Sharper Minds 2021 Pilot Report

Associate Professor Genevieve Dingle, Dr Julie Hodges,
and the Sharper Minds Research team

Suggested citation:

Dingle, G. A., Hodges, J., Hides, L., McKimmie, B., Gomersall, S., Beckman, E., Birch, S., Smith, S., Zurynski, Y., Maccallum, F., Bentley, S., Wright, O., Walter, Z., & Alhadad, S. (2021). *Sharper Minds 2021 Pilot Report*. School of Psychology, The University of QLD.

Acknowledgements:

The authors would like to sincerely thank the student participants, members of the Student Advisory group, Dianna Vidas and Rong Han for research assistance, Paul Jackson for IT programming support, Round House for digital design, and DVC (Academic) Professor Joanne Wright, DVC (Global Engagement), Allianz Care, and Darryl Grundy, Dr Rosy Dobrijevic and Rae Morris at UQ Health Care for supporting the 2021 work described in this report.

Table of Contents

Suggested citation:.....	2
Acknowledgements:	2
Sharper Minds: An overview.....	4
Sharper Minds is a stepped care package	5
Step 2. Awareness and Self-Management of Mental Health	6
Step 3. Early Intervention courses	8
Study - the TUNED-IN course	8
Physical Activity – the FIT 4 STUDY course	9
Social Connection – the GROUPS 4 EDUCATION course	10
Health Eating – the FOOD 4 THE BRAIN course	11
Step 4. Treatment	12
Evaluation of 2021 Pilot	13
Table 1. Sharper Minds Pilot 2021 - Participant characteristics.....	14
Measures.....	15
Design and Analysis.....	15
Results.....	16
% of students screening positive for mental health problems.....	16
Depression	16
Anxiety	17
Somatic symptoms.....	17
Mental Wellbeing.....	18
Number of Academic and General Stressors.....	18
Number of COVID-19 Stressors.....	19
Loneliness.....	20
Sense of Belonging at the University of QLD	20
Psychological Treatment.....	21
Conclusions	21
Budget expenditure and Future Plans	21

Sharper Minds: An overview

First year university students are in a phase of rapid social, vocational, and for some, geographical transition. Most are also in the peak age range for onset of mental disorders (1, 2). Our 2019 and 2020 surveys of first year UQ students indicate that the COVID-19 pandemic was associated with increased psychological distress and loneliness, and decreased wellbeing (3, 4) among first year students.

Despite help being available at Student Services, UQ Medical Centres, and UQ Psychology Clinic, students were unsure how to navigate these services. Our 2019 survey found that the key barrier to accessing help for both domestic and international students is the belief that their “problem isn’t important enough”. By the time students seek help, they often encounter waiting periods and their needs are more acute (4-6).

‘So first year is actually the most horrifying experience. Because if you get to campus you have to be alone and then you have to start meeting new people, making connections. And I don’t think there’s specifically people who teach us how to do that. Perhaps for people who socialise well, it’s easy for them, but then I believe that there are many students who can’t do that well and then there are no guidance. But through the program, the Sharper Minds program, they actually give us some tips on how to overcome that. Yeah, I think it’s really suited for first year students’ – UQ Student feedback 2021

Sharper Minds is a package of resources designed to increase first year UQ students’ use of **preventive health strategies and their mental health literacy** so they can achieve their best at university. It was designed by academics (the authors) in collaboration with student advisors and health staff at UQ Health Care. The **co-design process** ensures the materials are engaging and inclusive, especially to vulnerable groups such as international students from culturally and linguistically diverse backgrounds (7, 8).

Sharper Minds embeds the **principle of student belonging** throughout the package (9). Live online groups, facilitated by our postgraduate students, foster a sense of connection to UQ by encouraging active participation and meaningful connections with other students. The website, digital self-monitoring and brief intervention options align with evidence that young people are more likely to seek **digitally enabled services** since the COVID-19 pandemic.

Sharper Minds is a stepped care package

Sharper Minds takes a **stepped care approach** (see Box 1) that ensures greater access for students at a low intensity level and better targeted interventions for students who may need them at more intense levels (10).

Box 1. Sharper Minds is a stepped care package

STEP 1 is ASSESSMENT: a 15-minute online survey is available for first year students at the start and the end of semester. The surveys ask students about their knowledge and use of various health strategies, the things that cause them stress, their mental health and wellbeing, and use of health services.

