Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) and its short forms in adults with emotional disorders. *Frontiers in psychology*, 9, 539.

<sup>&</sup>lt;sup>14</sup> Goldberg, D. (1978) General Health Questionnaire. GL Assessment Limited, London.

<sup>&</sup>lt;sup>15</sup> Keyes, Corey. (2005). The Subjective Well-Being of America's Youth: Toward a Comprehensive Assessment. Adolescent & Family Health. 4. 3-11.

<sup>&</sup>lt;sup>16</sup> Mallecki, C., Elliott, S (1999). Adolescents' ratings of perceived social support and its importance: validation of the student social support scale. Psychology in the Schools, 36 (6), 473-483.

<sup>&</sup>lt;sup>17</sup> Based on: Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. Personality and Social Psychology Bulletin, 22, 280-287.

commenced, mentors had an informal online meeting with Mentor Group students to introduce themselves. In this meeting the students completed the survey on their device. Mentor students also experienced a post-program debriefing the week after their last session and completed their final survey in this time. This way students were able to receive one on one assistance if they had any reading difficulties or questions about word definitions. All other Control Group and General Group students underwent the survey in the week before and week after the intervention, within computer labs or in classrooms under the supervision of their teachers.

# ABOUT THE PARTICIPANTS

#### PARTICIPATING SCHOOLS

Secondary schools across NSW were recruited to take part in projectHOPE Online. Approximately 200 school principals, Head Teachers for Welfare or Head Teachers for Wellbeing were contacted by phone and email. Most schools chose not to implement the program, expressing immense pressure due to COVID-19 causing inability to take on any external or new projects at the time of Term 3 2021. Two schools were keen to participate but at the last minute could not commit to the program due to a lapse in resourcing. Despite this, we were able to extend our reach to 9 schools across NSW as described in Table 4 below.

Table 4. Participating secondary school characteristics.

| SCHOOL   | ICSEA | SECTOR         |
|----------|-------|----------------|
| SCHOOL 1 | 967   | GOVERNMENT     |
| SCHOOL 2 | 1077  | NON-GOVERNMENT |
| SCHOOL 3 | NA    | GOVERNMENT     |
| SCHOOL 4 | 1069  | GOVERNMENT     |
| SCHOOL 5 | 991   | GOVERNMENT     |
| SCHOOL 6 | 931   | GOVERNMENT     |
| SCHOOL 7 | 1053  | GOVERNMENT     |
| SCHOOL 8 | 976   | GOVERNMENT     |
| SCHOOL 9 | NA    | NON-GOVERNMENT |

#### **GENDER**

Students provided their gender to be male, female, and other. Gender distributed across intervention group is displayed in Figure 1 below.

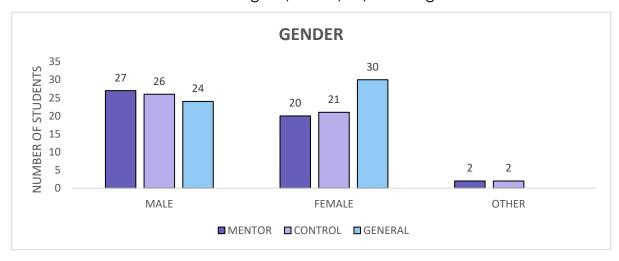


Figure 1. Distribution of student gender within intervention groups.

#### AGE AND GRADE

At commencement of the project the student age of all participating students ranged from 12 – 16 years. The student age for the Mentor and General Groups ranged between 12 – 16 years. For the Control Group, age ranged from 13–16 years. Age was an unavoidable confound due to the limited nature of recruitment. Figure 2 displays the distribution of students by grade.

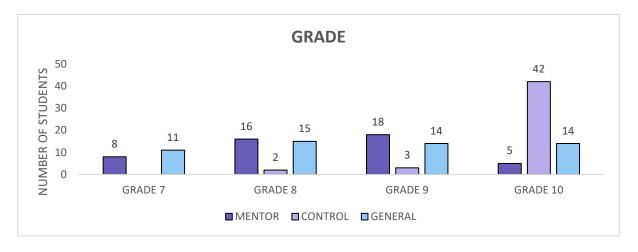


Figure 2. Distribution of participant grade level.

#### **ETHNICITY**

The participants in this project were of varied ethnicity. The Mentor Group was comprised of 48% Australian, 14% mixed Australian-European and 11% Aboriginal or Torres Strait Islander students. Other ethnicities reported were Asian (5%), mixed Australian-African (5%), mixed Australian-New Zealand (5%) and mixed Australian-Asian (5%). The remaining 6% of students were other ethnicities including Middle Eastern and South Pacific Islander.

The Control Group was comprised of 48% Australian, 8% European and 8% Asian students. Other ethnicities included Aboriginal or Torres Strait Islander (4%), New Zealand (4%), Middle Eastern (4%), mixed Australian-European (4%), South Pacific Islander (4%), mixed Australian-South American (4%), and mixed Australian-Asian (4%).

The General Group was comprised of 49% Australian, 16% European, 12% Asian and 9% mixed Australian-European students. Other ethnicities included mixed Asian-European (2%), South Pacific Islander (2%), mixed Australian-South American (2%), mixed Australian-New Zealand (2%), mixed Australian-Asian (2%), and Middle Eastern (2%).

#### RELIGIOUS BELIEFS

The most common response to religious faith selected across all three groups was no religious beliefs. This was followed by Christianity (including Catholicism, Orthodox, Anglican and Methodist), Other (including Agnostic,

Pagan, Wiccan and Maori), Buddhism and Islam.

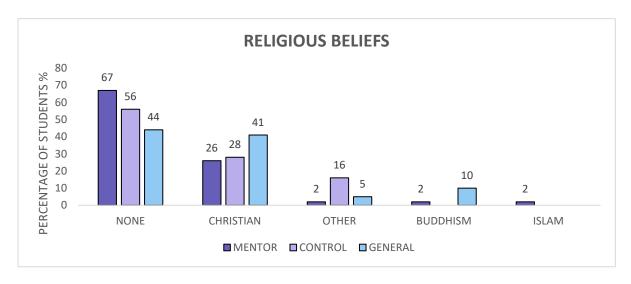


Figure 3. Distribution of participant religious beliefs.

#### RELATIONSHIP STATUS OF BIOLOGICAL PARENTS

While there was not a statistically significant difference between the Mentor and Control Groups, it is interesting to note that the General Group provided a higher response regarding married biological parents. The 'Other' category refers to single parent by sperm donation or widowed parents.

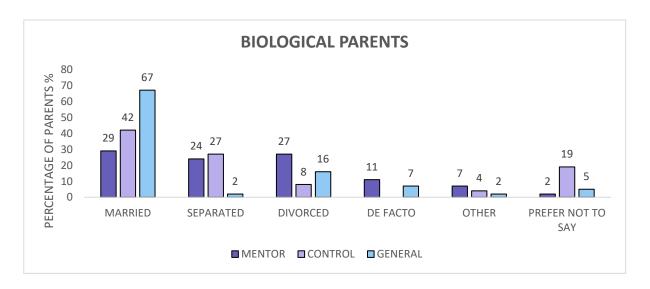


Figure 4. Distribution of participant parent relationship status.

