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Delivering Resilience: Embedding a Resilience Building Module into First-Year Curriculum

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Abstract

Starting university is challenging. Students require resilience to face the inevitable challenges of university life, yet many may not be equipped with the strategies they need. In this research, we explored changes in resilience following the delivery of a resilience building module within a core first-year university course. Psychology students at the University of South Australia completed the adapted Resilience at Work Scale at two separate time points and undertook a resilience building module. Pre- and post-scores were obtained for students' resilience (n = 205; n = 100 respectively); overall and components. On average, students had good levels of resilience at commencement, yet scores increased significantly across most components following completion of the module. Additionally, students who reported implementing resilience strategies experienced significantly higher score increases than their peers who did not. These findings hold important implications for staff across universities in relation to embedding resilience building programs into curriculum.

***Keywords**:* Wellbeing; higher education; student support; retention.

The Challenge of the First Year of University

The first year of university can be a challenging and emotional time for students, where they are required to balance university commitments with competing demands (Eberle & Hobrecht, 2021; Kahu & Nelson, 2018). As many as one in five students in Australian universities will drop out by the end of their first year (Shipley & Walker, 2019), with many complex and inter-related reasons contributing to these decisions (Kift, 2015). Of note for this current study are the high levels of stress that are commonly reported within university cohorts (Stallman et al., 2019). Indeed, stress was reported at the top of the list of reasons that undergraduate students consider early withdrawal from their study (Universities Australia, 2020). Increasingly, researchers are calling on universities to recognise the importance of their roles in preparing students for study (Kift, 2015), to provide first-year students with the best opportunity for both a smooth transition (van Rooij et al., 2018) and successful completion. Student support may occur in a range of ways, including the provision of tailored curriculum to equip students with the skills and knowledge to be able to bounce back from unexpected and adverse experiences. Given the prevalence of stress in university cohorts, and the associated impact on retention noted above, this study sets out to explore how students might be better equipped to deal with the known, and unknown, challenges of their university studies and how they can be supported to become more resilient.

Resilience for Traversing Challenging Experiences

Resilience is often described as a multifaceted construct, a capability, or as a dynamic process. Resilience is underpinned by numerous assets and resources which come together to provide an individual with the skills, experience and perspective to be able to respond effectively to adverse situations in their life and environment and proactively prepare for future challenges (McEwen, 2014). Effectively dealing with challenges, stress, and setbacks contributes to a range of conceptualisations of

student success, including not only academic achievement but wellbeing, health and social benefits (Holdsworth et al., 2018), highlighting the importance of equipping students with these skills early on in their university studies. Incorporating resilience building into first-year university programs would not only support students through their transition into study, but prepare them for the later stages of study, and even their careers beyond university (Holdsworth et al., 2018; Mueller, 2021).

Can Resilience Skills be Taught to University Students?

Resilience skills can be taught and developed (Schultz et al., 2019). In a recent scoping review Brewer et al. (2019) identified a number of resilience enhancement interventions that have been conducted in universities. Interventions differed in various ways, such as timeframe or frequency of the training/intervention, the approach or strategy guiding the intervention, the mode of delivery (face-to-face vs online), as well as differences in the definition or conceptualisation of resilience. For example, one study that utilised an online delivery method trialled an intervention that was relatively short, spanning five days, and involved online diaries for reflection on challenges students experienced. One group was asked to focus on what was challenging, while the other group focussed on how they overcame their challenges (Lohner & Aprea, 2021). An increase in resilience, measured using the Brief Resilience Scale (Smith et al., 2008), was achieved in both groups. In contrast, a mindfulness-based intervention was explored using a randomised-controlled trial methodology aiming to reduce students stress levels and increase resilience (Galante et al., 2018). Again, a positive change in resilience amongst those students who completed the intervention was observed.