STEP 2 is AWARENESS / SELF-MANAGEMENT: Co-designed posters showing common symptoms of stress and where to seek help, the Sharper Minds website, and the App tracker are designed to raise students' awareness of mental health and to take a more proactive role in managing their health and wellbeing throughout semester.

STEP 3 is EARLY INTERVENTION: students can choose from 6 online group courses to increase their knowledge and use of strategies in the key domains of Study, Physical Activity, Social Connection, Mood, Sleep and Healthy Eating.

STEP 4 is TREATMENT: two Masters of Psychology students are placed one day per week in the UQ Health Care service at St Lucia, to increase capacity for the GPs to refer patients for individual psychological treatment. There is no waiting period, and the service is provided for free to students with in-kind support from UQ Health Care.

Step 2. Awareness and Self-Management of Mental Health

The Sharper Minds posters (above, left) present the most common signs of stress in university students (data collected in our 2019 student survey) and a link to the website where students can access further information and support. The posters were translated into 7 commonly spoken languages in UQ international students, as our student advisory group indicated that this would help them to feel included, like the message was for them.

The Sharper Minds website (above, right) contains brief information, short videos, and tip sheets about six key domains (study, healthy eating, physical activity, sleep, social connection, mood) and links to the self-monitoring App, online courses, and other supports on campus relevant to each domain.

I like how user-friendly the website is. It's pretty easy to navigate. There's not too much of an information overload or a text overload. I thought it was smart to have those short videos instead of big blocks of text. Yeah, yeah, so I thought the design of it was really well done. – UQ Student Feedback, 2021

Self-Management

Students opting to use the App tracker were emailed a link to a secure UQ qualtrics survey which asked them to enter a simple rating of how they are going within 6 domains: study, healthy eating, physical activity, sleep, social connection, and mood (below).

They received personalised feedback, which allowed them to visually track their progress across semester (example shown below).

I just think seeing how each one of those six elements are looked after on a weekly basis and how they contribute to my general wellbeing. So, I think if my exercise was fabulous, that's not really going to make a difference. I think all six of those elements have to be at a reasonable level, if that makes sense. And so, that also gave me the impetus to go, "Well, I might need to speak to somebody a bit more about this" – UQ Student Feedback, 2021

Step 3. Early Intervention courses

The six short courses are aligned to the six domains and provide students with more detailed information and strategies to manage their health in each domain. The courses were developed by members of the research team with expertise in each field, and they are delivered online in real time, with small groups of students, so that participants can contribute, ask questions, and make friends with other students in the group.

Study - the TUNED-IN course

The Tuned In course, developed by Dr Genevieve Dingle in the School of Psychology, teaches students how to use music listening and other strategies for managing their emotions within the academic environment (e.g., panic, stress). It also addresses unhelpful behaviours such as rumination and procrastination. Tuned In is evidence-informed regarding young people's use of music for emotion regulation (11-14) and is effective for emotion regulation and strategic use of music listening among adolescents in school (15) and university students (16).

Program Sessions:

1. Feelings are your Friends (education about emotions and their functions)
2. Fearing the Worst (panic and anxiety related to exams and performance situations)
3. Stress Less (managing stress of multiple assignments due, procrastination, perfectionism)
4. Finding the Fun (enhancing positive emotions)

I often recommend Tuned In to people because I think almost everyone I know says that they like to use music in different ways to monitor their emotions. But it's great to be given kind of a structure or be given the language to kind of take that process and make it more explicit, make it work for you – Tuned In participant, 2021

Physical Activity – the FIT 4 STUDY course

Developed by Dr Sjaan Gomersall (School of Health and Rehabilitation Sciences) and Dr Emma Beckman (School of Human Movement and Nutrition Sciences), the Fit 4 Study course teaches students about the benefits of exercise for managing their health and strategies to set goals and how to manage the barriers experienced due to study demands. Evidence indicates that vigorous physical activity and decreased sedentary behaviour have a positive effect on educational outcomes in university students (17-20).

Fit 4 Study contains online content for students to work through in their own time and 4 x 1 hour 'live' sessions (delivered either in person or online in small groups). Sessions were delivered by professional Exercise Physiologists, assisted by Honours students from the School of Human Movement and Nutrition Sciences.

