A randomised control trial of Uprise for Australian university students: Final Report for Medibank Better Health Foundation

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Executive Summary

The Uprise program is an existing online program that incorporates cognitive behavioural and mindfulness strategies to help identify and retrain unhelpful thoughts; to identify personal values and set goals that align with them; to let go of unhelpful thoughts and be more present; and to develop skills to manage stress. While the Uprise program has been used extensively in workplace settings, it's suitability for use in university settings to support student mental health is unknown.

This trial funded by Medibank Better Health Foundation is the first study to investigate the acceptability, feasibility, safety, and efficacy of the Uprise program for Australian university students.

Research Summary

Seventy university students from ten Australian universities across the nation (Victoria, NSW, ACT, and Queensland) were recruited. After completing an initial mental health assessment, participants were randomly assigned to either complete the Uprise program immediately (treatment group), or to wait for one month (waitlist group) and complete a second assessment prior to commencing the program.

The assessment included measures of mental health symptoms, holistic wellbeing, and psychological processes. The two groups of participants were compared on change in each of these outcomes to identify whether Uprise lead to an improvement relative to no treatment.

Key findings

The outcomes of the project indicated that following completion of the Uprise program participants used less maladaptive psychological processes (e.g. avoidance, rumination, worry) and reported less severe symptoms of social anxiety and loneliness. These benefits were sustained over the subsequent 3 months, in addition to improved psychological wellbeing and quality of life and decreased negative affect. In line with these results, themes identified from the analysis of participant interviews reflected that the positive impact of Uprise was related to participants feeling that they had a toolkit of strategies to cope with difficult situations and that they felt a sense of connectedness with the coaching and video aspects of the program. Additionally, participants described a sense of being challenged by the program to confront difficult personal experiences, and that this was beneficial for personal growth.

Future Directions

Although Uprise did not lead to a reduction in mental health symptoms (except social anxiety), it appears to have holistic benefits for students in improving psychological wellbeing and feelings of social connectedness, as well as upskilling students with positive coping skills to deal with stressors and difficult situations. Future investigations should determine whether these effects can be replicated in larger samples of university students and particularly amongst university students with moderate to severe levels of psychological distress or psychiatric diagnoses.

Progress Report – Project Milestones

This is the final project report and contains full outcomes from the trial. Data collection and final data analysis have now been completed. A manuscript of the final trial outcomes is currently in preparation for publication.

Research objective	Key achievements
Ethics application The application for ethics will be submitted in order to facilitate the targeted recruitment date of Semester 2, 2018. It will be submitted June 1 2018.	Ethics application was submitted to SUHREC 30th May 2018. Initial response from ethics committee was received 20th of June with additional queries to be addressed in the application. Final approval was delayed due to additional amendments being made to the project including changes to the recruitment and assessment process. Final ethics approval was received 12th September 2018.
Staff recruitment Research assistant (or postdoctoral researcher) that is clinically trained will be hired in August 2018. Two Medibank interns, one in communication and marketing, and psychology will be recruited in order to facilitate Semester 2 recruitment targets.	Postdoctoral researcher, who is also a clinical psychology registrar, was recruited in August 2018. The postdoctoral researcher commenced work on the project from September 3rd 2018. Two Medibank interns were recruited to assist with the project in Semester 2 2018. Unfortunately only one intern was able to be recruited to the project in Semester 1 2019.
Participant recruitment Online and print advertising will be distributed across different locations throughout Melbourne, Australia. Initial contact will be made by the participant via email, phone, or via a contact form on the Uprise landing page. Up to seventy students will be recruited and enrolled in a randomised control trial with two groups of equal size: a treatment group, and a waitlist control (*n* = 35 each). All participants will complete 3 assessment sessions (baseline, post-treatment, and follow up).	70 participants were recruited to the study. The final participant was recruited 12th June 2019. Between 1st November 2018 and 12th June 2019, 162 potential participants were screened for the project.
Baseline assessments All participants will complete an assessment online survey, estimated to take 1-2 hours. The battery of questionnaires will include a series of self-report measures.	Of the 70 participants recruited, 61 participants completed the baseline assessment, with the final assessment completed on 17th June 2019.

Treatment group Participants in the treatment group will engage with Uprise for 4 weeks (28 days). Uprise activities will be tailored to the user's needs based on a wellbeing check tool to determine risk levels. Participants will then complete four core modules (Mindset, Personal Values, Mindfulness, Stress Management) and three additional advanced modules (Perspective Taking, Advanced Mindset, Improving Sleep). They will also be offered access to chat and telephone based support from trained psychologists and counsellors.	29 participants were randomised to the treatment group. From this group, 20 participants completed the full intervention and the end-of-treatment assessment.
Waitlist control Participants assigned to the waitlist control group will be asked to complete a second baseline assessment 4 weeks after their first baseline assessment. They will complete the same list of questionnaires (excluding the demographic questions) online. Participants will then receive access to the Uprise app.	32 participants were randomised to the waitlist group. From this group, 31 participants completed the assessment at the end of the waitlist period.
Post treatment assessment Both treatment and waitlist participants will then complete an end-of-treatment assessment where they will complete the same scales, excluding the demographic information. To ascertain further how the intervention went, the researcher will conduct a semi-structured interview on the participant's experience with the intervention. The interview will be recorded and later transcribed for analysis. Assessment interviews will be conducted by the researcher in person at Swinburne, via video conference, or via telephone.	42 participants completed the end of treatment assessment (20 from the treatment group and 22 from the waitlist group).
Follow up assessment Both treatment and waitlist participants will complete a follow up assessment which will include completing the same list of questionnaires (excluding the demographic questions, intervention satisfaction and semi-structured interview) either online or at Swinburne, 1 to 3 months (depending on the ability to retain the student) after completing the end-of-treatment interview.	38 participants completed the follow up assessment (18 from the treatment group and 20 from the waitlist group).

