

THE WELLBEING
of ARCHITECTS
culture, identity
+ practice.



The Wellbeing of Architects
2023 Student Survey,
Primary Report



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1 Executive Summary

The results from the 2023 survey revealed that the wellbeing of people studying architecture in Australia remains a significant concern, with student wellbeing having declined since 2021.

- Personal wellbeing of architecture students surveyed in 2023 was much lower than Australian population norms and has decreased slightly since our survey in 2021. This is especially the case for their sense of future security and personal health. Better personal wellbeing was associated with having a better study-life balance, feeling supported at home, or having more positive relationships on campus.
- Survey respondents reported experiencing a high level of psychological distress and this is the most notable and concerning change since our 2021 survey. There was an increase in the percentage of students who reported moderate to severe levels of psychological distress.
- About two-thirds of respondents to both the 2021 and 2023 survey reported that their studies had negatively affected their wellbeing. The aspects of study had the greatest impact on student wellbeing were the end of semesters and the final year of education (stages of study), design (subject areas), group work, studio, and public presentations (study processes), as well as the competitive culture among students and the clarity of assessment (study program).
- More than half of the respondents said they had poor financial security which was associated with poor personal wellbeing and higher levels of psychological distress and burnout. The percentage of students who experienced financial security in 2023 is higher than 2021.

Student perceptions of university life remained much the same as reported in the 2021 survey.

- They had positive perceptions of campus climate and the level of support they received from friends and family for their studies. They also tended to be satisfied that their needs for autonomy, competence, and relatedness at university were being met.
- Their perceptions of the level of institutional support they received were relatively neutral and were rated lower than the level of support they received from family and friends.
- Fewer than half of the students were satisfied regarding the quality of their education.

There were few substantial changes in other aspects of university life such as study practices.

- Sacrificing sleep for study at least a few nights a week was still a common practice.
- Students were still struggling to achieve a healthy study-life balance. In particular, fewer than half reported managing their time well or felt that they had control of their time and responses for these items were broadly consistent with the 2021 survey.
- Although, a greater percentage of students reported developing plans and sticking to them indicating that they were trying to plan their time more effectively with less time on study.

Overall, students were eager to work hard and achieve high standards in their studies and hoped to achieve success in their future careers.

- Respondents had relatively high aspirations for their career but were equivocal about their sense of identity with respect to being part of the architectural community. They also had a healthy sense of perfectionism with a balance between perfectionistic strivings and concerns.
- Compared to 2021, students had lower levels of career optimism, particularly their levels of excitement and inspiration towards their career.

The themes arising from the open-ended comments supported the quantitative findings, particularly those around issues regarding study-life balance and financial security which were seen to have a negative impact on student wellbeing.

- Study-life balance was seen as a challenging issue and managing the course load alongside work and home life was highlighted as an issue that had a negative impact. Study demands were also seen by some to reduce their capacity to engage in health-related practices.
- The cost-of-living crisis threatened respondents financial security, and in some cases, meant that respondents had to spend more time in paid work to cover the costs associated with secure housing and daily living.

Those who responded to the comments described several approaches to improving their wellbeing. They addressed several broad strategies.

- For some students, physical and mental health practices, such as working on improving their diet and exercise regimes, or taking time out for reflection were ways to improve wellbeing. Students also said they sought help from counsellors or other health professionals.
- Some students recognised the need for relaxing their perfectionistic tendencies or resisting what they saw as unhealthy comparisons to other students.
- For some students, attempting to change their study-life balance by spending time with family or friends and taking breaks from university or work activities where possible. Conversely, taking on paid work to ease financial pressures was also an example of a strategy to improve wellbeing.

Challenges to wellbeing for architectural students were seen to arise from the amount of study that was required by architectural courses.

- Those that responded to the question around greatest challenges highlighted extreme workloads, pace, and intensity of the work required to pass a degree in architecture.
- Some respondents also suggested that the course culture was competitive and sometimes unsupportive and consequently detrimental to their sense of wellbeing.
- Competitiveness combined with high expectations of themselves and the perceived expectations of what was required for the course were catalysts for unhealthy behaviours, such as sacrificing sleep, which directly compromised student health and wellbeing.

Some respondents suggested a need for attitude change within architecture, particularly with respect to the burdens placed on students to pass their degrees. The pressures of architecture were seen by some respondents as being sustainable only for those living at home with their parents. They also saw study pressures as being at odds with their learning, creativity, and the need for a healthy study-life balance.

Conclusion

This survey report provides a complex picture of architectural students who are struggling with their wellbeing. The measures used to gauge student wellbeing in this survey show that wellbeing in this group is well below the level enjoyed by Australians more generally. The respondents to the 2023 survey had relatively high career aspirations and a strong sense of perfectionistic strivings for their work. However, while ratings for student career aspirations, sense of identity, and connection to the architectural profession were the same as in 2021, their sense of optimism for their future careers has declined. The intensity of their study practices and their willingness to sacrifice sleep to achieve study goals further compromised their sense of wellbeing. The open-ended comments complemented the quantitative analysis and provided further insights into wellbeing in architectural studies through the voices of the respondents themselves. It is clear that wellbeing remains a substantive issue for architectural students which must be addressed to improve their experiences and creative life at university.

2 Introduction

The findings of the survey reported here are part of a larger research project 'Architectural Work Cultures: professional identity, education and wellbeing' (known as the 'Wellbeing of Architects' project), funded by the Australian Research Council Linkage Projects scheme (LP190100926, 2020-2023).

In 2021 we conducted a baseline survey to examine the broad range of experiences of people studying architecture in Australia, assessing factors such as university life, career and identity, wellbeing, psychological distress, and burnout. In October 2023 we conducted a follow up survey to examine students' experiences two years after the initial survey.

This longitudinal approach had always been planned as part of the study, but became even more important in light of the initial survey having been administered at the height of the Covid 19 pandemic, that led to widespread disruption in architectural education and general life in Australia. The follow up survey was therefore a means of ensuring the results of the first survey were not aberrations due to contextual circumstances. As it happens, the results reported here indicate that far from being disproportionately negative, the wellbeing of architecture students was substantially better in 2021 during the pandemic than two years later, when all pandemic restrictions had been lifted.

The results presented in this report can be used as a general guide to help universities and other stakeholders identify and prioritise areas in need of improvement for students of architecture in Australia.

For more detailed information about the overall project, including a brief survey of relevant literature, please see the report on the earlier 2021 survey data: Shea, T., Kinnaird, B., Gusheh, M., Cooper, B., Stead, N., Orr, K., Battiston, L., Cox, J.W., (2021). *The Wellbeing of Architects: culture, identity + practice. 2021 Student Survey, Primary Report*, Monash University: Caulfield East, Australia. Access via <https://thewellbeingofarchitects.org.au/publications/>.

This report is also complemented by a preceding report, addressing a survey of Australian architectural practitioners: Shea, T., Cooper, B., Gusheh, M., Kinnaird, B., Stead, N., Orr, K., Battiston, L., & Cox, J.W. (2022). *The Wellbeing of Architects: 2021 Practitioner Survey, Primary Report*, Caulfield East, Australia: Monash University.

Survey aims

The aims of the 2023 survey were to:

- understand the wellbeing of people studying architecture, as related to their educational experiences,
- understand the impact of specific aspects of architectural education on student wellbeing, and how the different aspects of university life, career, and identity, impact on student wellbeing,
- contribute to the development of tailored resources to support workplaces, and professional and educational organisations in architecture, as they work towards improved occupational wellbeing through cultural change, and
- identify changes in the study-related wellbeing of people studying architecture in Australia between the 2021 and 2023 student surveys.

3 About the survey

Sample and procedure

The survey was circulated to Australian architecture students with the aim of recruiting people enrolled in architecture courses at tertiary level, including recent graduates and Higher Degree Research students.

Respondents were recruited through professional and educational networks and communications addressed to students. An invitation email that contained a link to an online survey was sent to potential respondents via the project's research partners – which included six architectural practices, the Australian Institute of Architects, the ACA, and the Architects Registration Board of NSW. These organisations also circulated news about the survey via social media, e-newsletter and other digital means. Information was also shared via social media by other architectural community groups including Parlour.

In particular, information was circulated via the Association of Australasian Schools of Architecture (AASA) by direct email – largely circulated to currently-enrolled architecture students via their Head of School or other lecturers.

The survey was open for four weeks in October 2023 and responses took approximately 15 minutes on average to complete. We received 578 initial responses to the survey. After we deleted partially completed cases that had more than 50 percent missing data, there were 288 usable responses. This compares with the 2021 survey which had 600 usable responses. A full description of the sample is found in Part 6 of this report.

The project was approved by Monash University's Human Research Ethics Committee (Project ID: 36237), and all recipients of the survey were assured of confidentiality and anonymity.

A list of definitions for the constructs used in the report can be found in Appendix 1 and full description of measures is found in Appendix 2.

Survey participants

The definition of participants as 'students' includes anyone who primarily studies architecture at a tertiary level in Australia, including Bachelor of Architecture, Master of Architecture, and Doctoral studies in architecture. It also includes those who are on a break or between architectural degrees.

The range of participants invited to respond to the survey therefore included:

- people enrolled in a Bachelor of Architecture (or similar degrees such as Bachelor of Architectural Studies, including double degrees),
- people enrolled in a Master of Architecture (Professional, including double degrees),
- people enrolled in a Master of Architecture by research,
- people enrolled in Doctoral studies in architecture, and
- people who usually studied Architecture but were on a break or between degrees.

4 Key findings from the 2023 student survey

This chapter provides a detailed discussion of the survey results along with charts to illustrate the changes in respondent ratings across the measures used in the 2021 and 2023 surveys.

Note that in the charts that compare the two surveys, the 2021 survey results are shown in green and the 2023 survey results are shown in blue. The purpose of this section is to show how student perceptions have changed between the initial survey in 2021 and the present survey.

The findings are discussed as follows:

- **University life** where we examine student experiences of campus climate, institutional support, and whether their satisfaction that basic psychological needs at university are being met. We also describe student study-life balance and study practices.
- **Career and identity** where we examine career aspirations and optimism; how strongly students identify with the field of architecture, and their sense of perfectionism.
- **Wellbeing** where we examine personal wellbeing, psychological distress, and burnout. We also examine the impact of specific aspects of architectural education on student wellbeing and look at how the different aspects of university life, career, identity, and perfectionism impact on student wellbeing.

PART ONE: University life

Campus climate

'Campus climate' captures student perceptions of how comfortable they feel at university and how well they fit into the campus environment.

Note that for this scale, *lower scores are positive* and higher scores indicate a more negative impression of how students experience the campus environment.

Figure 1 compares the overall score and item ratings for campus climate in the 2021 and 2023 surveys. The overall mean campus climate rating for the respondents in 2023 was lower than the scale midpoint ($M = 2.1$, $SD = 0.7$) suggesting a reasonably healthy perceived campus climate. Although this score is higher than that reported in the 2021 survey (mean score = 2.0), this difference was not statistically significant.

Analysis of the individual items shows that most items had slightly higher ratings in 2023 compared to the 2021 survey. In both years feelings of isolation at university were rated highest by the respondents, while feeling angry at the university was rated the lowest.

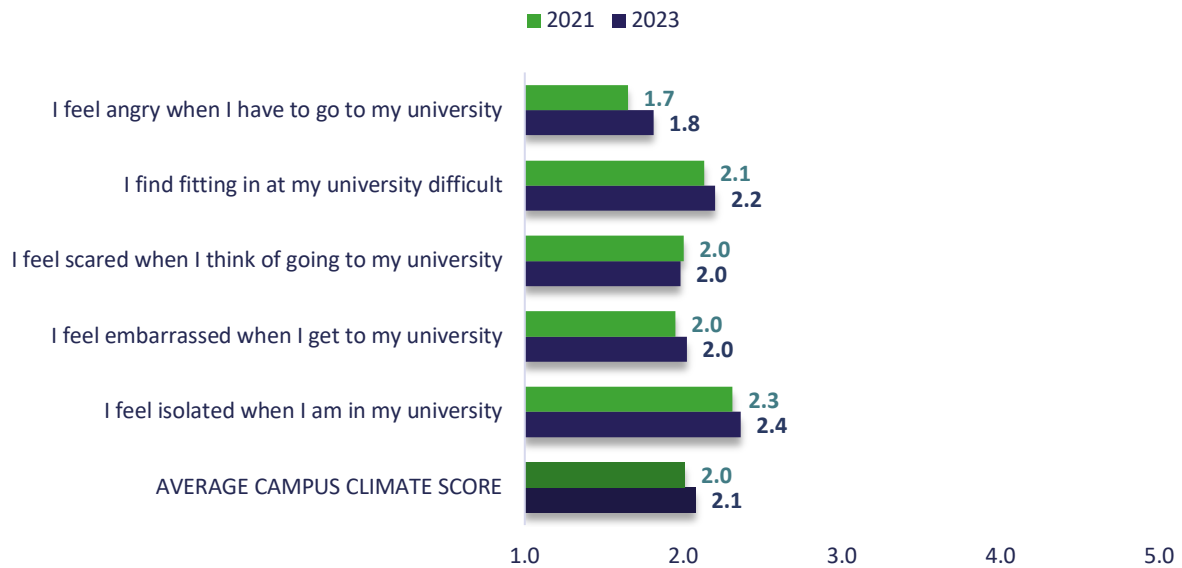


Figure 1: Campus climate

Institutional support

Institutional support examines student perceptions of the support they receive from teachers, mentors and advisors (Garriott & Nisle, 2018). The scores for this measure range from 1 to 5 with higher scores being more positive and indicating students received more helpful support and assistance.

Figure 2 compares the overall score and item ratings for institutional support in the 2021 and 2023 surveys. The overall mean institutional support rating for the respondents in 2023 was just over the scale midpoint ($M = 3.3$, $SD = 0.9$) and is the same as that reported in the 2021 survey (mean score = 3.3).

While this suggests a relatively neutral position on institutional support overall, some items were rated more positively than others. For example, the items that represent the experiences of having like-minded people at university and receiving helpful assistance from teachers or tutors were rated higher than the other items, particularly the items regarding access to mentors or role models.

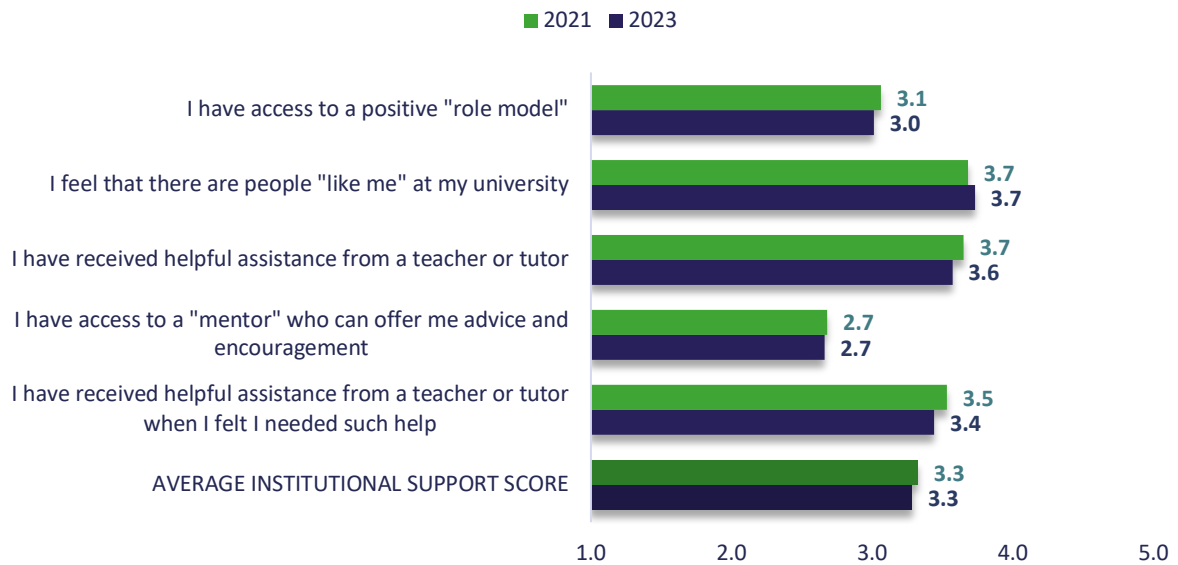


Figure 2: Institutional support

Support for studies

This measure of support examines student perceptions regarding the support they receive from family and friends for their studies (Rottinghaus et al., 2012). Scores for this measure range from 1 to 5 with higher scores indicating greater levels of perceived support from family and friends.

Figure 3 displays the overall score and individual item ratings for the 2021 and 2023 surveys. The overall mean support rating was 3.7 ($SD = 1.1$) which is lower than that reported in 2021 (mean score = 3.8) but this difference was not statistically significant. Compared to the findings on institutional support (see Figure 2), this suggests that respondents generally experience a more positive degree of support from friends and family compared to institutional support.

The ratings for the individual items show that all items had slightly lower ratings in 2023 compared to the 2021 survey.

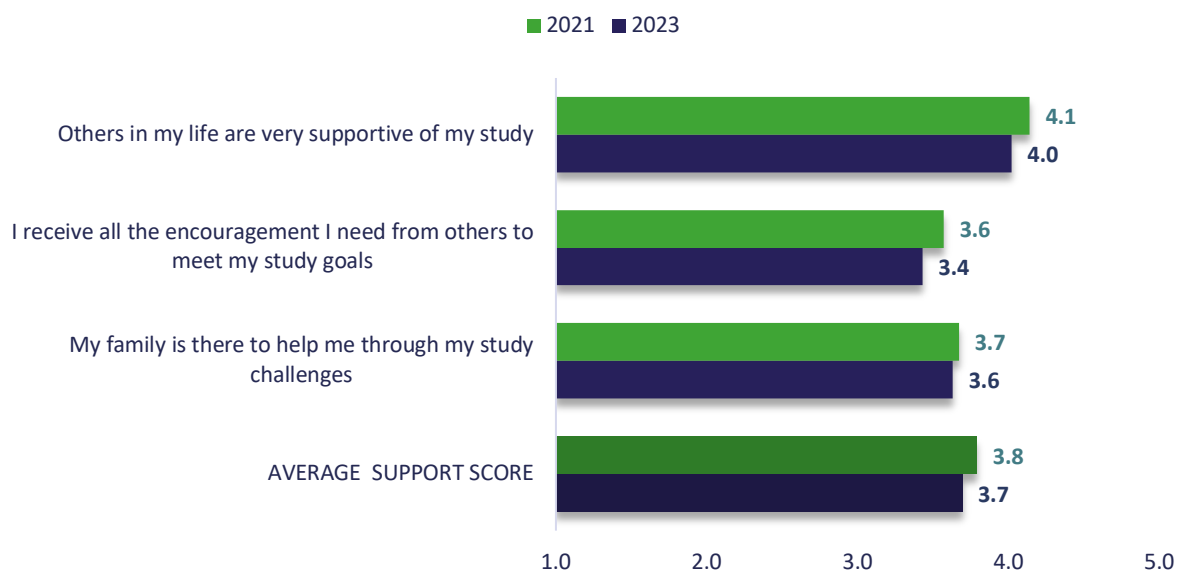


Figure 3: Support

CAMPUS CLIMATE AND SUPPORT

Key findings

- Respondents had a reasonably positive view of campus climate indicating that, on average, they perceived a reasonably healthy campus climate. They also have positive perceptions of the levels of institutional support and support from other people in their lives.
- There were no substantial changes in respondent perceptions of campus climate or the levels of institutional support or support from family and friend between the 2021 and 2023 surveys.

Satisfaction of basic psychological needs at university

Feeling satisfied that your basic psychological needs are met is important because it is associated with optimal functioning and wellbeing (Brien, et al., 2012). To examine this construct we modified Brien and colleagues (2012) measure of satisfaction of basic psychological needs for study rather than work. This modified version focuses on whether an individual feels able to satisfy their needs for autonomy, competence, and relatedness in their university studies.

Autonomy refers to how much control individuals have over how they work and complete the requirements of their studies. The scores for this measure range from 1 to 5 with higher scores being more positive. Figure 4 compares the overall score and item ratings for autonomy in the 2021 and 2023 surveys. The overall mean rating on this measure was 3.8 ($SD = 0.8$) and suggests that the respondents were relatively satisfied that their need for autonomy at university is being met. This score is slightly lower than the score from the 2021 survey (mean score = 3.9) and this difference was statistically significant.

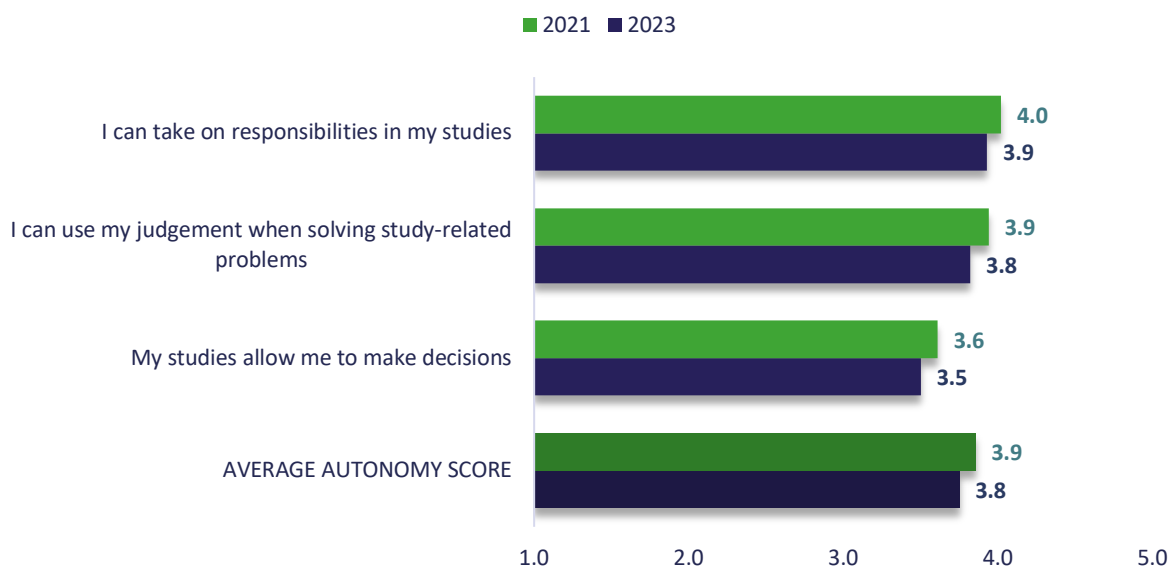


Figure 4: Autonomy

Competency is a measure of how satisfied individuals feel in being competent to complete their studies. The scores for this measure range from 1 to 5 with higher scores being more positive. Figure 5 compares the overall score and item ratings for competence in the 2021 and 2023 surveys. The overall mean respondent rating on this measure was high ($M = 3.8$, $SD = 0.9$) and suggests that the respondents were relatively satisfied that their need to feel a sense of competence at university is being met. This score is the same as that reported in the 2021 survey (mean score = 3.8).