#### PARENTAL OCCUPATION

Parental occupation did not significantly differ between the Mentor and Control Groups on either fathers or mothers.

#### FATHER'S OCCUPATION

For both groups, fathers were most often employed in the Construction industry (18% and 17.9%). Other popular occupations were within Retail, Transport, Postal and Warehousing, and Public Administration and Safety. For the General Group, fathers were most often employed in Transport, Postal and Warehousing (19%), followed by employment in the Construction (11.9%), Health Care and Social Assistance (7.1%) and Electricity, Gas and Water (7.1%) industries.

Mentor Group responses indicated unemployment of fathers at 13.3%, and unawareness of what their father did for work at 11.1%. Control Group responses indicated unemployment of fathers at 10.7% and unawareness of what their father did for work at 7.1%. General group responses indicated unemployment of fathers at 4.9%, and unawareness of what their father did for work at 7.3%. These General Group circumstances are in a lower direction than those Mentor and Control students.

#### MOTHER'S OCCUPATION

Mentor Group mothers were most often unemployed (12.5%) or employed in Other Services (such as beauty and hairdressing, 12.5%). Other popular industries include Education and Training (10%), Administrative and Support Services (10%) and Information Media and Telecommunications (10%). Another 10% of the sample were unaware of their mother's occupation. For the Control Group, mothers were most often employed within the Health Care and Social Assistance industry, followed by the Retail industry (10.7%). Completion of Domestic Duties was also at 10.7%. A similar size group of students also reported the unemployment of their mothers (11.1%) and an additional 8.9% of students were unaware of their mother's occupation.

The General Group reported Education and Training to be the most common occupation of their mothers (16.7%), followed by employment in the Agriculture, Forestry and Fishing (14.3%), Administrative and Support Services (9.5%) and Health Care and Social Assistance industries. Interestingly, unemployment (7.1%) and unawareness of the mother's occupation (2.4%) were also lower for the General Group than those students in the program, similar to the above described case with father's occupation.

# WEEKLY MENTOR SESSIONS

#### STUDENT ATTENDANCE TO THE MENTOR SESSION

Students across the program attended an average of 6 sessions in total. Figure 5 shows average number of mentor sessions attended by each school. It is important to note that the original Check & Connect method spans across the school year, as had been intended in our original pre-COVID design. The presented attendance rate speaks to the inconsistent nature of a disengaged student's relationship with school. A longer presence in the student's lives would have allowed us to better tackle engagement as required.

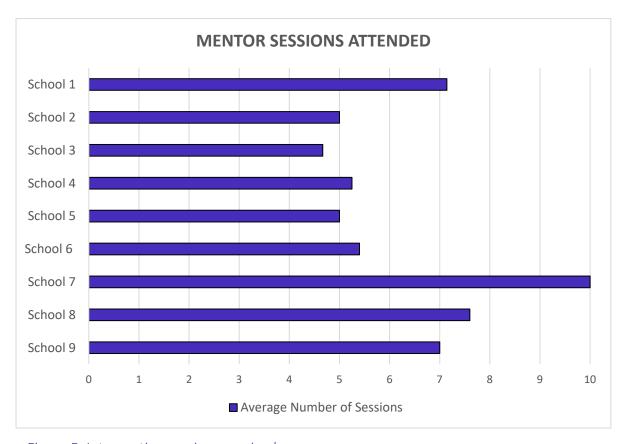


Figure 5. Intervention sessions received.

More attendance would allow for better development of skills. Nonetheless, improvement was still seen throughout the data collected from the mentor program, and so <u>our adaptation of the Check & Connect design could be of even greater assistance to students if received on a larger scale.</u>

#### PROBLEM SOLVING AREAS

Issues reported by students were recorded as part of the Mentor Notetaking Form. These issues were later categorised into Problem Solving Areas as displayed in Figure 6 on the following page.

A common struggle for students was with their time management skills which could affect numerous engagement factors, including attending class on time and preparing for or remembering to track dates of assessment tasks. These behaviours can attract immediate negative incident records, and can negatively impact on academic performance, with the student often feeling lost, unsettled, or unbothered as a result. Such issues were seen to cause ongoing poor perception regarding how to approach future assessment tasks.

Disengaging and disruptive behaviour in class were also highly recorded issues. These issues were usually linked to the student struggling with class content and concentration. As the intervention commenced in Semester 2, it was very difficult to alleviate some of these class content struggles for students as they were already quite far behind. It was not uncommon for students to mask their academic difficulty by distracting others near them or the entire class to avoid working. Poor concentration was also often reported among poor

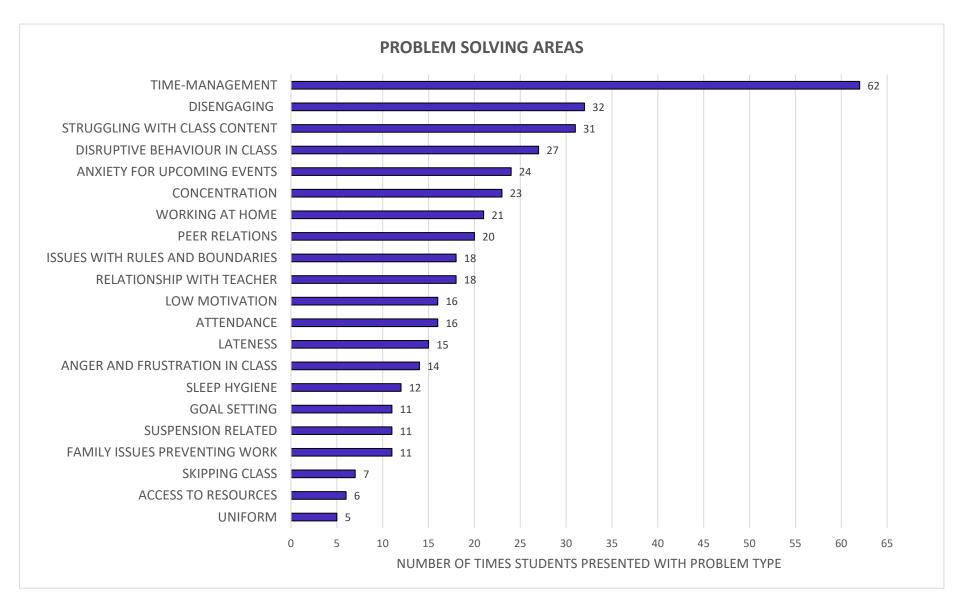


Figure 6. Number of times problem type was reported by Mentor Group.

eating habits at breakfast, and at school lunch breaks, with some children even explaining there was a lack of access to food at home. These incidents were reported to the teacher liaison for further investigation.

Some students experienced factors at home causing trouble with completion of homework and assignments, including looking after younger siblings, having inappropriate study spaces available or having insufficient access to resources. Others reported an inability of knowing how to approach their homework or additional study while at home. They frequently reported using laptops, phones, and television to procrastinate. Some viewed this as an effective use of time, however a majority were regretful about their choices and sought help from their mentor.