Publications

1. Harrington, KD, Eres, R, Lim, MH. The Uprise online program for mental health and wellbeing in Australian university students: study protocol for randomised control trial. Trials. (under review).

2. Harrington, KD, Eres, R, Lim, MH. A waitlist-controlled trial on the Uprise online program for mental health and wellbeing in Australian university students. Journal of Medical Internet Research. (in preparation).

Introduction to Uprise Program

The Uprise program is an existing online program that incorporates cognitive behavioural and mindfulness strategies to help identify and retrain unhelpful thoughts; to identify personal values and set goals that align with them; to let go of unhelpful thoughts and be more present; and to develop skills to manage stress.

The Uprise program involves four core modules that consist of a short introductory video and a series of 1 to 6 additional videos or exercises. Module length ranges from 6 to 28 minutes. The four core modules are: i) mindset, ii) personal values, iii) mindfulness, and iv) stress management. Uprise also includes four additional optional modules that participants could choose to complete, if they wished. This includes helping others, perspective taking, advanced mindset, and improving sleep. An overview of all eight modules is provided in Table 1 below. Within the program, there were links to 30-minute telephone or online coaching sessions with a trained psychologist or counsellor that could be accessed at any point during the Uprise program. The program was available via a smartphone application and online website.

Table 1. Outline of Uprise Module Content

Module	Content
	Core Modules
1. Mindset	Identifying unhelpful thinking styles and changing unhelpful thoughts.
2. Personal Values	Identifying values system, making behavioural choices based on values system, scheduling activities.
3. Mindfulness	Developing mindfulness skills to pay attention to and observe thoughts instead of trying to control and change them.
4. Stress Management	Developing stress-reduction and relaxation breathing skills.
	Optional Modules
1. Helping others	Skills for managing relationships with mental health in mind.
2. Perspective Taking	Learning to understand the perspectives of others.
3. Advanced Mindset	Advanced skills in retraining thinking related to stress, guilt, metacognition and beliefs.
4. Improving Sleep	Strategies to improve sleep habits.
5. Advanced Mindfulness	Advanced skills in awareness and mindfulness.

Project Aims

1. To evaluate the acceptability, feasibility, and safety of the Uprise program for Australian university students.
2. To evaluate the efficacy of Uprise in Australian university students.
3. To investigate the holistic impact of the Uprise program by evaluating the influence of the Uprise program on self-reported physical health, wellbeing, loneliness, and quality of life of university students.
4. To investigate whether Uprise influences the psychological processes that the program is designed to change.

Participant Recruitment

Participants were recruited via social media advertising campaign, flyers on campus (Swinburne University Hawthorn campus), targeted emails to Swinburne students who were at risk of dropping out due to personal difficulties, and word of mouth. Seventy students from 10 Australian universities were recruited to the trial and 38 completed all aspects of the trial. Figure 1 shows the trial design and flow of participants through each stage of the study.

The demographic characteristics of the recruited sample are shown in Table 2. There were no differences in demographic characteristics between the treatment and waitlist groups at the time of enrolment.

Assessments

Participants completed assessments online via the Qualtrics online survey platform. Assessment timepoints were baseline, post waitlist, end of treatment, and three-month follow up. Participants also completed a brief pre- and post-program survey on the Uprise platform, which included the World Health Organisation (Five) Wellbeing Index (WHO-5) and a modified Sheehan Disability Scale (SDS).

The outcome measures included in the assessment survey were specifically selected to measure aspects of mental health and psychological processes that were targeted by the Uprise program. Additional measures of wellbeing, quality of life, loneliness, and physical health were included to determine the holistic impact of the program. Table 3 provides a summary of all outcome measures included in the assessment survey.

