Identifying Graduate Research Student Satisfaction

Faculty of Information Technology

Monash University 2024

The Monash Graduate Association would like to thank all those who assisted in the production and distribution of this survey. We would also like to thank the graduate students who completed the survey.

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Executive summary

In April and May 2024, the Monash Graduate Association (MGA) conducted a survey of graduate students at Monash and nine other Australian universities. Similar surveys were conducted in 2017 and 2021, which have allowed for some comparisons throughout this report.

The main findings as they relate to graduate research students enrolled in the Faculty of Information Technology (IT) are summarised below:

IT graduate researchers are overwhelmingly positive in relation to their supervision experience

The sentiment of IT respondents in relation to supervision was overwhelmingly positive.

The University's recommended meeting frequency was met in almost every case with 88% of full-time graduate researchers meeting with their supervisor weekly or fortnightly, while 100% of part-time IT respondents met once a month or more frequently.

Supervisors were largely meeting the expectations and needs of their students. Having their research supported by skilled supervisors and receiving constructive feedback were the most important aspect of supervision according to IT respondents. However, despite recording relatively high satisfaction scores, these two areas had the widest gaps between importance and satisfaction.

Career pathway support (-8.42%) was the area where the gap between importance and satisfaction was widest.

Student satisfaction with their academic unit high

Across the board, IT graduate researchers were predominantly satisfied with the department or school in which they were enrolled.

The most common response as to the most satisfying aspect of their academic unit related to the supportive and friendly environment, while the most common dissatisfying aspects was in relation to the workload.

Confirmation process is largely satisfactory

Respondents were widely satisfied with their confirmation experience. In particular, they were satisfied that the behaviour and tone of the panel was professional.

Receiving useful feedback was the most useful aspect of the experience, according to IT respondents, while receiving unhelpful or insufficient feedback was the least useful aspect.

Professional Development opportunities

Having Professional Development (PD) opportunities that focus on industry exposure, data analysis techniques and publishing skills was of the utmost importance to IT graduate researchers, while experiencing PD with students from other fields was the least important of the themes.

Respondents were most satisfied with PD on professional ethics and least satisfied with coursework being relevant to their research. The widest gaps between importance and satisfaction were

recorded in relation to industry exposure and career planning.

Increase in number of graduate researchers working for the University and respondents mostly satisfied with pay

The likelihood of an IT graduate researcher at Monash being given an opportunity to conduct paid work for the faculty or university increased from 53% in 2021 to 59% in 2024. This figure was marginally higher than that recorded across STEM at Monash, but below the reality for engineering students at other universities.

The majority of IT respondents (64%) believed that they were paid appropriately for the work they did for the University.

Doubts, delays and drop outs

The majority of IT graduate researchers have, at some point, experienced imposter syndrome with 9% indicating that they experienced this feeling “often.”

Just over one-quarter of IT graduate researchers had never experienced a delay in their research, while 7% indicated that they often experienced delays.

A lack of motivation was the most common response for a delay in research among IT graduate research students.

IT graduate researchers were slightly less likely than their colleague across STEM and far less likely than information technology students at other universities to have considered leaving their degree.

Engagement with student association lower in Engineering than at other universities

IT students from other universities were more likely to have engaged with their student association than Monash IT students were.

Introduction

The Monash Graduate Association (MGA) ran a survey of graduate students in April and May 2024 across nine Australian universities. In relation to graduate research students, the aim of the MGA's *National Postgraduate Student Satisfaction Survey* was to better understand their degree experience.

This report explores many of the pillars of a research degree, including supervision, the academic unit, confirmation and professional development. It also looks into some common associated experiences, including paid employment opportunities, imposter syndrome, research delays and thoughts of dropping out. Finally, the report highlights the engagement and satisfaction of Monash graduate research students with the Monash Graduate Association (MGA) and includes suggestions for how the MGA could better support the University's students.

This report provides data and findings specifically for respondents enrolled at in the Faculty of IT at Monash University. In IT, a total of 54 graduate research students participated in the survey (see *Appendix 1: Demographics*), which we estimate to be approximately 15% of enrolled graduate research students at the Faculty.

The survey was advertised in the MGA newsletter, on the MGA website, through MGA social media channels and through contacts with Monash faculty groups and associate deans, many of whom agreed to forward the advertising of the survey to their students. Participants were self-selecting, so an incentive scheme (comprising the opportunity to win one of 100 gift cards worth $50 in value) was used to assist in attracting a representative sample.

With the support of colleagues at student associations across Australia, this survey was offered to postgraduate students at nine other universities. Respondents from the University of Queensland, Griffith University, Queensland University of Technology, Southern Cross University, University of Sydney, University of New South Wales, University of Technology Sydney, Victoria University and Federation University are all represented in this survey. A total of 10 graduate research students in the field of information technology completed the survey across these universities.

Where appropriate, comparisons between Monash and non-Monash respondents have been made.

This research has been approved by the Monash University Human Research Ethics Committee (Project ID: 41520).

Limitations

While this report provides valuable insight into graduate research student satisfaction, it is important to acknowledge certain limitations that may impact the interpretation of results. Two such limitations are outlined below.

Over- and under-representation of demographic groups

When considering results, it is important to acknowledge that the response rate is not consistent across demographic groups.

For example, domestic enrolments accounted for approximately 26% of total graduate research enrolments in the Faculty in 2024. In this survey, domestic students accounted for 8% of total responses at Monash. As a result, international students are over-represented and domestic students are under-represented.

Low turnout across engineering respondents at other universities

Where possible, comparisons have been made with those studying in the field of engineering at other participating universities. Owing to a low response rate among this cohort, it is difficult to have a degree of confidence that these results are representative. They have been included, but should be approached with a healthy degree of scepticism.

Positive-negative asymmetry (PNA) effect

Across the entire report, the responses of students have been taken at face-value. As such, it is important to reflect on the positive-negative asymmetry (PNA) effect. The PNA effect is two-part: firstly, it incorporates the positivity bias, which refers to an individual's inclination towards favourable perceptions of phenomena that are novel or do not directly impact them,[1] and, secondly, it incorporates the negativity bias which, in part, relates to how individuals are more curious about negative than positive stimuli and therefore are more mobilised by negative events.[2] In the context of this report, this may mean that answers to the quantitative questions in the survey are disproportionately positive, while the responses to the qualitative (open-ended) questions are disproportionately negative, given that students were not required to provide a response.

In relation to the qualitative questions in this survey, effort was made to overcome the PNA effect by splitting questions and asking for a positive and negative reflection.

[1] Maria Lewicka, Janusz Czapinski and Guido Peeters, "Positive-negative asymmetry or 'When the heart needs a reason'," *European Journal of Social Psychology* 22 (1992): 426.
[2] Reanna M. Poncheri, Jennifer T. Lindberg, Lori Foster Thompson and Eric A. Surface, "A comment on employee surveys: negativity bias in open-ended responses," *Organizational Research Methods* 11, no. 3 (2008): 615-16.

Supervision

Respondents were asked a series of questions in relation to their supervision experience.