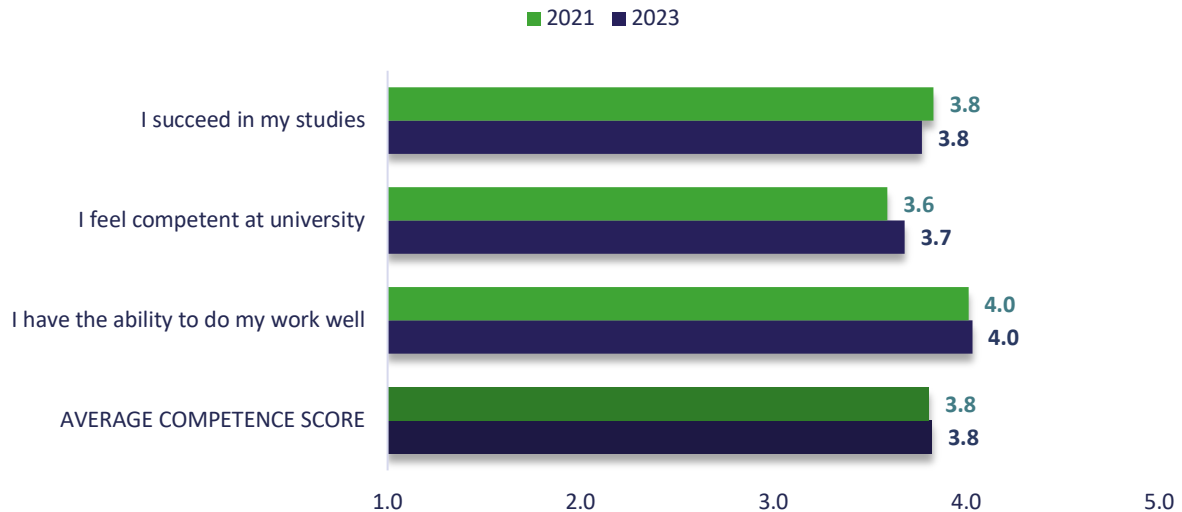


Figure 5: Competence

Relatedness is a measure of how well individuals feel they belong at university and have built good relationships. The scores for this measure range from 1 to 5 with higher scores being more positive. Figure 6 compares the overall score and item ratings for relatedness in the 2021 and 2023 surveys. The mean respondent rating on this measure was 3.5 ($SD = 1.1$) and suggests that the respondents were somewhat satisfied that their need for relatedness at university is being met. This score is lower than the score from the 2021 survey (mean = 3.6) but the difference was not statistically significant.

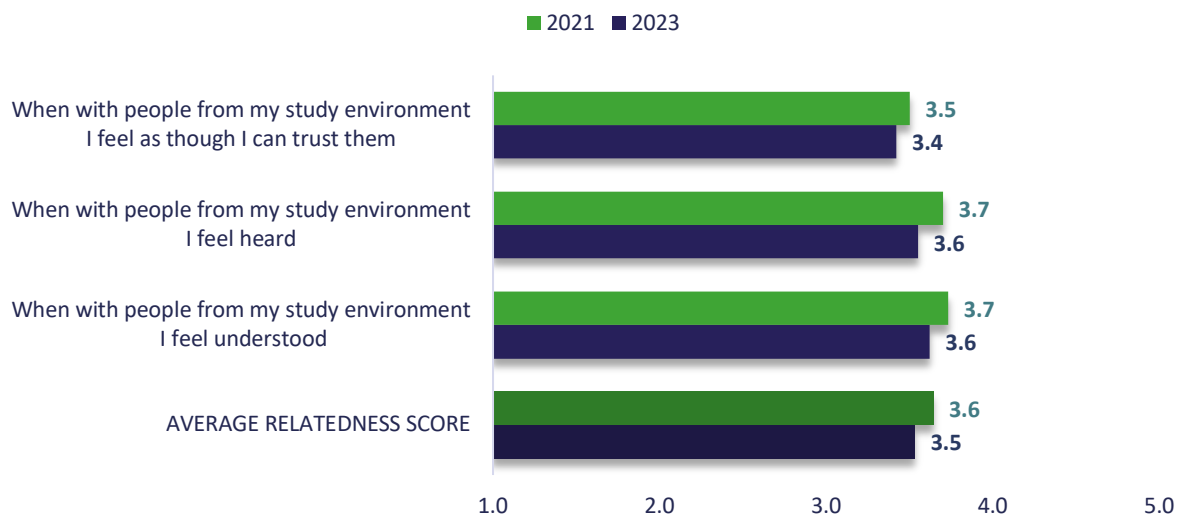


Figure 6: Relatedness

SATISFACTION OF BASIC PSYCHOLOGICAL NEEDS

Key findings

- Respondents rated the satisfaction of basic psychological needs for feelings of autonomy and competence higher than feelings of relatedness.
- While respondents were relatively satisfied that their need for autonomy at university was being met, this score was slightly lower in 2023 compared to the 2021 survey.
- There were no substantial changes in respondent satisfaction that their need for competence and relatedness was being met at university between the 2021 and 2023 surveys.

Satisfaction with education and study practices

Figure 7 below shows that just under half of the students responding to the survey reported being satisfied or very satisfied with the quality of their education while a quarter felt neutral about the quality of their education which is roughly consistent with the 2023 survey. In 2023 there was an increase in the percentage of students who reported feeling 'very dissatisfied' with their studies and a decrease in the percentage of students who reported feeling 'very satisfied' with their education compared to those in 2021.

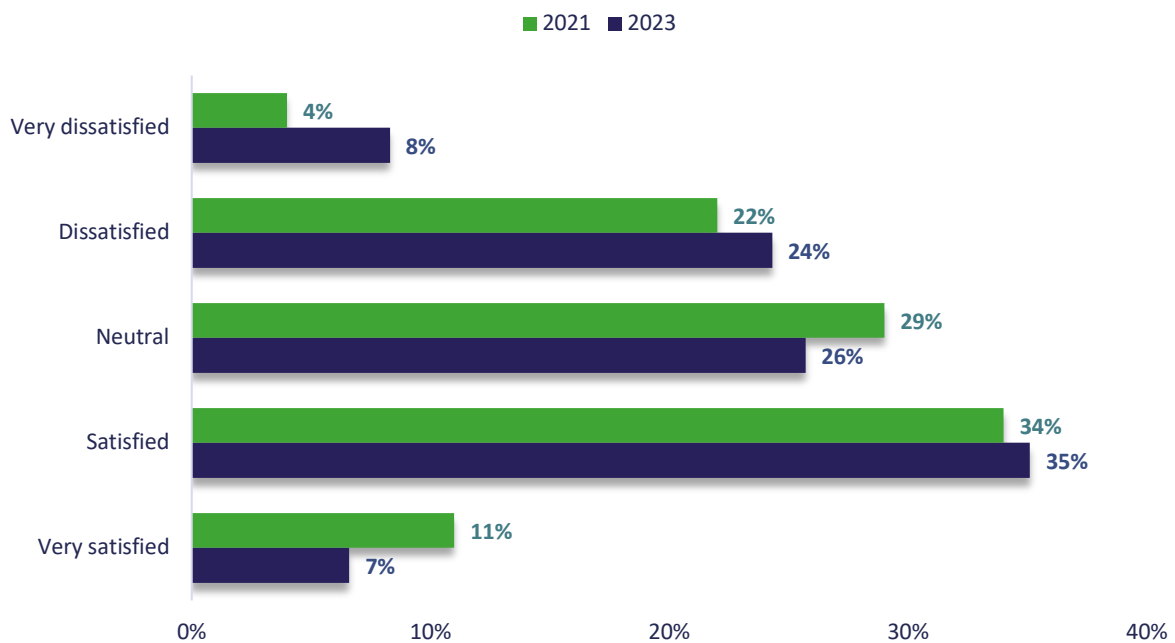


Figure 7: Satisfaction with the quality of education

Study-life balance is a measure of how well individuals balance the demands of their study and other aspects of their lives. The scores for this measure range from 1 to 5 with higher scores meaning that a more favourable balance between study and life has been achieved. Figure 8 compares the overall score and item ratings for relatedness in the 2021 and 2023 surveys.

The mean respondent rating on this measure was 2.9 ($SD = 1.0$). Individual item ratings indicate that respondents do not appear to have a manageable balance for study and family or study and personal life. This score is the same as that reported in the 2021 survey (mean = 2.9).

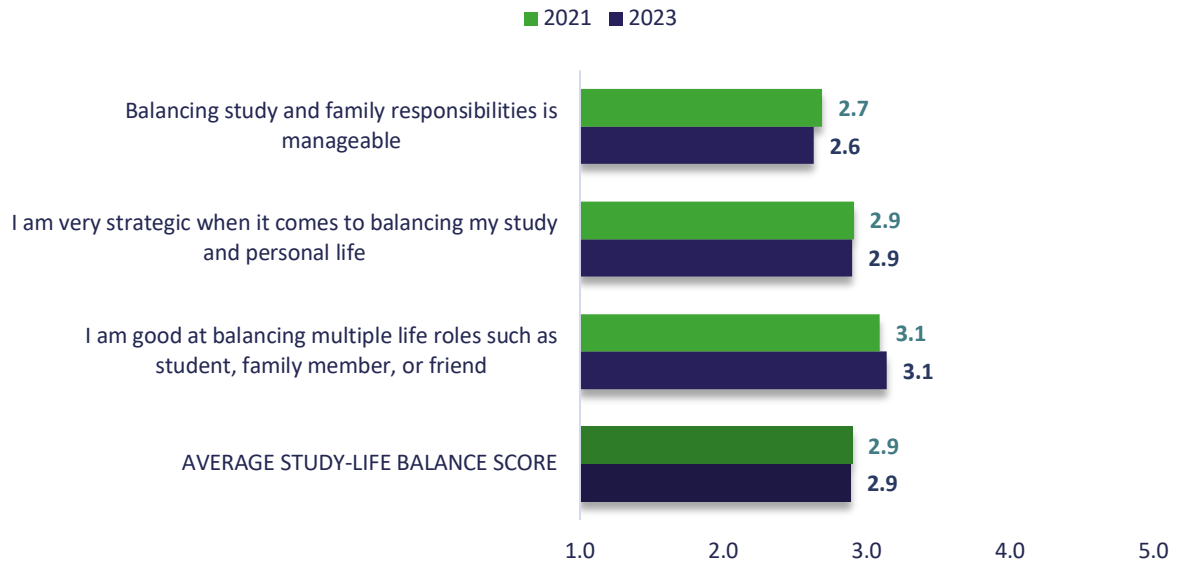


Figure 8: Study-life balance

When asked about study practices, while most students reported making a workload plan and sticking to it, a high percentage also reported panicking at the last minute, and procrastinating with assessment tasks. A smaller percentage of students reported that they felt they managed their time well, had control of their time, or set time limits for study. With the exception of making a workload plan which has increased from 2021, the pattern of responses for these items were broadly consistent to those responding to the earlier survey.

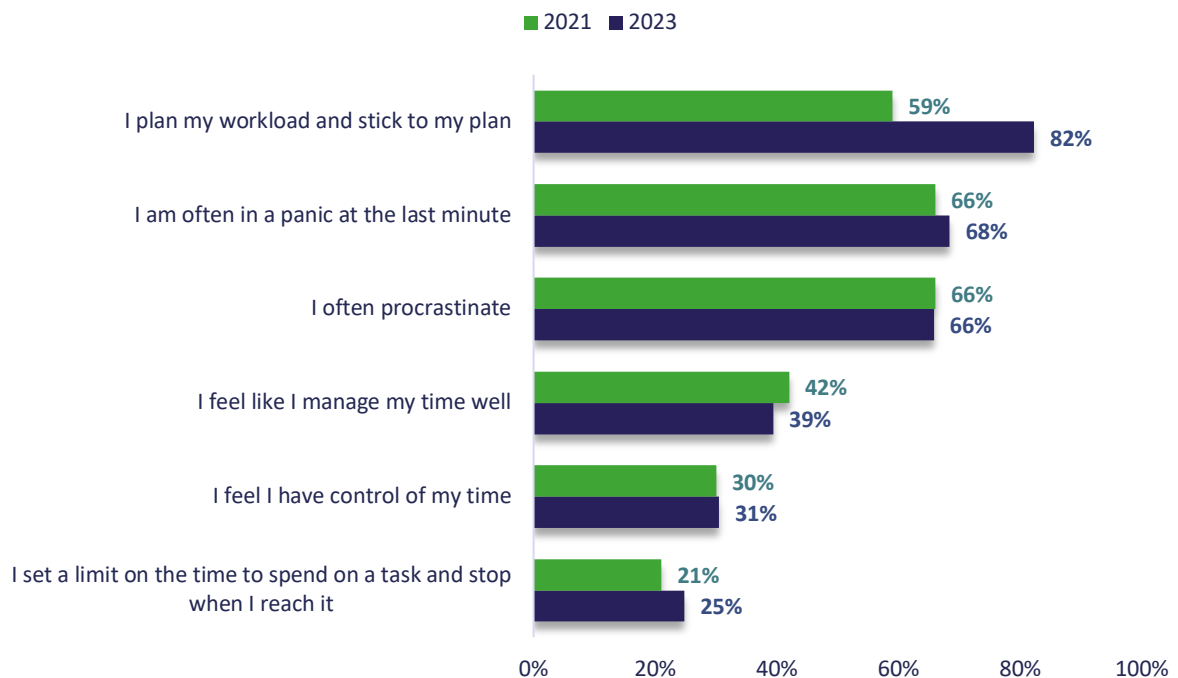


Figure 9: Study practices

Half of the full-time students reported studying between 25 and 44 hours per week, while about a third studied 45 or more hours per week. Full-time students who responded to the 2023 survey tended to report studying fewer hours compared to those who responded to the 2021 survey.

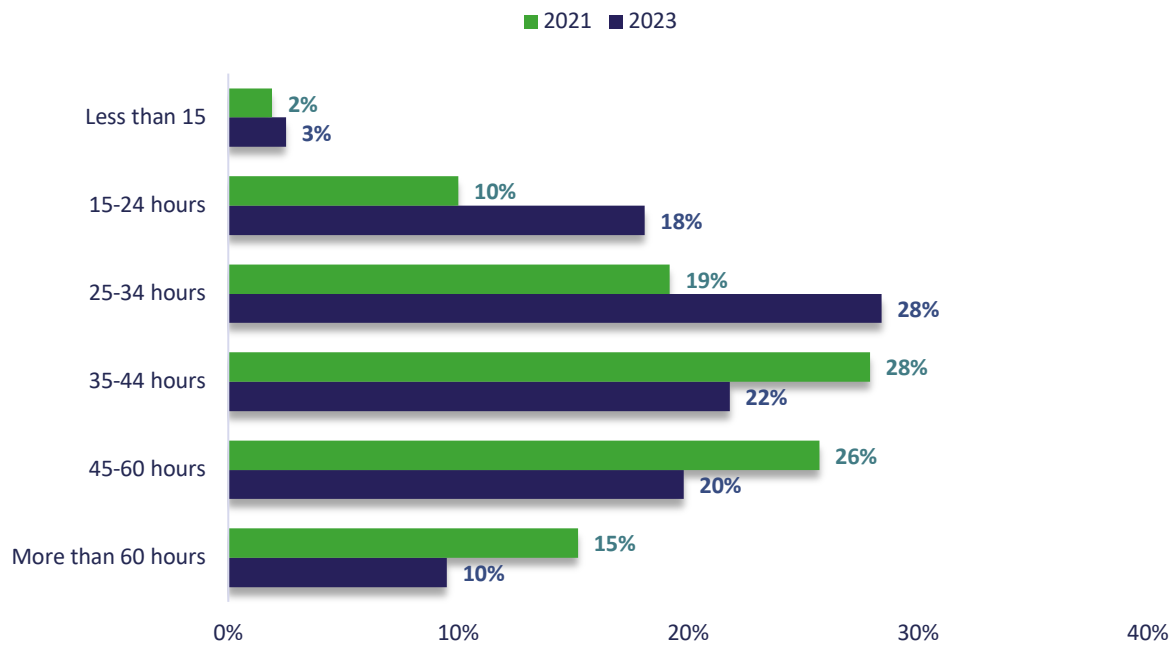


Figure 10: Study hours for full-time students

Part-time students tended to study 34 hours or less per week and a small group (n = 9) reported studying 45 or more hours per week. Part-time students who responded to the 2023 survey tended to report studying fewer hours compared to the 2021 survey. Consideration should be given to the small number of part-time students in the sample when interpreting these figures.

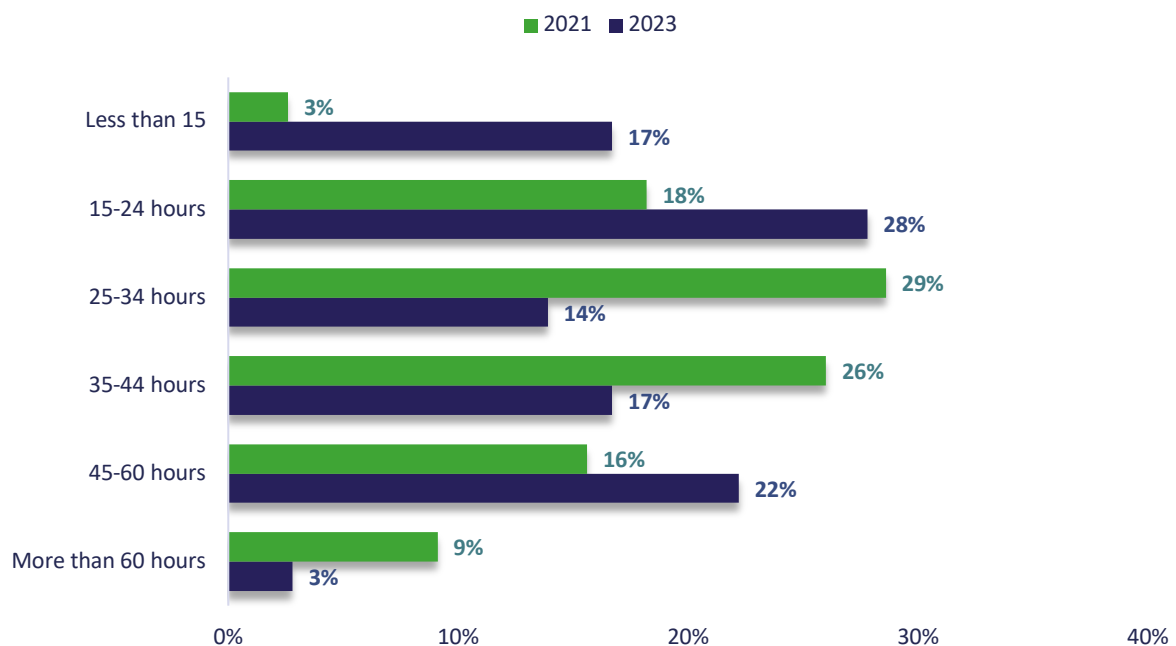


Figure 11: Study hours for part-time students

Figure 12 below shows that more than half of the students who responded to the survey reduce their sleep substantially in order to study. This is broadly consistent with the results from 2021.

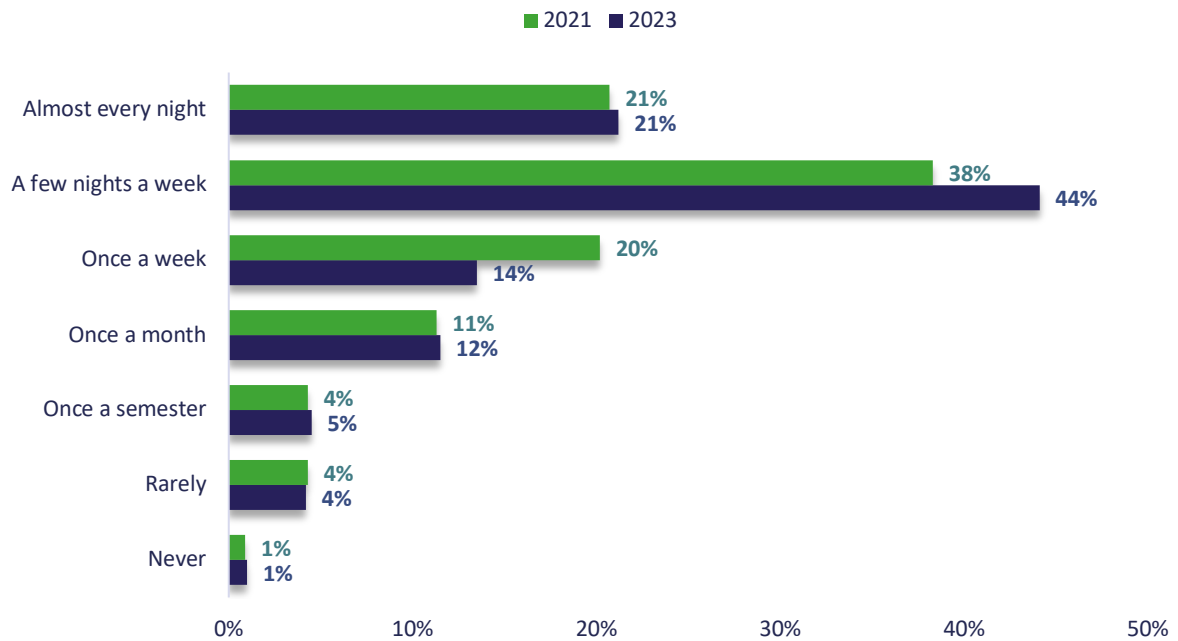


Figure 12: Frequency of reduction in sleep to study

Impact of study on student wellbeing

Respondents were asked about their perceptions of how their studies impact on their wellbeing. In this section we examine each aspect of university study and ask respondents to rate how each of these aspects impacted on their wellbeing.