When developing resilience building programs, tasks that focus on developing multiple aspects of resilience should be a focal point (Robbins et al., 2018). Adversity and challenges come in many different forms and students need to be able to draw upon psychological, social, cultural and environmental resources to lead to better outcomes (Brewer et al., 2019). While the many individual aspects of building resilience are becoming apparent in the literature, how to successfully deliver a comprehensive program to support the development of the full range of resilience aspects for first-year university students is less clear. Stallman (2011) investigated the feasibility of embedding a multi-aspect resilience building seminar within a university curriculum. The 90-minute seminar was well received by the cohort of first-year psychology students, with many endorsing the session as useful, both directly after attending, and within the two weeks that followed using reflection diaries. However, whether these effects lasted longer than those two weeks (e.g., the duration of a semester), and whether students were implementing resilience strategies around high-stress times (e.g., assessment deadlines and exams), is worthy of further exploration.

Considering that resilience is made up of many different skills and attributes (McEwen, 2014), other resilience building techniques would need to accompany these approaches to provide students with a more rounded and complete suite. Brewer et al. (2019) investigated resilience in higher education students and recommended an intervention to target all aspects that foster resilience, including emotional intelligence, mindfulness and coping strategies, alongside environmental strategies such as social connections and exposure to challenges. Transition Pedagogy also stresses the importance of embedding valuable skills within the first-year curriculum, avoiding one-off and isolated examples of good practice (Kift, 2015).

Building Resilience with the Most Impact

Following on from the recommendations of Brewer et al. (2019), the approach in the current study used a broader conceptualisation of resilience. This study also moved beyond a single point of resilience training or intervention by embedding a resilience building module within the first-year curriculum. Resilience building content was delivered to students within a first-year course with the content spanning several weeks, focusing on resilience concepts to provide students with an opportunity to develop resilience coping strategies. The Resilience at Work Scale (R@W Scale; Winwood et al., 2013) was utilised and is a realistic and practical measure of workplace resilience (Malik & Garg, 2018). The R@W Scale has been adapted for other settings (McEwen & Boyd, 2018) and in this instance was adapted to a university setting by scale creator Kathryn McEwen and the Course Coordinator by updating references of ‘workplace’ to ‘university’ (e.g., ‘When things go wrong at work (university), it usually tends to overshadow the other parts of my life’). The scale provides both an overall score and scores for more targeted components that will be explained further below.

Aims

To support the ongoing development and implementation of resilience building into the university curriculum, this study aimed to explore the efficacy of a resilience building module embedded into first-year psychology curriculum. As such, the study was guided by the following research questions:

RQ1. What are students' resilience scores (overall and component) when they commence university?

RQ2. Are there changes in students' resilience scores (overall and component) between the start and end of the semester?

RQ3. Does the implementation of resilience coping strategies improve overall resilience scores?

Methods

Participants

In the first semester of 2022, first-year students enrolled in a core psychology course at the University of South Australia participated in two rounds of data collection for the study (approval from the Human Research Ethics Committee of the University of South Australia – 203271). Participants' socio-demographic information is summarised in Table 1 below. The samples from time points one and two made up 75% and 37% of the total student cohort enrolled in the course respectively.

Table 1

Socio-demographic Characteristics for Participant Samples at Time 1 and Time 2 (count)

Socio-demographic characteristics		Time 1	Time 2
All students		205	100
Age			
	<21 years old	147	73
	21+ years old	58	27
Gender			
	Female	155	77
	Male	45	21
	Other[a]	5	2

Note. [a] Other includes 'non-binary/third gender' and 'prefer not to say' responses.

Materials and Measures

Online questionnaire

An online questionnaire, hosted on QualtricsXM software (Version 2022), was used in this study and consisted of several socio-demographic questions and the adapted R@W Scale (Winwood et al., 2013). The same information was collected at two time points across the semester with two additional questions included at the second time point.