I really liked the people that were in my [group].... it was very clear to me that they each had some sort of passion or interest in what they were talking about and that made it very enjoyable for me. I wanted to log on on Fridays to join the thing. It wasn't something that I had to do.
– Fit 4 Study participant, 2021

Social Connection – the GROUPS 4 EDUCATION course

The GROUPS 4 EDUCATION was developed by social psychologist Dr Sarah Bentley, Professor Catherine Haslam, and colleagues at the School of Psychology. The course is based on evidence that during life transitions, like starting university, students might lose previous social connections and might experience challenges establishing new connections while handling the demands of university life (21-23). A sense of belonging and connection to others is important for our quality of life and recent research also tells us that social connection has been shown to be important for how students think, communicate, and learn.

The GROUPS 4 EDUCATION course runs over 5 sessions – one per week, each an hour long. The sessions were delivered over zoom by postgraduate social psychologists to small groups of 6-8 students. In the sessions, students completed online activities, and were led through discussions about key issues, such as:

- the importance of connection and belonging
- how to manage your connections
- how to adapt your connections to be more aligned with what is important to you and your university goals.

I think it definitely helped me feel a little bit more at home in like UQ specifically. I think having some sort of extracurricular engagement, I guess it contributed to a course, but it felt a lot more casual and was - Yeah, definitely made me feel a little bit more comfortable with the routine of uni and the people there. – Groups 4 Education participant, 2021

Health Eating – the FOOD 4 THE BRAIN course

Many university students are new to grocery shopping and meal preparation and when things get busy with assignments and other commitments, they can become too reliant on takeaway foods that are not the most nutritious. The Food 4 the Brain course was developed by Dr Olivia Wright in the School of Human Movement and Nutrition Sciences. It teaches students: how to navigate fresh food markets and supermarkets; how to plan and prepare meals; how to manage a food budget; basic cooking skills; to understand the shortfalls of fad diets and to embrace social and cultural connections through sharing food (24-26).

The course was delivered over zoom by Masters in Dietetics students to small groups of participants. In the final session the groups cooked a nutritious and tasty meal together over zoom.

“Yeah. And I think it’s great that it’s so tailored to a university lifestyle, because it can be kind of overwhelming just to be told, “You need to eat healthy all the time, you need to get this much exercise a day, you need to get as much sleep a day, you need to do well in your studies.” But what does it actually look like if you’re on a university budget or you don’t have access to a gym, for example, or you don’t have that much experience with cooking or your studies and sleep and social life are in competition a lot of the time” – Food 4 The Brain participant, 2021

N.B. Two other courses – GRUNT, for student mood regulation and resilience; and Better Sleep; are currently being developed so no data were available for the semester 2 pilot.

Step 4. Treatment

In a new initiative in 2021, 4 provisional psychologists were embedded within the UQ Health Care (UQHC) service at St Lucia, one day a week as part of their semester-long internship practice. The aim of this part-placement was to help patients (i.e., students) access individual psychological treatment in a timely way as most private psychologists had long waiting lists, and similarly, to assist the GPs to reduce wait-times for psychology referrals.

‘So, I have heard that sometimes if there’s a time-sensitive issue or if you’re in a bit of a crisis, the wait times can be a bit difficult. You can book, but you may need to wait several weeks before anyone’s available to talk. And by then either maybe the problem has resolved itself, if it’s sort of a time-sensitive issue, or maybe it’s not the most effective timing for help by that point’

Evaluation of 2021 Pilot

We carried out a soft launch of the Sharper Minds package during 2021. Despite coinciding with periods of lockdown due to COVID-19, the pilot attracted 386 first year university students including 277 domestic students (Mean age = 20.81 years) and 109 international students (Mean age = 20.17 years). The students were enrolled in faculties across UQ, as shown in the table below.

Recruitment of students to Sharper Minds	n	%
Combination (student enrolled in > 1 faculty)	16	4.16
Health and Behavioural Sciences (HABS)	152	39.48
Humanities and Social Sciences (HASS)	41	10.65
Business, Economics and Law (BEL)	10	2.6
Engineering, Architecture, and IT (EAIT)	5	1.3
Medicine	33	8.57
Science	57	14.8
Other	71	18.44
Missing	1	0.2
TOTAL	386	100.0

Flow of students to Sharper Minds

The package was promoted to first year students in multiple ways, including posters around campus, presentations in large first year classes, the Psychology SONA research scheme, posts on UQ / Faculty / student social media sites and referrals from the UQ Health Care professionals. On the Sharper Minds website, students logged in to the UQ Authenticate system and could opt in to one of the components (see right of figure below).