Figure 13 below compares the impact of study on student wellbeing more generally and the responses for 2023 were similar to those of 2021 in that approximately two-thirds of students said that their studies had a negative impact on their wellbeing.

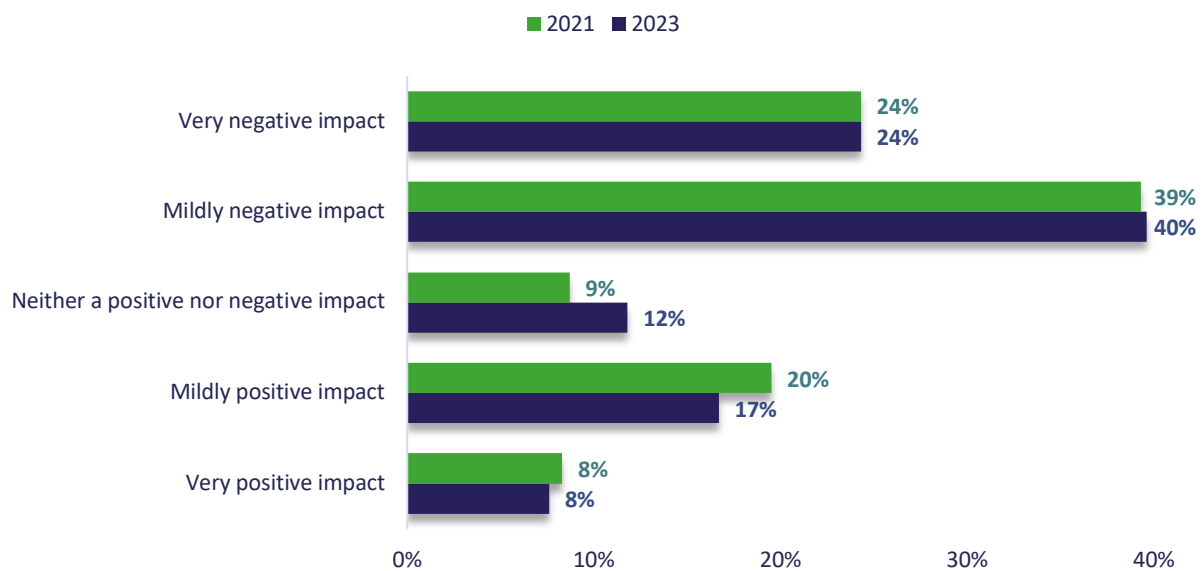


Figure 13: Impact of study on student wellbeing

Figure 14 below shows that student perceptions of whether specific *stages of study* had a negative impact on their wellbeing. The pattern of responses across each of the study stages in 2023 were similar to those of 2021 with the end of semesters and the final year of education being more likely to have a negative impact on wellbeing. However, the percentage of students reporting these stages of study as having a negative effect on their wellbeing has increased in 2023.

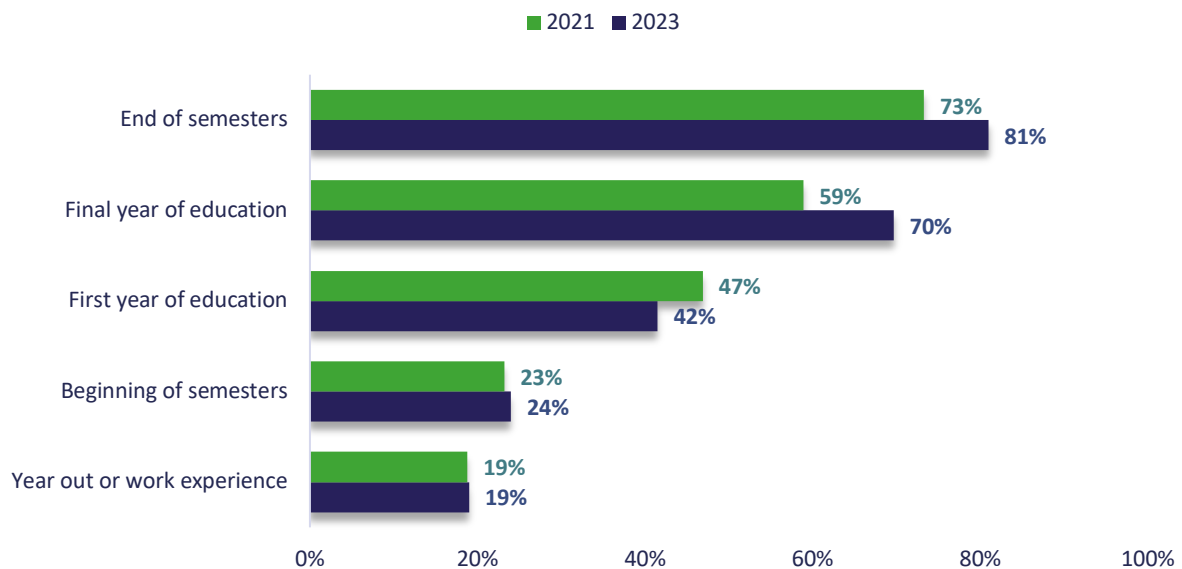


Figure 14: Negative impact of study stages on wellbeing

Figure 15 below shows student perceptions of whether specific *subject areas* had a negative impact on their wellbeing. The pattern of responses across each of the subject areas in 2023 were similar to those of 2021 with design being most likely to have a negative impact on wellbeing. Overall, the percentage of students reporting these subject areas as having a negative effect on their wellbeing has increased in 2023.

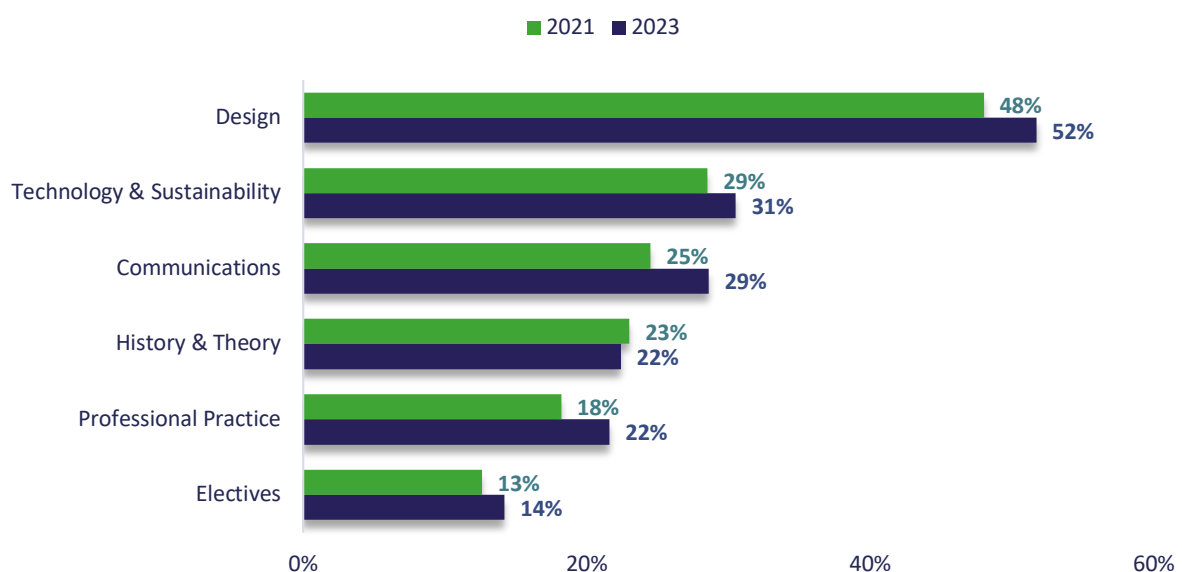


Figure 15: Negative impact of subject areas on wellbeing

Figure 16 below shows student perceptions of specific *study processes* (as distinct from subject areas) and whether they had a negative impact on their wellbeing. The pattern of responses across each of the subject areas in 2023 were similar to those of 2021 with group work, studio and public presentations being most likely to have a negative impact on wellbeing. With the exception of online learning, the percentage of students reporting these subject areas as having a negative effect on their wellbeing has increased in 2023.

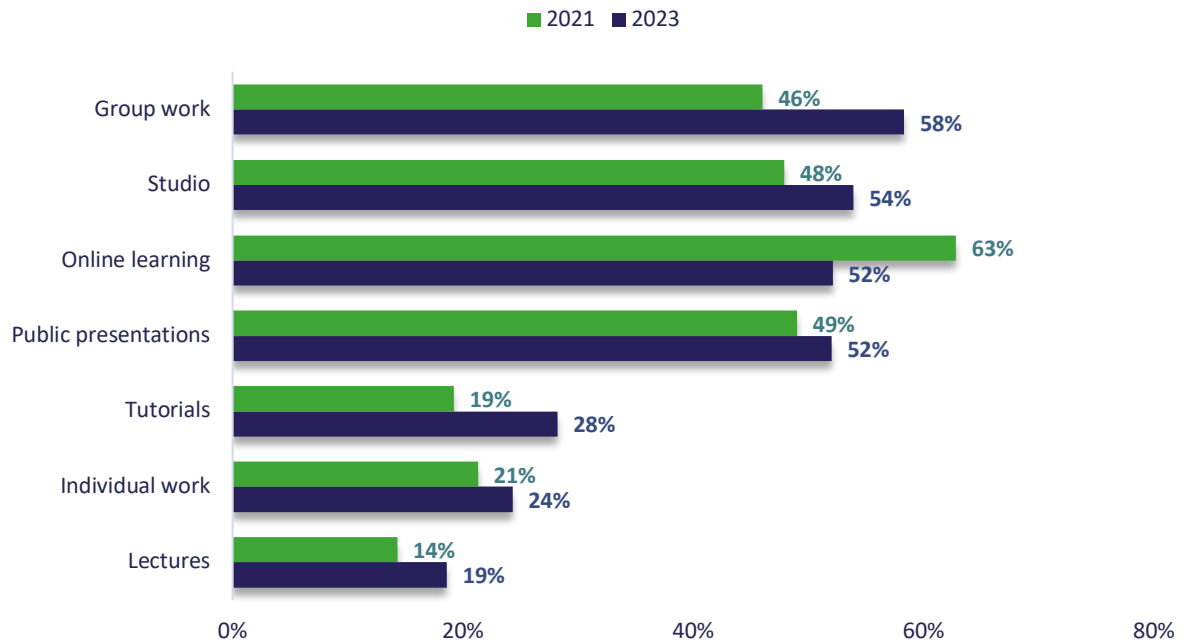


Figure 16: Negative impact of study processes on wellbeing

Figure 17 below shows the different aspects of the *study program* that tended to have a negative impact on student wellbeing. The pattern of responses across each of the subject areas in 2023 were similar to those of 2021 with competitive culture among students and clarity of assessment being more likely to have a negative impact on wellbeing.

With the exception of online learning, the percentage of students reporting these aspects of the study program as having a negative effect on their wellbeing has increased in 2023. This increase is particularly notable for the level of support from staff, ability to tailor subject choices, and the quality of teaching.

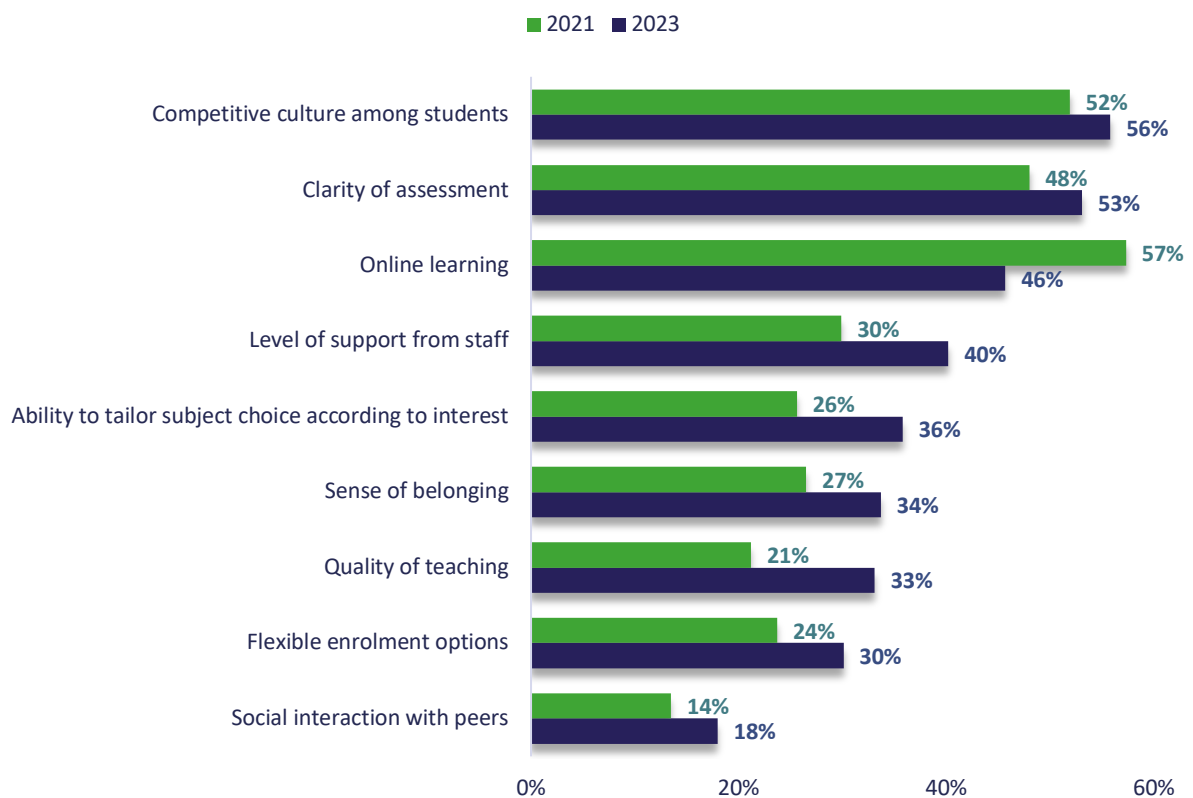


Figure 17: Negative impact of the study program on wellbeing

IMPACT OF STUDY ON WELLBEING

Key findings

- Around two-thirds of respondents to the 2023 survey reported that their studies in architecture had negatively affected their wellbeing.
- The areas with greatest impact of study on wellbeing came from: the end of semesters and final year of education (stages of study), design (subject areas), group work, studio, and public presentations (study processes), as well as competitive culture and the clarity of assessment (study program).
- While these results were broadly consistent with the 2021 survey, some aspects of the study program were reported as having a negative impact on wellbeing by a greater percentage of students in 2023 compared to 2021. These include, the end of semesters, the final year of education, group work, the level of support from staff, ability to tailor subject choices, and the quality of teaching.

PART TWO: Career, identity, and perfectionism

Career aspirations

Career aspirations are the motivations that students have for themselves in their future career. The scores for this measure range from 1 to 5 with higher scores indicating higher levels of motivation for their career outcomes.

Figure 18 compares the overall score and item ratings for career aspirations in the 2021 and 2023 surveys. The overall mean respondent rating on this measure was 3.8 ($SD = 0.8$) and suggests that the respondents have reasonably high levels of motivation for their career outcomes. This is the same as that reported in the 2021 survey (mean score = 3.8). However, the score for students' perceptions that they will be recognised for their accomplishments is notably lower than the other items – indicating a possible lack of optimism about career reward.

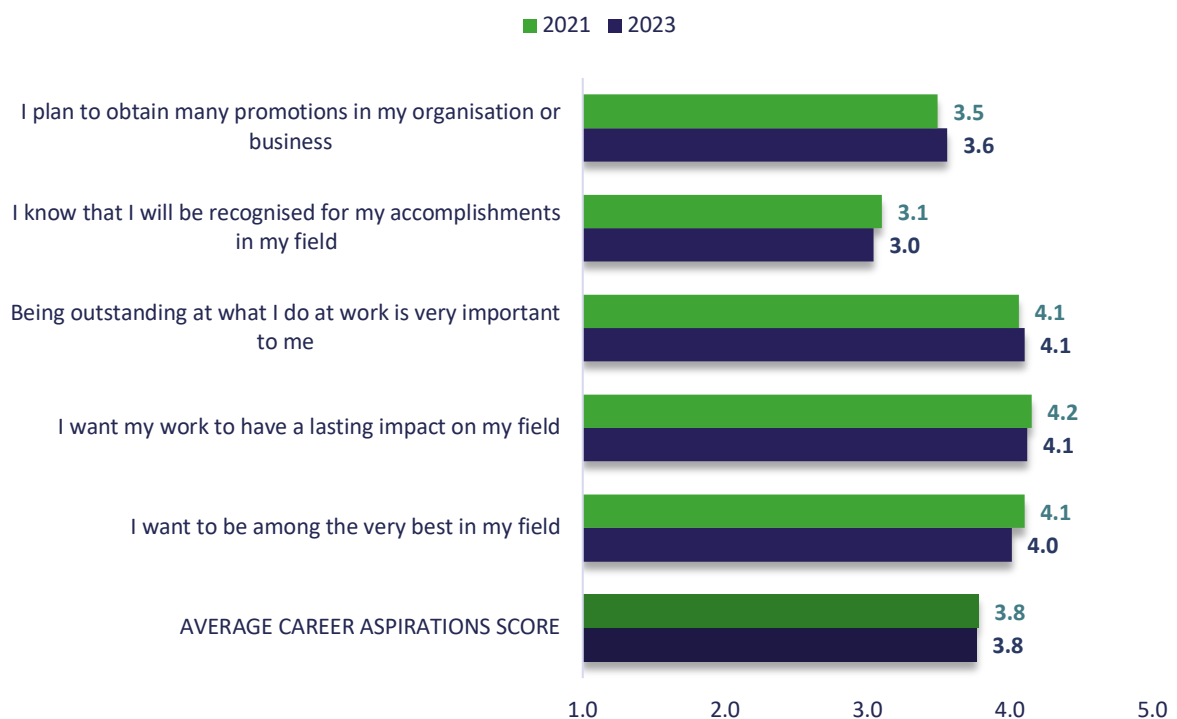


Figure 18: Career aspirations

Career optimism

This scale measures how optimistic students feel about their future careers. Scores range from 1 to 5 with higher scores indicating that respondents feel more positively about their future careers.

Figure 19 compares the overall score and item ratings for career optimism in the 2021 and 2023 surveys. The overall mean respondent rating on this measure ($M = 3.4$, $SD = 1.2$) suggests that the respondents are equivocal in their optimism about their future careers. This score is lower than the score from the 2021 survey (mean score = 3.8) and this difference was statistically significant – meaning that students are substantially less optimistic about their careers overall.



Figure 19: Career optimism

Career identity

In the context of this project, career identity refers to the importance to an individual of their identity as a member of the architectural community (Brenner et al, 2014). The scores for this measure range from 1 to 5 with higher scores indicating a clearer sense of career identity.

Figure 20 compares the overall score and item ratings for career identity in the 2021 and 2023 surveys. The overall career identity rating for respondents in 2023 ($M = 3.2$, $SD = 1.0$) is the same as that reported in 2021 (mean score = 3.2). This rating is near the scale midpoint suggesting that the respondents are equivocal about their career identity.

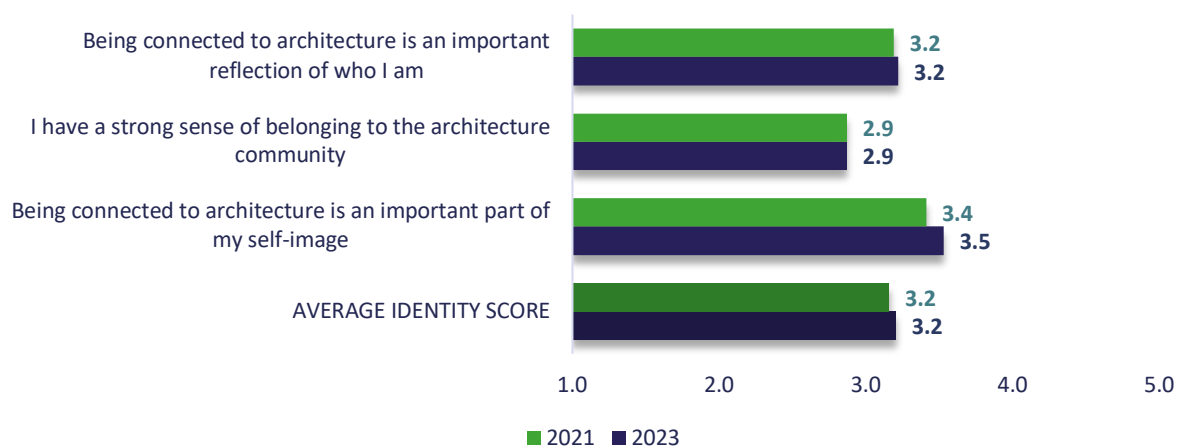


Figure 20: Career identity

CAREER AND IDENTITY

Key findings

- Respondents have high levels of motivation for their career outcomes, particularly around work excellence and having a lasting impact on the architectural field.
- Respondents are equivocal regarding their career optimism as well as career identity and their feelings of connection to the architectural field.
- While respondent ratings for career aspirations and career identity were similar in the 2021 survey, the sense of career optimism has diminished between 2021 and 2023.

Perfectionism

Perfectionism is a personality style with positive and negative facets (Strober & Otto, 2006) measured by 'perfectionistic strivings' and 'perfectionistic concerns'. Those with a healthy balance between these two modes of thinking maintain their strivings without being overly burdened by self-criticism (Rice et al., 2013).

The perfectionistic standards measure refers to individuals' high personal performance standards or expectations for their work - and are seen as the positive aspect of perfectionism. The scores for this measure range from 1 to 5 with higher scores being more positive.

Figure 21 compares the overall score and item ratings for perfectionistic standards in the 2021 and 2023 surveys. The overall mean rating for perfectionistic standards in 2023 was high ($M = 4.4$, $SD = 0.8$) suggesting that respondents have a strong sense of perfectionistic striving. This is the same as the score in the 2021 survey (mean score = 4.4).



Figure 21: Perfectionistic standards

The concept of perfectionistic concerns refers to the gap between an individual’s standards or expectations and their perceived achievements (Rice et al., 2013) and can be described as the negative aspect of perfectionism. The scores for this measure range from 1 to 5 with higher scores being indicative of more negative preoccupations with perfectionism.