Choice of supervisor

Did you choose your supervisor?	IT 2021	IT 2024	Monash STEM 2024	Other IT 2024
Yes	76%	80%	89%	80%
No	24%	20%	11%	20%

The proportion of IT PhD candidates choosing their own supervisors increased over the past 3 years.

However, the result in IT was lower than that recorded across STEM at Monash.

Previous studies have identified that doctoral students who choose their own supervisor are more likely to complete their degree than those assigned a supervisor.[3]

Choice of topic

Did you choose your own topic?	IT 2021	IT 2024	Monash STEM 2024	Other IT 2024
Yes	79%	75%	72%	80%
No	21%	26%	28%	20%

Between 2021 and 2024, there was a minor decrease in the proportion of IT respondents choosing their own research topic.

IT respondents were marginally more likely that their STEM colleagues at Monash, but less likely than those outside of Monash to be choosing their own topic.

[3] Karen Hunter and Kay Devine, "Doctoral student's emotional exhaustion and intentions to leave academia," *International Journal of Doctoral Studies* 11 (2016): 40.

Contact with supervisors

Participants were asked, on average, how often they meet with their supervisors?

How often do you meet with your supervisor?	IT 2024	Monash STEM 2024	Other IT 2024
Weekly	65%	57%	40%
Fortnightly	24%	35%	30%
Once every 3 weeks	4%	4%	20%
Once a month	2%	3%	0%
Less than once a month	6%	2%	10%

The majority of IT graduate research respondents met with their supervisors on a weekly or fortnightly basis.

The Monash University *Graduate Research Student Supervision Procedure* recommends full-time graduate researchers meet with their main supervisor at least every two weeks, while part-time students should meet monthly.

Of full-time IT respondents, 88% met with their supervisor weekly or fortnightly, while 100% of part-time IT respondents met once a month or more frequently.

Those who met their supervisors once a month or less were asked to respond to the question ***Why don't you meet more frequently with your supervisors?***

Comments included:

> *"Difficulty in arranging the time and sometimes nothing much to report."*

Supervision: Importance and Satisfaction

Participants were asked to rate how important certain aspects of supervision were and how satisfied they were with their own experience. For the purposes of analysis, this 7-point *LIKERT*-scale has been converted to a numerical value and averaged across graduate research respondents.

The gap was calculated as below:

$$\text{Gap} = (\text{Satisfaction} - \text{Importance}) \div \text{Importance (\%)}$$

In regard to satisfaction, respondents were asked to consider their supervision experience overall or as a collective, rather than their experience with individual supervisors.

	Importance (1-7)	Satisfaction (1-7)	Gap (%)
Skilled supervisors	6.53	5.98	-8.42%
Constructive feedback	6.38	5.89	-7.68%
Access to supervisors	6.36	6.00	-5.66%
Timely feedback	6.26	6.02	-3.83%
Support for work/life balance	6.17	5.74	-6.97%
Guide me through the degree	6.15	5.87	-4.55%
Help me belong academically	6.06	5.72	-5.61%
Mentor me	6.04	5.65	-6.46%
Act professionally	5.96	6.00	0.67%
I am a priority	5.87	5.67	-3.41%
I am heard	5.85	5.76	-1.54%
Help me network	5.81	5.57	-4.13%
Clear role delegation	5.79	5.52	-4.66%
Inform me of support services	5.77	5.57	-3.47%
Encourage ownership	5.74	5.83	1.57%
Career pathway	5.60	5.48	-2.14%
	6.02	5.77	-4.14%

Having their research supported by skilled supervisors as well as receiving constructive feedback were the most important aspects of supervision according to IT respondents. Despite recording relatively high satisfaction scores, these two areas had the widest gaps between importance and satisfaction.

Career pathway support was the least important area and also where IT respondents were least satisfied.

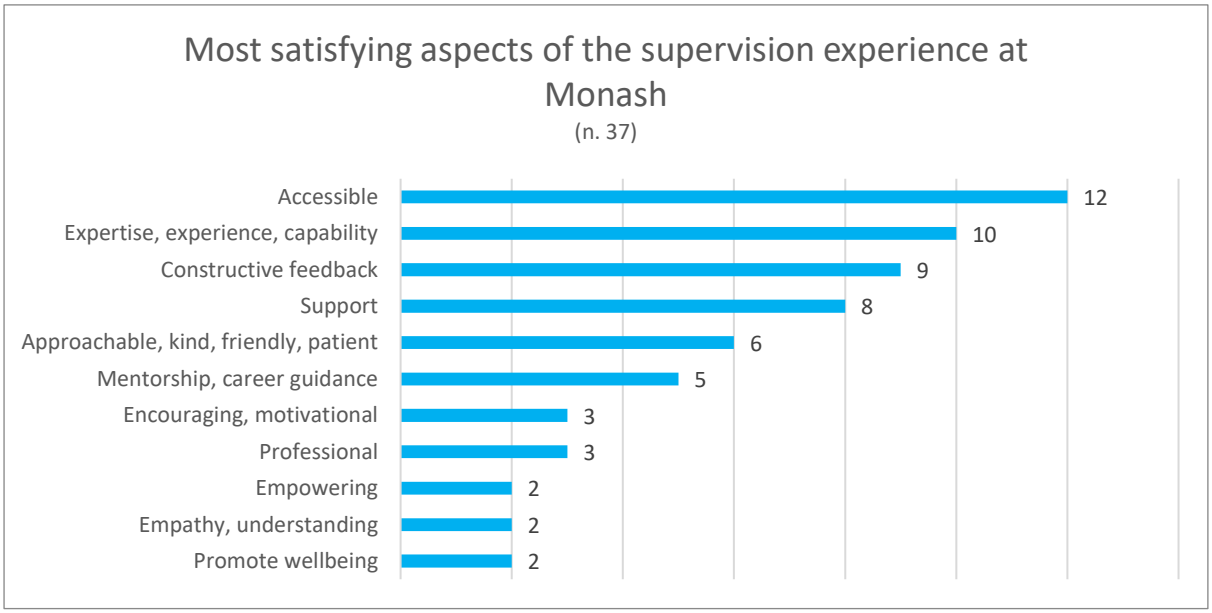
The supervision experience

Participants were asked to reflect on what aspects of their supervision experience they found most satisfying and what aspects they found most dissatisfying.

Most satisfying aspects of supervision

In order to gain further insight into what graduate research students most value in their supervisors, participants were asked to *Tell us about what aspects are most satisfying about your supervision experience*.

Below is a summary of the responses from IT:



The primary theme to emerge from the responses related to the **accessibility** of supervisors. Comments included:

> *"My supervisor provides sufficient time and advice for me to navigate my research project."*
>
> *"Available at all times. Responds to my queries timely."*
>
> *"My supervisors are available each time I want. They are skilled and give me good feedbacks."*
>
> *"I can meet supervisor when and where needed even for a casual chat since we both come to university office."*

Other interesting comments included:

> *"They are supportive and skilled supervisors."*

"My supervisors are highly experienced and they help me get acquainted with the nuances of research in my field. They are supportive of my research interests and overall decisions."

"My supervisors are very caring, understanding and helpful. They are eager to help me when I face a problem and they always make constructive comments about my works, which helps my studies in a good manner."