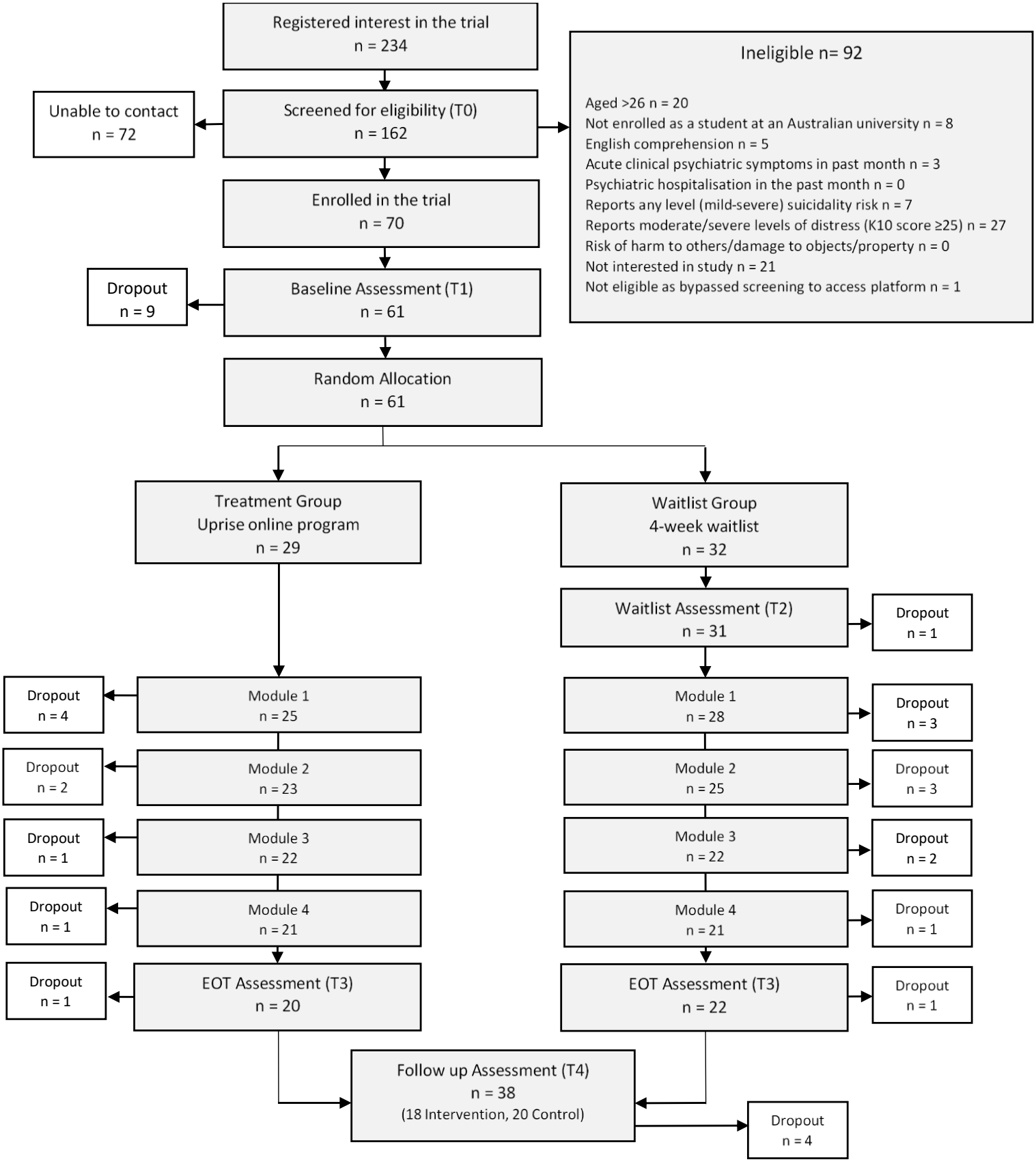

Figure 1. Consolidated Standards of Reporting Trials (CONSORT) diagram showing trial design

Table 2. Descriptive statistics of sample demographic characteristics

	All Participants		Waitlist Group		Treatment Group		p
	Mean	SD	Mean	SD	Mean	SD	
Age	20.92	2.33	21.10	2.51	20.72	2.15	0.54
Current year in program	2.10	1.17	1.97	1.10	2.24	1.24	0.37
Number of subjects currently undertaking	4.36	3.67	4.79	4.59	3.89	2.29	0.35
Years of schooling	14.14	2.32	14.13	2.69	14.14	1.90	0.99
Hours worked in employment per week	12.24	11.45	9.37	11.97	36.24	10.51	0.10
Number of people co-habiting with	2.54	1.49	2.83	1.39	5.34	1.55	0.13
Social Network (LSNS-12)	33.38	8.45	33.59	8.45	33.17	8.60	0.85
PANAS-Trait Negative Affect	9.88	3.47	10.45	3.41	9.31	3.51	0.22
PANAS-Trait Positive Affect	16.17	3.74	16.03	3.95	16.31	3.59	0.78
	%	n	%	n	%	n	p
%Female	59.32	35.00	53.33	16.00	65.52	19.00	0.51
%Undergraduate student	83.05	49.00	76.67	23.00	89.66	26.00	0.30
%International student							0.32
Yes	20.34	12.00	13.33	4.00	27.59	8.00	
No	61.02	36.00	63.33	19.00	58.62	17.00	
Not answered	18.64	11.00	23.33	7.00	13.79	4.00	
Current work status							0.07
Part-time	54.24	32.00	40.00	12.00	68.97	20.00	
Full-time	5.08	3.00	6.67	2.00	3.45	1.00	
Not working	40.68	24.00	53.33	16.00	27.59	8.00	
Orientation							1.00
Heterosexual	74.58	44.00	73.33	22.00	75.86	22.00	
Homosexual	5.08	3.00	3.33	1.00	6.90	2.00	
Bisexual	15.25	9.00	16.67	5.00	13.79	4.00	
Other	1.69	1.00	3.33	1.00	0.00	0.00	
Prefer not to say	3.39	2.00	3.33	1.00	3.45	1.00	
Relationship status							1.00
Single	79.66	47.00	80.00	24.00	79.31	23.00	
Defacto/Co-habiting	18.64	11.00	16.67	5.00	20.69	6.00	
Married	1.69	1.00	3.33	1.00	0.00	0.00	
Household status							0.06
Living alone	8.47	5.00	3.33	1.00	13.79	4.00	
Living with housemates	30.51	18.00	23.33	7.00	37.93	11.00	
Living with family/partner	47.46	28.00	50.00	15.00	44.83	13.00	
Living with relatives/extended family	13.56	8.00	23.33	7.00	3.45	1.00	
Living in university	0.00	0.00	0.00	0.00	0.00	0.00	
Religion							0.83
Roman Catholicism	10.17	6.00	6.67	2.00	13.79	4.00	
Protestant	8.47	5.00	13.33	4.00	3.45	1.00	
Nonreligious/Secular	25.42	15.00	20.00	6.00	31.03	9.00	
Islam	6.78	4.00	6.67	2.00	6.90	2.00	
Buddhism	1.69	1.00	0.00	0.00	3.45	1.00	
Agnostic	13.56	8.00	16.67	5.00	10.34	3.00	
Atheist	15.25	9.00	16.67	5.00	13.79	4.00	
Hinduism	10.17	6.00	10.00	3.00	10.34	3.00	
Not listed	8.47	5.00	10.00	3.00	6.90	2.00	
Ethnicity							0.39
Asian Australian or Asian	44.07	26.00	40.00	12.00	48.28	14.00	
African Australian	1.69	1.00	3.33	1.00	0.00	0.00	
Hispanic	1.69	1.00	3.33	1.00	0.00	0.00	
Multiracial, Biracial	6.78	4.00	10.00	3.00	3.45	1.00	
White	42.37	25.00	36.67	11.00	48.28	14.00	
Pacific Islander	3.39	2.00	6.67	2.00	0.00	0.00	