The R@W Scale consists of statements comprising a wide range of possible behaviours, beliefs, attitudes and feelings towards resilience (Winwood et al., 2013). Tested by Winwood et al. (2013) and re-tested by Malik and Garg (2018) and Sanhokwe and Takawira (2022), the scale is described as a realistic measure of workplace resilience featuring adequate psychometric features, including a Cronbach α of 0.81 (Malik & Garg, 2018). The scale was adapted to a university setting by updating references from work to university, similar to the approach taken by Turner et al. (2017) who developed a 19-item scale, validated within a university population (Cronbach α = 0.81). The 25-item adapted R@W Scale used in this study comprises of seven resilience components that interrelate and contribute to overall resilience. The components are: *Living Authentically*

(e.g., I have important core values that I hold fast to in my university life), *Finding your Calling* (e.g., The studies that I do fit well with my personal values and beliefs), *Maintaining Perspective* (e.g., Nothing at university ever really 'fazes me' for long), *Managing Stress* (e.g., I have developed some reliable ways to relax when I'm under pressure at university), *Interacting Cooperatively* (e.g., I believe in giving help to my peers, as well as asking for it), *Staying Healthy* (e.g., I am careful about eating well and healthily), and *Building Networks* (e.g., I have friends at university I can rely on to support me when I need it). Each item was scored on a 7-point Likert-style scale (Strongly disagree = 0, Strongly agree = 6) and a high overall score indicated a high level of resilience. Two items were reverse coded, Item 9 (When things go wrong at university, it usually tends to overshadow the other parts of my life) and Item 11 (Negative people at university tend to pull me down; Winwood et al., 2013). The quantitative data obtained with this scale was used to capture individual student resilience scores to examine differences between pre-test and post-test scores.

Two additional questions were included in the second round of data collection:

1. Did you use any of the resilience strategies you identified in your action plan over the course of the semester? Please answer Yes or No.
2. If you answered yes to the previous question, did the completion of this course and creation of the action plan contribute to you using resilience strategies? Please answer Yes, No or N/A, and provide any supporting comments regarding your answer.

Resilience at Work Scale Workbook

The R@W Scale Workbook was used by students across the semester to support their learning of key concepts and included a range of guided activities they completed both in and out of class. Information included a clear definition of the construct of resilience, important background information around how to become more resilient, while also dispelling resilience myths (McEwen, 2014). The workbook also provided information on the individual components and explained how to develop strategies to build resilience, e.g., values reflection, determining strengths, assessing reactivity and creating belonging. The workbook required students to integrate their strategies into an action plan (McEwen, 2014). Regular topics covered in the course (e.g., stress management and positivity) complemented and reinforced the learnings in the workbook. The first assignment for the course was a reflective journal in which students reflected on the concepts and theories learnt in class, considering how they may apply to their personal or professional lives. This assignment was designed to reinforce the learning covered in the resilience focussed classes and required students to engage more meaningfully with the resilience module content. Students' submissions were not included as data in this study, nor were the research team involved in marking or providing feedback.

Data Collection

This explorative, cross-sectional study employed a quantitative, pre-test-post-test, within-subjects, non-experimental design to compare students' resilience scores obtained using the adapted R@W Scale (Winwood et al., 2013). Students' resilience scores were obtained before and after the completion of modules designed to build resilience. The study also utilised a quasi-experimental design to compare resilience level changes in students who had self-reported implementing resilience coping strategies, or not. While participation in the study was voluntary, completion of the questionnaire and participation in the workshops were part of the taught curriculum of the course. Course grades were not impacted on by the decision to participate (or not), and both recruitment and data collection were conducted by a member of the research team with no involvement in teaching the course.

Students completed the online questionnaire, accessed via a link on the online course site, in Week 2 (Time 1; Figure 1). The questionnaire took approximately ten minutes to complete. The adapted R@W Scale returned an overall resilience score, as well as scores relating to the individual components. Students received their overall and individual component scores on the final screen of the questionnaire, which they recorded for interpretation in their Week 2 tutorial. During Week 2 and 3, students worked through the R@W Scale Workbook (McEwen, 2014) under the guidance of the course instructors, with at least one activity from each resilience component completed in class. Many of the tasks involved self-reflection and goal setting as relevant to the individual circumstances and component scores of each student. As such, students varied in how much of the activities they completed in class; however, all students explored the same broad topics and activities each week as shown in Figure 1. Teaching staff may also have referred students back to the Workbook activities at later points in the course during class, but this was most often in response to specific student needs or discussions; not as a planned part of the curriculum.

Finally, the students were invited to complete the adapted R@W questionnaire again in Week 10 (Time 2; Figure 1) and spent some time interpreting and reflecting on their score differences in class to understand how their resilience changed after completing the resilience building module.