Other students also frequently reported stress or anxiety regarding upcoming events such as particular classes, exams, assignments or interactions with teachers and peers. These students often catastrophised situations or needed assistance in creating a plan to overcome their worst-case scenarios or achieve what they saw to be impossible. These students were often hesitant to reach out to teachers for help.

Many students found difficulty with following rules and boundaries, especially where there was a deep-seated belief that rules, and boundaries were different for themselves in comparison to others. Often this impacted on their relationship with their teachers, as many of them had struggled to shake negative stigma despite trying good behaviour in the past. Upon starting

mentoring, many students reported that they had fallen back onto negative behaviour as it seemed easier than maintaining good behaviour, which they perceived to have previously been unrewarded. Most struggled with interpersonal effectiveness with peers and teachers based upon this foundation.

The difficulties described above could often impact on motivation levels, attendance, lateness, skipping class, anger and frustration while in class, poor adherence to wearing correct uniform with pride, and an inability to be forward focused to set goals for the future. Throughout the program we saw students become suspended and need to work to meet set criteria upon their return. This was often difficult and overwhelming for students who could have missed up to five weeks of school and were highly disengaged. The difficulties above could often be aggravated by poor sleep hygiene and family problems at home such as hospitalised parents or siblings.

#### STRATEGIES IMPLEMENTED

To overcome negative behaviours, mentors worked to problem solve with each student. The strategies used are on the next page in Figure 7. The most common strategy used was to have the student assess the problem situation. Often the student would have the benefit of hindsight to fully understand how to adapt change for the future. Students would explore

roadblocks to achieving that change, and the mentor would encourage the student to think about how to eliminate the roadblock.

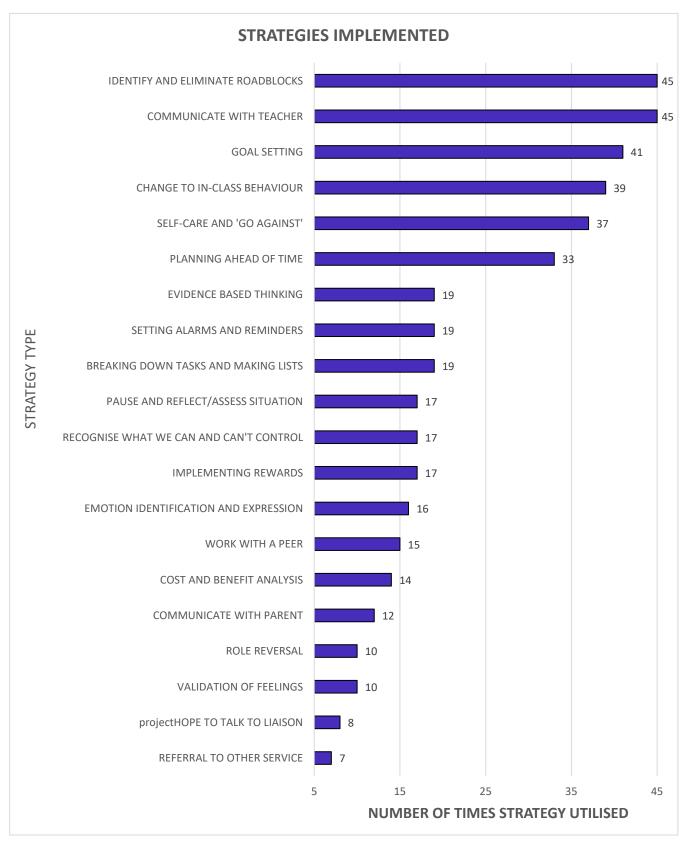


Figure 7. Strategy types implemented.

Also of significance was encouraging the student to open lines of communication with their teacher. For example, if they were too shy to ask questions about struggles in front of class, students were encouraged to send an email to their teacher after class as a first step. Further, students who had built up frustration toward their teacher or evidenced a negative attitude toward class were encouraged to conduct role reversal. This allowed them to consider different perspectives and to understand where their teacher was coming from when managing student behaviours in certain ways while responsible for a whole class of students. They were encouraged to talk to the teacher after class or in a one-to-one setting if they were unsure of which behaviour had warranted punishment, and how the teacher would recommend they behave in the future.

In order to help students in such interpersonal situations, they were encouraged to have an easy manner during difficult communications and were taught the importance of adapting the phrase 'I feel like x when y happens.' rather than using statements beginning with 'You did x' which can make the other party defensive and escalate conversation intensity. This strategy was often used in conjunction with emotion identification and expression tasks.

To focus on how to appropriately behave when irritated, frustrated, or disappointed, students worked on pausing to breathe and assess the situation and the possible consequences before acting. Students with high levels of worry or concern were taught skills to recognise whether they were in control

of the situation, whether their intended behaviour was going to change the outcome, or whether it was somebody else's responsibility to solve the problem.

Many students needed assistance with motivation and were simply not looking after themselves. These students trialled basic mindfulness and self-care routines and were encouraged to recognise negative thoughts or actions and 'go against' to complete the opposite action, often resulting in participation. They were taught to validate their own feelings, as well as the feelings of others. In cases of lower mood, with student permission the student was referred to the school counsellor through their projectHOPE liaison.

For many students, in class behaviour was a source of most negative incidents. Goal setting was used mostly in this setting to encourage the implementation of agreed changes to disengaging class behaviours. These strategies could include:

- Listening to at least the first 5 minutes of instruction from the teacher in class, writing today's focus at the top of their page and ticking it off at end of class to see if they had learnt it.
- Aiming to talk for a percentage of time less than usual and implementing a reward.
- Sitting next to a studious peer and making sure to work when they were working, or mindfully noticing how they behave throughout class.
- Setting a visual reminder such as a star on the pencil case to refocus back on the lesson if their mind has wandered.

Almost all students needed assistance with planning ahead of time in order complete set tasks, especially assignments. Students were encouraged to create lists or to break down tasks into sections with miniature due dates. For some students it involved reaching out to their parents to assist in implementing self-made rules and boundaries for schoolwork completion at home, where they previously had not existed. Parents would assist by removing the student's phone for certain time periods or by making students aware it was time for a break. Where parent help for school content was unavailable for some students, they were encouraged to go to Homework Club or similar if they were able to make their way home afterwards. Other students benefited by working with their mentor during session to add important dates to their phone or laptop calendars, or to set reminders and alarms on same.

#### VALUE EXPLORATION

The frequency of value exploration by mentors with students are displayed in Figure 8 on the next page. The most frequently explored values were those to remind the student that they were capable of being successful and could complete schoolwork. Many students had low self-perception surrounding academics and participation at school. For this reason, future focused post-school values such as those surrounding graduation, completion of tertiary education or gainful employment were less often discussed with students who were not in Year 10. Demand was higher for more present-focused value reinforcement among younger students.