**p<.05 indicates statistical significance*

Table 3. Summary of outcome measures included in trial assessment surveys.

	Measures	Possible Range of Scores
Primary Outcomes		
Depression	Centre for Epidemiological Studies – Depression (CES-D)	0-60
	Depression Anxiety Stress Scale (DASS21) - Depression Subscale	0-21
Anxiety	Social Interaction Anxiety Scale (SIAS)	0-80
	Depression Anxiety Stress Scale (DASS21) - Anxiety Subscale	0-21
Stress/Distress	Depression Anxiety Stress Scale (DASS21) - Stress Subscale	0-21
	Kessler Psychological Distress Scale (K10)	10-50
	Modified Sheehan Disability Scale (SDS)	0-7
Secondary Outcomes		
Wellbeing and Quality of Life	World Health Organisation- Five Well-Being Index (WHO-5)	0-25
	Psychological Well-Being Scale (PWB)	42-252
	Assessment of Quality of Life – 8 Dimensions (AQoL-8D)	0-1
Loneliness	UCLA Loneliness Scale - Version 3 (UCLA-LS)	20-70
Physical health	Short Form Health Survey - Question 1 (SF-12)	1-5
	Physical Health Questionnaire (PHQ)	14-98
Emotion Regulation, Cognitive, and Mindfulness Processes	Positive and Negative Affect Schedule –State (PANAS-State)	5-25
	Emotion Regulation Questionnaire (ERQ)	Reappraisal subscale 6-42, Suppression subscale 4-28
	Cognitive Behavioural Processes Questionnaire (CBP-Q)	0-120
	Five Facet Mindfulness Questionnaire (FFMQ)	39-195

Project Outcomes

Acceptability

A self-report scale created by Uprise to measure participant satisfaction with the program was used to determine the acceptability of the program to participants. Participants rated out of 10 how satisfied they were with each of the program modules and the coaching calls, as well as how likely they were to recommend Uprise to friends or family. Scores greater than 5 out of 10 were defined as indicating that aspect of the program to be acceptable to participants. Table 4 shows the ratings for acceptability of each aspect of the program across the entire sample. There were no statistically significant differences between the treatment and waitlist groups for these ratings. All aspects of the program had a mean rating of >7, indicating high levels of acceptability of all aspects of the program to participants.

Table 4. Mean and standard deviation for acceptability ratings for each aspect of the Uprise program.

	Mean	Standard Deviation	Possible Range
Likelihood to recommend to friends or family	7.86	1.85	0-10
Satisfaction with module 1 (mindset)	7.90	1.50	0-10
Satisfaction with module 2 (values)	7.41	1.55	0-10
Satisfaction with module 3 (mindfulness)	7.21	2.19	0-10
Satisfaction with module 4 (stress management)	7.52	2.01	0-10
Satisfaction with coaching	7.38	2.43	0-10

Feasibility

Feasibility was assessed by the attrition rate across both groups and the proportion of participants that completed the four core Uprise modules within the 6-week intervention period. Table 5 shows the average number of modules and coaching calls completed by participants, the average number of days spent on the platform, as well as the proportion of participants who opted-in for coaching calls, the attrition rate, and the proportion of participants who completed the program within 6-weeks.

Participants accessed the platform for a mean of 27.39 days, which equates to one month and is line with the 1-module per week format of the Uprise program. Uptake of coaching was high (86%), with the majority of students opting-in for coaching.

The attrition rate from the program was 30.5%, which is consistent with rates for other similar interventions. This included all participants who registered for an account on the Uprise platform and did not complete all 4 of the core program modules. Of those who completed all 4 of the core program modules, 75% completed within 6-weeks. There were no statistically significant differences between the treatment and waitlist group for attrition or timely completion rates. Together these results indicate that the Uprise program is feasible for use with university students.

Table 5. Uptake of the Uprise program including module and coaching completion, attrition and completion rates.

	Mean	Standard Deviation	Possible Range
Number of modules completed	3.21	1.46	0-4
Number of coaching calls	1.30	1.61	0-4
Number of days on the platform	27.39	17.97	N/A
	%	**n**	
%Opted in for coaching	86.44	51.00	N/A
% Attrition	30.51	18.00	N/A
% Completed within 6 weeks (of those who completed 4 core modules)	75.61	31.00	N/A

Safety

Safety was determined according to the number of adverse events occurring across the trial period. In the context of the trial, a serious adverse event was defined as an event that lead to participant death, that was life-threatening, required inpatient hospitalisation, or resulted in persistent significant disability/incapacity in accordance with the National Statement on Ethical Conduct in Human Research. There were no adverse events reported for the trial.