Figure 1

Timeline of the Course including Data Collection Timepoints, Semester 1

Data Analysis

All statistical analyses were conducted using IBM SPSS Statistics (Version 28). Independent samples *t*-tests were used to explore between-group differences in baseline (Time 1) resilience scores for Age, Strategy Implementation and Attrition. Given the low numbers in the 'non-binary/other' Gender group, there were not enough data to perform sufficiently precise analyses to determine whether significant differences between groups existed. Paired-samples *t*-tests and an independent samples *t*-test were used to explore the changes to resilience scores between Time 1 and Time 2. Normality and linearity of scores were assessed and outliers were screened for. Three outliers were identified within the *Living Authentically* (LA) component and, even after removal, the LA component values for skewness and kurtosis were still outside of the acceptable ranges (Kline, 2011). Therefore, the non-parametric Wilcoxon signed-rank test was used to analyse the LA component data. The value for Cronbach's Alpha for the 25-item survey for this sample at Time 1 was $\alpha = .84$; and Time 2, $\alpha = .88$.

Results

Resilience Levels at Commencement of University

Students' overall scores on the adapted R@W Scale at commencement were on the higher end of scoring ($M = 100.03$, $SD = 15.58$), with a possible range of 0-150. Individual component scores also fell on the higher end of the scoring range as shown in Table 2 below. Baseline scores, both overall and component, were then compared between Age groups, as per the socio-demographic data collected at Time 1. Students <21 years old were found to have significantly higher scores in the *Building Networks* component ($p < .05$), while their 21+ year old peers scored more strongly in the *Staying Healthy* component ($p < .05$). No other significant differences in baseline scores were found.

Table 2

Students' Baseline (Time 1) Scores on the Adapted Resilience at Work Scale; Whole Cohort, and split by Age and Gender Groups

	Whole cohort	Age		Gender		
	Mean (SD) *n* = 205	<21 years *n* = 147	21+ years *n* = 58	Female *n* = 155	Male *n* = 45	Other [a] *n* = 5
Overall Score	100.03 (15.58)	99.38 (15.50)	101.69 (15.80)	99.61 (14.40)	102.67 (17.80)	89.40 (26.17)
Living Authentically[b]	17.13 (3.66)	17.15 (3.2)	17.09 (4.66)	16.94 (3.70)	18.16 (3.10)	14.00 (4.95)
Finding your Calling[b]	19.49 (3.33)	19.22 (3.06)	20.16 (3.88)	19.74 (3.29)	18.73 (3.29)	18.60 (4.45)
Maintaining Perspective[b]	12.37 (3.88)	12.09 (3.87)	13.07 (3.84)	12.17 (3.76)	13.18 (4.06)	11.20 (5.63)
Managing Stress[b]	16.11 (4.32)	15.97 (4.27)	16.47 (4.44)	15.99 (4.33)	16.62 (4.18)	15.20 (5.54)
Interacting Cooperatively[c]	12.40 (3.27)	12.41 (3.09)	12.36 (3.75)	12.40 (3.14)	12.58 (3.59)	10.80 (4.60)
Staying Healthy[c]	12.07 (4.41)	**11.51** (4.38)	**13.48** (4.18)	11.97 (4.20)	13.18 (4.37)	5.20 (5.36)
Building Networks[c]	10.47 (3.60)	**11.03** (3.38)	**9.07** (3.78)	10.42 (3.50)	10.22 (3.83)	14.40 (2.70)

Note. [a] Other includes 'non-binary/third gender' & 'prefer not to say' responses.
[b] Component score range 0-24.
[c] Component score range 0-18, Significance represented in boldface $p < .05$.

Baseline resilience scores were also explored for a sub-set of the Time 1 student population, based on groups that only became apparent at Time 2: students who did/did not employ resilience strategies; and students who did/did not complete the study. For those students who reported implementing resilience strategies during the semester, only scores in one component, *Building Networks* (M = 11.08, SD = 3.43), was significantly higher than their peers (M = 9.32, SD = 3.77; p = .05). No significant differences were observed between the overall or component scores for students who completed the study as compared to those who did not.