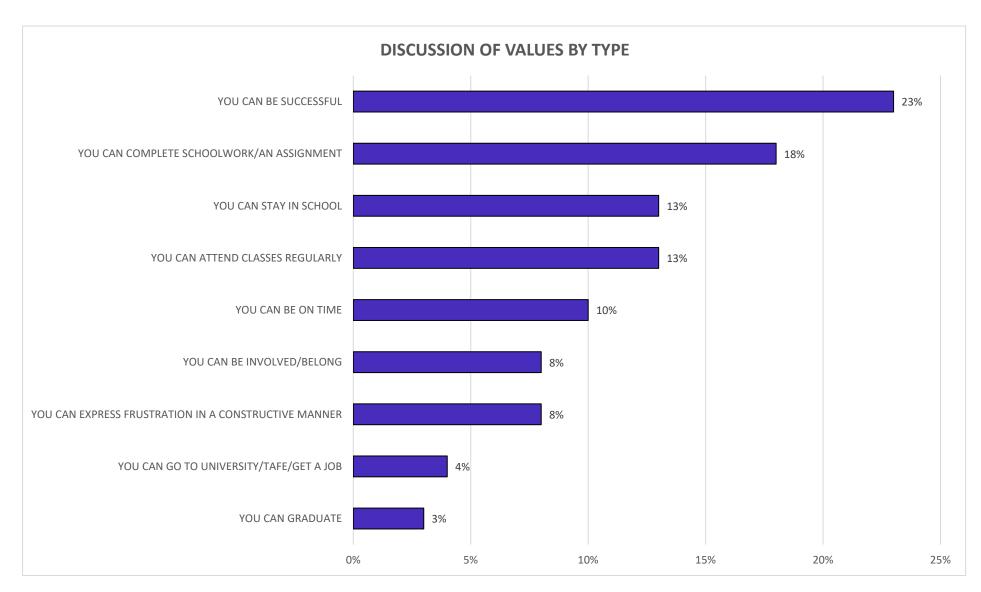


Figure 8. Frequency of discussion of value type with Mentor Group students.

### ENGAGEMENT OUTCOMES

#### STUDENT'S WEEKLY ENGAGEMENT (OBJECTIVE)

Figure 9 shows a statistically significant increase in school engagement scores for the Mentor Group by the second half of the intervention in comparison to the first (t(45) = -5.57, p = .000)\*. This means that on average, the students were receptive to the problem-solving strategies provided during mentoring, which was improving their overall engagement and outlook on school.

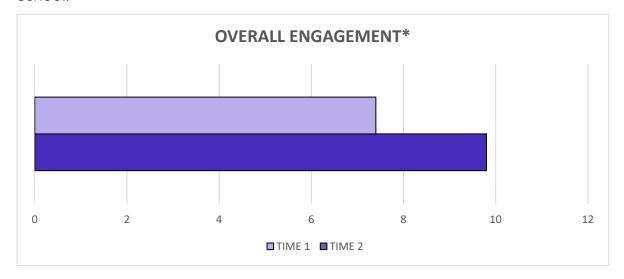


Figure 9. Objective overall engagement rating at Time 1 and Time 2.

Figure 10 below shows that students saw the largest statistically significant increase over time in Affective Engagement (t(45) = -5.31, p = .000). This means that by the end of the program, students were reporting to their mentor more feelings of belonging, good relationships with friends, and feelings of more support from their teachers and parents.

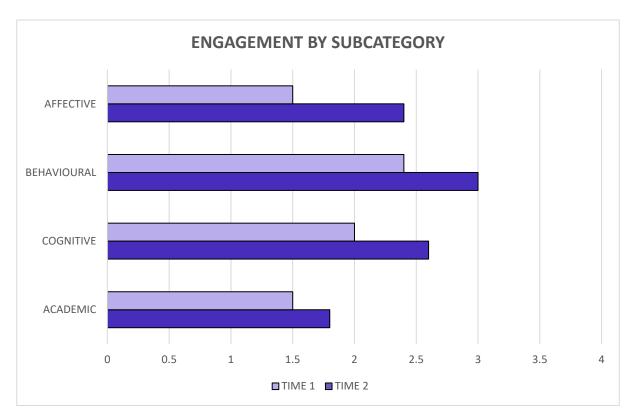


Figure 10. Objective overall engagement rating by subcategory. NOTE: All statistically significant increases.

They similarly received significantly higher Behavioural Engagement (t (45) = -3.92, p = .000) and Cognitive Engagement (t (45) = -3.36, p = .002) ratings. This means they reported less office referrals and incidents, and an increase in class attendance or extra-curricular activity by the end of the program. Students demonstrated that they had engaged with previous strategies, were showing more of an interest in learning or the future and were more confident in getting their work done.

Academic Engagement scores also showed a statistically significant increase at Time 2 (t(45) = -2.92, p = .005), however, this increase was smaller than the other categories. It is suggested that Affective, Behavioural and Cognitive Engagement need to be increased before Academic Engagement

can follow to a full extent. It is proposed that should our intervention had further time to be implemented, Academic Engagement ratings would have increased to an even larger extent.

#### STUDENT'S WEEKLY ENGAGEMENT (SUBJECTIVE)

The results of our adapted Behavioural Emotional Cognitive School Engagement Scale showed an overall increase in scores from the first half of the program in comparison to the second half of the program as displayed in Figure 11 (t(45) = -1.54, p = .130).

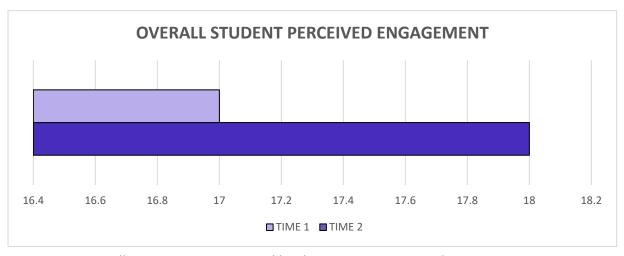


Figure 11. Overall engagement perceived by the Mentor Group students.

Figure 12 on the next page displays a breakdown of student perceived engagement by subcategory. The largest, statistically significant increase was the students' report of caring about their school by the end of the program  $(t(45) = -2.19, p = .003)^{-1}$ . This could be due to a restructure of perspectives toward teachers and peers during the program. Most interestingly, at least in a confidential setting, students understood receipt of good marks as highly important to them from the beginning of the program, even though their

behaviour would suggest otherwise. This did not waiver throughout the program.

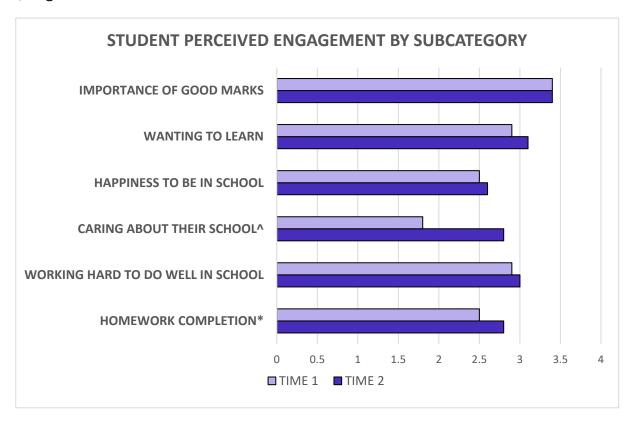


Figure 12. Subcategories of engagement perceived by the Mentor Group students.