Table 1. Sharper Minds Pilot 2021 - Participant characteristics

<i>Characteristic</i>	International Students (N=109)	Domestic Students (N= 277)
<i>Age (years)</i>	20.17 (1.81)	20.81 (6.68)
<i>Gender</i>		
Female	78%	74.7%
Male	20.2%	24.5%
Other	1.8%	0.7%
<i>Citizenship</i>		
Australian	-	73%
Chinese	39.4%	-
Hong Kong	10.0%	-
Dual-Citizens	0.9%	15.6%
Other	49.7%	11.4%
<i>Relationship Status</i>		
Single	71.6%	61.7%
Relationship (not cohabitating)	23.8%	24.2%
Cohabitating	4.6%	6.9%
Married	-	5.8%
Divorced	-	.7%
Other	-	.7%
<i>Living Situation</i>		
Living with family	82.2%	60.6%
Share-house	3.7%	15.7%
University College	.9%	10.9%
Shared student accom	3.7%	4.7%
Single student accom	2.8%	2.6%
Living alone	6.5%	5.5%

Sharper Minds Component	Number of international students who completed pre and post surveys	Number of domestic students who completed pre and post surveys
Control (surveys only)	30	79
App tracker	3	17
Tuned In course	25	22
Fit 4 Study course	3	20
Groups 4 Education course	4	17
Food for the Brain course	1	2
Individual psychology at UQ Health Care (St Lucia)*	22	21
TOTALS	88	178

*Patients seen for individual treatment at UQ Health Care were not required to participate in the evaluation, so the numbers are different in this table from other parts of the report.

Measures

A subset of the full set of measures will be reported here. They include:

- % Positive for mental health problems on the PsyCheck screener
- Depression (score out of 4 from the PsyCheck measure)
- Anxiety (score out of 4 from the PsyCheck measure)
- Somatic symptoms (score out of 4 from the PsyCheck measure)
- Short Warwick Edinburgh Mental Wellbeing Scale (scores range from 7 to 35)
- Number of (academic and general) causes of stress (out of 10)
- Number of COVID-19 causes of stress (out of 10)
- Loneliness (8 item UCLA loneliness scale; scores range from 8 to 32)
- Sense of belonging to University of QLD (1 to 5 rating)

Design and Analysis

The pilot had a non-randomised controlled design (students opted in to one of the available options so randomisation was not appropriate). The aim was to examine changes over time in the students who participated in any aspect of the Sharper Minds package (app tracker or one of the short courses; referred to as the **Intervention condition**) compared to those who completed surveys only (referred to as the **Control condition**). To optimise the analysis, data were pooled across these intervention components and across domestic and international students within each of the two conditions.

Results

% of students screening positive for mental health problems

The PsyCheck screener has 20 items asking respondents whether they have experienced each symptom over the past 30 days on a *Yes* = 1, *No* = 0 scale. Scores are summed to a total out of 20, with a value over 5 indicating a positive screen. From the start to the end of semester, the proportion of students screening positive for mental health issues in the Control condition did not change significantly (59% to 56%). However, the **proportion of students who engaged with the Sharper Minds package who screened positive decreased significantly from 68% to 50%.**

Depression

A depression score was computed by adding scores of 4 depression symptoms from the PsyCheck measure (feel unhappy, difficult to enjoy daily activities, unable to play a useful part in life, feel worthless) to give a score in the range of 0 to 4. Depression scores decreased significantly across the semester in both conditions, and **significantly greater reduction in depression symptoms was reported in the Intervention than the Control group** participants, see Figure 1.

Figure 1. The decline in depression symptoms across semester was significantly greater in students who engaged with the Sharper Minds package than for students in the Control condition.

Anxiety

Anxiety scores were computed by adding scores of 4 anxiety symptoms from the PsyCheck measure (easily frightened, hands shake, feel nervous, difficulty making decisions) to give a score in the range of 0 to 4. **Average Anxiety scores decreased significantly across the semester in both conditions**, see Figure 2.

Figure 2. Average anxiety scores decreased across semester in both the Control and the Intervention conditions.

Somatic symptoms

Somatic symptom scores were computed by adding scores of 4 symptoms from the PsyCheck measure (often have headaches, poor appetite, poor digestion, uncomfortable feelings in the stomach) to give a score in the range of 0 to 4. **Average Somatic scores decreased significantly across the semester in both conditions**, see Figure 3.