Figure 22 compares the overall score and item ratings for perfectionistic concerns in the 2021 and 2023 surveys. The mean rating on this measure was 3.7 (*SD* = 1.0) which suggests that the respondents have a moderate to high level of perfectionistic concerns. This score is slightly higher than the score from the 2021 survey (mean = 3.6) but the difference was not statistically significant.

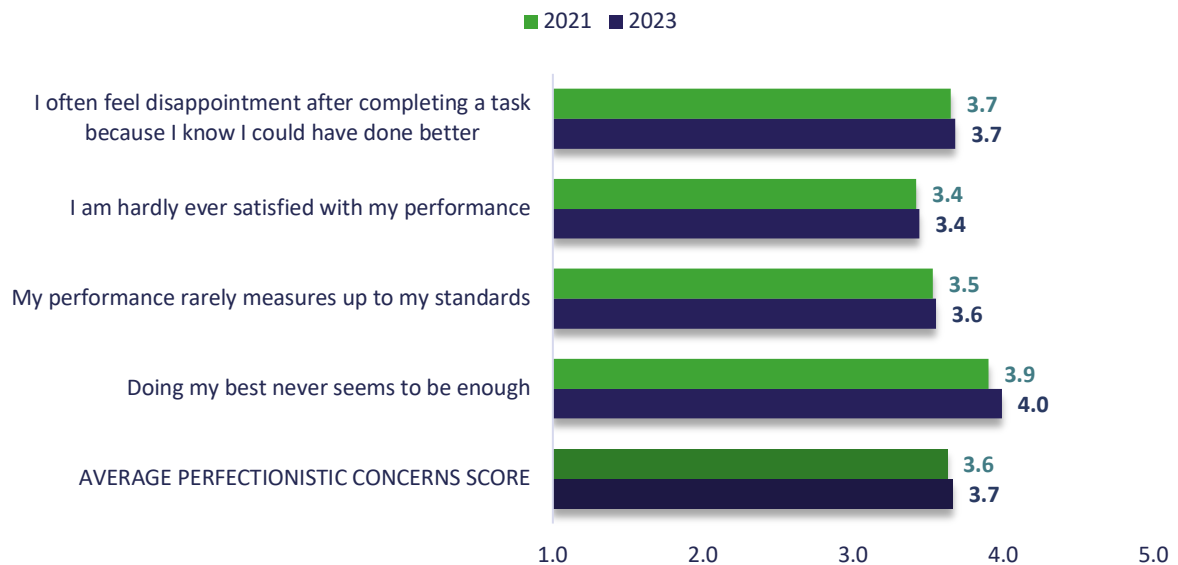


Figure 22: Perfectionistic concerns

PERFECTIONISM

Key findings

- Respondents, on average, had higher levels of perfectionistic standards – or high standards for their own work and achievements – compared to their levels of perfectionistic concerns – or self-criticism.
- This dynamic between standards and concerns represents what is sometimes known as ‘healthy perfectionism’.
- There were no substantial changes in respondent levels of perfectionism between 2021 and 2023.

PART THREE: Wellbeing, distress, and burnout

Personal wellbeing index

Wellbeing, as measured by the Personal Wellbeing Index, is ascertained by assessing seven life domains that collectively capture subjective perceptions of wellbeing and life satisfaction (Cummins et al., 2021). The average rating for each item in this measure and the overall score are each scored out of 100, where higher scores indicate greater satisfaction with life.

Figure 23 compares the overall score and item ratings for the Personal Wellbeing Index in the 2021 and 2023 surveys. The overall mean personal wellbeing score for the respondents in 2023 (mean = 56) was slightly lower than the sample score in 2021 (mean score = 59) and this difference was statistically significant. Scores for the Personal Wellbeing Index tend to be stable over time in the Australian population but there was a small decrease from 2021 (mean score = 76) to 2022 (mean score = 74) which is the most recent data available and consistent with the student scores in this report.

However, the average personal wellbeing score for our 2023 respondents still sits well below these averages and changes in wellbeing are particularly notable for the items 'your future security' and 'your health'. This is a key finding of the 2023 architecture student survey.

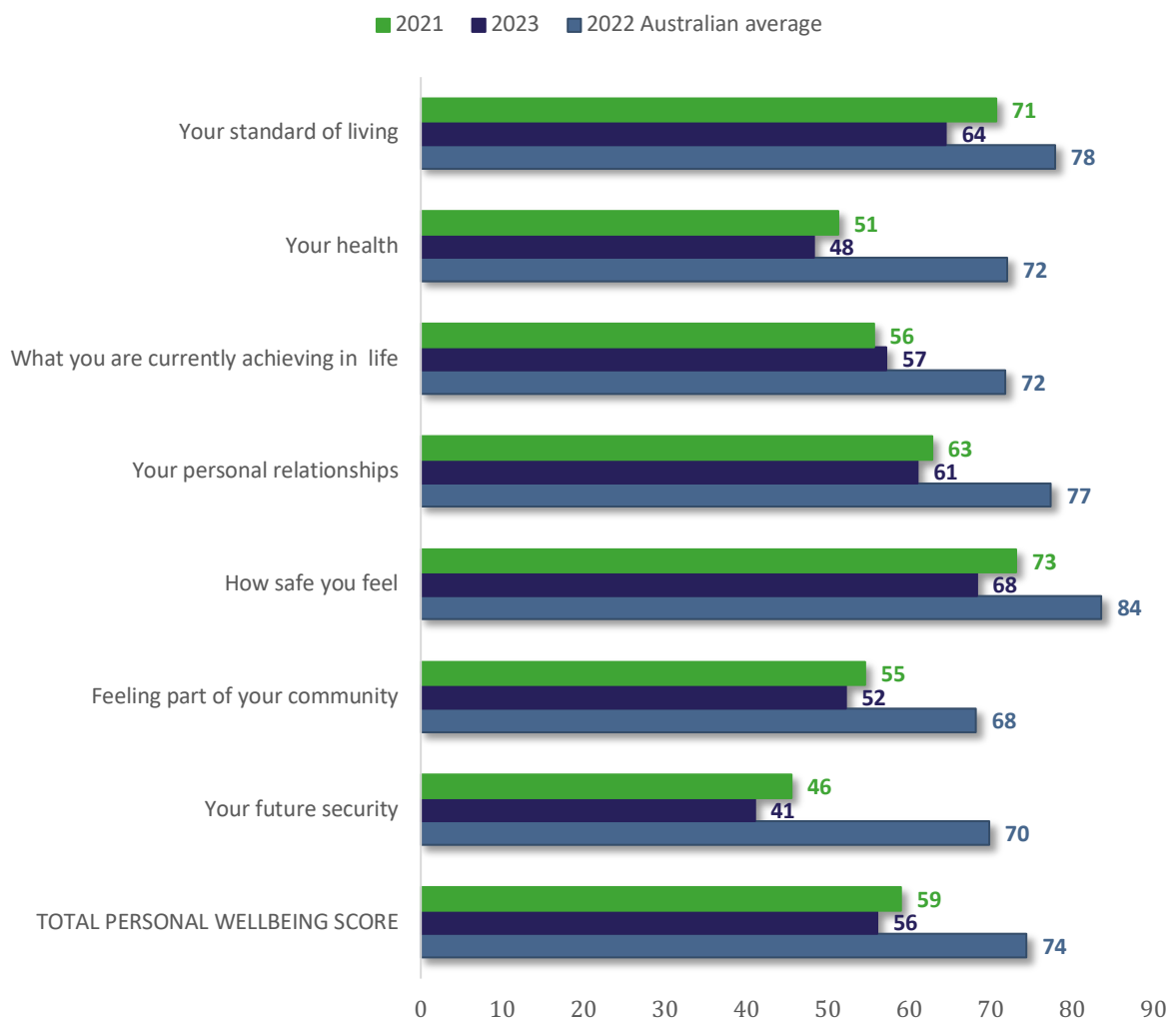


Figure 23: Personal Wellbeing Index

Psychological distress

The total score on the psychological distress scale ranges from 0 (no or low distress) to 12 (severe distress). The overall mean score in this sample for psychological distress was 6.4 ($SD = 3.4$) which is indicative of moderate psychological distress (range 6–8) (Kroenke et al., 2009). The average score for psychological distress has increased since the 2021 survey (mean score = 5.9) and this difference was statistically significant. This score can be partitioned into four groups to show level of distress. Figure 24 compares the percentage of respondents classified by level of psychological distress in 2021 and 2023 and shows that since the 2021 survey the percentage of respondents in the:

- **none to low distress** group has decreased.
- **mild distress** group has decreased.
- **moderate distress** group has increased.
- **severe distress** group has increased.

This indicates that overall level of distress among architecture students has notably increased between the 2021 and 2023 surveys, which is a key finding.

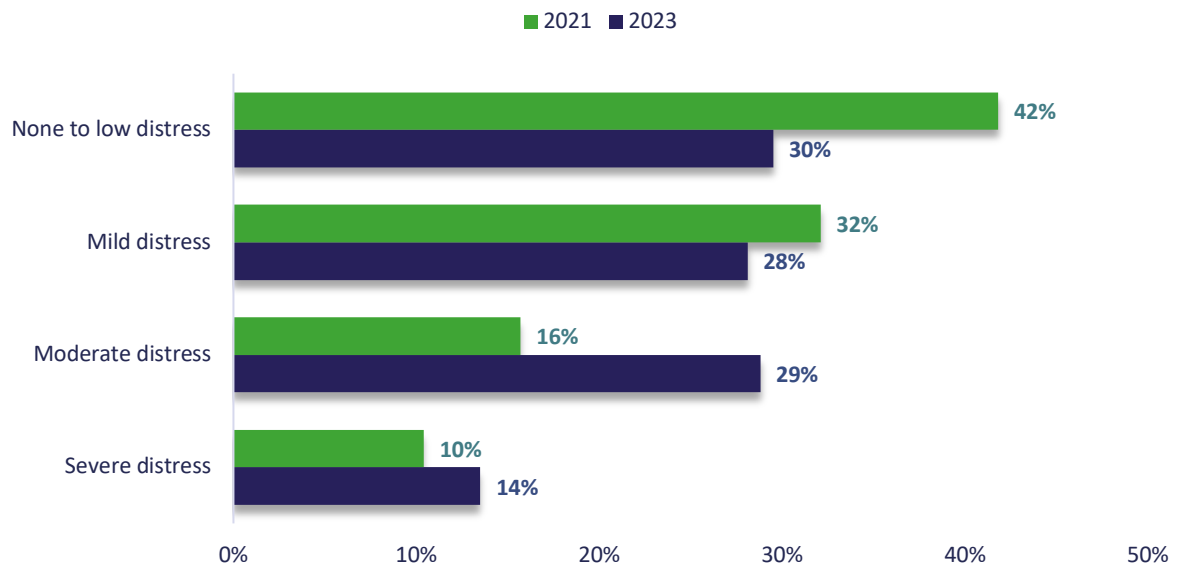


Figure 24: Level of psychological distress

Anxiety and depression are common mental health disorders in the general population (Kroenke et al., 2009) and are associated with reduced participation in the workplace and dissatisfaction with both family and social aspects of life. Figure 25 compares the overall sum score and item ratings for anxiety in the 2021 and 2023 surveys. The score for anxiety ranges from 0 to 6 with higher scores indicating higher levels of anxiety.

The mean respondent rating on this measure was 3.6 ($SD = 2.0$), which meets the threshold for significant anxiety (i.e. score ≥ 3), and is higher than those reported in other studies (e.g., Kroenke et al., 2009 mean score = 1.4). It is also higher than the score in the 2021 survey (mean score = 3.3) and the difference was statistically significant. This means that the general level of anxiety amongst architecture student respondents has increased between 2021 and 2023.

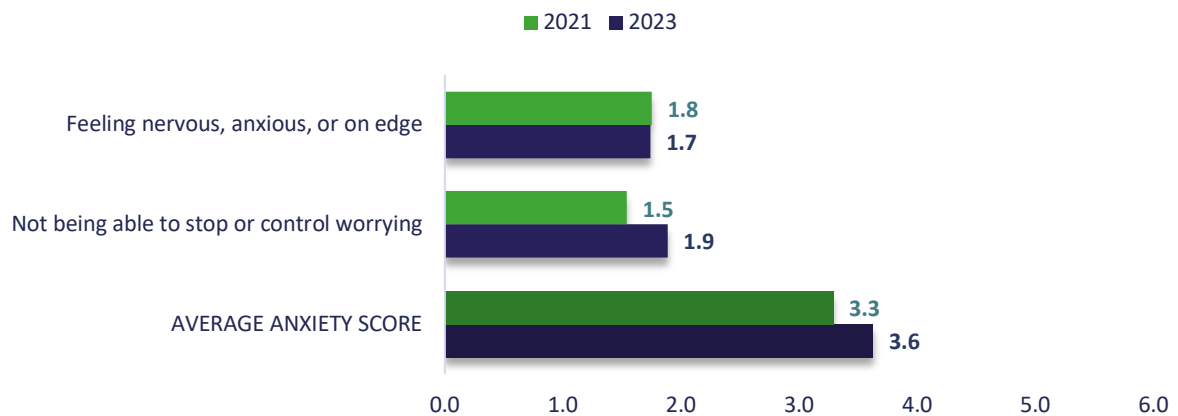


Figure 25: Anxiety

Figure 26 compares the overall sum score and item ratings for depression in the 2021 and 2023 surveys. The score for depression ranges from 0 to 6 with higher scores indicating higher levels of depression.

The mean respondent rating on this measure in the 2023 survey was 1.8 ($SD = 1.7$) and while this score doesn't meet the threshold for significant depression (i.e. score ≥ 3), it is higher than in other studies (e.g., Kroenke et al., 2009 mean score = 1.0). It is also higher than the score in the 2021 survey (mean score = 2.6) but the difference was not statistically significant.

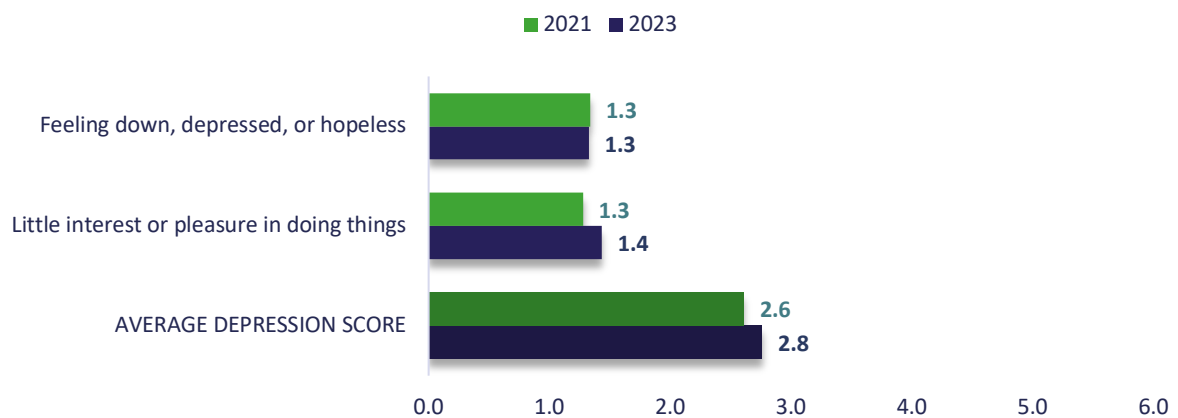


Figure 26: Depression

Burnout

Schaufeli and colleagues (2002) describe student burnout as “feeling exhausted because of study demands, having a cynical and detached attitude toward one’s study, and feeling incompetent as a student” (p. 465). The measure of student burnout used in the study has three subscales that measure the three aspects of burnout referred to in this definition: cynicism, exhaustion, and inefficacy.

Cynicism is a dimension of burnout that reflects a student’s indifference or detachment towards their studies. The scores for this measure range from 1 to 5 with higher scores indicating a higher level of cynicism. Figure 27 compares the overall score and item ratings for cynicism in the 2021 and 2023 surveys. The mean overall respondent rating on this measure was just over the midpoint 3.2 ($SD = 1.2$) suggesting that the respondents were neutral in their feelings of cynicism about their studies. The mean score is slightly higher compared to the 2021 survey (mean score = 3.3) and this difference was statistically significant.

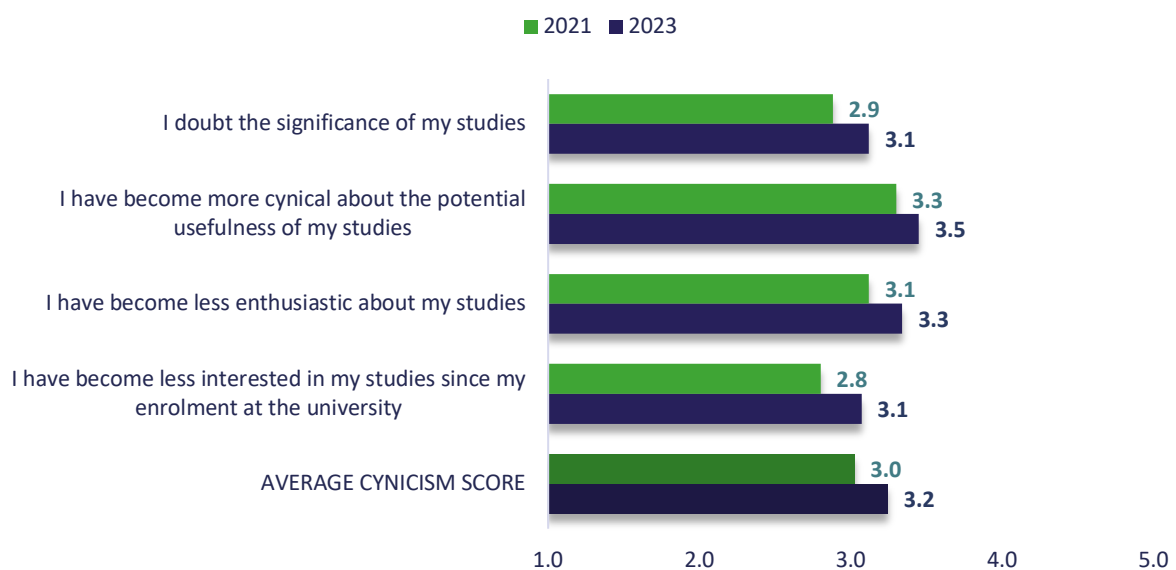


Figure 27: Cynicism

Exhaustion is a dimension of burnout that measures student fatigue. The scores for this measure range from 1 to 5 with higher scores indicating a higher level of fatigue. Figure 28 compares the overall score and item ratings for exhaustion in the 2021 and 2023 surveys.

The mean overall respondent rating on this measure in 2023 was 4.0 ($SD = 1.0$) suggesting that the respondents are experiencing high levels of exhaustion. The mean score is slightly higher compared to the 2021 survey (mean score = 3.9) and this difference was statistically significant.

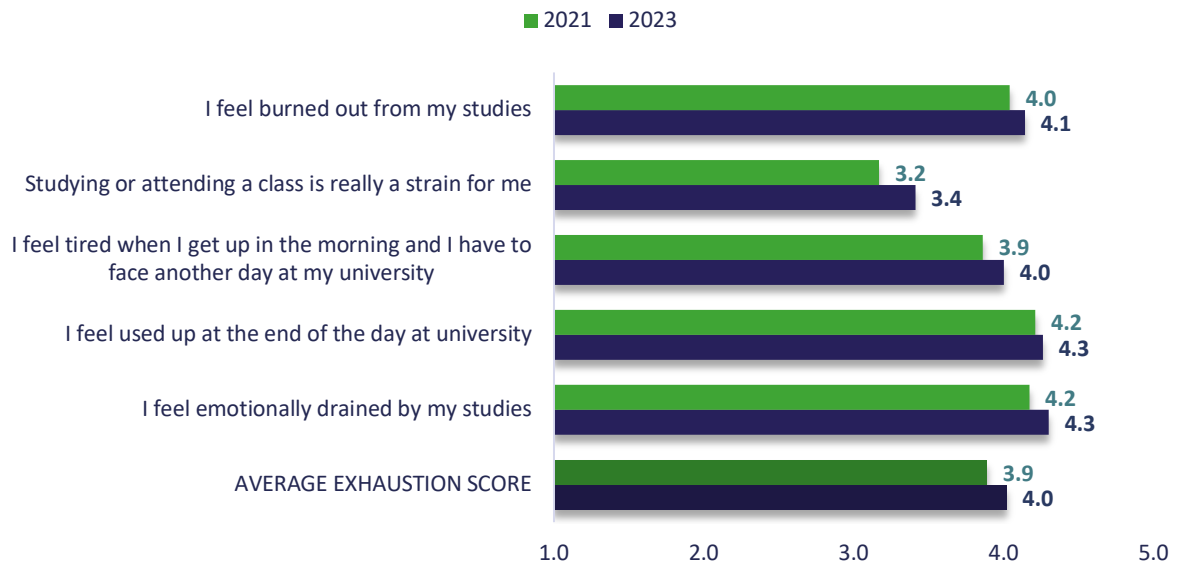


Figure 28: Exhaustion

Inefficacy is a dimension of burnout that reflects a student's feelings of competence with respect to their studies.

Figure 29 compares the overall score and item ratings for inefficacy in the 2021 and 2023 surveys. Note the scores for the items of this measure are reversed before calculating an overall score so that higher scores represent greater inefficacy making the polarity of the score consistent with cynicism and exhaustion. The mean overall respondent rating on this measure was below the midpoint 2.2 ($SD = 1.2$) suggesting that the respondents felt positive about many aspects of their competency at university. This is particularly the case for learning, achievements, and being a good student. The mean score is the same compared to the 2021 survey (mean score = 2.2).