Tackling negative behaviours through our mentoring intervention for a longer period could allow students to better achieve these academic expectations. This is evidenced by the improvements the mentoring intervention offered to students wanting to learn (t(45) = -1.80, p = .079), their perception that they were working as hard as they could (t(45) = -.910, p = .368), and their increased homework completion (t(45) = -2.19, p = .033)\*, which was of statistical significance. Our program also saw an increase in student happiness to be in school (t(45) = -5.58, p = .580). Even our short burst program was beneficial to these students, and so in future the same or longer intervention could offer even greater engagement outcomes.

### **SURVEY OUTCOMES**

This section explores the results from our Engagement and Wellbeing Survey. Any analysis that follows was measured by Paired-Samples T-Tests due to sample size and comparison of only two groups. Similar results were also yielded using a Repeated Measures ANOVA displayed in Appendix B.

#### **TOTAL SCORE**

The Total Score is the score for the entire assessment. Improvement for the Mentor Group was statistically significant between Time 1 and Time 2  $(t(28) = -4.26, p = .000)^*$ . Mentor student results showed higher engagement and wellbeing after receiving the intervention by Time 2, in comparison to the Control Group who did not receive the intervention (t(16) = -3.91, p = .624).

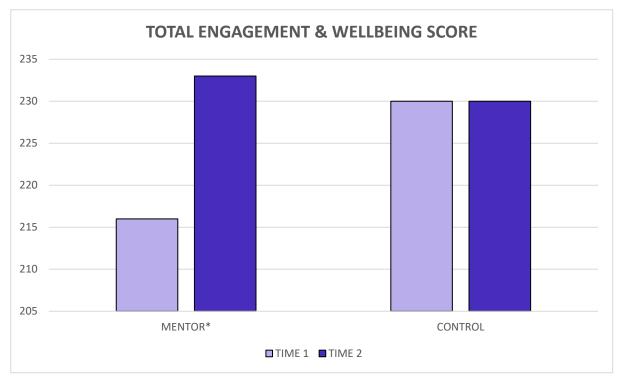


Figure 13. Total Wellbeing Scores for Mentor and Control Groups at Time 1 and Time 2.

#### SUBSCALE SCORES

#### GENERAL HEALTH

Both the Mentor Group (t(36) = -10.72, p = .000)\* and the Control Group (t(18) = -7.74, p = .000)^ saw statistically significant improvement in General Health over the intervention period as displayed in Figure 14. Interestingly, this was also the case for General Group students. So, we understood this to be a possible effect of returning to on-campus life after a negative disruption to routine and socialisation during the peak of COVID infection.

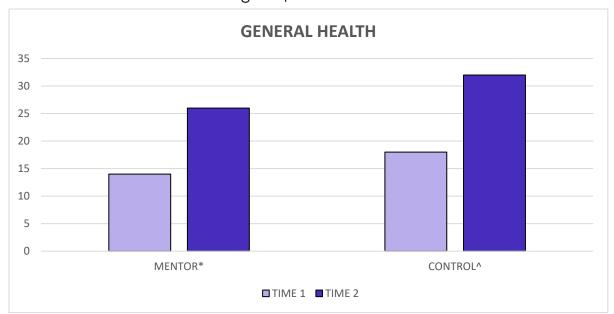


Figure 14. Scores for General Health for Time 1 and Time 2.

#### **HOPF**

Our measure of Hope indicates a student's positive motivational state. 18
Students were asked questions regarding their energy and plans to meet goals.
There were no significant differences between Time 1 and Time 2 scores for the

<sup>&</sup>lt;sup>18</sup> Snyder, Irving, & Anderson, 1991, p. 287

Mentor Group (t(41) = .102, p = .919) or the Control Group (t(26) = .176, p = .862). However, in Figure 15 we can see that the Mentor Group's scores remained stable throughout the program, whereas the Control Group's scores dropped. This may be because of the added support and motivation provided by the mentoring program to the Mentor Group.

Neither Group's scores were eligible to meet the definition of 'Highly hopeful' (37-40) or 'Moderately hopeful' (32-36) which would be optimum for maintaining practice in overcoming negative behaviours. The Mentor Group scores indicated that they were 'Hopeful' at both time points, scoring at the lower end of this definition (27-31). Meanwhile the Control Group score indicated that the group did not meet the criteria of 'Hopeful' (26) and this worsened over time. We assert that a maintenance of 'Hopefulness' within the Mentor Group is an achievement, as it indicates that motivation levels were kept active by the intervention even as the latter part of the year progressed, when motivation can lag.

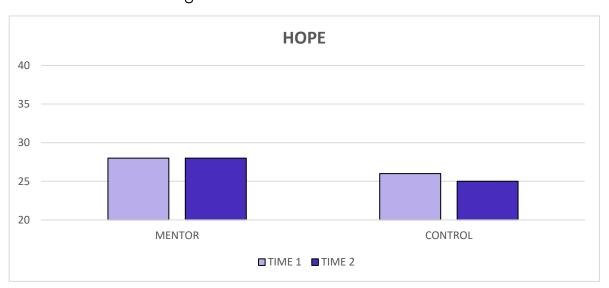


Figure 15. Scores for Hope for Time 1 and Time 2.

#### DIFFICULTY IN EMOTION REGULATION

The Difficulty in Emotion Regulation assessment explored student nonacceptance of emotional responses and difficulty in engaging in goal related behaviours. These issues often prevent a student from positively engaging with their education due to emotions getting in the way of interpersonal effectiveness, concentration, and focus. Higher scores indicate students experiencing trouble with these negative issues to a larger extent. As displayed in Figure 16, while there were no significant differences between scores across time points for either group, the Mentor Group's emotion regulation remained consistent across time points (t (41) = -.255, p =.800), whereas the Control Group's regulation became slightly poorer by Time 2 (t (25) = -.194, p = .848).

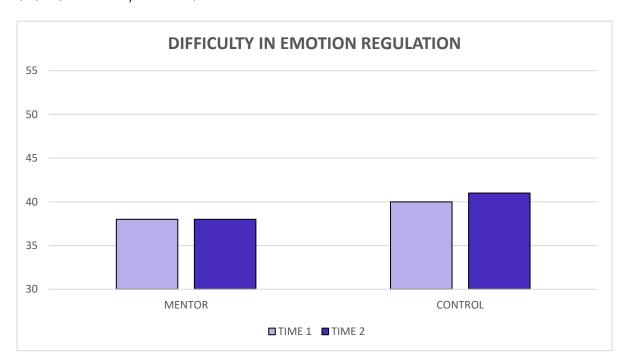


Figure 16. Scores for Difficulty in Emotion Regulation for Time 1 and Time 2.