"The support they give and how gentle and encouraging they are towards me and my work."

"Good compromise between work/mentor/friend."

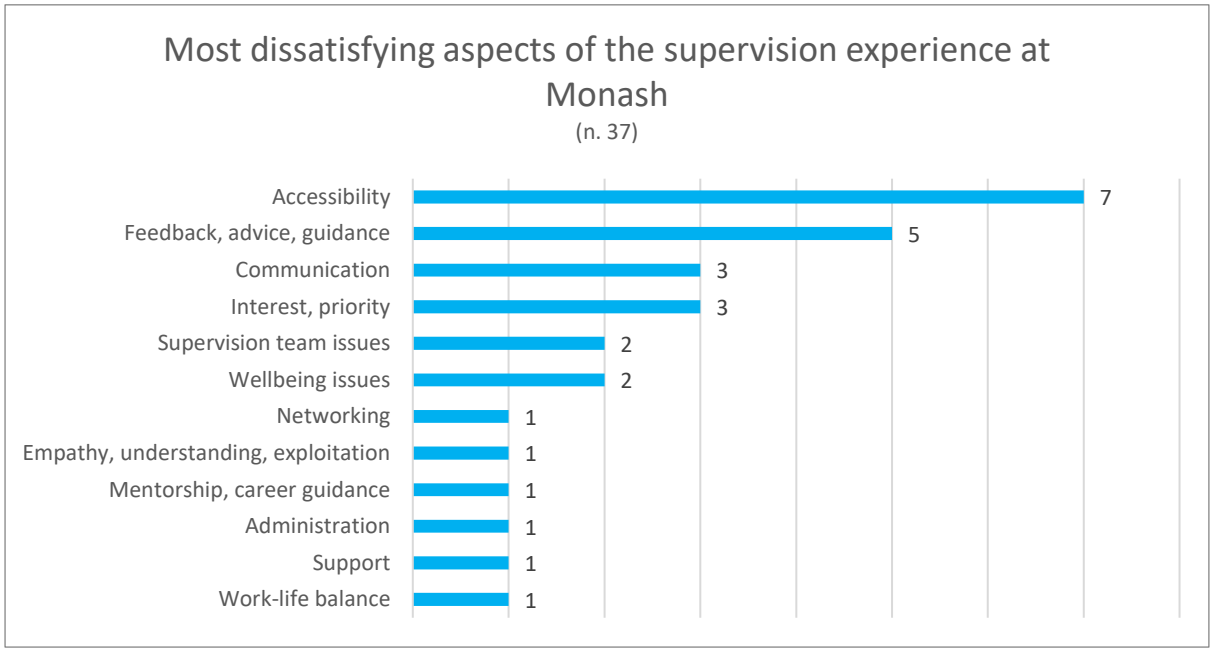
"Considering my eventual interest to work in an industrial lab, my supervisor actively encouraged and supported me to explore internship opportunities."

"My supervisors provide me with constructive feedback and guide me throughout the journey. They appreciate the work I do and encourage me to do better."

Most dissatisfying aspects of supervision

In order to gain insight into what traits graduate research students find most problematic about their supervisors, participants were asked to *tell us about what aspects are most dissatisfying about your supervision experience*.

Below is a summary of responses from IT:



The most common frustration with supervisors also related to **accessibility**. Comments included:

"Sometimes my supervisor is not replying my email in timely manner. Sometimes his email uses complex wording."

"Secondary supervisor is quite disconnected."

"I have experienced to do the supervision meeting every week and it has really exhausted."

"Being busy with teaching in the semester, broaden the topic scope when no need."

Other interesting comments included:

"Supervisor expects me to work on campus constantly which I think is a bit much because everyone has their own way to work. Some can work constantly but some needs breaks and change of environment."

"There are too many supervisors sometimes I feel like my weekly meeting wasn't very effective."

"I wish I have gotten more support when I wanted to explore more diverse methods for my research other than the ones mainly used and published in our lab. If it's not within the knowledge and skills of the lab, I expect referring me to others that have and are within the knowledge base of my major. As we're in a multidisciplinary field, and I feel guidance from my own field is missed. I feel far from my own expertise and kinda alone among others expertise in the lab."

"A little bit strict, experimental resources are relatively scarce."

"Supervisors are not engaged in research at all. My colleagues and I feel that our research is at the bottom of their priority."

"I wish they would show more interest and provide more feedback on my work."

"More advices on non-academic subjects."

"He sometimes needs more funding to support our research."

Conflict with supervisor

Have you ever had a disagreement with a supervisor that was challenging to overcome?	IT 2017*	IT 2021*	IT 2024	Monash STEM 2024	Other IT 2024
No, I've never had a serious disagreement with a supervisor	*(no) 90%*	*(no) 76%*	67%	70%	30%
Yes, but it was only minor	*(yes) 10%*	*(yes) 24%*	28%	23%	70%
Yes, I have had a serious disagreement			4%	7%	0%

*Please note that in 2017 and 2021 this was a "yes" or "no" question and "conflict or misunderstanding" was used in place of "disagreement."

Respondents from IT were marginally more likely to have had a disagreement with a supervisor than their STEM colleagues.

Type of conflict

Respondents who had experienced a disagreement with a supervisor ("minor" or "serious") were asked to describe this disagreement.

Below is a selection of responses from IT:

> *"It was about the methodology, I wanted to do a mixed method but been told that it won't help. It might be true but I didn't get any discussions with anyone expert in what I wanted. I mean, I wouldn't expect an agreement about quantitative methods among people all from social sciences and anthropologists. But in my field, both are important!"*
>
> *"My supervisor suggested a topic to another student that I originally came up with. It's not 100% identical but highly relevant."*
>
> *"For nearly a month I observed my supervisor to be very uninterested in me and my work (scrolling on their phone during my PhD meetings) and asking emotionally loaded questions/statements (e.g. "I have no idea what you're doing or why you're doing it"). I arranged a coffee with this supervisor to meet in a less formal setting to touch base, this was when they shared that they'd been experiencing a lot of stress in their home life. I understood but it was still upsetting to me that because my supervisor is in a position of power, they could make me feel small and worthless because they were having a bad day / feeling stressed about things that do not relate to my PhD."*
>
> *"The disagreement is related to the author affiliation in the papers. My supervisor directs me to the faculty or the MGRO without specifying the explicit contact there."*
>
> *"Don't support the direction I want to research, and strongly doubt whether this direction is meaningful."*

Dealing with conflict

Respondents who had experienced a form of conflict were asked to select if they had dealt with it and, if so, the ways in which they had dealt with it.

How did you deal with this "disagreement"?	IT 2021*	IT 2024	Monash STEM 2024	Other IT 2024
Decided to do nothing	44%	7%	7%	14%
Sorted it out directly with supervisor(s)	56%	53%	72%	29%
Sought assistance from a friend/colleague	0%	20%	43%	14%
Sought assistance from student association	0%	0%	7%	0%
Sought assistance from my chair	NA	7%	0%	14%
Sought assistance from grad. coordinator or head of school	0%	27%	14%	43%
Other	0%	13%	14%	14%

* Please note, when we asked this question in 2017 and 2021, "conflict" was used in place of "disagreement" i.e. *How did you deal with the conflict?*

The proportion of respondents from IT who decided to do nothing decreased substantially from 2021 and 2017 levels.