Figure 3. Average somatic scores decreased significantly across semester in both Intervention and Control conditions.

Mental Wellbeing

Scores on the short version of the Warwick Edinburgh Mental Wellbeing scale range from 7 to 35, with higher scores indicating better wellbeing. Published scores for people aged 16-24 years are around 23-24 (Ng Fat, Scholes, Boniface, Mindell, & Stewart-Brown, 2017). Our sample means were in that range. There was a significant interaction effect such that **wellbeing improved significantly more for the students involved in a Sharper Minds intervention** than for the students in the Control condition, see Figure 4.

Figure 4. Average scores on the short Warwick Edinburgh Mental Wellbeing scale for students in the control and intervention conditions, at the start and end of semesters in 2021.

Number of Academic and General Stressors

In the pre- survey, students reported they experienced stress from an average of 3 to 4 academic and general causes (out of a list of 10: speaking up in the class, presenting in class, group assignments/projects, studying for exams, personal financial issues, environment and climate change, trying to maintain a healthy lifestyle, issues with making friends at University, mental health issues, physical health issues). The **number of academic and general causes of stress decreased over the semester in both the control and intervention conditions**, see Figure 5.

Figure 5. Average number of academic and general causes of stress (out of 10) in the control and intervention conditions, at the start and end of semesters in 2021.

Number of COVID-19 Stressors

At the start of semester, students reported being stressed by between 3 and 4 COVID-19 causes (out of a list of 10: anxiety about being exposed to COVID19 infection, travel restrictions due to COVID19, avoiding crowded places due to risk of exposure to COVID19, required to self-isolate due to potential risk, study was disrupted, work was disrupted, financial issues due to COVID19, worry about family members being infected, reading reports about COVID-19, worry about running out of medical and other supplies / groceries). **The number of COVID-19 causes of stress decreased significantly over the semester in both the intervention and control groups, see Figure 6.**

Figure 6. Average number of COVID-19 related causes of stress (out of 10) in the control and intervention conditions, at the start and end of semesters in 2021.

Loneliness

Scores on the 8 item UCLA loneliness scale indicated that **students in the Intervention condition were significantly less lonely over time than their Control condition peers**, see Figure 7.

Figure 7. Loneliness did not change over time in the Control condition but significantly decreased over time in the Intervention participants.

Sense of Belonging at the University of QLD

University belonging was measured on a single item 'I feel a sense of belonging as a University of QLD student' rated on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. As shown in Figure 8 below, sense of belonging at UQ was just above the neutral point for students in both conditions and did not change significantly across semester.

Psychological Treatment

Between May and November 2021, **46 UQ students attended 156 psychology sessions** with provisional Psychologists. The mean number of sessions was 3.49 with students each attending between 1 and 6 sessions. There were 23 males and 19 females. An equal number of international (22) and domestic students (21) attended sessions.

Common presenting problems were **depression, anxiety, interpersonal conflict, academic stress, grief, and suicidal ideation**. Patients (students) reported: “feeling more in control of emotions and having greater insight to their presenting issues” and “feeling more resilient, having better tolerance for distress, and having higher self-efficacy for using adaptive coping strategies such as positive self-talk, breathing.”

Conclusions

The 2021 pilot of Sharper Minds indicated that this model of mental health awareness and early intervention is feasible. Students from across faculties engaged with various components of the package, and majority of the student feedback (example quotes in this report) was highly positive. Students who used the app tracker or completed one of the online courses benefited significantly in terms of depression, mental health and wellbeing, and loneliness. These results are very encouraging given that the ‘dose’ of each intervention is quite small. In addition to the **mental health service benefits**, there were substantial **teaching and research benefits** from the project.

The project provided supervised practice hours for:

- 15 Masters in Psychology students
- 2 Masters in Dietetics students

The Sharper Minds project also supported the research theses for:

- 1 Masters in Clinical Psychology student
- 21 Psychology Honours students
- 5 Exercise Physiology Honours students

Budget expenditure and Future Plans

Accounts provided in the appendix show that the strategic funding provided by the DVC(A) office was underspent, with \$20,000 returned. Very little of the funding provided by Allianz via the DVC(GE) office was spent, as we will need this to continue over into 2022. On current estimates, Sharper Minds costs around \$75,000 per year to operate effectively. We plan an expanded launch of the package in the lead up to Orientation week in February 2022, with all six online courses being offered and wider promotion of the Sharper Minds package through social media, Student Services and the Student Experience teams in the faculties.