#### EMOTIONAL WELLBEING

Frequency of feelings of happiness, interest in life and satisfaction with life were assessed to calculate Emotional Wellbeing as shown in Figure 17. While the Control Group remained stable over time (t(22) = .240, p = .812), the Mentor Group saw a non-significant improvement to their Emotional Wellbeing (t(40) = -.913, p = .367), which may be attributed to the mentoring program.

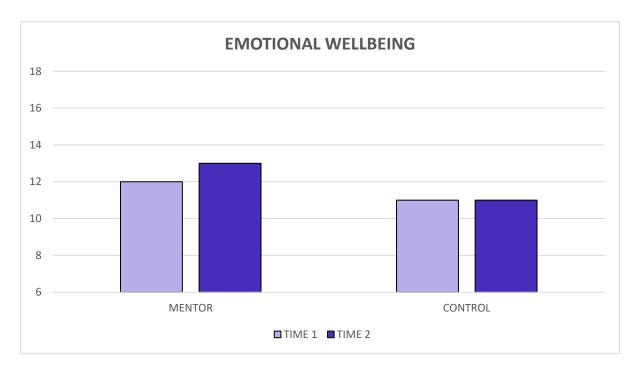


Figure 17. Scores for Emotional Wellbeing for Time 1 and Time 2.

#### BRIEF STUDENT SUPPORT SCALE

The Brief Student Support Scale assessed perceived support experienced by students as displayed in Figure 18. This total support is the combination of perceived support received from teachers, classmates, parents, and close friends, as displayed in Figure 19.

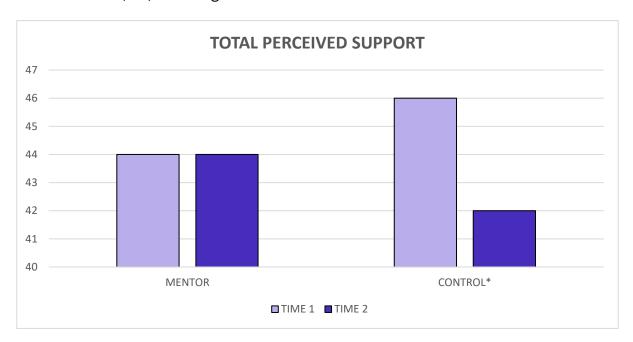
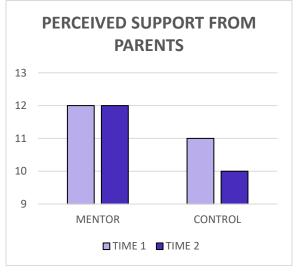


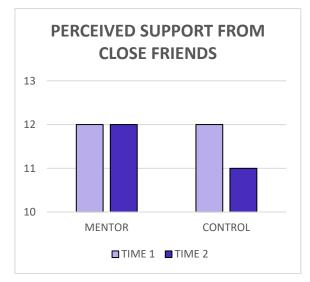
Figure 18. Total scores for Brief Student Support Scale for Time 1 and Time 2.

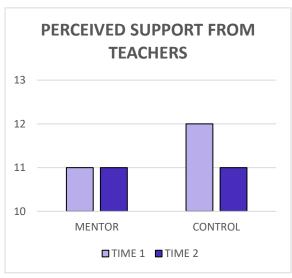
There was no significant difference between scores at Time 1 and Time 2 for the Mentor Group (t(41) = -.076, p = .940). There was a significant difference between scores for the Control Group (t(24) = 2.30, p = .031)\*, which declined at Time 2.

Figure 19 highlights that the Mentor Group felt more support from those in their personal lives (parents and close friends) than those in their school lives (teachers and classmates), whereas the Control Group felt more supported by teachers and close friends than their parents and classmates. Important to note is that while the Control Group felt more support than the Mentor Group

at Time 1, this support decreased by Time 2 to below the Mentor Group level that was maintained across the program.







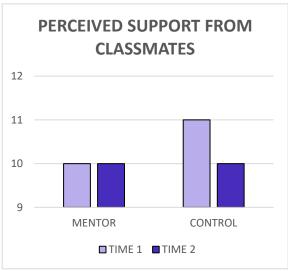


Figure 19. Total scores for Brief Student Support Scale for Time 1 and Time 2.

## SCHOOL REPORT OUTCOMES

The NSW Department of Education allowed schools to choose whether to award letter grades (A, B, C, D & E) in Semester 1. As this was the case, and not all participating schools awarded letter grades, we used the student learning effort scores provided in the reports, which measure learning skill and commitment. We focused on the core curriculum subject areas of Mathematics, displayed in Figure 20, Science, displayed in Figure 21, and English, displayed in Figure 22.<sup>19</sup>

On average, the Mentor Group received a higher learning effort score for both Mathematics (t(33) = -.971, p = .339) and Science (t(33) = -1.83, p = .076), but a lower score for English (t(33) = 1.65, p = .109). These changes were not statistically significant.

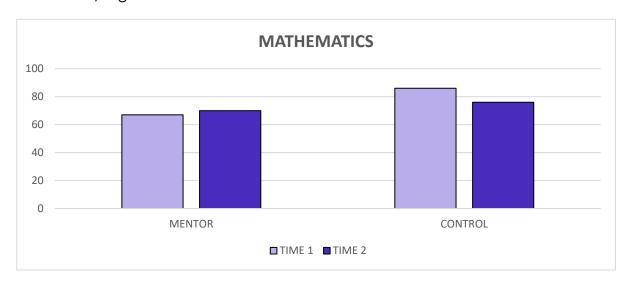


Figure 20. Learning effort for Mathematics lessons.

 $<sup>^{19}</sup>$  Results in this section exclude School 2 due to insufficient resources to provide data.

Differently, the Control Group's effort scores decreased from Time 1 to Time 2 across all three subject areas; Mathematics (t (13) = 1.43, p = .176), Science (t (13) = 1.02, p = .330), English (t (13) = 1.44, p = .173). These decreases were not statistically significant.

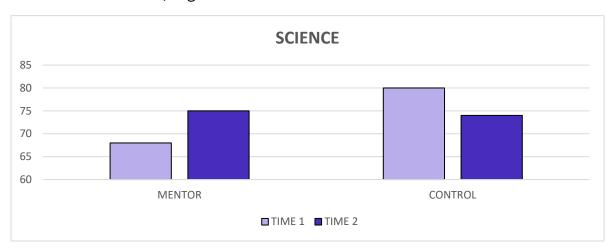


Figure 21. Learning effort for Science lessons.

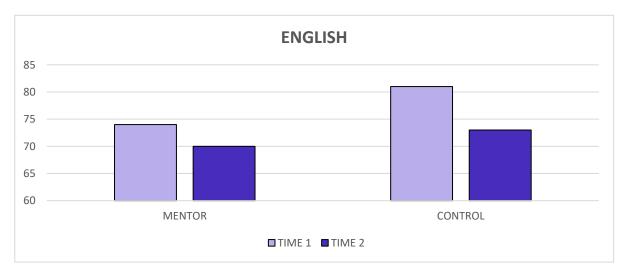


Figure 22. Learning effort for English lessons.