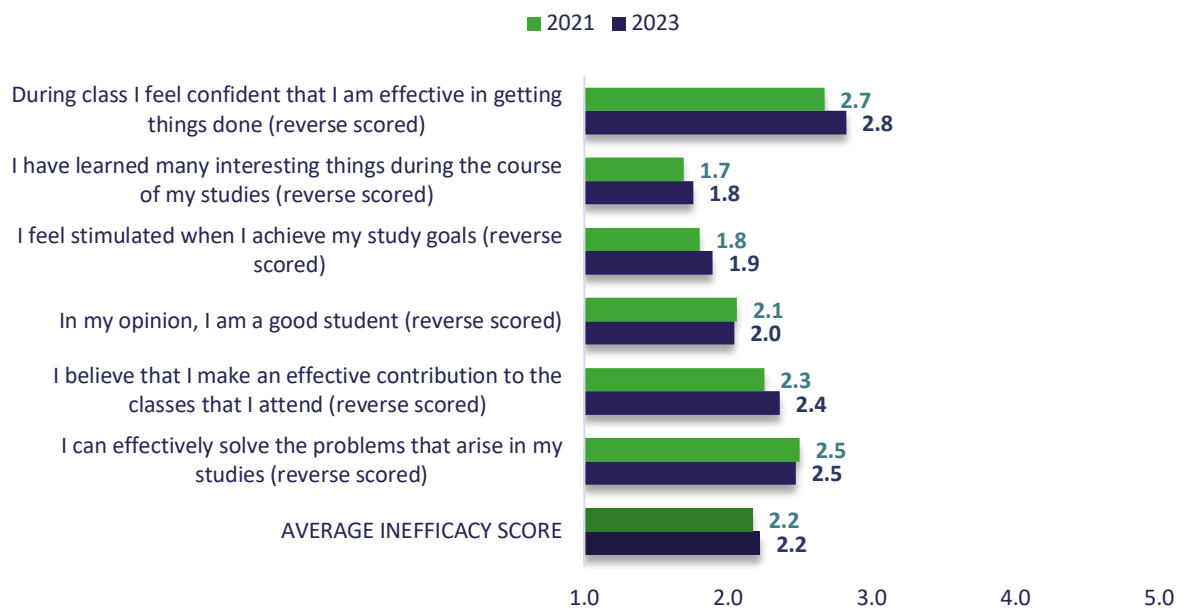


Figure 29: Inefficacy

WELLBEING, DISTRESS, AND BURNOUT

Key findings

- Respondents have very low levels of wellbeing as measured by the Personal Wellbeing Index. The average score for the sample is lower than the 2021 survey and substantially lower than the Australian average in 2022.
- Many respondents reported moderate to high levels of psychological distress. However, scores on the subscales for anxiety and depression that are greater than or equal to 3 indicate the presence of anxiety or depression. On average, there were significant levels of anxiety, but the level of depression was below this threshold.
- The three aspects of student burnout revealed mixed results. Students reported high levels of exhaustion but did not tend to feel diminished personal accomplishment (inefficacy).
- In the 2023 survey personal wellbeing was lower and psychological distress was notably higher among architecture students compared to the 2021 survey.
- While the levels of inefficacy have not changed since the 2021 survey, other aspects of burnout have increased in 2023 with students tending to experience greater levels of cynicism and exhaustion.

PART FOUR: Personal factors and the experience of wellbeing

Gender and age

In this section we compared respondent scores on personal wellbeing, psychological distress, and burnout (as measured by cynicism, exhaustion, and inefficacy) to examine the impact of gender and age on these issues.

This additional analysis showed that there were no statistically significant differences based on gender or age for:

- personal wellbeing.
- psychological distress.

With respect to the three aspects of burnout, there were no statistically significant differences for gender or age on the measures of cynicism and exhaustion.

However, the analysis revealed that there were statistically significant differences for both gender and age on the measure of inefficacy. Figure 30 shows that:

- female respondents reported higher levels of inefficacy compared to males.
- respondents in the youngest age group (less than 26 years) were more likely to report higher levels of inefficacy compared to the two older age groups (26 years or more)

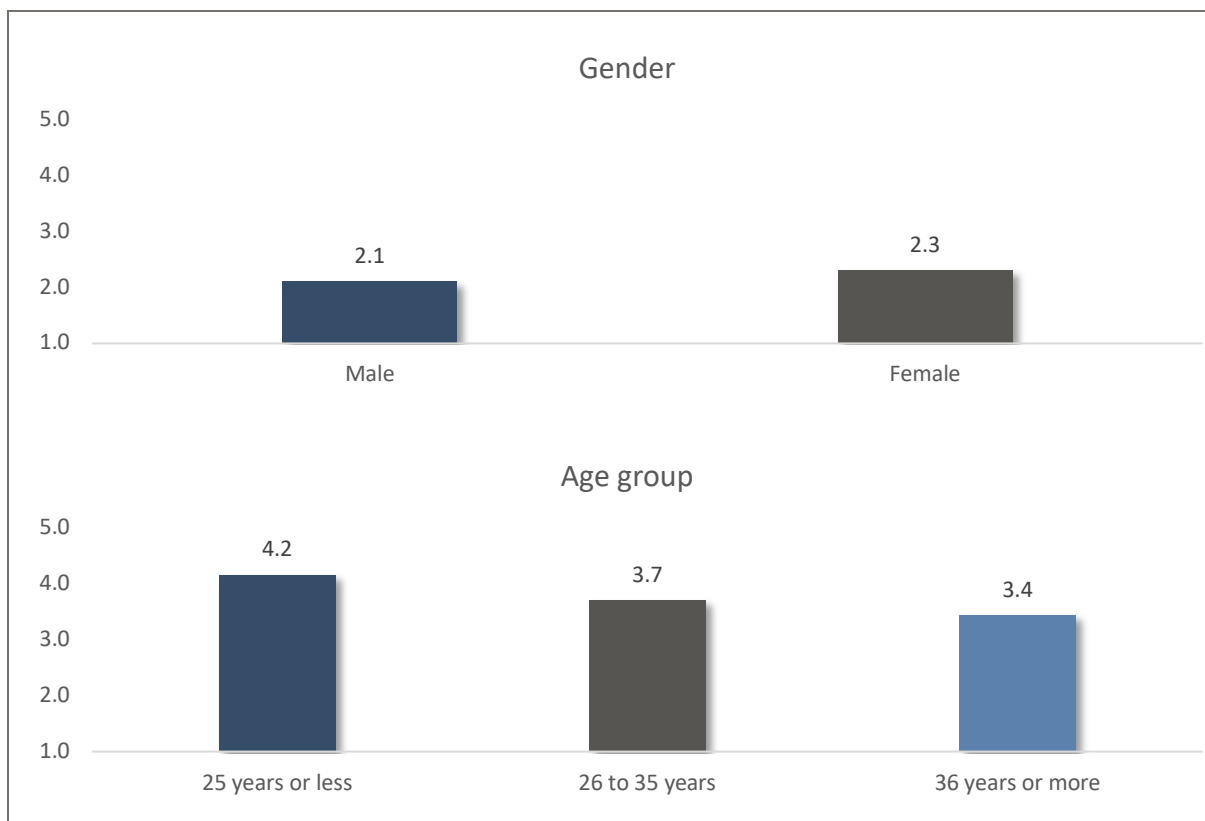


Figure 30: Gender, age, and inefficacy

Student work status

We also examined whether work status had an impact on respondents experience of personal wellbeing, psychological distress, and burnout.

This additional analysis compared those who were employed in architecture ($n = 95$), employed outside of architecture ($n = 115$), and those who were not working ($n = 77$). The results showed that there were no statistically significant differences for work status on the measures of:

- personal wellbeing.
- psychological distress.
- exhaustion.

The analysis did reveal that there were statistically significant differences for work status on feelings of cynicism and inefficacy. Figure 31 shows that:

- those who were employed within the field of architecture were more likely to report higher levels of cynicism compared to those who were employed in other industries.
- those who were not working at all reported higher levels of inefficacy compared to those who were employed in architectural work and those employed in other industries.

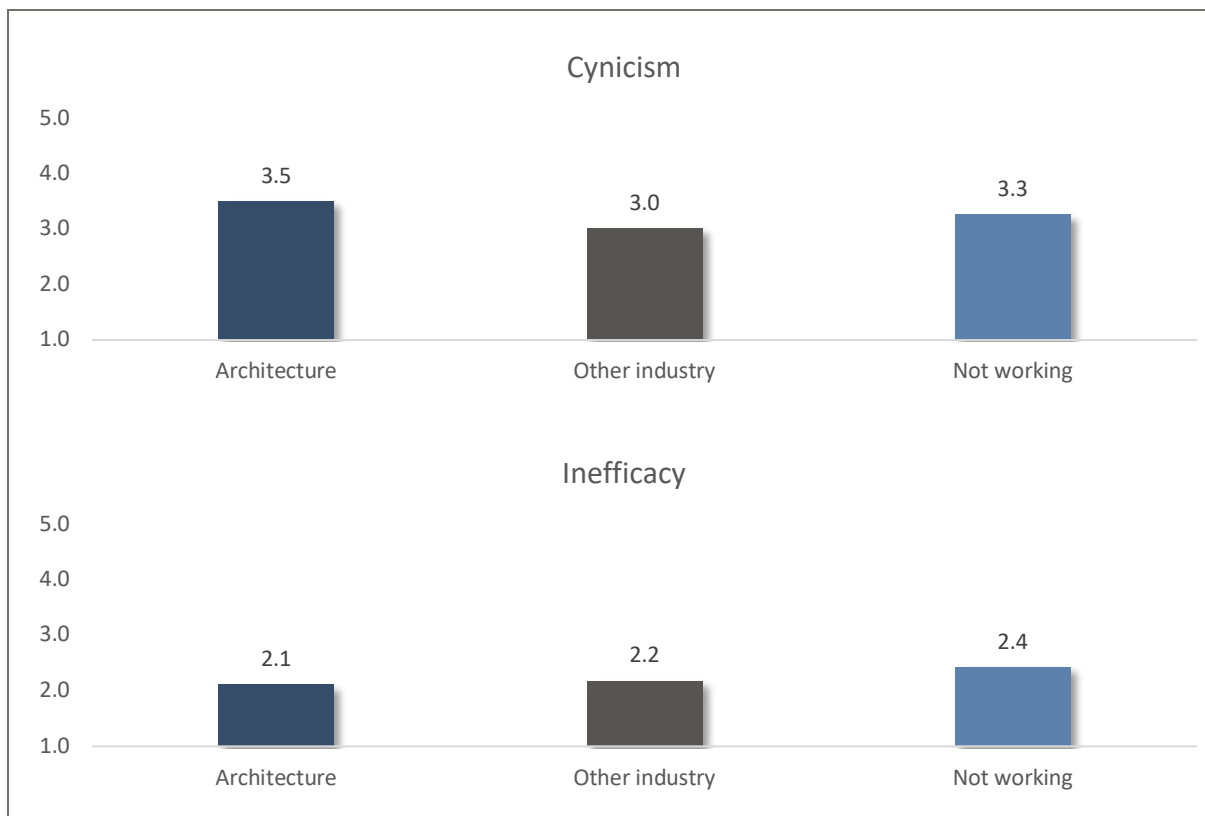


Figure 31: Work status and burnout

Level of financial security

We examined whether financial security had an impact on respondents' personal wellbeing and psychological distress.

This additional analysis compared those who rated their financial security as very secure or somewhat secure (secure = 72), neutral ($n = 42$), with those who rated their financial security as very insecure or somewhat insecure (insecure = 173).

The analysis showed that there were statistically significant differences for the level of financial security and:

- personal wellbeing, and
- psychological distress.

Figure 32 shows that:

- those who rated themselves as financially secure or neutral about their finances were more likely to report higher levels of personal wellbeing compared to those who were financially insecure, and
- those who rated themselves as financially secure were more likely to report lower mean levels of psychological distress compared to those who were financially insecure or neutral about their finances.

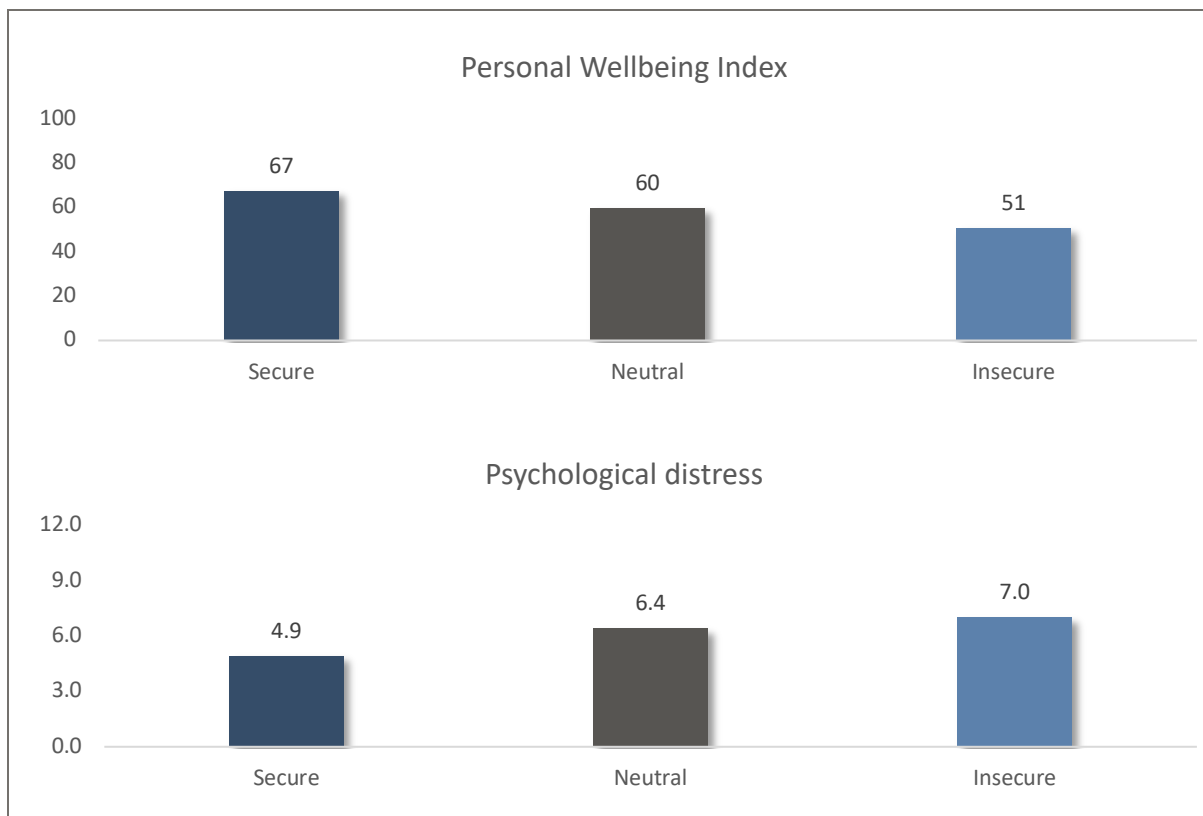


Figure 32: Financial security and wellbeing

Notably, those who reported that they were financially secure have mean scores on personal wellbeing that are closer to the general population mean of 74 while those who reported being financially insecure have personal wellbeing scores well below the population norm. Further, those who reported that they felt insecure about their financial situation reported the highest average levels of psychological distress.

We also examined whether financial security had an impact on respondents' levels of burnout (as measured by cynicism, exhaustion, and inefficacy).

The analysis showed that there were statistically significant differences in the effect that the level of financial security had on all aspects of burnout.

Figure 33 shows that those who rated themselves as financially secure or neutral about their finances were more likely to report:

- lower levels of cynicism compared to those who were financially insecure, and
- lower levels of exhaustion compared to those who were financially insecure.

Finally, those who rated themselves as financially secure were more likely to report lower levels of inefficacy compared to those who rated themselves as financially insecure.

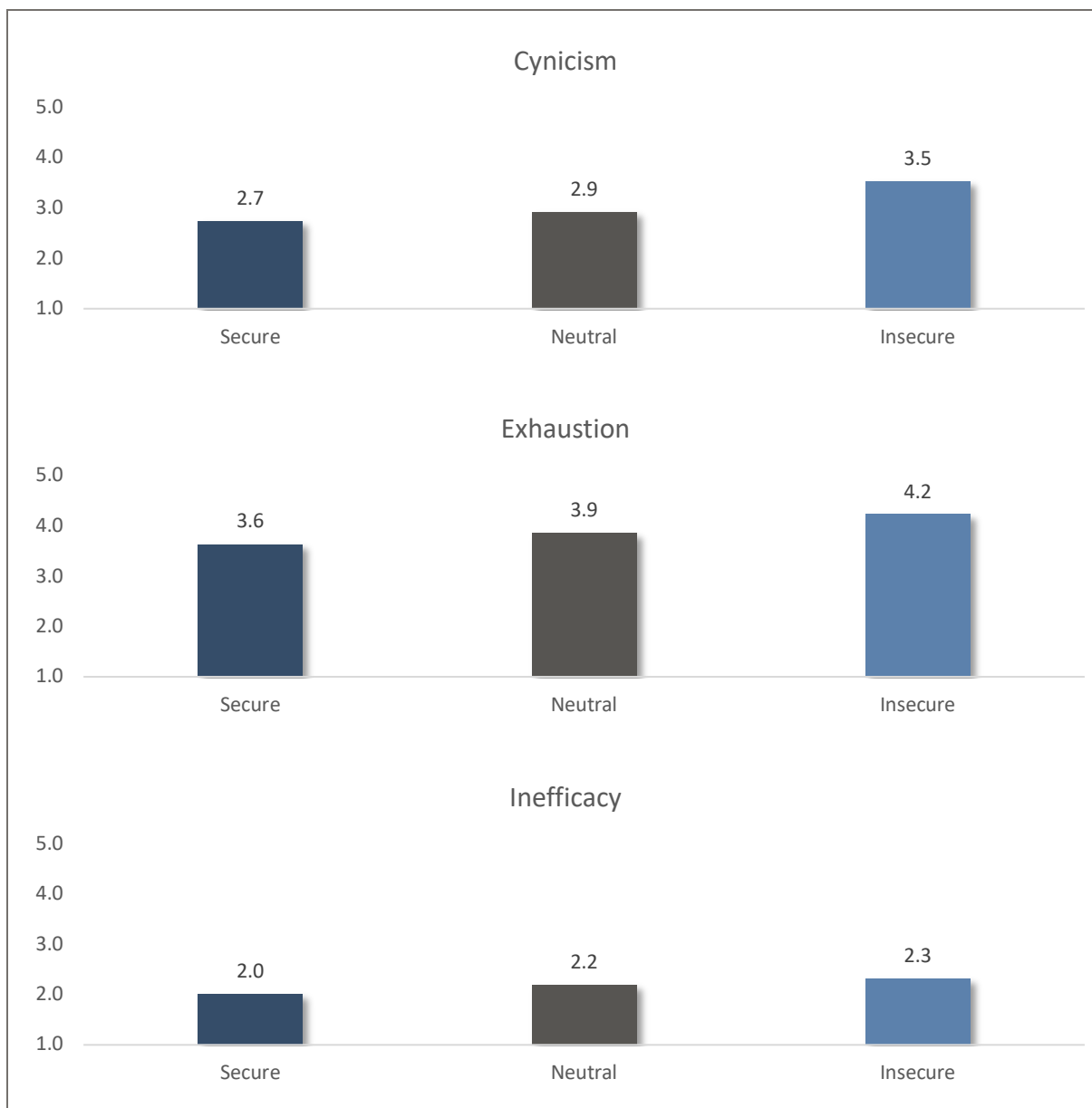


Figure 33: Financial security and burnout

Climate and support at university

In this section we present correlational analyses between experiences of student life and respondents' wellbeing, psychological distress, and burnout. The associations among these variables are displayed in Table 1 below, and more detail can be found in Appendix 3.

There are some notable relationships between scores for student life and those of wellbeing, psychological distress, and burnout which we highlight below. These results are important and informative because they show how student experiences at university can have an impact on their overall health and wellbeing.

Respondents who had **higher levels of personal wellbeing** tended to also report experiencing:

- better study-life balance,
- better support from family and other people in their lives, and
- satisfaction that their need to feel competent at university was being met.

They also reported that they felt:

- a greater sense of career optimism, and
- satisfaction that their need for relatedness was being met.

Respondents who had **higher levels of psychological distress** tended to report experiencing:

- more negative feelings about their relationships on campus,
- higher levels of perfectionistic concerns, and
- poorer study-life balance.

The relationships between student life and their experience of burnout varied across cynicism, exhaustion, and inefficacy. However, it was feelings of inefficacy that had the strongest relationship to their experience of student life.

Respondents who had a **higher level of cynicism** tended to report experiencing:

- lower levels of career optimism, and
- more negative feelings about their relationships on campus.

Respondents who had a **higher level of exhaustion** tended to report experiencing:

- more negative feelings about their relationships on campus.

Respondents who had a **higher level of inefficacy** tended to report:

- that their need to feel competent at university was not being met,
- that their need for feelings of autonomy at university was not being met,
- a lower sense of career optimism,
- a lower sense of institutional support
- that their need for feelings of relatedness was not being met, and
- a poorer study-life balance.

The table below shows both the magnitude and direction of the relationships among the variables, where higher numbers indicate a stronger relationship between two variables.

- **Positive relationships**, shown in shades of green, are indicated by figures between zero and 1 (these relationships are called 'positive' because the scores for the variables in question will increase together).
- **Negative relationships**, shown in shades of red, are indicated by figures between zero and -1 (these relationships are called 'negative' because as the score on one variable increases, the score on the related variable will decrease).

Table 1: Student life and wellbeing

Student life	Wellbeing	Distress	Cynicism	Exhaustion	Inefficacy
(poor) Campus climate	-0.44	0.48	0.42	0.37	0.33
Institutional support	0.38	-0.16	-0.23	-0.24	-0.46
Support for study	0.45	-0.14	-0.15	0.01	-0.26
Autonomy	0.35	-0.21	-0.28	-0.28	-0.54
Competence	0.44	-0.30	-0.24	-0.25	-0.66
Relatedness	0.40	-0.21	-0.15	-0.17	-0.44
Study-life balance	0.48	-0.36	-0.24	-0.23	-0.41
Career aspirations	0.15	0.10	-0.20	-0.04	-0.37
Career optimism	0.41	-0.28	-0.47	-0.29	-0.48
Identity	0.18	-0.01	-0.25	-0.21	-0.34
Perfectionistic standards	0.17	0.06	0.02	0.09	-0.29
Perfectionistic concerns	-0.32	0.48	0.27	0.26	0.22

IMPACT OF STUDENT LIFE ON WELLBEING, DISTRESS, AND BURNOUT

Key findings

In general, experiences of student life were impactful on student wellbeing, particularly campus climate.