The majority of respondents felt comfortable enough to directly sort out their disagreement with their supervisors.

Changing supervisors

Participants were asked a series of questions relating to changing supervisors.

Considered changing supervisors

Have you thought about changing supervisors?	IT 2024	Monash STEM 2024	Other IT 2024
Never	76%	75%	56%
Rarely	15%	17%	33%
Often	7%	6%	11%
All the time	2%	2%	0%

IT respondents were slightly as likely as those from across STEM faculties at Monash, but far less likely than those studying information technology elsewhere to have considered changing their supervisors.

Supervisor changes

Have you ever changed supervisors?	IT 2024	Monash STEM 2024	Other IT 2024
No	78%	86%	56%
Yes, but it wasn't my choice	11%	7%	11%
Yes, my supervisor and I agreed to make a change	4%	5%	22%
Yes, I decided to change a supervisor(s) even though they did not want to be replaced	0%	1%	0%
Other	11%	4%	11%

IT respondents were more likely than those across STEM at Monash to have changed supervisors.

Why students did not change supervisors

Respondents who had not changed supervisors, but who had considered it, were asked what stopped them from changing supervisors.

Comments of note from IT included:

> *"Too late. I'm in my third year."*
>
> *"I was worried I'd lose my scholarship funding."*
>
> *"Might affect the duration and direction of studies as already had changed once."*
>
> *"I have good support with main supervisor. Changing secondary supervision seems like a hassle. I don't need more help because my main supervisor is great, so I guess it doesn't matter if secondary supervisor doesn't provide much."*
>
> *"I tried to improve the communication skill between us and transparent to share concerns and ideas."*

Comments on the process of changing supervisors

Respondents who had changed supervisors were asked to comment on the process of changing supervisors.

The responses from IT included:

> *"As a rule, supervisors who leave the university and are unable to remain considerably involved in the research project should voluntarily leave the advisory team."*
>
> *"In some cases, might need to consider co-supervisors from different faculties."*

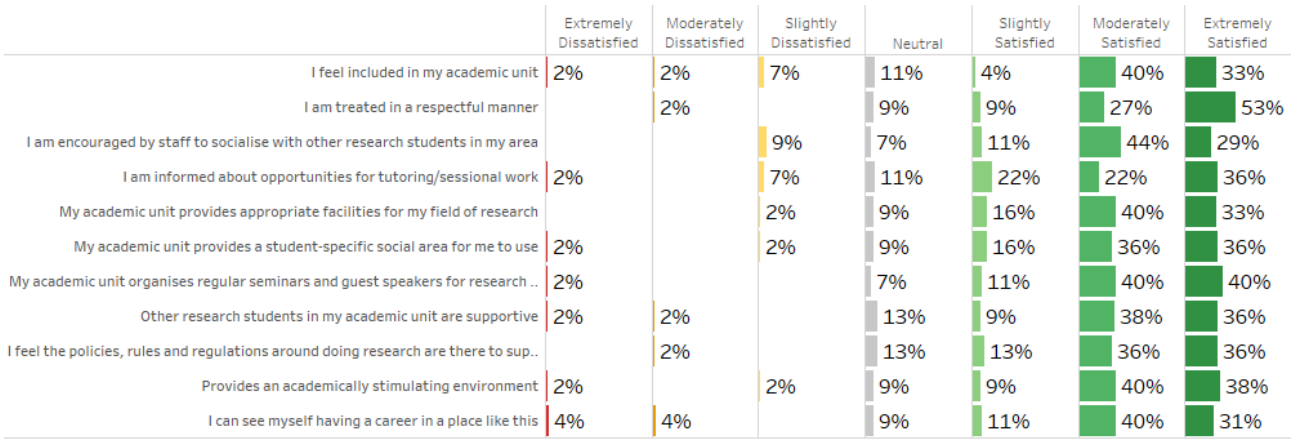
Academic Unit

The following questions were asked in relation to the faculty, department or school in which a student was enrolled.

Academic unit satisfaction

Participants were asked how satisfied they were with their academic unit across a range of areas.

The results of IT graduate researchers are presented below:



	Extremely Dissatisfied	Moderately Dissatisfied	Slightly Dissatisfied	Neutral	Slightly Satisfied	Moderately Satisfied	Extremely Satisfied
I feel included in my academic unit	2%	2%	7%	11%	4%	40%	33%
I am treated in a respectful manner		2%		9%	9%	27%	53%
I am encouraged by staff to socialise with other research students in my area			9%	7%	11%	44%	29%
I am informed about opportunities for tutoring/sessional work	2%		7%	11%	22%	22%	36%
My academic unit provides appropriate facilities for my field of research			2%	9%	16%	40%	33%
My academic unit provides a student-specific social area for me to use	2%		2%	9%	16%	36%	36%
My academic unit organises regular seminars and guest speakers for research ..	2%			7%	11%	40%	40%
Other research students in my academic unit are supportive	2%	2%		13%	9%	38%	36%
I feel the policies, rules and regulations around doing research are there to sup..		2%		13%	13%	36%	36%
Provides an academically stimulating environment	2%		2%	9%	9%	40%	38%
I can see myself having a career in a place like this	4%	4%		9%	11%	40%	31%

Across the board, IT graduate researchers were predominantly satisfied with their academic unit.

Satisfaction was highest in relation to regular seminars and guest speakers being organised (91%), while dissatisfaction was highest in relation to feeling included in their academic unit(11%).

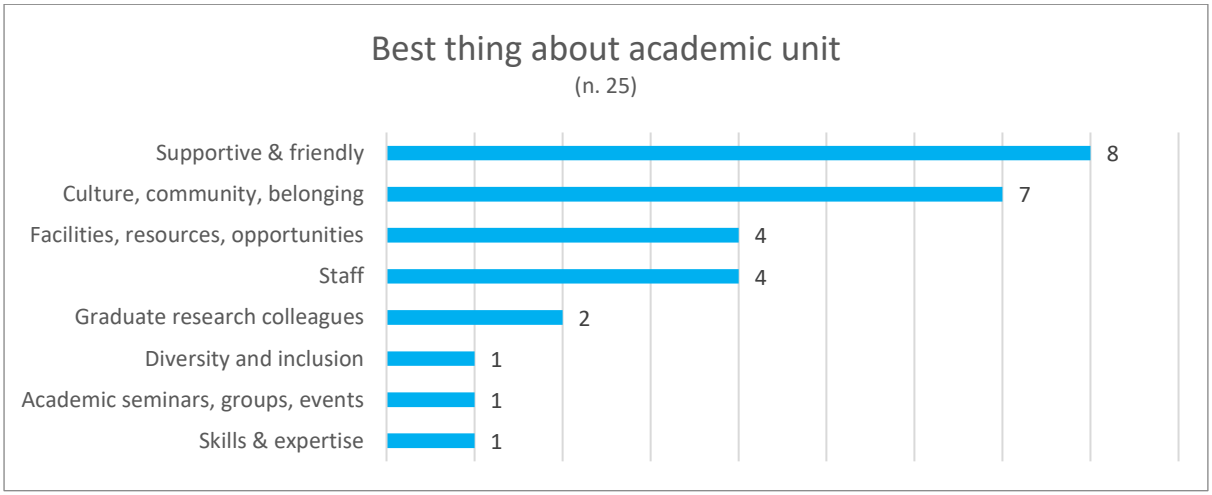
Academic unit comments

Respondents were asked to reflect on what aspects of their supervision experience they found most satisfying and what aspects they found most dissatisfying.