References

1. Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry*, 20(4), 359.
2. McGorry, P. D., Purcell, R., Goldstone, S., & Amminger, G. P. (2011). Age of onset and timing of treatment for mental and substance use disorders: implications for preventive intervention strategies and models of care. *Current Opinion in Psychiatry*, 24(4), 301-306.
3. Dingle, G., & Han, R. (2021). *The Effect of COVID-19 on Australian University Students' Mental Health*. Preprint Report available at <https://t.co/864TzAOklx?amp=1>
4. Dingle, G., Vidas, D., & Hong, M. (2020). *Stress, Wellbeing, and Help Seeking in First Year University Students*. Preprint Report available at <https://doi.org/10.31234/osf.io/85scz>
5. Cage, E., Stock, M., Sharpington, A., Pitman, E., & Batchelor, R. (2020). Barriers to accessing support for mental health issues at university. *Studies in Higher Education*, 45(8), 1637-1649.
6. Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007b). Help-seeking and access to mental health care in a university student population. *Medical Care*, 594-601.
7. Hetrick, S. E., Robinson, J., Burge, E., et al. (2018). Youth codesign of a mobile phone app to facilitate self-monitoring and management of mood symptoms in young people with major depression, suicidal ideation, and self-harm. *JMIR Mental Health*, 5(1), e9.
8. Sundram, F., Hawken, S. J., Stasiak, K., et al. (2017). Tips and traps: lessons from codesigning a clinician e-monitoring tool for computerized cognitive behavioral therapy. *JMIR Mental Health*, 4(1), e5878.
9. Suhlmann, M., Sassenberg, K., Nagengast, B., & Trautwein, U. (2018). Belonging mediates effects of student-university fit on well-being, motivation, and dropout intention. *Social Psychology*.
10. Cornish, P. A., Berry, G., Benton, S., Barros-Gomes, P., Johnson, D., Ginsburg, R., Whelan, B., Fawcett, E., & Romano, V. (2017). Meeting the mental health needs of today's college student: Reinventing services through Stepped Care 2.0. *Psychological Services*, 14(4), 428.
11. McFerran, K. S., Garrido, S., O'Grady, L., Grocke, D., & Sawyer, S. M. (2015). Examining the relationship between self-reported mood management and music preferences of Australian teenagers. *Nordic Journal of Music Therapy*, 24(3), 187-203.
12. Papinczak, Z. E., Dingle, G. A., Stoyanov, S. R., Hides, L., & Zelenko, O. (2015). Young people's uses of music for well-being. *Journal of Youth Studies*, 18(9), 1119-1134.
13. Västfjäll, D., Juslin, P. N., & Hartig, T. (2012). Music, subjective wellbeing, and health: Västfjäll The role of everyday emotions. *Music, Health & Wellbeing*, 405-423.
14. Vidas, D., Larwood, J. L., Nelson, N. L., & Dingle, G. A. (2021). Music Listening as a Strategy for Managing COVID-19 Stress in First-Year University Students [Brief Research Report]. *Frontiers in Psychology*, 12(922).
15. Dingle, G. A., Hodges, J., & Kunde, A. (2016). Tuned in emotion regulation program using music listening: Effectiveness for adolescents in educational settings. *Frontiers in Psychology*, 7, 859.
16. Dingle, G. A., & Fay, C., (2017). Tuned In: The effectiveness for young adults of a group emotion regulation program using music listening. *Psychology of Music*, 45(4), 513-529.