- Better personal wellbeing was associated with attaining study-life balance, feeling supported at home and positive about relationships on campus. Personal wellbeing was also associated with feelings of competence and optimism for their future career.
- Greater levels of psychological distress were associated with poorer campus climate and stronger perfectionistic concerns.
- Burnout, as measured by cynicism, exhaustion and inefficacy, was related to all aspects of student life but there were some notable associations:
 - A higher level of cynicism tended to be associated with poor campus climate and lower levels of career optimism.
 - Exhaustion tended to be associated with poor campus climate.
 - Inefficacy tended to be associated with basic psychological needs not being met, particularly competence and autonomy. Inefficacy was also associated with lower levels of career optimism, lower levels of institutional support, and poor study-life balance.
- This pattern of relationships is broadly similar to that reported in the 2021 survey.

PART FIVE: Comments about wellbeing of students

The survey included four open-ended questions that gave students an opportunity to discuss their study-related wellbeing in their own words. The four questions were:

1. What personal factors have had an impact on your wellbeing?
2. What actions have you taken to support your wellbeing?
3. What do you think are the greatest challenges for the wellbeing of people studying architecture today?
4. Is there anything else you would like to add about wellbeing in architecture?

While not all respondents answered each question, most individuals answered at least one open-ended question. This resulted in 234 responses to the first question, 242 responses to the second question, 238 responses to the third question, and 155 responses to the final question.

The first two open-ended questions were focused specifically on factors that respondents felt had impacted on their own wellbeing and actions taken to support their wellbeing throughout their architectural studies. The remaining open-ended questions asked respondents to think about student wellbeing in architecture more broadly.

The responses to each of the open-ended questions were manually coded into themes. These responses were summarised into their common themes and are discussed below, with a brief selection of indicative responses.

Personal factors that had an impact on study-related wellbeing

Several main themes emerged from the comments including homelife and finances, health and wellbeing, study-life balance, and university life.

Relationships and family

A number of respondents indicated that relationships and family issues had an impact on their wellbeing. Many were not specific about how their relationships impacted their wellbeing but those who were said, for example, that they had lost support when they or their friends moved location. Similarly, relationship break-ups also impacted on respondents' capacity to cope with study or focus on study.

Work and finance

Cost of living pressures and financial hardships were a concern for many respondents, particularly those who do not live at home with their parents. Poor financial conditions, experiencing redundancy, restricted work hours on student visas, and the impact of financial precarity more generally had a negative impact on respondent wellbeing.

Housing

Finding and maintaining a secure home was problematic for some respondents. Precarious housing, excessive or increasing rent, and the threat of homelessness all took a toll on wellbeing.

“Going through a breakup had a significant impact on my ability to focus.”

“Having close person friends move away and losing emotional support. Exclusion from social activities from friends due to perceived study workload. Lack of dating (a personal choice to not date anyone due to the pressures of being a student).”

“Moving cities to start my Master of Architecture at a different university. Leaving my friends and family behind.”

“Living alone without family in Australia.”

“I've been struggling with financial security, living away from home to study and fully financially support myself.”

“My financial circumstances have had a negative impact on my wellbeing; supporting myself entirely, living out of home.”

“Dealing with redundancy, lockdowns and trying to manage part time work.”

“Uncertainty related to work, income, rent.”

“They even tell you at [name deleted] that you should only work 1 day a week as a full-timer. That doesn't even cover groceries or transport ... MORONIC.”

“Having to move homes multiple times due to relationships and owners selling the rental I have lived in.”

“Having insecure housing due to dramatic increases in rent and a competitive rental market.”

“Basically impossible to focus on study when my primary day-to-day concerns invoke trying not to be homeless.”

Mental health and trauma

The experience of anxiety, depression and stress, were commonly raised issues that respondents' said impacted on their capacity for positive wellbeing.

These issues were sometimes reported to arise from family problems and study-related stress. However, some reported having had traumatic experiences such as the death or serious injury of family members or the experience sexual assault.

Physical health

Respondents described physical health issues that impacted on their wellbeing including poor sleep, musculoskeletal injury, disability, and managing chronic illness. Loss of sleep was a common subtheme for physical health and was associated to stresses from study and assignments.

"The amount of stress that I have been put under the past 3 years has significantly impacted both my physical and mental health."

"Currently I do have mental health issues already and studying architecture has made it very difficult to look after myself."

"Depression, anxiety possibly rooting from burnout after 2 years of uni. Other life factors have increased depression, but continuing to do uni makes it worse."

"An incident of sexual assault and dealing with ongoing trauma from childhood."

"Parent passing away."

"The passing of both my grandparents."

"I have a physical disability and architecture leaves no room for poor physical health. At times, the structure of architectural courses feel ableist with the amount of work expected, sacrifices made and physical toll on body."

"I can tell my health has also declined, increased visits to the doctor. I'm also a lot more overwhelmed, despite family support."

"Lack of sleep. Assignment periods affecting sleep patterns."

"My chronic illnesses are getting worse because I've been up all night."

Study-life balance

Creating a balanced life was reported as a considerable challenge for respondents. They described the challenges of managing their studies alongside work, families, and friendships, and other activities, such as physical fitness, that they saw as necessary for their wellbeing.

They discussed how the high demands of their architectural studies were sometimes at odds with the realities of needing to earn a living. They indicated that the pressures of study combined with a cost-of-living crisis and the amount of work they needed to do to pay rent or a mortgage impacted negatively on their wellbeing.

Similarly, respondents who were attempting to balance their studies alongside the care of children or other family members also found that balancing study, family, and work, were challenging and sometimes difficult.

There was a sense that architecture studies were designed for those who did not have responsibilities and were unencumbered by the need to work to cover the cost of living.

“I and lots of others would agree that this degree doesn't lend well to someone who isn't straight out of high school and still being supported by their parents. It definitely makes it a whole lot harder than it should be, and fosters quite a stressful study environment.”

“Job stress and the unreasonable expectations of study loads, basically we have lives to support outside of uni we can't not work.”

“Maintaining an income whilst studying full time and paying a mortgage.”

“Having to work part-time and study full time with the demands of the degree still being unreasonable, living out of home which makes studying after a day at work very tiring as well as having to cook dinner and do other chores etc.”

“Having three children and a mortgage means that my study competes with a very busy home life and a financial obligation to provide income.”

“As well as full time study I am also doing part-time work [20 hours per week] and I'm a mum so I have family commitments. The combination of everything is incredibly challenging.”

“I am a part time student who is also working and with a young family, it is often difficult to juggle the demands of work, family and Uni deadlines.”

“Caring for grandparent with dementia.”

“Balancing a social life, intimate relationships, extracurricular activities and work on top of architectural studies has been tough.”

“Unable to keep up with personal relationships because of degree and dedication needed to pass.”

Support at university

Comments on support at university covered relationships with fellow students, interactions with staff, and a general feeling of isolation.

Some respondents felt unsupported due to the competition that they sensed from their peers or judgemental behaviour towards women in class. Others felt that they did not have enough personal interaction at university.

A lack of supportive behaviour from staff was also discussed in the comments with some respondents feeling a lack of support through the education process for how to manage assignments and deliver the quality of work that was expected of them.

Workload

Study-life balance was reported by respondents as difficult to achieve while studying architecture, some noting that there were unrealistic pressures placed on students and that lecturers didn't understand the intensity of the time requirements to complete assessment tasks.

Feelings about the future

While concerns about the future were not a major focus of qualitative responses about study-related wellbeing, some respondents were concerned about the value of their course and how they would get an internship or job.

“Misogynist views from some class members are degrading to women in architecture and effect our motivation to continue. The judgement from peers is purely judgement and not criticism and this happens when unprompted.”

“I think presenting in person has contributed to a lower wellbeing due to the competitive nature of my major.”

“Lack of personal interaction.”

“Staff not being clear or transparent about grading or feedback.”

“Staff not supporting or managing group work.”

“Can only do this degree because I am living at home. The workload makes it impossible to sustain an income.”

“The subjectiveness of the program and how unrespectful some tutors or lecturers can be. The expectations from lecturers to achieve perfection when in reality we are learning and trying our hardest.”

“Staff setting unreasonable deliverables that cannot be delivered in a reasonable time limit especially without preloading any teachings or how to do.”

“Unrealistic assessments and expectations, assessments that take more than double the time the lecturers think they would take.”

“The unreasonable expectations of study loads.”

“Thinking about my life decisions and whether this course is worth it.”

“Actually, starting a career in architecture. I feel like I was tagged along and given hope when there is none. The university just wanted the money and doesn't care about what happens to the person next.”

“The knowledge the despite the degree, our future in this field is not guaranteed. Despite all the debt and work, our degree doesn't guarantee a job. Instead, this field is reliant on who you know and if you're integrated into elite circles.”

What actions have you taken to support your wellbeing?

Several main themes emerged from the comments including health practices, help seeking behaviours, and study-life balance.

Physical health practices

A number of respondents supported their study-related wellbeing by focusing on the quality of their diet and fitness as well as improving their sleep.

For some respondents, taking care of their physical health was an important approach to their study-related wellbeing. This included increasing physical activity, going to the gym, practicing yoga, and walking. Some respondents also said they attempted to focus on good nutrition.

Mental health

Respondents also sought to improve their mental health through positive practices that were usually aimed at reducing stress. These practices included taking time out, meditation, and working at changing their attitudes or behaviours that were not conducive to improved wellbeing.

Time out was sometimes as simple as taking breaks or naps but it also included getting outside and going for walks. Self-care practices including introspection, listening to music or a podcast were also said to contribute positively to study-life wellbeing.

Changing attitudes and behaviours

This theme included relaxing perfectionistic attitudes and behaviours as well as understanding that university is important but it is not everything. Other changes to attitudes included trying not to compare themselves to others who are in different circumstances.

“Took more care of my physical and mental health by staying more active and eating healthier.”

“Live healthier by exercising, sleeping well and eating well.”

“I have also been working on myself in other areas such as: meditation, journaling, maintaining an active lifestyle i.e. riding to work/uni and recreationally when I can as well.”

“Taken more time to myself to relax and refresh.”

“My main self-care included allocating times to watch my favourite shows or listen to a podcast.”

“Mindfulness practices to manage stress and increase productivity.”

“Self-care, going on walks, taking breaks.”

“Sit in nature, drive around to music.”

“I bought an electric scooter and ride it most days when I need a break from study. When going for a ride on it, I find it regenerates me.”

“Limit my expectations of my work, it is unrealistic for me currently to achieve the pushed high grades. Tutors often forget that 50% is a pass and is around what is expected of you however 80-90+ marks are all that is talked about which makes study exceptionally stressful.”

“Lower my personal standards to stop being a perfectionist.”

“Addressing that my difficulty with concentration and procrastination is something within my power. I have been reading on research around regaining concentration and working to formulate strategies to complete my workload.”

“Have reduced the amount of comparison I do with other students and a knowledge that others spend more time on their uni than I can afford at this stage of life.”

“Putting my phone away to concentrate.”

Help-seeking behaviours

Those who sought help to improve their wellbeing generally sought help from counsellors or therapists and some respondents sought help directly through the university.

While most respondents did not specify the reason for seeking professional help, those that did, stated that they were seeking help to cope with their studies or mental health concerns such as anxiety or depression.

Those seeking help from university support services mostly reported that they were seeking special consideration in assessments. Others spoke to academic staff members including tutors, lecturers, and course directors.

Study-life balance

Measures taken to improve wellbeing also included improving study life balance. The main way to achieve study-life balance was to ensure that students spent time with family and friends so that they could rest and seek support.

Taking breaks from study and work was also a common theme which included taking breaks from both university and work as well as taking short trips away. This might mean changing study load to part-time so that students can manage their stress levels. Similarly, setting boundaries around study and time management was also seen as a factor for improving wellbeing.

While time management meant reducing time spent in paid work for some, others increased their paid work to reduce the impact of poor financial security on their sense of wellbeing.

Finally, some respondents reported that they spent more time on their hobbies and other activities. This included learning new things that could distract them from stressors as well as enjoying simple things such as reading.

“I have started going to therapy because of the stress from architecture.”

“I have been going to counselling to talk about coping with the negative impacts of the architectural education canon.”

“I have begun therapy to address increased feelings of anxiety and depression.”

“I have started seeing a psychologist, for multiple reasons but definitely to support my own wellbeing.”

“I have been going to [name removed] Counselling for my wellbeing.”

“Gone to [name removed] counselling, lowering social activity, speaking to my tutors about my issues, deciding when to prioritise health over uni work.”

“Sacrificed my standard of work in favour of having more time to rest and spend time with family and friends.”

“Seek special considerations and make use of simple extensions.”

“Trying to spend more time around friends.”

“I have gotten support from friends and family.”

“Have one night a week dedicated to rest/family.”

“Going on small getaways to ensure a mental break.”

“Decided to take part time to better manage my stress levels.”

“Have cut back with work to 25 hrs a week instead of 40.”

“I've reduced my in-semester study to three subjects and taken an intensive to maintain full time.”

“Setting a plan for deliverables and getting them done strictly.”

“Setting boundaries with my study commitments.”

“Doing hobbies, learning about things other than architecture.”

“Trying new activities to distract myself from stress.”

“Taking up part-time work to help with financing studies.”

Greatest challenges for the wellbeing of people studying architecture today?

The main theme that emerged from the comments on challenges was about respondent experiences at university, particularly around workload – which they felt strongly about. However, course culture along with concerns about their future career also emerged as themes. Overall, the responses to this question were worrying and suggest the need for reform in architectural education, particularly around workload.

Work intensity

The dominant concern for architectural students regarding challenges to their wellbeing was the intensity of work and the investment of time required to manage their assignments and complete the course.

Respondents described the workload in architectural courses as unmanageable, overwhelming, unrealistic, and excessive.

They felt that workload problems were exacerbated by shorter semesters that left them with decreasing study time. They said they were challenged by frequent deadlines with short timeframes for their assignments. They also felt that their assignments were labour intensive which further exacerbated their workloads.

Some students reported that the workload pressure was impacting their health through a lack of sleep and other mental health concerns such as of anxiety, burnout, and panic attacks.

There was also a sense that the high workloads meant that it was difficult to maintain high standards. This meant that respondents felt that they were not able to reach their full capacity as a student because they found the workload draining rather than inspiring.

“The workload is completely unmanageable. It feels like whatever you produce will NEVER be enough. It seems impossible to set boundaries around study.”

“The workload is insane compared to other degrees. We are known for not sleeping.”

“Workload expectations in what seems to be an ever-decreasing study period ... If the semesters were longer, then it would allow a less intense, more manageable workload.”

“Deadlines with heavy amount of deliverables in a short amount of time.”

“I feel as though no matter how well you organise your time, studying a full load while living out of home and being both fulfilled in life and exceptional at university is impossible.”

“The amount of pressure and workload and time that it takes to complete assignments as well as the creative strain.”

“Getting overwhelmed about the workload of the architecture degree. It has made students in my cohort have panic attacks, freeze, shake, and struggle to get work completed.”

“It’s hard to achieve what you’re capable of when you have to rush assignments due to heavy and tight workload.”

“The constant workload. Not being able to take breaks between assessments when in the design process (studio) -- if you take a week off during the mid-semester break, you end up being behind for the rest of the semester.”

“I don't think the intense workload during university is a good reflection of the work force and feel it only drains students rather than inspires them. The workload intensity and lack of flexibility disables students from being able to pursue other passions or work whilst studying.”

“Deadlines are usually really, really close together. It's almost impossible to get everything done for each assignment to a high standard when everything is due at the same time.”

Course culture

Respondents said that the high expectations within the course were unrealistic and that these expectations led to unhealthy behaviours such as sacrificing sleep for studies.

There were also comments about course expectations creating a toxic culture of competition among students. It was suggested that this culture is sometimes not conducive to students' capacity to learn or be creative.

More generally, the comments indicated that there was an unsupportive culture within architecture. This was partly because architecture was seen by some as a 'results driven' course rather than a holistic learning experience. This is a challenge to students because it does not accommodate their need for a sense of wellbeing or for being creative.

There were also some comments that described everyday occurrences of negative behaviours such as incivility from teaching staff and highly critical evaluations within studio culture that are distressing and impact negatively on student wellbeing.

Overall the comments in this area were powerful and present a worrying picture of poor culture in some educational contexts in architecture.

"I think the greatest challenge was the relentless expectations and feelings of toxic competition between peers that drives people to neglect sleep."

"The competitive nature of architecture creates a fear, and reduces the opportunity to experiment, ask, and try. The culture has transitioned from education to a need for perfection, and its stifling."

"Perpetuating a culture where it's "normal" to have consistent all-nighters."

"Tutors and professors who are overly negative. Pretentiousness of the industry and those who work in it. Unhealthy work expectations and culture - people feel proud that they are pulling all nighters."

"I am ... really struggling to find the strength to keep going, after constantly being ripped apart in critiques and told I am not good enough."

"Some tutors create fear and pressure in the studio to "promote" good work."

"The studio culture and study mindsets have definitely been the hardest and most demanding. The lack of support and understanding in these spaces from tutors and staff have also made a great negative impact on a lot of us."

"The usual dissatisfaction with marks from unclear moderation and parity processes, the 'crits' culture where student works are heavily criticised."

"We have personally had a coordinator and tutor be quite verbally abusive towards university student work which was a large blow to wellbeing."

"There is a lot of pressure to take on a massive workload, and produce satisfactory results in a short period of time. I feel the current structure is makes it difficult for people to have fun and enjoy the course, because they're more focused on handing something in. Learning architecture is amazing, but the learning process itself can be so damaging; life draining."

"Balancing an increasingly complex workload that was already demanding, but is becoming more information and research intense, whilst not reducing any of the deliverable or creative requirements of the deliverables. Beyond this working in architecture and studying is an incredibly draining balance of reality and creativity, that isn't well accommodated within the course."

"The overwhelming amount of pressure and stress students and especially myself, have been put under has greatly impacted my physical and mental health."

Course delivery and relevance

There were some specific comments regarding architectural courses that presented issues that respondents found challenging.

Group work was seen as challenging to wellbeing because those who were conscientious were expected to take on the responsibility for group projects. Consequently, they felt taken advantage of by students who were less productive or less capable.

Some respondents said that the process and timing for getting feedback and the final submission of assignments was flawed. They indicated that feedback from tutors was often given shortly before submission which did not allow enough time to effectively finalise their assignments without sacrificing paid work or sleep.

Work and future career

Some respondents had concerns about gaining internships or work but they were also concerned about their prospects of a career in architecture in the longer term.

They saw the future of architecture as having practical problems associated with rising costs of labour or the role of artificial intelligence. However, they also queried whether architecture and architects would be valued into the future.

In general, they saw an effort - reward imbalance in both studying for, and pursuing, an architectural career. This has implications for the future workforce in the profession and is an important issue to contend with for the future of architecture.

“Group work - honestly, it is horrible at times. It’s stressful thinking of how your results are tied up with someone else’s performance or lack of effort.”

“Groupwork: there are people who have obtained a bachelor’s degree because I did the assignments for them and teachers have the attitude you can either do all the work or your grade will be affected. There is absolutely no regard for students who want to do well, but rather this approach runs people into the ground.”

“Every task in architecture takes a lot longer than expected, and it’s hard to manage and balance time when tutors give you feedback to change things the week before submission ... its only after the final studio tutorial that students can finalise everything (but are only given 1 week to do this). Therefore in this week, it’s very common to get only 4-5 hours of sleep each night.”

“Lack of preparation and clarity from the unit coordinators. Tasks not being explained effectively ... assessment briefs and CRA's not being released until close to the assessment.”

“I believe the architecture course is quite detached from the industry - my learnings from my architectural work differs greatly from what is learnt in the classroom.”

“Lack of clear career progression = no mandatory placements, limited internship opportunities (mostly UNPAID or below minimum wage, untenable for students who are not fully supported by their parents).”

“Feeling secure that our studies will lead to a Successful career/confidence and great performance in the career.”

“The future job prospects for new graduates with no prior experience and how they will be able to make the transition from uni to the workplace.”

It’s a really individual degree where the greatest help you can get is from yourself. It also doesn’t pay as well as other degrees pathways so it can seem like you are working for less in the future and that can undermine the effort. It also doesn’t seem architecture is as crucial in the modern world as an engineering or even business degree.”

Study-life balance

Time management was often mentioned as a challenge for wellbeing because it impacted on respondent capacity to successfully balance multiple aspects of life including study, work, family, and friends.

Financial security and having time with family and friends were seen a critical to wellbeing but some respondents felt that they had to sacrifice these elements of their lives to some degree to keep up with their studies. In some cases, this has led to feelings of loneliness

The inability to achieve study-life balance meant that study-life demands took a toll on respondents' energy levels, compromised their sleep, and sometimes had a negative impact on their physical or mental health.

"Time management and mental health. I believe that many students feel they have to give their life to architectural studies, which seems to be supported by tutors and professionals, and this often leads to poor mental health outcomes."

"Architecture is very demanding and requires you to sacrifice time working as well as time with family and friends."

"Students who try to pursue work and study often feel that they are sacrificing everything for something that doesn't have clear, and guaranteed success in their future career ... The sacrifice often does not feel worth the outcome."

"I have to keep working to survive (especially after the 24 hour a week restraint), I don't have nearly as much time as others to properly look deep into the work I do and study how to efficiently do it well."

"Being able to have a work-life and study-life balance. Trying to be creative all the time is also a struggle for me."

"For me the course workload is not the issue. The issue is being exhausted from working to earn money and doing my course at the same time. I do not find the course work difficult I find it challenging in a good way. But having to work as much as I do while studying takes its toll on my energy levels. My financial insecurity and stress about money, not having free time and time away from my family and friends is what I find the most challenging."

"Managing goals with sleep. It's difficult to be able to stop working on an assignment and go to sleep when tired because it feels like you are compromising your goals."

Is there anything else you would like to add about wellbeing in architecture?

While a number of issues were raised in answers to this question, the main response to this item was that cultural change is needed in architectural courses in Australia.

The need for attitude change

The main theme for the answers to this question was that attitudes within architecture schools need to change. The respondents said that there should not be a sense of 'pride' in a culture that engages in poor health behaviours to meet course expectations.

Respondents discussed having to sacrifice their physical and mental health in their pursuit of a degree in architecture. They also felt that the narrative within architectural courses was characterised by poor pay, inequity, and work overload. This was seen as detracting from their need to be creative and innovative.

There was a sense that respondents needed more support from the university and that teaching staff needed to respect the wellbeing of students and have a greater sense of compassion for them. They wanted to move away from the idea that being overworked, losing substantial amounts of sleep, and being stressed as the norm in architecture – part of the culture and seen as a necessary part of studying in this field.

Respondents argued strongly for a need for change in the way architectural courses are run – not only in pursuit of health and wellbeing, but also with regard to the need to value learning and creativity.