Changes in Resilience Scores

Statistical analyses were conducted to determine whether there was a significant mean increase between students' Time 1 and Time 2 scores on the adapted R@W Scale, both overall and within the individual components (Table 3). Overall scale scores increased at Time 2, as did all component scores except for *Interacting Cooperatively* and *Staying Healthy*.

Table 3

Students' scores on the adapted Resilience at Work Scale; Time 1 (T1) and Time 2 (T2) Paired-samples t-test and Wilcoxon Signed-Rank Test (n = 100)

	T1 Mean (SD)	T2 Mean (SD)	t(99)	Cohen's d[a]	*z*[b]
Overall Score [c]	100.71 (14.54)	106.75 (17.28)	**4.24*** **	.387	
Finding your Calling	19.43 (2.96)	20.16 (3.04)	**2.69** **	.243	
Maintaining Perspective	12.42 (3.86)	13.71 (4.34)	**2.86** **	.314	
Managing Stress	16.27 (4.52)	17.86 (4.33)	**3.72*** **	.360	
Interacting Cooperatively	12.72 (3.03)	12.53 (3.16)	.643	.06	
Staying Healthy	12.24 (4.21)	12.34 (4.37)	.336	.02	
Building Networks	10.54 (3.61)	12.30 (3.96)	**4.94*** **	.464	
Living Authentically [c]	17.70 (2.56)	18.26 (3.32)			**-2.51***

Note. Data are expressed as Means (Standard Deviations), with t-values, Significance (p), Cohen's d and z-scores.
[a] Effect size reported as 0.2 (small), 0.5 (medium), and 0.8 (large) as determined by Cohen (1988).
[b] Living Authentically scores did not meet the assumption of normality, a Wilcoxon signed-rank test was conducted.
[c] Overall and Living Authentically analyses included 97 participants after removal of outliers.
Significance represented in boldface; *p<.05, **p<.01, ***p<.001.

Improvements after Implementing Resilience Coping Strategies

The change in resilience scores from Time 1 to Time 2 for students who implemented resilience strategies were then compared to the change in scores for student who *did not* implement resilience strategies (n = 66 and 31 respectively). An independent samples *t*-test revealed a significantly larger difference ($t(95) = 2.2$; p=.017 (one-tailed); Cohen's d = 0.45) in the change in overall resilience scores of students who did implement resilience strategies (M = 8.11, SD = 12.81) compared to students who did not (M = 1.65, SD = 15.64).

Thirty-five open text responses were received, with 97% acknowledging that the completion of the course and creation of the action plan contributed to the use of resilience strategies; 3% of responses suggested the opposite.

Discussion

This study explored resilience in first-year university students and changes in resilience following the delivery of an embedded resilience building module and related topics in a core first-year psychology course. Results showed that students began their university journey with a good level of resilience and became more resilient over the course of the semester. Students reported increases in all resilience components except for *Interacting Cooperatively* and *Staying Healthy*. Furthermore, students who implemented resilience strategies had higher increases in resilience levels than those who did not implement strategies.

Reviewing the results of the individual resilience components at commencement, *Finding your Calling* and *Living Authentically* were the highest rated components among the cohort. These results suggest that the students had a good level of emotional awareness and felt that they had a purpose and sense of belonging. Indeed, a high level of resilience in these areas indicates students felt a sense of connection to their choice of degree (McEwen, 2014). Resilience components *Managing Stress*, *Interacting Cooperatively* and *Staying Healthy* followed soon thereafter, showing a potential trend towards students taking time to prepare themselves for university, both mentally and physically. *Maintaining Perspective* and *Building Networks* were the lowest rated components. These lower scores may be due to the wording of the scale questions for these components, which included, "When things go wrong at university, it usually tends to overshadow the other parts of my life" (*Maintaining Perspective*) and "I have a strong and reliable network of supportive colleagues at university" (*Building Networks*). Many students may not have yet experienced these situations given the first round of data collection occurred in