Efficacy

Short Term Treatment Effects

To assess acute treatment effects, multilevel linear mixed effects models (MLM) were used to determine change in each of the outcomes from baseline (T1) to post-waitlist/end-of-treatment (T2), and to compare between groups.

There were no statistically significant differences between groups in change on any of the outcome measures. However, relative to the waitlist group, the treatment group showed statistically non-significant trends towards improvement in cognitive behavioural processes, social anxiety, and loneliness.

A secondary analysis was conducted to adjust for baseline differences between the groups in depression symptom severity and use of suppression emotion regulation strategies. After adjusting for these additional covariates in the models, the trends for improvement in the treatment group were statistically significant. Figures 2 to 4 show the time by group interaction from each of these models. These results indicate that the treatment group were using less maladaptive cognitive and behavioural strategies to cope with difficulties, as well as experiencing less severe symptoms of social anxiety and loneliness, following the intervention.

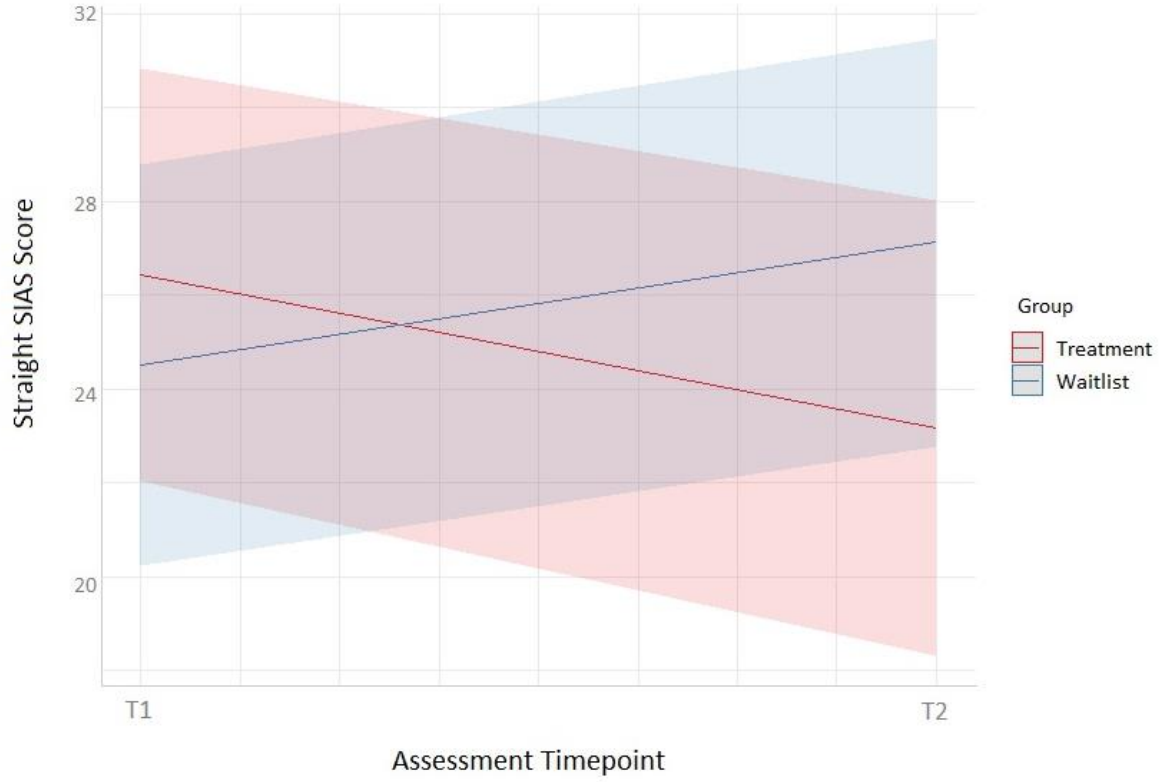

Figure 2. Change in social anxiety (Straight SIAS score) from baseline (T1) to post-waitlist/end-of-treatment (T2) in each of the groups. Shading around each line is 95% confidence interval for change in that group.