Best aspects of academic unit

Participants were asked to comment on what they thought was the best thing about their academic unit.

The responses of IT graduate researchers are summarised below:



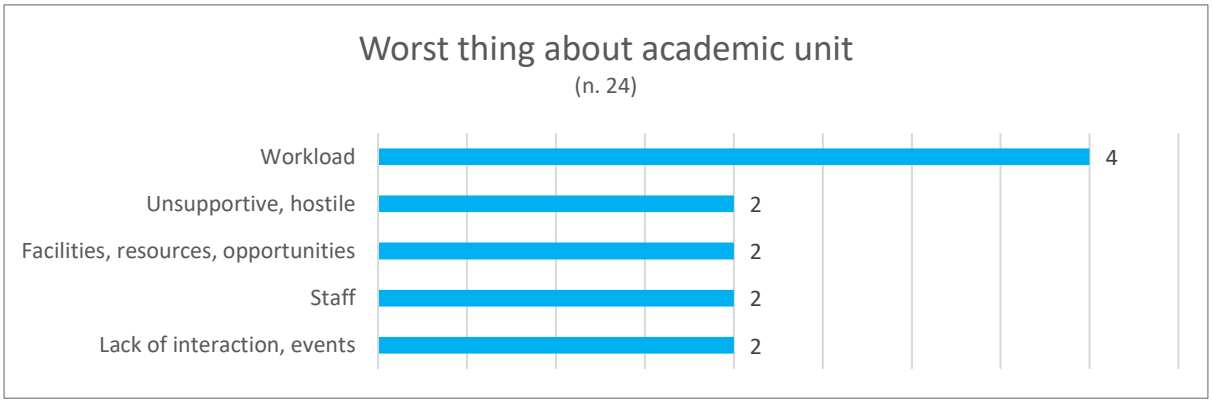
Interesting comments included:

> *"My academic units provide dedicated desk for the first-year students. A dedicated working space is necessary for the PhD student."*
>
> *"Everything is available to boost my research and morale. There is kitchen, and recreational areas. I feel comfortable to work here."*
>
> *"I can find any help (from supervisor, colleague and friend) when I am confused."*
>
> *"Excellent and conducive learning environment, open communication atmosphere."*
>
> *"There is good collaboration between people in this unit."*
>
> *"It is a friendly and supportive community where the majority of the cohort come to office workspace."*
>
> *"They are very caring, helpful, understanding."*

Worst aspects of academic unit

Participants were asked to comment on what they thought was most-dissatisfying about their academic unit.

The responses of IT graduate researchers are summarised below:



Interesting comments included:

> *"Everything feels like boring. There are no activities or interaction sessions."*
>
> *"In thrown into a different world, the multidisciplinary thing is good, increases the exposure and knowledge and skills. But I don't get enough compared to if I were between people and department I belong to. I'm [from a discipline somewhat outside of IT] but in the Faculty of IT, even the PD doesn't provide me with relevant skills in my discipline. I don't get the skills I want and need for my research and future career."*
>
> *"The monitors with 1080p resolution are not quite clear for daily use."*
>
> *"Unfriendly graduate research staffs and painfully complicated admin processes."*
>
> *"There is no course offline and we need to take online course with students on Clayton campus."*
>
> *"There is no mandatory elective course that should be taken by the students to enhance their knowledge. Having mandatory elective course is beneficial for students who returned to the university after several years of intermission."*

Confirmation

Relevant participants were asked to reflect on their experience of confirmation.

Have you passed your confirmation?	Respondents
We don't have this requirement where I study	3 (7%)
No, I'm not at this stage yet	21 (46%)
No, I presented my research, but I need to make amendments	0 (0%)
Yes, I passed first time	20 (44%)
Yes, I passed, but after I needed to make amendments	2 (4%)

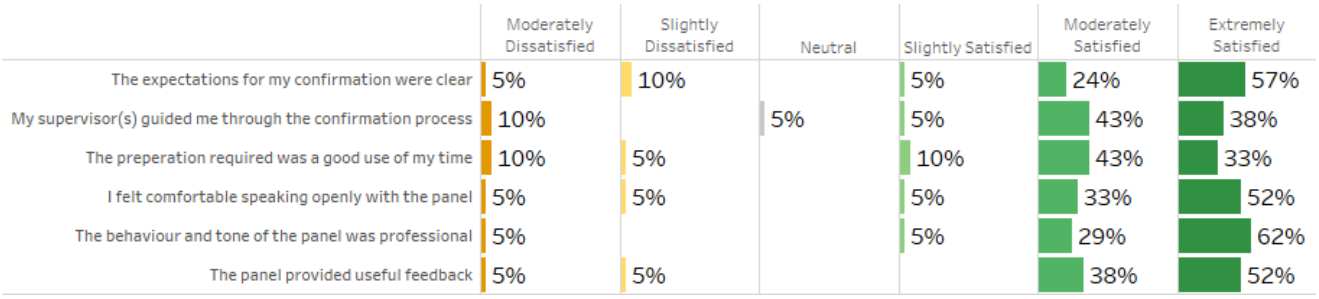
Satisfaction with confirmation process

Participants were firstly asked how satisfied they were with the confirmation process.

The overwhelming majority of respondents expressed that they were satisfied (43% extremely satisfied, 33% moderately satisfied, 14% slightly satisfied), while a small proportion indicted that they were dissatisfied (0% extremely dissatisfied, 5% moderately dissatisfied, 0% slightly dissatisfied).

Participants were then asked a series of questions about their satisfaction with certain aspects of the confirmation milestone.