the commencing weeks of their university studies (Kift, 2015). When exploring between-group differences in baseline scores, differences were found in only the *Building Networks* component scores for both the Strategy Implementation and Age groups. Students who later reported implementing resilience strategies had higher scores in this particular component compared to their peers who did not implement strategies. Younger students (<21 years) also had higher scores than their mature-aged peers for *Building Networks*. This difference in scores between age groups may be due, in part, to the nature of the questions in the *Building Networks* component. Two of the three questions in the adapted R@W scale relate to having support from friends/colleagues at university to draw on in times of need, yet, making close connections in university settings can be a challenge for mature-aged students as they are often in the minority (van Rhijn et. al., 2015). Some of the younger cohort may have also had peers from high school commencing university with them, leading to a stronger sense of already having a network around them.

A range of resilience enhancement interventions have been implemented in university settings demonstrating resilience can be taught (Brewer et al., 2019). However, many of these interventions have been stand-alone sessions delivered outside of the classroom (e.g., Damásio et al., 2015; Geraghty et al., 2010) rather than embedded into the curriculum. Embedding resilience programs into the curriculum aligns with first-year transition pedagogy (Kift, 2015) and has a number of other advantages for the university, staff and for students. For example, embedding programs into the curriculum is cost effective, does not require any extra time from students and may potentially reduce burden on other resources such as university counsellors (Young et al., 2022). Furthermore, the actual score a student receives on the scale is not as important or useful as the opportunity to explore and reflect on each component. The students in this study were provided with multiple opportunities to reflect on their own resilience and potential strategies in their tutorial classes across the semester. These reflective tasks required students to plan for how they would apply their learnings each week in their personal and/or professional lives. Asking students to complete the adapted R@W scale early in the course can also inform the focus of in-class activities. For example, if results show students are lower in some areas of resilience as compared to others, educators can adjust lesson plans to focus more on activities relating to the components requiring attention.

A strength of this study was the multi-component approach taken to explore and develop student resilience. Focusing on only one area at a time, such as mindfulness (e.g., Galante et al., 2018) or positive psychology (Delany et al., 2015) may not equip the students for the wide range of adversity and future challenges they will likely experience at university. Through using the adapted R@W model, students were asked to reflect on each of the seven interrelated components. For example, the *Finding your Calling* component required students to reflect on how their studies align with their core values. The adapted R@W model also focuses on behaviours which are modifiable, encouraging students to consider specific strategies that can be implemented in their lives. For example, to increase their sense of belonging, students were asked to consider activities they could do to feel more connected to their studies, such as volunteering or joining a professional association related to psychology. Areas such as purpose and connectedness are also domains that appear in the Five Senses of Success Framework (Lizzio, 2006) developed to facilitate student success in the first year of university. Encouraging students to be aware of the resources available to them and to implement strategies aligns with recommendations of Brewer et al. (2019) in which they suggest students approach their university experience as an opportunity for growth and develop the capacity to draw on resources from a range of areas (e.g., psychological, social, cultural and environmental). Comments received from students in the free text question at Time 2 provided insight into student opinion on the benefits of the embedded resilience building. Such comments included “It definitely showed me where I was struggling and what areas of myself, I could work on” (Participant 13); “I gain more knowledge about different things or tools that I can use to develop my resilient and maintain my wellbeing” (Participant 10); and “Main reason I think was just being made aware of it so throughout the semester I made an effort to employ some strategies” (Participant 30).

This study was explorative in nature, acting as a starting block to understand resilience in first-year university students. As such, a causal relationship between the completion of the resilience building module and an increase in student resilience could not be confirmed, as a control group was not used due to the course delivery logistics and the curriculum design. To explore causality, future studies could investigate multiple cohorts of students across different institutions to compare differences in resilience levels in student groups that complete the resilience building module against those who do not. The adapted R@W scale collects self-reported data, meaning the data has potential to contain some degree of social desirability bias, a common risk with self-report measures (Caputo, 2017). Finally, there were 50% fewer responses on the final questionnaire as compared to the first time point. Although there were no differences in baseline scores between the students that completed the study and those that did not, there is a real possibility that only students who possessed higher resilience levels at the end of the semester were the ones still attending class, and therefore completing the survey at the second time point (opportunity to complete the Time 2 survey in-class was provided). Future studies may explore whether differences exist between the resilience of students who stop attending classes and those who continue to attend. Indeed, recent research has demonstrated that differences exist in student academic performance across student groups who attend classes consistently

compared to those who do not (Khan, 2022); perhaps the development of resilience skills follows a similar trajectory. Understanding this non-attending demographic is essential to determine how to effectively deliver resilience building programs to first-year students more broadly.