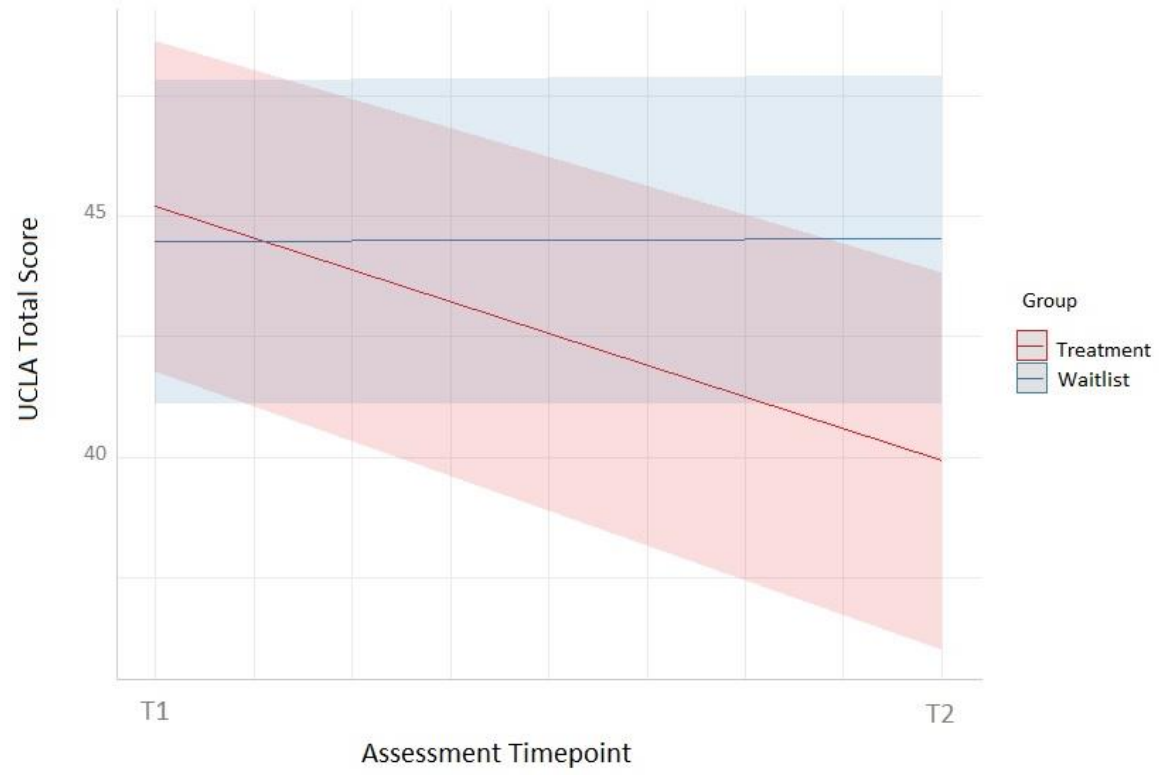

Figure 3. Change in loneliness (UCLA score) from baseline (T1) to post-waitlist/end-of-treatment (T2) in each of the groups. Shading around each line is 95% confidence interval for change in that group.

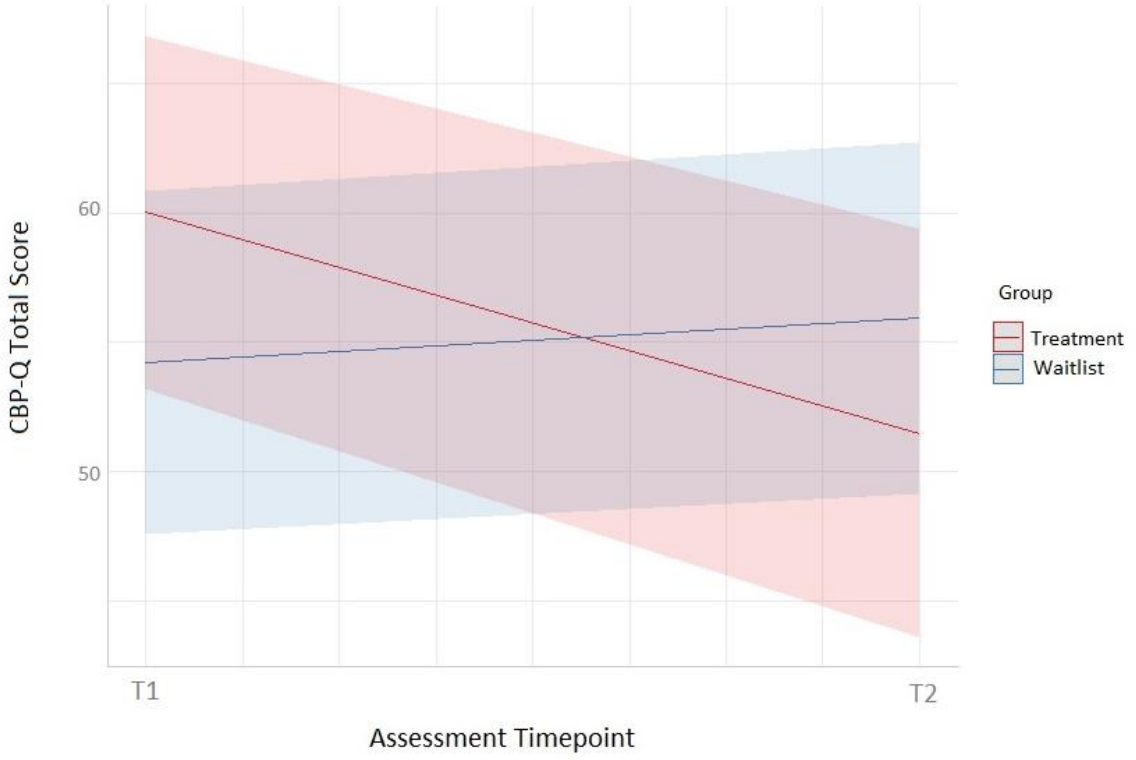

Figure 4. Change in cognitive behavioural processes (CBP-Q score) from baseline (T1) to post-waitlist/end-of-treatment (T2) in each of the groups. Shading around each line is 95% confidence interval for change in that group.

Long Term Treatment Effects

To assess long-term treatment effects, the trajectory of change in outcomes from baseline to three-month follow-up was examined in the treatment group only. This analysis could not be conducted comparing both groups as the waitlist period was constrained to only 4-weeks due to ethical requirements and the timeframe of the trial. Table 6 shows descriptive statistics for all participants and each of the groups at each assessment timepoint.