Responses to this question were sobering and underscored the argument where respondents queried the value of undertaking architectural study in the first place.

“The culture of working really hard even if it means running on a dangerously small amount of sleep just to get a good grade as a pat on the back is heinous - then you start working and come to the sole crushing realisation that there is zero financial payoff for those hours.”

“[Wellbeing] doesn't exist. We shouldn't be proud of our sleepless nights. They shouldn't be necessary. We definitely shouldn't be proud of the high dropout rate.”

“Wellbeing and the need for support & help, only provides a temporary fix to an issue that is tied to the architectural university world driven by unrealistic expectations.”

“I think architecture is a ruthless degree that I have a love hate relationship with. I have sacrificed my well-being and physical health to pursue this degree. I think there needs to be more initiatives in place to help students.”

“It's a hard degree, but if you love it it's awesome. Student wellbeing is difficult in this degree, especially when people start boasting about not sleeping/unhealthy study habits as it can make you feel like you aren't doing enough.”

“I think the course unfortunately detracts from students initial passion - often the tutors instil a sense of cynicism about the professions - discussing the poor pay, hard workload and inequity for women in the workplace. This is disheartening for students and doesn't inspire creativity and innovation and makes them feel as though they are wasting their time which is definitely not good for wellbeing.”

“Perhaps it's time to slow things right down and question why architecture takes itself so seriously? Perhaps if we worked to enact more playful and caring pedagogic practices in our schools of architecture we might start to see wellbeing re-centred?”

“I think it is crucial to address this underlying culture of competition between peers and to show all that this is a career of collaboration rather than one of large egos, and that we need to allow one another to flourish to progress.”

PART SIX: About the respondents

In this section we describe the characteristics of the respondents to the 2023 survey. In many cases, the demographic composition of the sample in 2023 was similar to the survey sample in 2021 (e.g., gender, age). Detailed comparisons between the 2021 and 2023 surveys for respondent characteristics can be found in Appendix 4.

Personal characteristics

Figure 34 displays the distribution of gender in the survey sample. More than half of the respondents identified as female, 35 percent as male and four percent as nonbinary or transgender. This is consistent with the distribution of gender in the 2021 survey; noting that both surveys have an over-representation of female students.

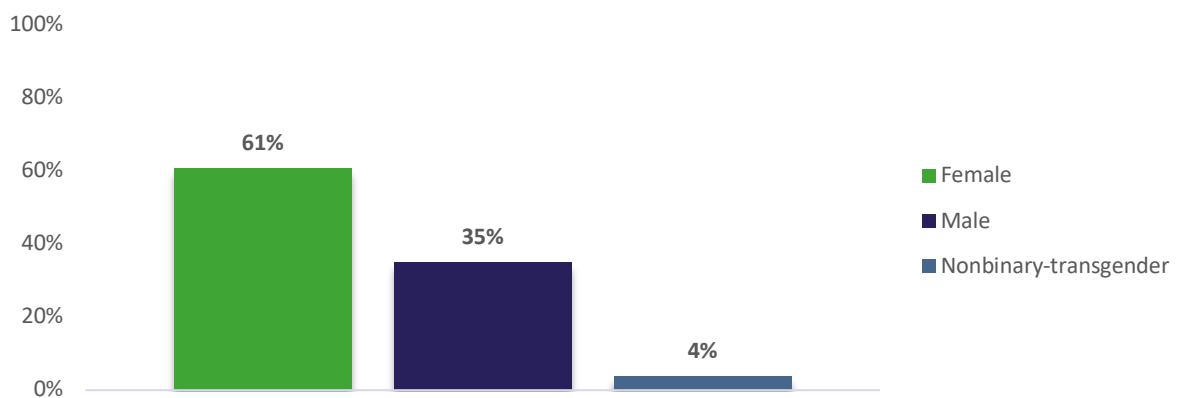


Figure 34: Gender of respondents

Figure 35 shows that respondents to the survey tended to be 25 years old or less, while 32 percent were 26 years of age or more. This is roughly consistent with the distribution of age in the 2021 survey.

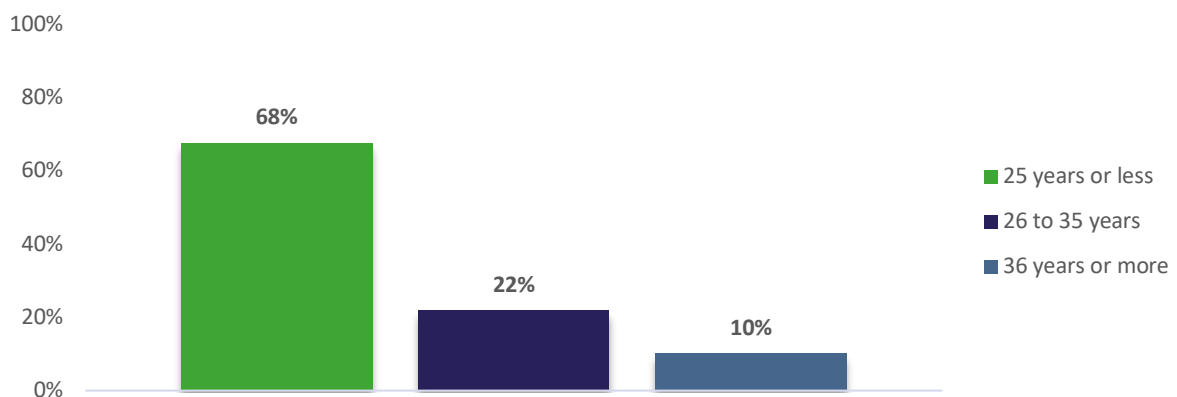


Figure 35: Age of respondents

Figure 36 shows that the largest number of respondents lived in New South Wales, Victoria, and Queensland. None of the respondents were from the ACT or the Northern Territory.

This distribution differs from the 2021 survey, where just over half of the respondents were from Victoria (52 percent) rather than New South Wales (18 percent). Further, in the 2021 survey approximately one percent of the respondents were from the ACT or Northern Territory.

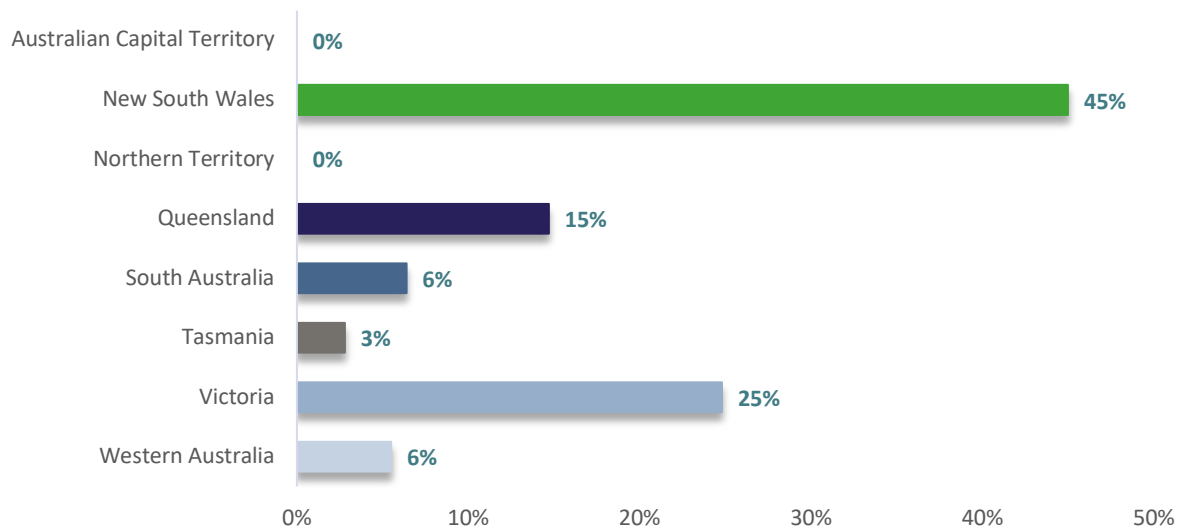


Figure 36: State of residence

About two-thirds of respondents were born in Australia (64 percent), which is consistent with the respondents in the 2021 survey and the general population of Australia (Australian Bureau of Statistics, 2021).

Figure 37 shows the place of birth for respondents in the sample who were not born in Australia. The largest group was born in north-east Asia, south-east Asia, and southern and central Asia. This pattern is roughly consistent with the 2021 survey.

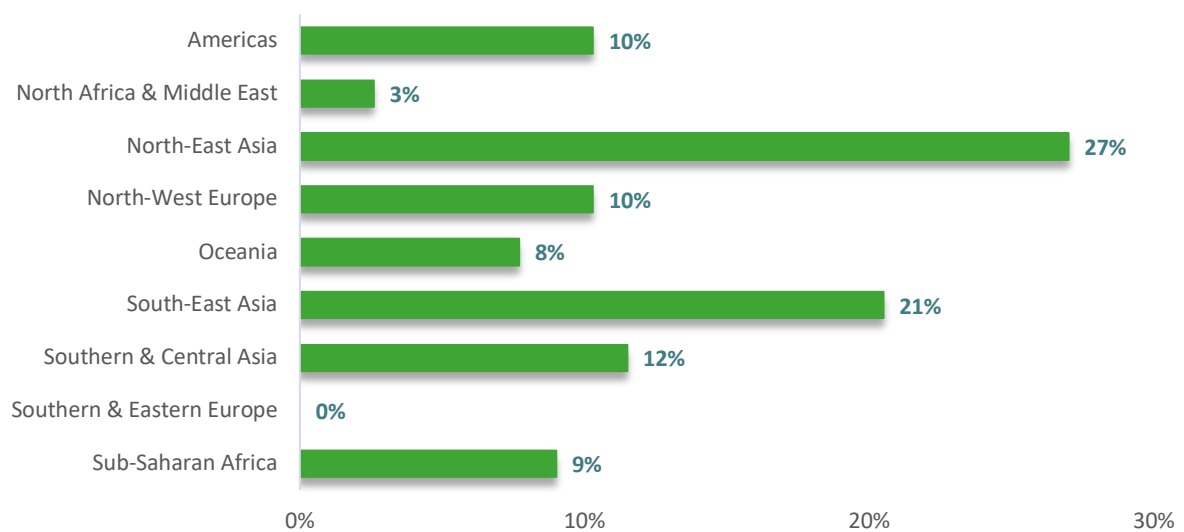


Figure 37: Place of birth for those not born in Australia

Figure 38 shows that, for respondents not born in Australia, most were either Australian citizens or living in Australia on a temporary visa. This is consistent with the 2021 survey.

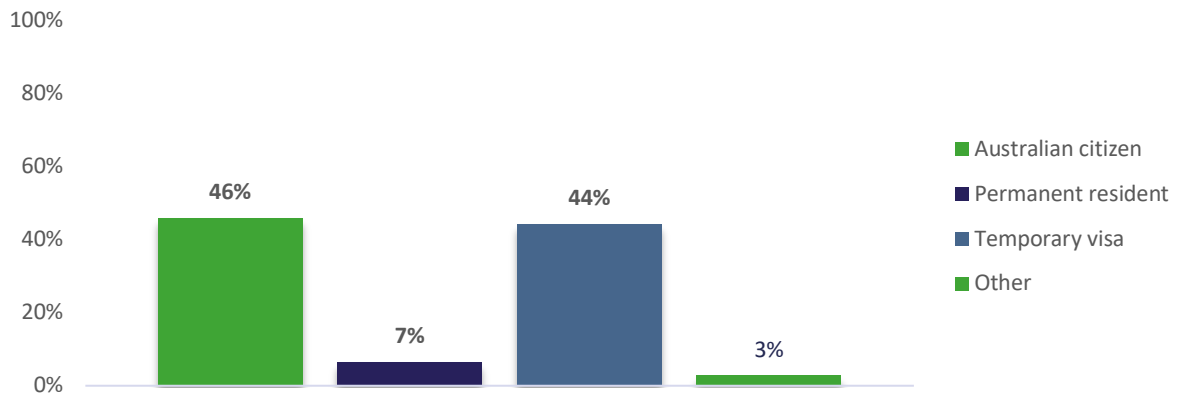


Figure 38: Residency status

Figure 39 shows that, for respondents who speak English as a second language, more than half said they spoke English very well. Only a small percentage of respondents said they did not speak English very well. This is also consistent with the 2021 survey.

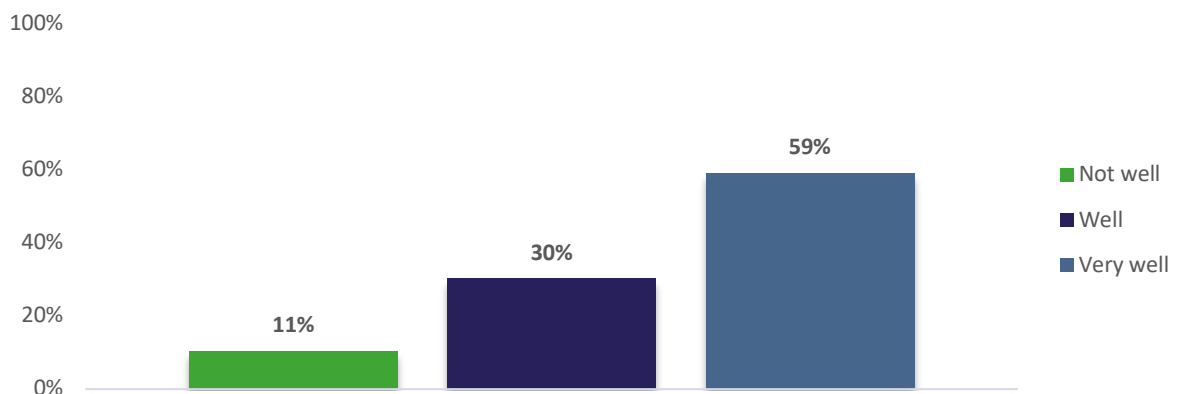


Figure 39: Proficiency in English for those who speak English as a second language

Most respondents in the sample reported living with their parents or in shared accommodation. This is consistent with the 2021 survey.

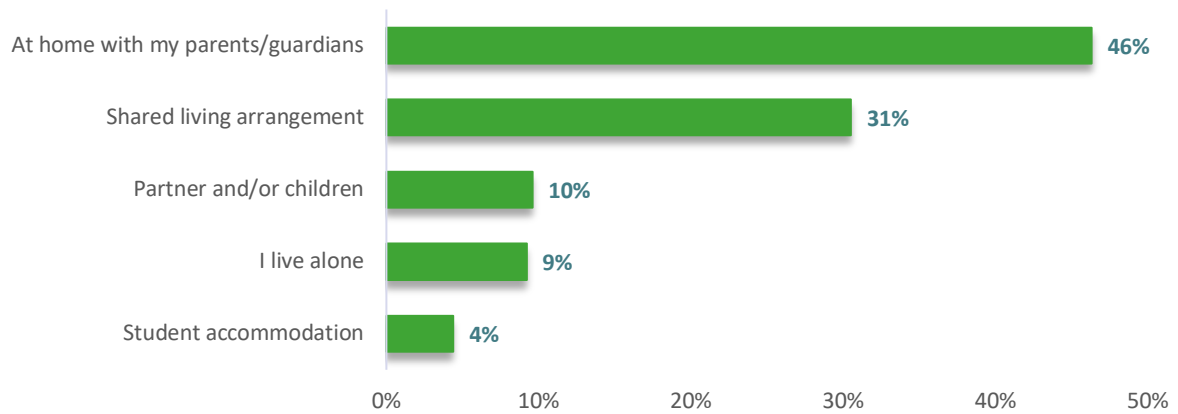


Figure 40: Usual living arrangements

Study characteristics

Figure 41 below shows that more than half of the respondents reported being enrolled in a Bachelor of Architecture or similar degree (e.g., architectural studies). Nearly half were enrolled in a Master of Architecture.

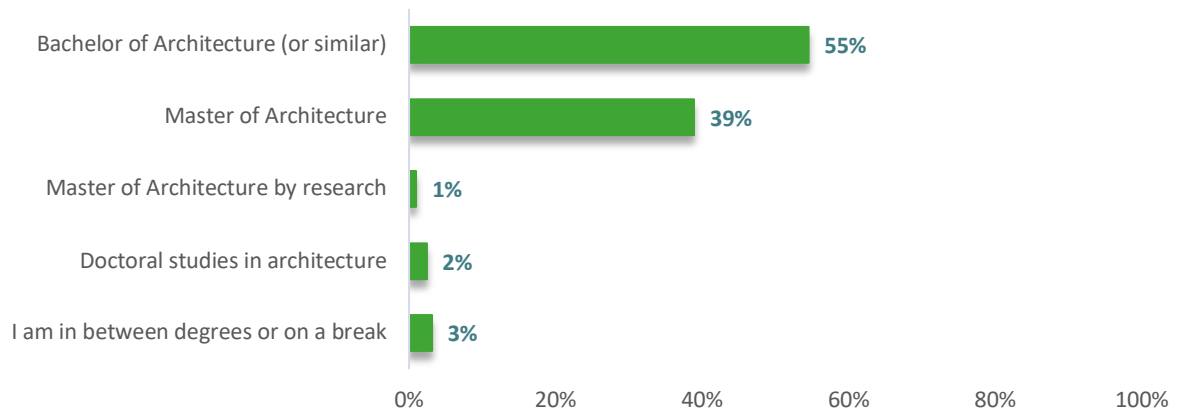


Figure 41: Type of degree

Figure 42 below shows that most respondents were domestic rather than international students. This is consistent with the 2021 survey.

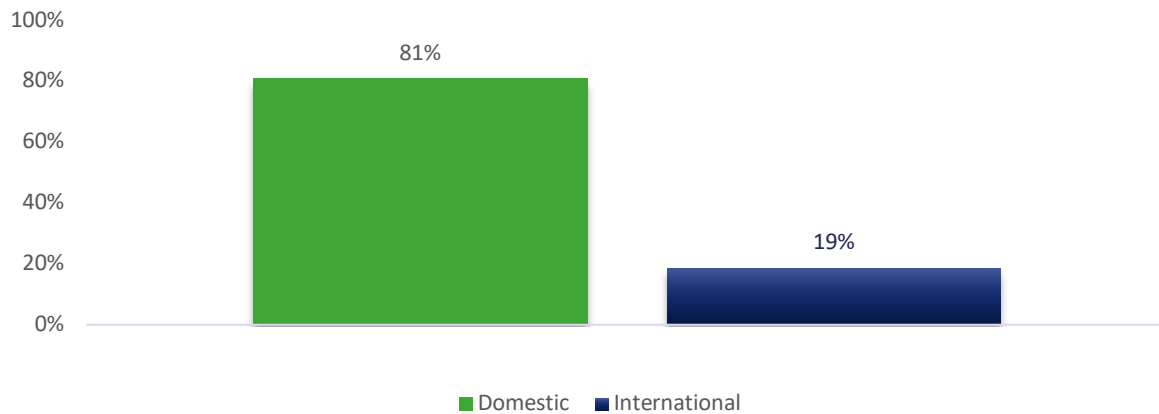


Figure 42: Type of student

Work and financial security

Figure 43 below shows that more than two thirds of the respondents (n = 211) were employed. A greater percentage of those in employment said that they worked outside the field of architecture. While there were more people working in the field of architecture in 2023 compared to the 2021 survey, the pattern of employment was roughly the same.

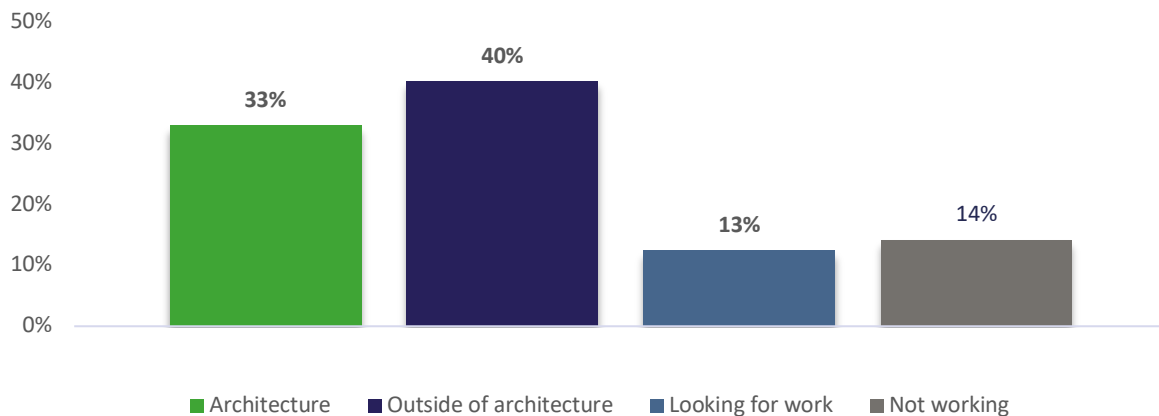


Figure 43: Current work

For respondents who worked within the field of architecture, Figure 44 shows that most worked in an architectural practice (n = 76).

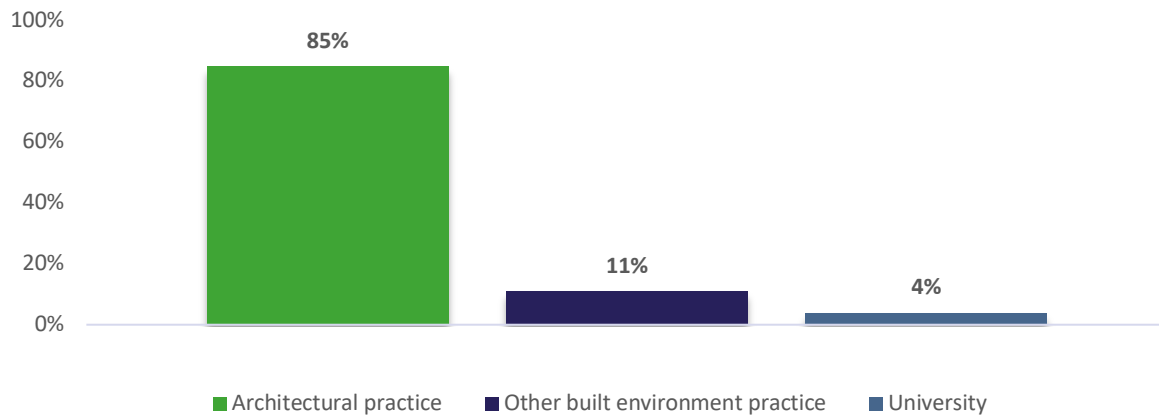


Figure 44: Organisational type of those employed within architecture

For respondents who worked outside the field of architecture, Figure 45 shows that most worked in retail and sales or hospitality and tourism.