Conclusion

Embedding resilience building within a first-year course provides a safe learning space for students to develop techniques to cope with the range of adversity faced not only in their first year, but their subsequent years of study and lives more broadly. The current study demonstrated that embedding resilience building modules into the curriculum of a first-year course shows promise for developing and improving resilience in university students. Unfortunately, many students did not complete the scale at the second time point, which also coincided with declines in class attendance. To more effectively support all students in developing resilience skills and attributes, future work needs to grow our understanding of how we can better support those students who stopped attending classes. Ultimately, resilience building should be considered a core skill by universities, and for staff to look for opportunities both within and outside of the curriculum to support students to have the best start possible.

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References

Brewer, M. L., van Kessel, G., Sanderson, B., Naumann, F., Lane, M., Reubenson, A., & Carter, A. (2019). Resilience in higher education students: A scoping review. *Higher Education Research and Development*, *38*(6), 1105-1120. https://doi.org/10.1080/07294360.2019.1626810

Caputo, A. (2017). Social desirability bias in self-reported well-being measures: Evidence from an online survey. *Universitas Psychologica*, *16*(2), 245-255. https://doi.org/10.11144/Javeriana.upsy16-2.sdsw

Damásio, B. F., Golart, J. B., & Koller, S. H. (2015). Attrition rates in a Brazilian longitudinal survey on positive psychology: Empirical and methodological considerations. *Psico-USF*, *20*, 219-228. https://doi.org/10.1590/1413-82712015200203

Delany, C., Miller, K. J., El-Ansary, D., Remedios, L., Hosseini, A., & McLeod, S. (2015). Replacing stressful challenges with positive coping strategies: A resilience program for clinical placement learning. *Advances in Health Sciences Education*, *20*, 1303-1324. https://doi.org/10.1007/s10459-015-9603-3

Eberle, J., & Hobrecht, J. (2021). The lonely struggle with autonomy: A case study of first-year university students' experiences during emergency online teaching. *Computers in Human Behavior*, *121*, 106804. https://doi.org/10.1016/j.chb.2021.106804

Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., Lathia, N., Howarth, E., & Jones, P. B. (2018). A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): A pragmatic randomised controlled trial. *Lancet Public Health*, *3*(2), e72-e81. https://doi.org/10.1016/S2468-2667(17)30231-1

Geraghty, A. W., Wood, A. M., & Hyland, M. E. (2010). Attrition from self-directed interventions: Investigating the relationship between psychological predictors, intervention content and dropout from a body dissatisfaction intervention. *Social Science & Medicine*, *71*(1), 30-37. https://doi.org/10.1016/j.socscimed.2010.03.007

Holdsworth, S., Turner, M., & Scott-Young, C. M. (2018). Not drowning, waving. Resilience and university: A student perspective. *Studies in Higher Education (Dorchester-on-Thames)*, *43*(11), 1837-1853. https://doi.org/10.1080/03075079.2017.1284193

Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research and Development*, *37*(1), 58-71. https://doi.org/10.1080/07294360.2017.1344197

Khan, R. N. (2022). Attendance matters: Student performance and attitudes. *International Journal of Innovation in Science and Mathematics Education*, *30*(4). https://doi.org/10.30722/IJISME.30.04.004

Kift, S. (2015). A decade of transition pedagogy: A quantum leap in conceptualising the first- year experience. *HERDSA Review of Higher Education*, *2*(1), 51-86.

Kline, R. B. (2011). *Principles and practice of structural equation modeling.* The Guilford Press.

Lizzio, A. (2006). *Designing an orientation and transition strategy for commencing students.* A conceptual summary of research and practice. First Year Experience Project. Brisbane, Australia: Griffith University.