The responses of IT graduate researchers are summarised below:

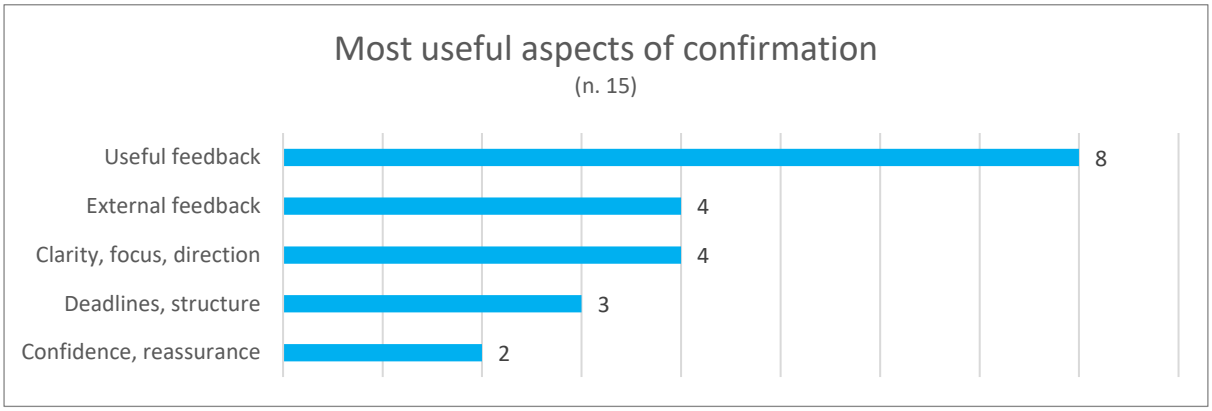


Respondents were overwhelmingly satisfied with all areas of confirmation. The greatest level of dissatisfaction (15%) was in relation to the preparation required representing a good use of their time and the expectations being clear.

Most useful aspects of confirmation

Respondents were asked to reflect on what they found most useful about the confirmation process.

Below is a summary of their responses:



The most common response from Monash graduate researchers related to how **helpful or useful the feedback** they received was. Comments included:

> *"Some suggestions they gave me regarding what else I can look in to."*
>
> *"The feedback from my panel members was extremely constructive and insightful. It was great to have time dedicated to discussing my project with interested academics."*
>
> *"Panel provided good feedback and were very professional to make student feel at ease."*

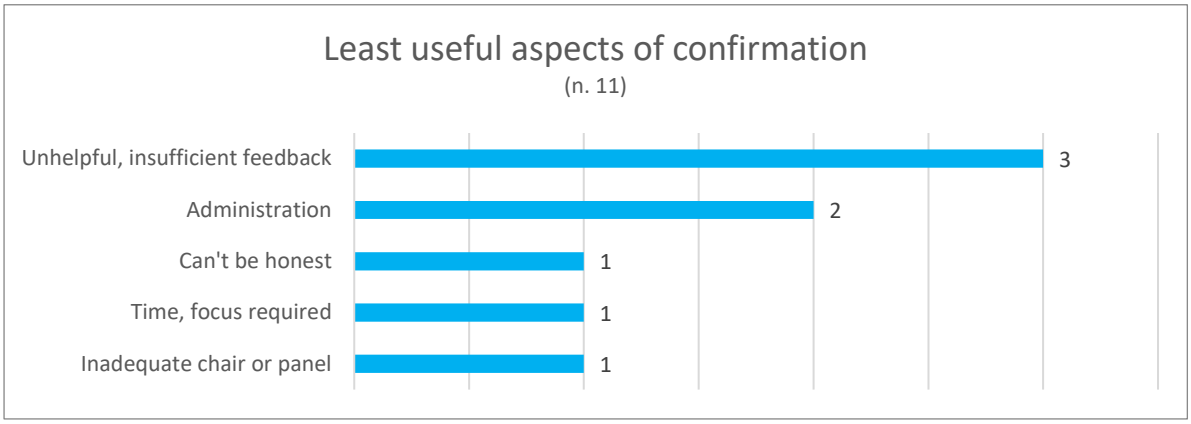
Other interesting comments included:

> *"Given the shorter duration of the doctorate degree (3.5 years rather than traditional 5 years), the milestone ensures that the topic of the project is timely finalised and gives an outside perspective on the utility and/or possible complications that the student and supervisors may have overlooked."*
>
> *"It gave an understanding about how to plan the PhD duration and a validation of the research questions."*
>
> *"This give a clear direction for my upcoming research."*
>
> *"Getting my research area/questions validated by researchers external to my supervision team."*
>
> *"It allowed me to get an idea of the current literature in my field."*

Least useful aspects of confirmation%

Respondents were asked to reflect on what they found least useful about the confirmation process.

Below is a summary of their responses:



Interesting comments included:

> *"The fact that they insisted on doing something that I explained why wasn't my priority in this research. They told the same thing to my supervisor again after me leaving the room, and kinda pushing them in a way that they felt the need to tell me to do that, even though we were on the same page before the confirmation. They told me that I don't have to do what the panel says that I'm not forced and whatsoever, but I feel like that anyway. It kinda redirected my research and made me further away from what I was exploring the potential, the mixed thing I discussed in the previous questions."*
>
> *"It takes time to arrange a time which fits the chair, supervisors and panel members."*
>
> *"I had to spend weeks to prepare it but feedbacks I received were not constructive."*
>
> *"The requirements of confirmation are a little vague."*
>
> *"That the chairperson assumed that I wasn't experiencing any trouble with my supervisor. This made it difficult to flag that I was in fact experiencing tension with my supervisor."*

Professional Development

Respondents were provided with an opportunity to reflect on their experiences of Professional Development at their university.

Only students for whom Professional Development was relevant (i.e. included in their degree) and who had completed some Professional Development units were asked to respond in regard to their satisfaction and experiences.

Professional Development included in degree

Is Professional Development included in your degree?	IT 2024	Monash STEM 2024	Other IT 2024
No	9%	16%	25%
Yes, but it was optional	13%	21%	63%
Yes, it is mandatory	78%	63%	13%

Professional Development was mandatory for 78% of IT respondents compared to 63% of respondents from STEM at Monash and 13% of those studying in the field of IT at other universities.

Professional Development: Importance and Satisfaction

Participants were asked to rate how important certain Professional Development themes were and how satisfied they were with what Monash University provides in relation to that theme.

Question	Importance (1-7)	Satisfaction (1-7)	Gap (%)
Industry exposure	5.89	5.03	-14.60%
Data analysis techniques	5.87	5.31	-9.54%
Publishing skills and knowledge	5.87	5.76	-1.87%
Research methodologies	5.84	5.67	-2.91%
Presenting findings e.g. conferences, meetings, seminars	5.78	5.67	-1.90%
Career planning	5.76	5.05	-12.33%
Professional ethics	5.73	5.79	1.05%
Grant writing	5.69	5.34	-6.15%
Project/research management	5.69	5.61	-1.41%
Networking skills	5.67	5.28	-6.88%
Coursework relevant to my research	5.60	4.91	-12.32%
Mental health and wellbeing	5.51	5.50	-0.18%
Entrepreneurial skills	5.40	5.11	-5.37%
PD with students from other fields	5.00	5.33	6.60%
	5.66	5.38	-4.84%

Having Professional Development opportunities that focus on industry exposure, data analysis techniques and publishing skill was of the utmost importance to IT graduate researchers, while experiencing PD with students from other fields was the least important of the themes.

Respondents were most satisfied with PD on professional ethics and least satisfied with coursework relevant to their research being delivered.

The widest gaps between importance and satisfaction was in relation to industry exposure and career planning.

Professional Development ideas

Participants were asked what they would like to see offered in relation to Professional Development that was not currently available to them.