Approximately, one-third worked in other sectors such as education (12 percent), entertainment and arts (5 percent), construction-trade (6 percent), clerical-administration (6 percent), and professional-scientific (5 percent). While there was an increase in respondents working in retail-sales the pattern of employment across industry was roughly consistent with the 2021 survey.

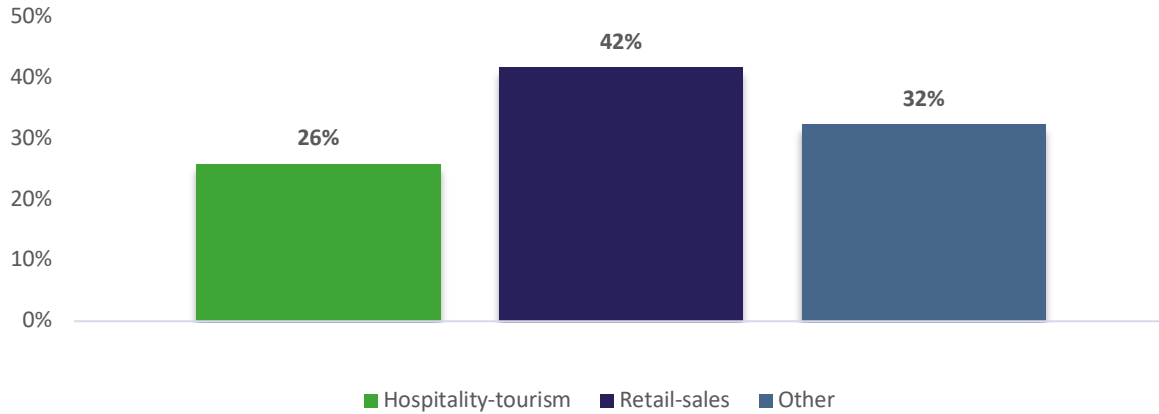


Figure 45: Work sector of those employed outside of architecture

Respondents who worked outside of architecture or did not work at all were asked if they would like to be working within their field of study. Figure 46 shows that most respondents agreed that they would like to work in the same field that they were studying although this is slightly less than reported in 2021.

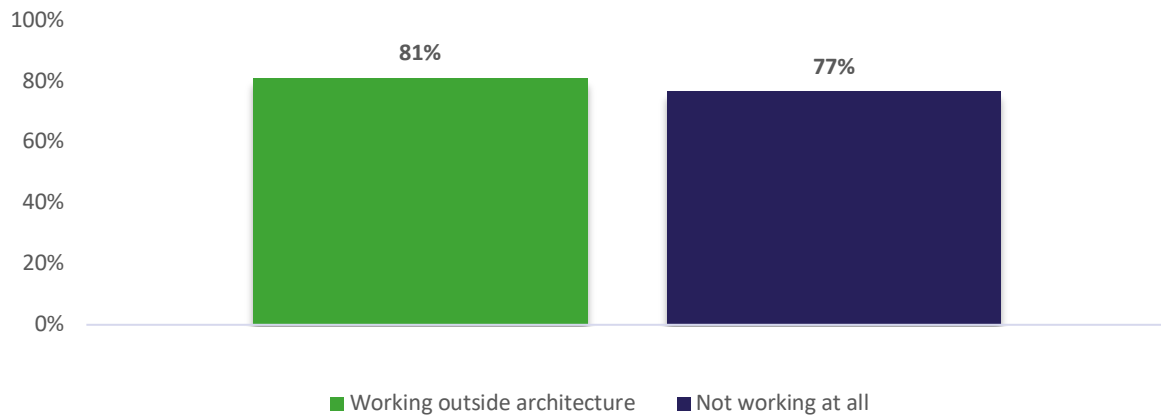


Figure 46: Percentage of respondents who would prefer to work in architecture

Figure 47 displays the hours respondents spent per week in paid employment. Over a third of the full-time students worked less than 15 hours per week. In general, just under half of the students reported spending between 15 and 24 hours per week in paid employment irrespective of their study load.

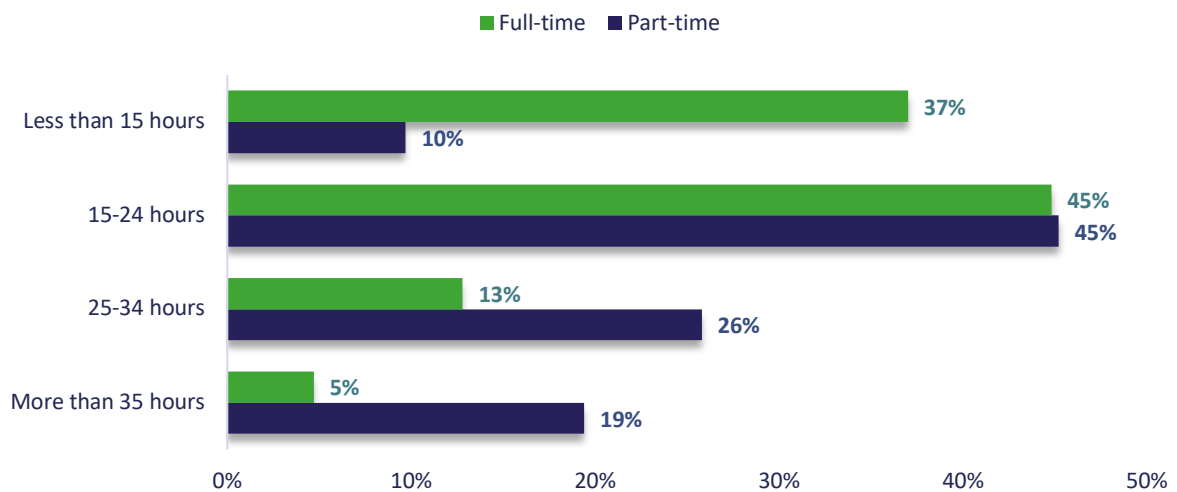


Figure 47: Comparing hours of paid employment for full-time and part-time students

Figure 48 displays the percentage of respondents who said they intended to work in architecture after they graduate. Most of the respondents said that they definitely or probably would work in architecture following their graduation. This pattern of responses is roughly consistent with 2021.

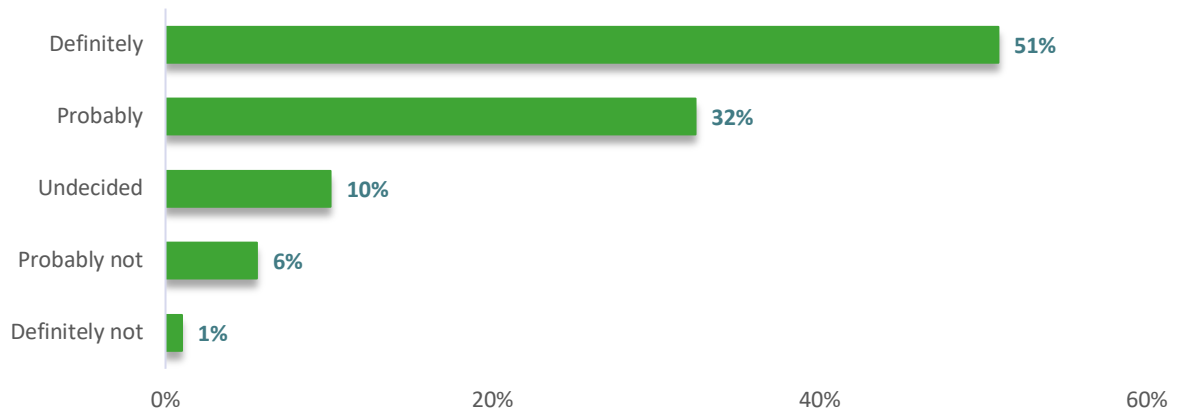


Figure 48: Percentage of respondents who intend to work in architecture after graduation

Figure 49 displays the percentage of respondents who said they intended to register as an architect. Most of the respondents said that they definitely or probably would register as an architect. This pattern of responses is roughly consistent with the 2021 survey.

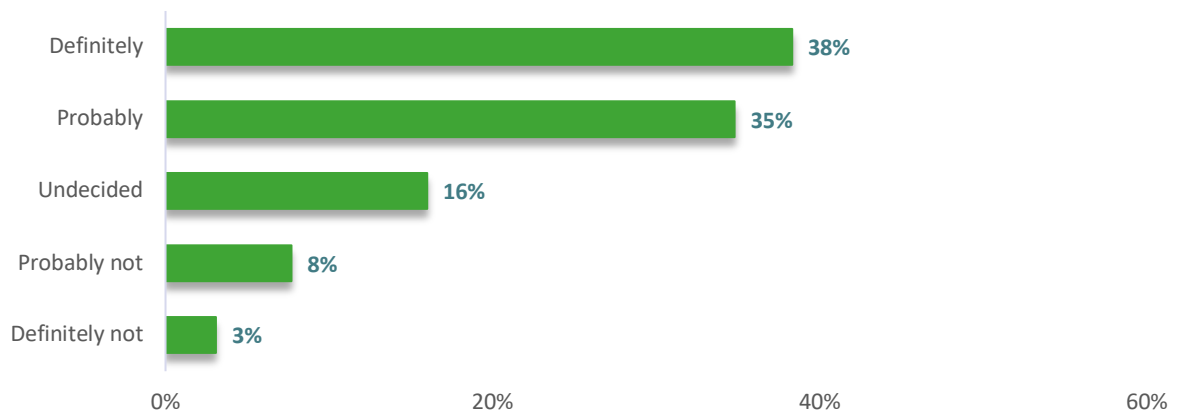


Figure 49: Percentage of respondents who intend to register as an architect

Figure 50 compares respondent perceptions of their financial security. More than half of the respondents reported that their financial security was somewhat insecure or very insecure. This is a substantial increase since the 2021 survey where 11 percent of students reported that their finances were very insecure and 24 percent reported that their finances were somewhat insecure.

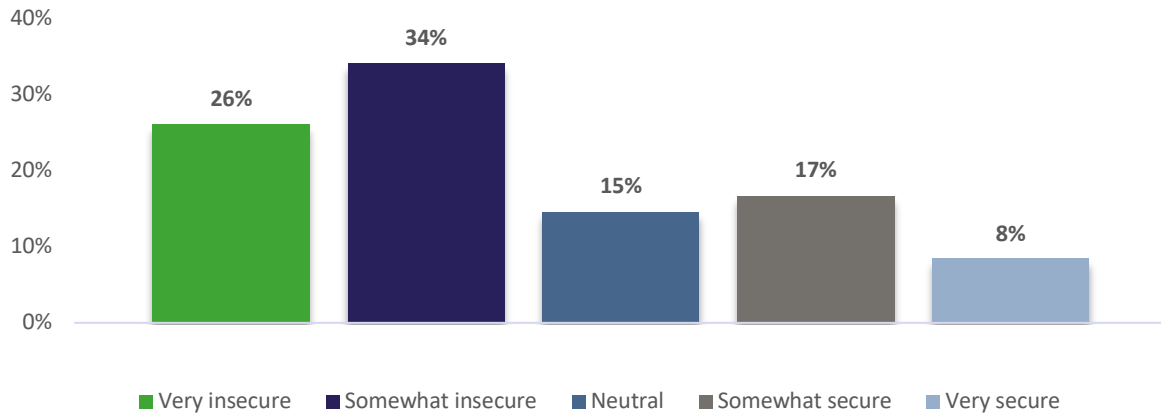


Figure 50: Perceptions of financial security

5 Acknowledgements

Acknowledgements – research team

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7 Appendices

Appendix 1 List of Definitions

Table 2 below contains definitions for the measures that we have used in this report.

Table 2: List of definitions for terms used in this report

Construct	Definitions
Autonomy	“The need for autonomy is defined as an individual’s desire to make his or her own choices, to express his or her feelings freely and to initiate his or her own actions ... when the need for autonomy is fulfilled, an individual feels free to choose and organise his own actions.” (Brien et al, 2021, p. 169).
Basic psychological needs	Basic psychological needs satisfaction is about whether a student feels that they are able to satisfy their needs for autonomy, competence, and relatedness at university. The capacity to gain a sense of satisfaction with basic psychological needs is important because it is associated with optimal functioning and wellbeing (Brien, et al., 2012).
Burnout	Burnout “among students refers to feeling exhausted because of study demands, having a cynical and detached attitude toward one’s study, and feeling incompetent as a student.” (Schaufeli et al., 2002, p. 465).
Campus climate	According to Hurtado and colleagues “campus climate is part of an intricate web of relations, socially constructed by individuals in an environment.” (Hurtado et al., 2008, p. 204).
Career aspirations	Career aspirations are “the degree to which individuals seek leadership roles, advanced education, and recognition in future careers” (Gregor et al., 2019, p. 263).
Career identity	Identity is the importance of an individual’s identity to their view of themselves “it is essentially defined as the individual’s subjective sense of the worth or value of an identity to himself or herself ... relative to that of other identities” (Brenner et al., 2014, p. 233).
Career optimism	Career optimism refers to the positive outlook people have about their careers (Rottinghaus et al., 2012).
Competence	“The need for competence refers to the individual’s desire to have an effect on the environment and to reach desired outcomes ... [the] need for competence is satisfied when one feels skilled enough to carry out a task to the best of one’s ability, and thus, reach one’s goals.” (Brien et al, 2021, p. 169).
Cynicism	Cynicism “reflects indifference or a distant attitude toward study in general, not necessarily with other people” (Schaufeli et al., 2002. p. 465).
Exhaustion	Exhaustion “is measured by items that refer to fatigue but do not make direct reference to other people as the source of those feelings” (Schaufeli et al., 2002. p. 465).
Inefficacy	Inefficacy has been defined as a lack of accomplishment, also described as reduced productivity or capability, low morale, and an inability to cope (Leiter & Maslach, 2016, p. 89). It is widely used as an indicator of burnout alongside cynicism and exhaustion.
Institutional support	Institutional support taps student perceptions of the support they receive from teachers, mentors and advisors (Garriott et al., 2018).
Perfectionism	According to Rice and colleagues “perfectionism involves personal standards (performance expectations) and excessive self-criticism or concerns about reaching or maintaining personal standards (evaluation concerns).” (p. 368).
Relatedness	“The need for relatedness refers to the desire to establish mutually caring bonds and positive alliances with others.” (Brien et al, 2021, p. 169).

Appendix 2 Measures used in the 2023 survey

Table 3: Items used to measure personal, study, and work characteristics

Measure	Response options
Personal characteristics	
Gender	Male, female, nonbinary, I prefer not to say, and I use a different term
Age	Less than 25 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, and 65 years or more
State or Territory	Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, and Western Australia
Born in Australia	Yes, no
Country of birth	Selected from list of all countries
Residency status	Australian citizen, permanent resident, temporary visa, other
English second language	Yes, no
English proficiency	[Speak English] not well, well, very well
Usual living arrangements	At home with my parents/guardians, I live alone, partner and/or children, shared living arrangement, and student accommodation
Study characteristics	
Degree	Bachelor of Architecture (or similar), Master of Architecture, Master of Architecture by research, Doctorate in architecture, I am in between studies, other
Enrolment status	Domestic, international, exchange student
Study load	Full-time, part-time
Work and finance	
Currently working	Working in architecture, working outside of architecture, looking for work, and not working
Organisation type	Architectural practice, government, other built environment practice, Non-profit-volunteer-representative organisation, university, and other
Sector	Construction-trade, clerical-administration, entertainment-arts, hospitality-tourism, and retail-sales
Hours worked	Less than 15 hours, 16-25 hour, 26-35 hours, more than 35 hours
Financial security	Very secure, somewhat secure, neutral, somewhat insecure, very insecure

Table 4: Multi-item measures used in the survey

Measure	N	Sample item and response option
Autonomy (Brien et al., 2012)	3	My study allows me to make decisions.
Campus climate (Souza et al., 2019)	5	I feel isolated when I am in my university.
Career aspirations (Gregor et al., 2016)	5	I want to be among the very best in my field.
Career identity (Brenner et al., 2014)	3	I have a strong sense of belonging to the architecture community.
Career optimism (McIlveen et al., 2013)	3	I get excited when I think about my career.
Competence (Brien et al., 2012)	3	I have the ability to do my study well.
Cynicism (Schaufeli et al., 2002)	4	I doubt the significance of my studies.
Exhaustion (Schaufeli et al., 2002)	5	I feel emotionally drained by my studies.
Inefficacy (Schaufeli et al., 2002)	6	I can effectively solve the problems that arise in my studies (reversed)
Institutional support (Garriott et al., 2018)	3	I have access to a positive "role model".
Perfectionistic standards (Rice et al., 2014)	4	I have high expectations for myself.
Perfectionistic concerns (Rice et al., 2014)	4	Doing my best never seems to be enough
Personal Wellbeing Index (Cummins et al., 2021)	7	Please select the response that best describes how satisfied you are with each of the following areas ... your future security.
Psychological distress (Kroenke et al., 2009)	4	Over the last 2 weeks, how often have you been bothered by the following problems? e.g., Feeling nervous, anxious, or on edge
Relatedness (Brien et al., 2012)	3	When I'm with the people from my study environment, I feel heard.
Study-life balance (Rottinghaus et al., 2012)	3	I am good at balancing multiple life roles such as worker, family member, or friend.
Support for study (Rottinghaus et al., 2012)	3	My family is there to help me through my study challenges.

Appendix 3 Correlational analysis for wellbeing and distress

Table 5 shows the correlational analyses between student experiences at university, wellbeing, and psychological distress. These relationships are listed in order of strength.

Greater personal wellbeing was associated with:

- better study-life balance,
- higher levels of support from family and others,
- better campus climate,
- greater satisfaction with competence,
- higher levels of career optimism,
- greater satisfaction with relatedness,
- higher levels of institutional support,
- greater satisfaction with autonomy,
- lower levels of perfectionistic concerns.
- stronger sense of identity with the field of architecture,
- higher levels of perfectionistic standards, and
- higher levels of career aspirations.

Increased psychological distress was associated with:

- higher levels of perfectionistic concerns,
- poorer campus climate,
- poorer study-life balance,
- lower satisfaction with competence,
- lower levels of career optimism,
- lower satisfaction with relatedness,
- lower satisfaction with autonomy,
- lower levels of institutional support, and
- lower levels of support from family and others.

Table 5: Correlational analysis for wellbeing and psychological distress

Experiences at university	Wellbeing	Distress
Campus climate	-0.44**	0.48**
Institutional support	0.38**	-0.16**
Support for study	0.45**	-0.14*
Autonomy	0.35**	-0.21**
Competence	0.44**	-0.30**
Relatedness	0.40**	-0.21**
Study-life balance	0.48**	-0.36**
Career aspirations	0.15*	0.10
Career optimism	0.41**	-0.28**
Career identity	0.18**	-0.01
Perfectionistic standards	0.17**	0.06
Perfectionistic concerns	-0.32**	0.48**

* $p < .05$, ** $p < .01$

Study experiences and burnout

Table 6 shows the correlational analyses between student experiences burnout. These relationships are listed in order of strength.

Increased cynicism was associated with:

- lower levels of career optimism,
- poorer campus climate,
- lower satisfaction with autonomy,
- higher levels of perfectionistic concerns,
- poorer sense of identity with the field of architecture,
- poorer study-life balance,
- lower satisfaction with competence,
- lower levels of institutional support,
- poorer career aspirations,
- lower satisfaction with relatedness, and
- lower levels of support from family and others.

Increased exhaustion was associated with:

- poorer campus climate,
- lower levels of career optimism,
- lower satisfaction with autonomy,
- higher levels of perfectionistic concerns,
- lower satisfaction with competence,
- lower levels of institutional support,
- poorer study-life balance,
- poorer sense of identity with the field of architecture, and
- lower satisfaction with relatedness.

Increased inefficacy was associated with:

- lower satisfaction with competence,
- lower satisfaction with autonomy,
- lower levels of career optimism,
- lower levels of institutional support,
- lower satisfaction with relatedness,
- poorer study-life balance,
- poorer career aspirations,
- poorer sense of identity with the field of architecture,
- poorer campus climate,
- lower levels of perfectionistic standards,
- lower levels of support from family and others, and
- higher levels of perfectionistic concerns.

Table 6: Correlational analysis for burnout

Experiences at work	Cynicism	Exhaustion	Inefficacy
Campus climate	0.42**	0.37**	0.33**
Institutional support	-0.23**	-0.24**	-0.46**
Support for study	-0.15**	0.01	-0.26**
Autonomy	-0.28**	-0.28**	-0.54**
Competence	-0.24**	-0.25**	-0.66**
Relatedness	-0.15*	-0.17**	-0.44**
Study-life balance	-0.24**	-0.23**	-0.41**
Career aspirations	-0.20**	-0.04	-0.37**
Career optimism	-0.47**	-0.29**	-0.48**
Career identity	-0.25**	-0.21**	-0.34**
Perfectionistic standards	0.02	0.09	-0.29**
Perfectionistic concerns	0.27**	0.26**	0.22**

* $p < .05$, ** $p < .01$

Appendix 4 Respondent characteristics for the 2021 and 2023 surveys

Table 7: Personal characteristics of respondents 2021 and 2023

Measure	2021	2023
Gender		
Female	67%	61%
Male	31%	35%
Nonbinary-transgender	2%	4%
Age		
Less than 26 years	71%	68%
26 to 35 years	22%	22%
36 years or more	7%	10%
Residence		
Australian Capital Territory	1%	0%
New South Wales	19%	45%
Northern Territory	1%	0%
Queensland	10%	15%
South Australia	5%	6%
Tasmania	3%	3%
Victoria	54%	25%
Western Australia	7%	6%
Country of birth		
Australia	64%	64%
Born elsewhere	36%	36%
Country of birth		
Australian citizen	41%	46%
Permanent resident	4%	7%
Temporary visa	45%	44%
Other	3%	3%
Living arrangements		
At home with my parents/guardians	44%	46%
Shared living arrangement	30%	31%
Partner and/or children	12%	10%
Student accommodation	4%	4%
I live alone	10%	9%
Financial security		
Very insecure	15%	26%
Somewhat insecure	31%	34%
Neutral	18%	15%
Somewhat secure	25%	17%
Very secure	11%	8%