It is possible that strategies implemented during mentoring based on classroom concentration and focus allowed for Mentor Group students to apply themselves more appropriately in classes such as a Mathematics and Science where more often than not, skills learnt in previous lessons are crucial to grasp prior to the next lesson in order to develop knowledge.

# CHANGES IN STUDENT PLANS

#### PLANS FOR THE YEAR AFTER GRADUATION

#### THE STUDENT'S PLAN

Students were asked what their plans for after graduation were at the beginning and end of the program as highlighted in Figure 23.

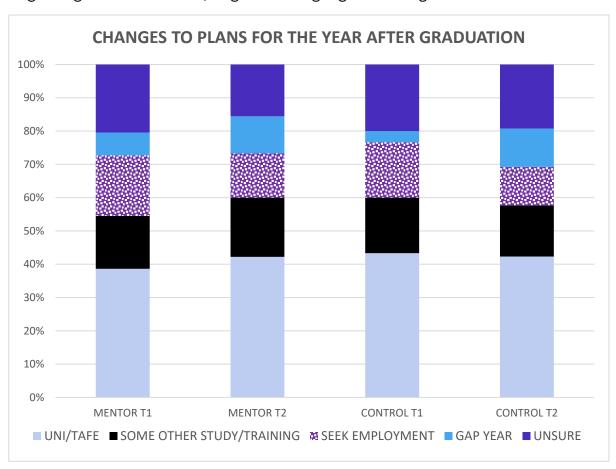


Figure 23. Frequencies of Plans for the Year After Graduation at Time 1 and Time 2.

The Mentor Group saw a larger increase in perception that they would complete a form of tertiary or post-school education than their Control Group peers who remained the same. The Mentor Group saw a decrease in the

number of students who would directly seek employment, while the Control Group remained relatively consistent. The number of students who considered a 'Gap Year' also remained relatively consistent across Groups. However, the Mentor Group saw a more marked decrease in students being unsure of what their plans were after school. Overall, the Mentor Group made more progress in seeing a more opportunistic future.

#### INFLUENCE OF OTHERS

Mentor student plans for the year after graduation coincided with what they expected their friends to do 52% of the time, and with what they thought their parents expected of them 54% of the time. Mentor student plans were harmonious with what they expected their friends and their parents to prefer 37% of the time.

Control student plans for the year after graduation coincided with what they expected their friends to do 30% of the time, and with what they thought their parents expected of them 33% of the time. Control student plans were harmonious with what they expected their friends and their parents to prefer 11% of the time.

# CHANGES IN STUDENT GOALS

#### NUMBER OF GOALS SET

The Mentor Group saw a slight increase in goal setting whereas the Control Group lowered their goal setting by Time 2 as displayed in Figure 24.



Figure 24. Percentage of goals set out of all that could have been made.

#### TYPES OF GOALS SET

Types of goals set by students are shown in Figure 25 on the next page. At Time 1 both groups set a large amount of goals around relationships with peers, teachers, and family. The Mentor Group saw the largest decrease in goal setting around relationships at Time 2. This made room for an increase in goal setting surrounding academia, a 75% increase in goals surrounding improving

behaviour and a 50% increase in setting goals for the future such as employment or career focused goals.

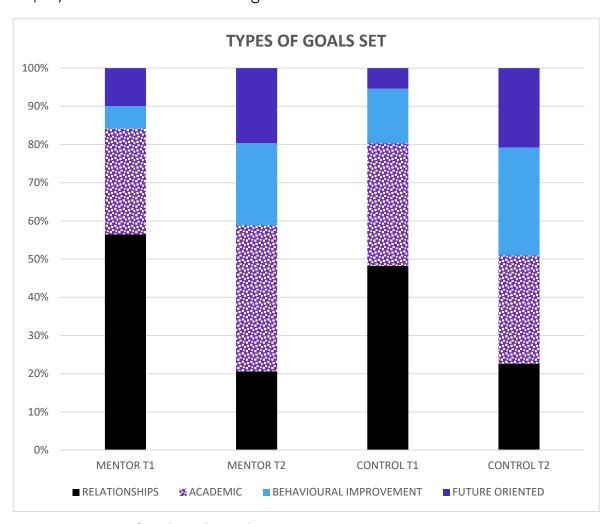


Figure 25. Types of goals set by students.

NOTE: Results may be influenced by less variation of age in Control Group.

The Control Group had a large sample of Year 10 students who often reported achieving Record of School Achievement requirements (replacing School Certificate) and decisions surrounding senior school. So, a stronger focus on the future at Time 2 is not unexpected. Like the Mentor Group, the Control Group also set more behaviour related goals. However, they did not follow match the trend for academic goal setting, setting fewer academic goals than in the beginning of the program.

Overall, both groups reported generally consistent patterns in their goal setting, however the younger age average in the Mentor Group being motivated to work toward the future, academics and behaviour is a promising result for the program. This is especially the case as students in the lower age range are more unstable in their identity, values, and peer relationships, so a move away from this focus within just 10 weeks is positive.

## APPENDIX A GENERAL GROUP RESULTS

#### **GENERAL HEALTH**

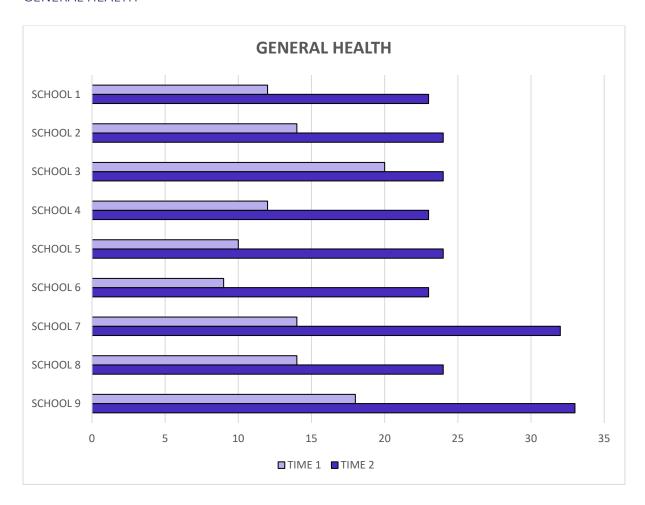


Figure 1. General Health scores for the General Group at Time 1 and Time 2.

As with the Mentor and Control Groups, the General Group had a significant increase in General Health, likely explained by a return to consistent on-campus learning post isolation of online learning and cancellation of many extracurricular activities and events.

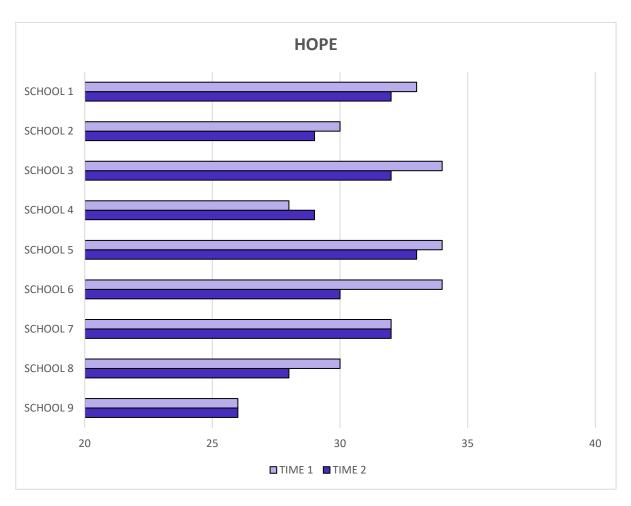


Figure 2. Hope scores for the General Group at Time 1 and Time 2.