Table 6. Mean and standard deviation (SD) for all participants and each of the groups at each assessment timepoint

	All Participants		Waitlist Group		Treatment Group	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Baseline						
CES-D	14.22	9.97	16.90	11.12	11.36	7.78
DASS - Depression	4.02	2.96	4.62	2.88	3.41	2.97
SIAS	25.03	12.95	26.86	14.25	23.21	11.47
DASS - Anxiety	3.28	3.25	3.38	2.76	3.17	3.73
DASS- Stress	5.14	3.43	5.34	3.53	4.93	3.38
K10	16.83	3.80	17.77	4.12	15.86	3.23
Modified SDS*	1.00	7.00	N/A	N/A	0.00	6.00
Waitlist Assessment						
CES-D			17.93	12.55		
DASS - Depression			5.14	3.82		
SIAS			28.79	15.74		
DASS - Anxiety			3.71	3.68		
DASS- Stress			6.54	3.84		
K10			20.50	6.75		
Modified SDS*			1.00	7.00		
End of Treatment Assessment						
CES-D	13.28	11.97	14.95	13.96	11.53	9.52
DASS - Depression	3.20	2.99	2.95	2.82	3.45	3.20
SIAS	20.23	11.59	20.95	10.49	19.50	12.83
DASS - Anxiety	2.83	3.25	2.50	2.93	3.15	3.59
DASS- Stress	4.60	3.14	4.80	3.46	4.40	2.85
K10	16.95	5.62	16.80	5.25	17.11	6.14
Modified SDS*	0.00	6.00	0.00	6.00	0.00	3.00
3-month Follow Up Assessment						
CES-D	12.09	10.80	14.47	12.62	9.83	8.51
DASS - Depression	3.03	3.00	3.12	2.71	2.94	3.34
SIAS	18.63	11.65	22.00	12.70	15.44	9.88
DASS - Anxiety	2.82	3.04	3.12	2.89	2.53	3.24
DASS- Stress	4.41	3.29	5.00	3.76	3.82	2.74
K10	16.06	5.81	16.41	4.49	15.69	7.09
Modified SDS*	N/A – Only collected pre- and post-intervention					

**median and range shown due to non-normal data distribution*

CES-D = Centre for Epidemiological Studies – Depression; DASS = Depression, Anxiety, Stress Scale;SIAS = Social Interaction Anxiety Scale; K10 = Kessler Psychological Distress Scale, SDS = Sheehan Disability Scale

At three-month follow-up the intervention group showed statistically significant improvement (relative to baseline) in cognitive behavioural processes, social anxiety, loneliness, psychological wellbeing, quality of life, and state negative affect. These effects remained statistically significant even after adjustment for age, gender, international student status, number of Uprise modules completed, number of coaching calls completed, and number of days accessing the platform, with the exception of cognitive behavioural process which was reduced to a non-significant trend.

Qualitative Interview Outcomes

Participants spoke about the stress they experienced not only in relation to their studies, but juggling work with studies, and also the hardships related to being an international student.

- 1069: "I always have a lot negative thoughts in my mind, like I'm not good enough, will I able to do my job properly? Because I'm new to **[unintelligible 00:04:08]**, so everything is completely new to me."

Participants positively endorsed the program in relation to their wellbeing.

- 1013: "I found it super helpful and very beneficial. It's five weeks in and I was already feeling the stress from uni, and doing these Uprise modules and stuff was just super helpful."

There four themes that reflect the positive impact of Uprise, in particular the 'how' and 'why' participants found it useful. They are **a) Toolkit, b) Choice, c) Challenge and d) Connection.**

Toolkit

Participants found the strategies in the program helpful, and felt as though they had built a toolkit of practical exercises they could use.

- 1045: "provides really helpful and useful techniques to apply in your real life.".
- 1033: "A lot more motivated and felt like I had some more tools under my belt"
- 1013: "I feel like I have resources up my sleeve basically. Even if I don't have continuous access to, for instance, the videos and stuff, I've memorized them in a sense that I know even the simple breathing exercises of three by three by three. That itself is something that I can remind myself of and then do it. That by itself is just helpful and has helped me manage with the stressful environment of uni and stuff."
- 1020: "They are mental tools that I now have at my disposable (sic)"
- 1049: "but some things that I felt specifically applied to me I have put into practice and I can notice a difference in the way that I interact with others and how I feel every day."

Choice

Participants enjoyed the flexibility afforded to them when using the program. All participants described using the program at the end of their day after they had finished work and/or university. Some participants preferred to use the program on their laptop because the screen was bigger and therefore easier to use. Others enjoyed using the program on their phone during their commute and when they did not have wifi:

- 1027: “because you have your phone, you have your headphones, everyone has those two things with them all the time. If you want to train anywhere, you can, you're free if you like doing it.”

One participant spoke about using different platforms depending on the module:

- 1047: “There was some that were good on my laptop and then there's some that would be better on a phone lying down with ear plugs in. I think there's different uses for different of the modules”

Participants enjoyed the option of having a coach available even if they didn’t speak to one, and participants differed on whether they chose to speak to their coach via email or phone. Participants used the email function when they felt more comfortable to type than speak, and this also afforded more privacy when using the program around others. Participants found that speaking to the coach more them feel more accountable to the program and were provided with more personalised strategies.

Participants that were engaged with a psychologist discussed that although they did not use coaching, it was helpful to know that the option was available.

- 1013: “I didn't use it but I think if I needed to, it was good to know that it was there. There probably would have been times that I probably could have or should have used it but I just didn't. I see a psychologist at Headspace, so I was using that instead, I suppose but if I didn't have that option, then I probably would have taken advantage of those.”

Challenge:

Participants spoke about Uprise encouraging them to confront difficult personal experiences, and that from this challenge came growth.