Lohner, M., & Aprea, C. (2021). The resilience journal: Exploring the potential of journal interventions to promote resilience in university students. *Frontiers in Psychology*, *12*, 1-12. https://doi.org/10.3389/fpsyg.2021.702683

Malik, P., & Garg, P. (2018). Psychometric testing of the resilience at work scale using Indian sample. *Vikalpa*, *43*(2), 77-91. https://doi.org/10.1177/0256090918773922

McEwen, K. (2014). *Coaching guide: Building resilience using the resilience at work scale*. http://workingwithresilience.com.au/rw-accreditation

McEwen, K., & Boyd, C. M. (2018). A measure of team resilience: Developing the resilience at work team scale. *Journal of Occupational and Environmental Medicine*, *60*(3), 258-272. https://doi.org/10.1097/JOM.0000000000001223

Mueller, T. (2021). Development and testing of the university student resilience scale. *Journal of American College Health*, 1-11. https://doi.org/10.1080/07448481.2021.1909050

Robbins, A., Kaye, E., & Catling, J. (2018). Predictors of student resilience in higher education. *Psychology Teaching Review*, *24*(1), 44-52.

Sanhokwe, H., & Takawira, S. (2022). Appreciating resilience at work: Psychometric assessment, measurement, and practical implications. *Cogent Psychology*, *9*(1), 2052620. https://doi.org/10.1080/23311908.2022.2052620

Schultz, T., Shoobridge, J., Harvey, G., Carter, L., & Kitson, A. (2019). Building capacity for change: Evaluation of an organisation-wide leadership development program. *Australian Health Review*, *43*(3), 335-344. https://doi.org/10.1071/AH17158

Shipley, B., & Walker, I. (2019). 'Here comes the drop: University drop out rates and increasing student retention through education. https://youthsense.com.au/wp-content/uploads/2019/11/Here-Comes-The-Drop-Universities-Report-2019-Year13-YouthSense.pdf

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioural Medicine*, *15*(3), 194-200. https://doi.org/10.1080/10705500802222972

Stallman, H. M. (2011). Embedding resilience within the tertiary curriculum: A feasibility study. *Higher Education Research and Development*, *30*(2), 121-133. https://doi.org/10.1080/07294360.2010.509763

Stallman, H. M., Ohan, J. L., & Chiera, B. (2019). Reducing distress in university students: A randomised control trial of two online interventions. *Australian Psychologist*, *54*(2), 125-131. https://doi.org/ 10.1111/ap.12375

Turner, M., Holdsworth, S., & Scott-Young, C. M. (2017). Resilience at university: The development and testing of a new measure. *Higher Education Research and Development*, *36*(2), 386-400. https://doi.org/10.1080/07294360.2016.1185398

Universities Australia. (2020). *2020 Higher education facts and figures*. https://www.universitiesaustralia.edu.au/wp-content/uploads/2020/11/200917-HE-Facts-and-Figures-2020.pdf

van Rhijn, T. M., Lero, D. S., Bridge, K., & Fritz, V. A. (2015). Unmet needs: Challenges to success from the perspectives of mature university students. *Canadian Journal for the Study of Adult Education*, *28*(1), 29-47. https://cjsae.library.dal.ca/index.php/cjsae/article/view/4704

van Rooij, E., Jansen, E., & van de Grift, W. (2018). First-year university students' academic success: The importance of academic adjustment. *European Journal of Psychology of Education*, *33*(4), 749-767. https://doi.org/10.1007/s10212-017-0347-8

Winwood, P. C., Colon, R., & McEwen, K. (2013). A practical measure of workplace resilience. *Journal of Occupational and Environmental Medicine*, *55*(10), 1205-1212. https://doi.org/10.1097/jom.0b013e3182a2a60a

Young, T., Macinnes, S., Jarden, A., & Colla, R. (2022). The impact of a wellbeing program imbedded in university classes: The importance of valuing happiness, baseline wellbeing and practice frequency. *Studies in Higher Education*, *47*(4), 751-770. https://doi.org/10.1080/03075079.2020.1793932

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