Comments included:

> *"I would like to see industry internships for PhD students. Right now there is PD under the term internship but the university does not arrange internships."*
>
> *"Effective ways to utilize pre-existing github codebases into your own research, more in-depth sessions on usage of popular pytorch based libraries such as multi-gpu utilization etc."*
>
> *"I think taking mandatory coursework will be beneficial for some students with more than five years interval between the last degree and the current enrolment."*
>
> *"More focused topics research methodologies and data analysis."*

Paid Employment Opportunities

The following questions were asked in relation to paid employment opportunities.

Paid work at the University

Participants were asked whether they had been given the opportunity to conduct paid work for the faculty or university.

Have you conducted paid work for the faculty or university?	IT 2021	IT 2024	Monash STEM 2024	Other IT 2024
Yes	53%	59%	57%	63%
No	47%	41%	43%	38%

*Please note that in 2021 the wording of this question was slightly different. It asked if participants had been given the opportunity to "tutor."

The likelihood of an IT graduate researcher at Monash being given an opportunity to conduct paid work for the faculty or university increased over the past three years and was marginally ahead of the norm across STEM at Monash.

Position at the University

Monash respondents were asked to specify the nature of their position at the University.

What was your position at Monash?	IT 2024	Monash STEM 2024
Fixed-term (one of the 450 fixed-term roles offered at Monash)	19%	13%
Casual	73%	82%
Other	8%	5%

The overwhelming majority of IT graduate researchers employed by the University were on (or had been on) casual contracts.

Paid appropriately

Participants were asked if they felt they were paid appropriately for the work they conducted for their university.

Were you paid appropriately for your work at the university?	IT 2021	IT 2024	Monash STEM 2024	Other IT 2024
Definitely not	*(no)*	12%	10%	0%
Probably not	*21%*	23%	15%	40%
Probably yes	*(yes)*	58%	50%	40%
Definitely yes	*79%*	8%	24%	20%

*Please note that in 2021 this question related to being paid for tutoring only and participants could only answer "yes" or "no".

The majority of IT respondents believed that they were probably paid (58%) or definitely paid (8%) appropriately for the work they did for the University; however, this was lower than it was across STEM at Monash.

Doubt, Delays and Drop Outs

The following section explores research delays and if and why graduate researchers consider leaving their degree.

Imposter syndrome

Participants were asked: Do you ever feel like you don't belong in your field of study despite evidence of your accomplishments and abilities?

Do you ever feel like you don't belong in your field of study…?	IT 2024	Monash STEM 2024	Other IT 2024
Never	34%	33%	0%
Rarely	30%	24%	63%
Sometimes	27%	31%	38%
Often	9%	11%	0%

The majority of IT graduate researchers have, at some point, felt like they did not belong in their field of study, with 9% indicated that they experienced this feeling "often."

Research delay

Participants were asked if they had experienced delays in the progress of their research.

Have you experienced delays in the progress of your research?	IT 2017*	IT 2021*	IT 2024	Monash STEM 2024	Other IT 2024
Never	*(no) 69%*	*(no) 50%*	27%	24%	25%
Rarely	*(yes) 31%*	*(yes) 50%*	36%	23%	25%
Sometimes			30%	39%	50%
Often			7%	14%	0%

*Please note that in 2017 and 2021 this was a "yes" or "no" question.

Just over a quarter of IT graduate researchers (27%) had never experienced a delay in their research, while 7% indicated that they often experienced delays.

Reasons for delay

Respondents who had experienced a delay in the progress of their research were asked to select the reasons for that delay from a list of prepared reasons.

Please select all relevant reasons regarding the delay in progress to your research	IT 2021	IT 2024	Monash STEM 2024	Other IT 2024
Change of research project direction	28%	22%	30%	0%
Poor supervision	28%	19%	15%	33%
Lack of resources for my research	11%	22%	28%	33%
Preparing for hurdles/milestones	6%	31%	36%	33%
Unpleasant workplace/research environment	6%	13%	11%	17%
Lack of motivation	28%	41%	38%	0%
Procrastination	NA	31%	35%	17%
Health issues	28%	22%	28%	17%
Family responsibilities	22%	16%	25%	0%
Cost of living/financial concerns	33%	19%	32%	67%
Work commitments	6%	16%	14%	17%
Data collection issues	NA	19%	29%	0%
COVID-19	83%	16%	18%	17%
Other	17%	9%	13%	0%

A lack of motivation was the most common cause of delay for IT graduate research students.

Considered leaving

Participants were asked if they had ever considered leaving their course.

Have you ever considered leaving your course?	IT 2021*	IT 2024	Monash STEM 2024	Other IT 2024
Never	*(no) 64%*	68%	65%	50%
Rarely	*(yes) 36%*	16%	19%	50%
Sometimes		16%	14%	0%
Often		0%	3%	0%

*Please note that in 2017 and 2021 this was a “yes” or “no” question.

IT graduate researchers were slightly less likely than their colleague across STEM to have considered leaving their degree.

Why leave

Respondents who had considered leaving were asked to elaborate as to why.

Revealing comments from IT included:

> *"Lack of motivation and absence of clear picture on where my research is headed. No work life balance."*
>
> *"Financial crisis."*
>
> *"Multiple consecutive paper rejections made me doubt my abilities as an individual researcher. Moreover, my supervisors didn't seem to be much interested in my progress (or lack of it). I felt all alone working on my project and considered leaving my degree to pursue a job based upon my bachelor's degree which I might have enjoyed too."*
>
> *"When you have a few weeks feeling lost in your project and struggling to receive support from your supervisors, it makes you wonder whether you'd be better off working in industry so that you'd at least be in a better position to financially support yourself."*
>
> *"(1) fear that will not be able to complete it in time; (2) sometimes feeling of low self-confidence that I'm not capable enough; (3) lack of support from family members."*

Why continue

Respondents who had considered leaving their course were asked why they had decided to continue.

Interesting comments from IT included:

> *"I have started so that I think it's better to continue."*
>
> *"Sunk cost fallacy."*
>
> *"Positive feedback from associate supervisor, friends and family. Moreover, given that I am already more than half-way through the course, I want to see it through to the end."*
>
> *"(1) As I'm under organization's scholarship, I have to complete it to avoid being penalized;(2) A small hope that the research results will be useful to the particular stakeholders; (3) a challenge to myself to overcome my fears and shortcomings."*

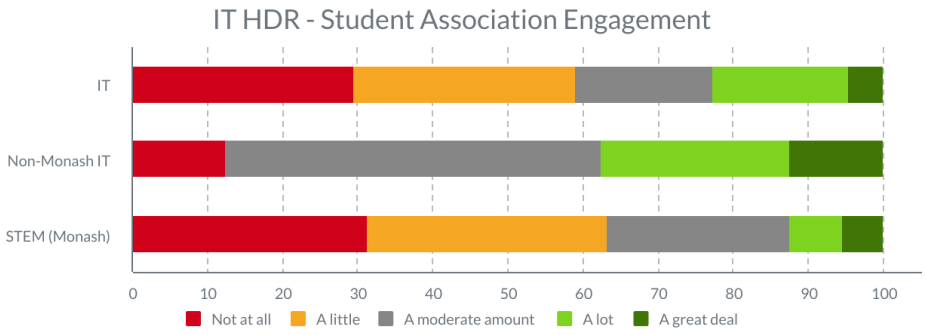
Engagement and Satisfaction with the Monash Graduate Association (MGA)

This section highlights the engagement levels that IT graduate research students have with their representative body - the Monash Graduate Association (MGA) – as well as their satisfaction with the MGA. It also includes respondents' suggestions for how the MGA or equivalent student body could better support the university's students.