17. Babaeer, L., Stylianou, M., Leveritt, M., & Gomersall, S. (2020). Physical activity, sedentary behavior and educational outcomes in university students: A systematic review. *Journal of American College Health*, 1-26.
18. deJonge, M. L., Omran, J., Faulkner, G. E., & Sabiston, C. M. (2020). University students' and clinicians' beliefs and attitudes towards physical activity for mental health. *Mental Health and Physical Activity*, 18, 100316.
19. Kwan, M. Y., Cairney, J., Faulkner, G. E., & Pullenayegum, E. E. (2012). Physical activity and other health-risk behaviors during the transition into early adulthood: a longitudinal cohort study. *American Journal of Preventive Medicine*, 42(1), 14-20.
20. López-Valenciano, A., Suárez-Iglesias, D., Sanchez-Lastra, M. A., & Ayán, C. (2021). Impact of COVID-19 Pandemic on University Students' Physical Activity Levels: An Early Systematic Review [Systematic Review]. *Frontiers in psychology*, 11(3787).
21. Haslam, C., Cruwys, T., Chang, M. X.-L., Bentley, S. V., Haslam, S. A., Dingle, G. A., & Jetten, J. (2019). GROUPS 4 HEALTH reduces loneliness and social anxiety in adults with psychological distress: Findings from a randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 87(9), 787.
22. Haslam, S. A., Haslam, C., Cruwys, T., Jetten, J., Bentley, S. V., Fong, P., & Steffens, N. K. (2021). Social identity makes group-based social connection possible: Implications for loneliness and mental health. *Current Opinion in Psychology*.
23. Steffens, N. K., LaRue, C. J., Haslam, C., Walter, Z. C., Cruwys, T., Munt, K. A., Haslam, S. A., Jetten, J., & Tarrant, M. (2021). Social identification-building interventions to improve health: a systematic review and meta-analysis. *Health Psychology Review*, 15(1), 85-112.
24. El Ansari, W., Adetunji, H., & Oskrochi, R. (2014). Food and mental health: relationship between food and perceived stress and depressive symptoms among university students in the United Kingdom. *Central European Journal of Public Health*, 22(2), 90-97.
25. Lassale, C., Batty, G. D., Baghdadli, A., Jacka, F., Sánchez-Villegas, A., Kivimäki, M., & Akbaraly, T. (2019). Healthy dietary indices and risk of depressive outcomes: asystematic review and meta-analysis of observational studies. *Molecular Psychiatry*, 24(7), 965-986.
26. Sogari, G., Velez-Argumedo, C., Gómez, M. I., & Mora, C. (2018). College students and eating habits: A study using an ecological model for healthy behavior. *Nutrients*, 10(12), 1823.

As the account records show, the majority of work was funded by strategic funding from the DVC(A)'s office, which paid for salary for the 0.4FTE Research Clinical Psychologist (Julie Hodges) and casual salaries for the Exercise Physiologists (Matthew Crear and Camilla Williams). Contract work was supplied by videographer Joshua Darrah, and interview transcription from Karina Kersh. Website design and development was supplied by Round House (Lynxos). Other items included participant vouchers and printing.

April to December / 617868 DVCA - Sharper Minds
Actuals / Other Expenditure:General Salaries

April to December / 617868 DVCA - Sharper Minds

Page 2 of 2: Transaction Details / By Account (Cons Sal)
Refreshed: 14 December 2021 by uqayang4

Most of the funding from Allianz via the DVC(Global Engagement) will be held over for the start of 2022 as no new funding has been obtained at this point. The amounts shown below were for research assistance (Dianna Vidas) and videography (Joshua Darrah).

2021 Transaction Details											
July to December / 618238 Allianz - Sharper Minds											
Actuals;Commitments / Other Expenditure;General Salaries											
Account	Account Description Salaries consolidated	Date	Generic Chart String	Type	Transaction Entity Description	Transaction ID	Transaction Description	FFT	Invoice Id	Invoice Date	Amount
601310	Salaries-General Casual	16/07/2021	5021230-01-608-21-618238	SAL	Vidas, D (2202844)	0146170	Pay Fortnight 16/07/2021	VIDAS			649.55
	Salaries-General Casual	13/08/2021	5021230-01-608-21-618238	SAL	Vidas, D (2202844)	0146170	Pay Fortnight 13/08/2021	VIDAS			216.53
	Salaries-General Casual	22/10/2021	5021230-01-608-21-618238	SAL	Vidas, D (2202844)	0146170	Pay Fortnight 22/10/2021	VIDAS			378.91
	Salaries-General Casual	19/11/2021	5021230-01-608-21-618238	SAL	Vidas, D (2202844)	0146170	Pay Fortnight 19/11/2021	VIDAS			243.58
	Salaries-General Casual	03/12/2021	5021230-01-608-21-618238	SAL	Vidas, D (2202844)	0146170	Pay Fortnight 03/12/2021	VIDAS			323.39
								Salaries-General Casual			
704195	Other Marketing & Promo Costs	22/11/2021	5021230-01-608-21-618238	APO*	Joshua Darrah	2120008656	Video production for the Brain & Grunt - Sharper Minds project				2,786.00
							Other Marketing & Promo Costs				2,786.00
Total	Transactions										4,597.96