- 1069: Uprise helped me out to get out of my comfort zone and start doing new things, and start learning new things.
- 1013: There’s certain things that you have in your mind, but then as soon as you have to actually write them out and put them into the world, it makes them real. I think addressing certain issues, which you need to address…recognizing them is a bit difficult. It was for me. I'm sure it would be for other people as well, but once it was done, I felt the weight lifted off my shoulders. I was like, "That's okay. It's gone now."
- 1013: Then I would be like, "Okay, well there are options here, so I can use them", but because I already had that I felt like I didn't need to use them

Connection/Belonging:

Many of the participants were international students that felt homesick, and they found the coaching and video aspects of the program provided a sense of connectedness.

- 1003: When you're feeling alone or when you feel like nothing is happening your way, those videos are like some close people is giving me an advice of what can be done.
- 1027 (about the videos): Otherwise, maybe sometimes programs would have a monotone voice... but if it's more human, even if it's like some mistakes in saying sentences and stuff, it just feels more good because it's like a real person that's talking to you and not just a device.
- 1000 (about the coaching): “It’s cool to be able to talk to someone and you just chat”
- One participant spoke about how the content of the program had encouraged them to deepen their existing family connections. 1049: “This is why I went back to the first module…because one of my thoughts was that our relationship would always just be like this because a) because she's in New Zealand; and b) because she is much older and we would run out of things to talk about. Then I proved that that was wrong. Now I've been talking to my sister more and it's fine.”

Platform Recommendations

Participants provided a series of recommendations to improve the Uprise program for use with university students specifically. These included:

- Participants reported forgetting to use Uprise and many suggested including a notification feature for prompting/reminding.
- Participants suggested including a feature that encouraged progression through the app, e.g., gamification.
- Participants requested more student-centred examples in the program as some of the content did not apply to a student audience.
- Participants discussed technical difficulties including difficulties loading the videos, signing in, viewing their results, and a coach missing a scheduled appointment.
- Other positive feedback included participants endorsing the lay out, the content and length of videos, and that way the content of the modules flowed.
- Participants suggested that an app version of the program might be useful.

Future Directions

The findings from this trial provide preliminary evidence for the acceptability, feasibility, safety, and efficacy of the Uprise program for Australian university students. There are several caveats to be considered: this was a pilot trial with a small sample of university students, who did not have clinical (moderate to severe) levels of mental health symptoms. Thus, it is important to determine whether these findings can be replicated in a larger trial and for university students with more severe levels of mental health symptoms.

There were also several risks to the project (detailed p.18) related to low staff resourcing and running the trial across two separate teams (Swinburne and Uprise). It would be beneficial for future studies to be run within a single team in order to minimise risks and allow for greater control and precision within the trial. Ensuring the research team staff are all clinically trained in mental health or psychology will also be essential for further trials, particularly for trials involving students with more severe mental health concerns.

Project Issues and Risks

There were several issues and risks to the project that are worth noting as they have impacted on the project timeline. However, all issues have been resolved by the research team and should not impact on the validity of the outcomes of the trial.

- **Under resourcing of staff:** In order to cope with the workload for the project within the prescribed timeframe, postdoctoral research fellow hours were increased from 0.6EFT to 0.8EFT, and 64.25 additional hours for a Senior Research Assistant were allocated. This was partly due to the inability to recruit a suitable second intern to work on the project for Semester 1, 2019. However, even with a second intern additional postdoctoral and research assistant hours would have been required. Shortfalls of this funding amounting to $48,170.70 was met by Dr Lim.

- **Short timeframe for RCT:** The usual timeframe for a small scale RCT of this type with 70 respondents randomised across two arms would be approximately 2 years.

- **Reliance on interns for participant recruitment:** Participant recruitment involved mental health screening, including taking of mental health history and risk assessment. This task was not suitable to the level of skill and experience of undergraduate psychology students recruited for the intern role.

- **Delays in starting the trial:** The commencement of the project was delayed due to amendments to the recruitment process at the request of Uprise, and the Uprise platform not being finalised until October, 2018.

- **Unauthorised contact with trial participants by Uprise product development team:** Due to multiple instances of unauthorised contact, participant recruitment was required to be put on hold while a formal report was made to SUHREC and trial processes were reviewed by the ethics committee to ensure no future breaches.

- **Changes to the Uprise platform:** During the trial period, the format of the on-boarding process and matching of participants to coaches was changed. This led to technical difficulties for multiple participants including not being able to access the program modules. These difficulties may have influenced participant engagement with the platform and thus the outcomes of the trial.

- **Delays in provision of data from Uprise:** Initial request for trial data collected on the Uprise platform (metadata, pre- and post-program survey data) was made 24th July, 2019. Final dataset was provided from Uprise to Swinburne 4th December, 2019. Several delays in provision of data occurred due to data having been lost and incomplete or inaccurate datasets having been provided.

- **Data not collected by Uprise as per trial protocol:** One of the primary outcome measures for the trial – The Perceived Stress Scale, was not collected on the Uprise platform as per the project protocol. Thus, this outcome is not included in the trial results.

Budgetary Reporting

	Budget	Actual	Variance ($)
Expenditure (itemised per approved budget)			
Salaries	$61,281.80	$109,452.50	-$48,170.70
Uprise costs for coaching services	$27,000	$27,000	$0.00
Consumable & other project costs (Participant reimbursement, phone recording device)	$16,382	$7,164	$9,218.00
Advertising & Marketing (social media advertisements)	$6,000	$2,309.79	$3,690.21
Specialised equipment costs (e.g. purchase or access to specialised infrastructure)	Provided in kind by FHAD		
Administration & project management	Provided in kind by Medibank interns		
TOTAL	$110,663.80	$145,926.29	-$35,262.49
SURPLUS/DEFICIT			

Note: Budget includes GST