Our measure of Hope indicates a student's positive motivational state. Students were asked questions regarding their energy and plans to meet goals. Most schools saw an increase in hope from the General Group throughout the year. The Mentor Group's scores remained stable throughout the program, whereas the Control Group's scores dropped. This may be because of the added support and motivation provided by the mentoring program to the Mentor Group. Most General Groups fell within the 'Moderately hopeful' bracket (32–36) which are optimum for maintaining practice in overcoming negative behaviours. Others were 'Hopeful' at both time points (27–31).

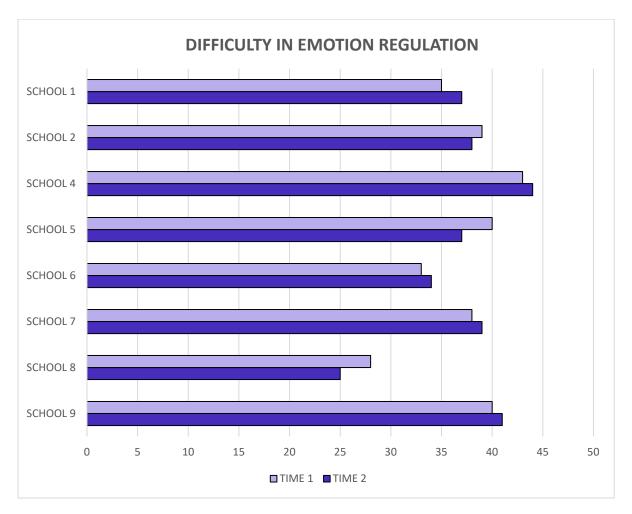


Figure 3. Difficulty in Emotion Regulation scores for the General Group at Time 1 and Time 2.

The Difficulty in Emotion Regulation assessment explores nonacceptance of emotional responses and difficulty in engaging in goal related behaviours. These issues often prevent a student from positively engaging with their education due to emotions getting in the way of interpersonal effectiveness, concentration, and focus. Higher scores indicate students experiencing trouble with these negative issues. General Group scores saw small increases across time points and were mostly consistent with the Control Group pattern. This suggests that all students may benefit from some emotional regulation and mindfulness skills as offered in the mentoring intervention.

#### **EMOTIONAL WELLBEING**

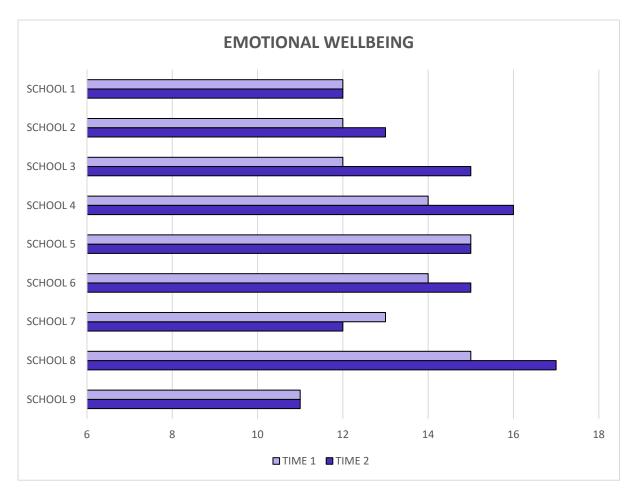


Figure 4. Emotional Wellbeing scores for the General Group at Time 1 and Time 2.

Frequency of feelings of happiness, interest in life and satisfaction with life were assessed to calculate Emotional Wellbeing. The General Group at most schools experienced a stable or increased sense of wellbeing upon returning from COVID-19 disruption.

#### BRIEF STUDENT SUPPORT SCALE

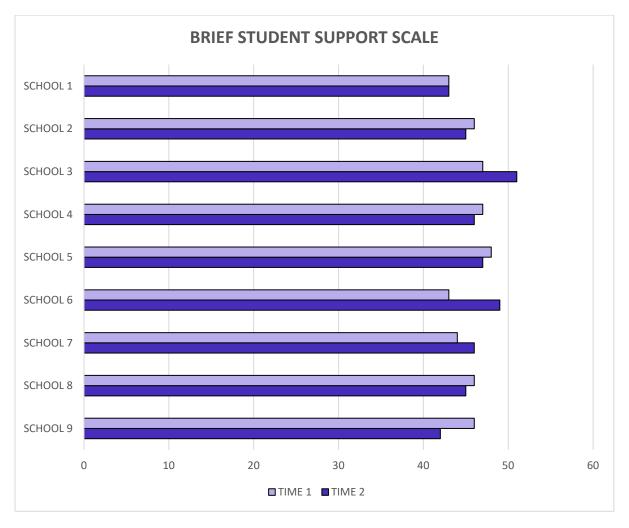


Figure 17. Brief Student Support scores for the General Group at Time 1 and Time 2.

The Brief Student Support Scale assesses perceived support from teachers, classmates, parents, and close friends. General Group students at most schools saw increased or stable perceptions of support by Time 2. Only some schools saw a small decrease in support which may be due to the emerging pressures at work for teachers and parents, and an increased feeling of pressure toward academic performance for students drawing closer to year end.

### APPENDIX B

#### REPEATED MEASURES ANOVA RESULTS

The ten-week mentoring program had a statistically significant effect on the Total Engagement and Wellbeing score and Brief Student Support scores. All other measures showed a non-significant effect of the intervention which is not unexpected with a small sample size. As discussed throughout the report, Paired T-Tests also showed that the Mentor Group significantly improved on Total Engagement and Wellbeing, and the Control Group significantly declined on Student Support. This, along with the pattern of increases or maintenance for all other subscale outcomes in favour of the Mentor Group, combined with the below ANOVA results, provide preliminary evidence that the brief mentoring program is beneficial.

Table 1. Repeated Measures ANOVA output.

| MEASURE                            | DF<br>(GROUP) | DF<br>(ERROR) | F      | SIG<br>(< 0.05*) |
|------------------------------------|---------------|---------------|--------|------------------|
| TOTAL ENGAGEMENT & WELLBEING SCORE | 1             | 38            | 7.535  | .009*            |
| GENERAL HEALTH                     | 1             | 53            | 2.654  | .109             |
| HOPE                               | 1             | 65            | 16.517 | .274             |
| DIFFICULTY IN EMOTION REGULATION   | 1             | 65            | .007   | .932             |
| EMOTIONAL WELLBEING                | 1             | 59            | .203   | .654             |
| BRIEF STUDENT SUPPORT              | 1             | 62            | 5.256  | .025*            |