3.1 MGA engagement

Participants were asked to respond to the question *how engaged do you feel with your student association or union or guild?*

Below is a summary of how key groups within IT responded:

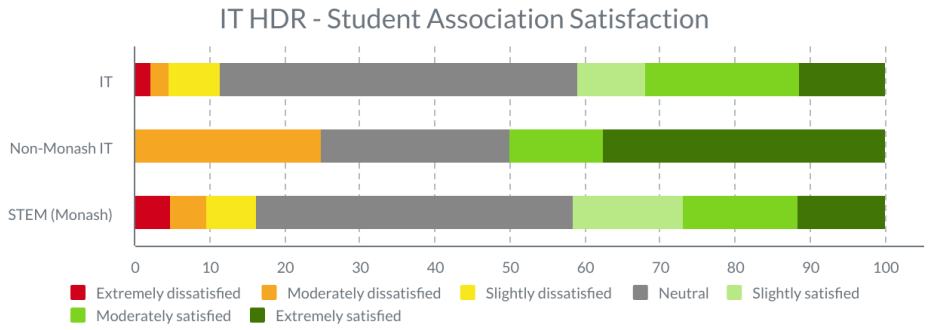


IT students from other universities were more likely to have engaged with their student association than Monash IT students were.

3.2 MGA satisfaction

Participants were asked to respond to the question *how satisfied are you with your student association/union/guild?*

Below is a summary of how key groups within IT responded:

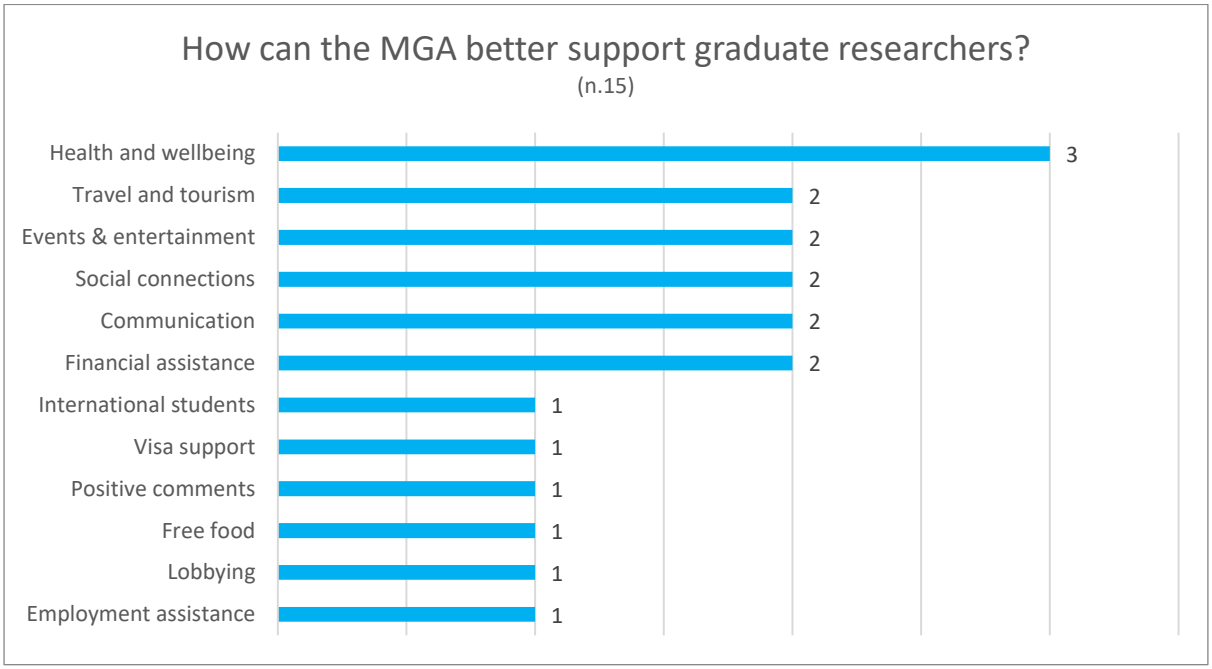


IT respondents were as satisfied with the MGA as respondents were across STEM at Monash.

3.3 Suggestions for additional support

Participants were given the opportunity to respond to the question *how could your student association better support you?*

Below is a summary of responses:



Interesting suggestions and comments included:

> *"I hope there could be more chances to know more people, to support daily life social network and mental health."*
>
> *"By arranging more interactive extracurricular activities, like camping, hiking."*
>
> *"As an international student, I would appreciate guidance with my visa and opportunities to get a PR. This is a big concern for me and is always on my mind. It also leaves a big financial pressure on me without the help from university."*
>
> *"Student associations team provides a lot activity that support well-being of student. I think if they can provide much more quota for holiday activities."*
>
> *"More sport activities, more regular activity positions to make friends and engage."*
>
> *"Interesting activities can cheer me up and let me get rid of the tiring academic moment for a short time."*
>
> *"There should be a moodle page for the student association, given that not all PhD students start the degree at the same time."*
>
> *"Probably more constant interaction and getting feedback from members on their well-being."*

Conclusion

The results of the MGA's *National Postgraduate Student Satisfaction Survey 2024* have provided valuable insights into what IT graduate research students value in regard to their educational experience, as well as how satisfied they are with the structure and delivery of their degrees.

The key findings, as they relate to respondents from the Faculty of Information Technology are summarised below:

Key findings

IT graduate researchers are largely satisfied with their supervision experience

Across all sixteen metrics surveyed, satisfaction in relation to supervision was high. IT graduate researchers are predominantly satisfied with their supervision experience with supervisors largely meeting the expectations and needs of their students.

The four most important aspects of supervision to IT respondents were having skilled supervisors, receiving constructive feedback, accessibility and receiving timely feedback. These four themes also occupied four of the top 5 places for satisfaction.

An average gap score of -4.14% between importance and satisfaction, as well as the fact that importance rankings closely resembled satisfaction rankings, indicates that the Faculty's supervisors are largely meeting the expectations of their graduate research students.

A focus on career planning and industry exposure is desired from Professional Development

Students in IT placed great importance on Professional Development themes that focused on career planning and industry exposure. Satisfaction with what is being delivered in relation to these themes was comparatively low, which meant there was a relatively wide gap between importance and satisfaction.

Increase in proportion of graduate researchers being employed by the University

The proportion of IT graduate research students reporting that they were or had been employed by the University rose from 53% in 2021 to 59% in 2024.

Likelihood of financial concerns delaying research reduced

The proportion of graduate researchers experiencing delays because of financial or cost of living concerns declined in the Faculty. It was a factor in 33% of delays in 2021, but only 19% in 2024. By comparison, it was mentioned as a cause of delay in 32% of delays in STEM at Monash in 2024 and 67% of delays within IT at other universities.

Recommendations

Based on the findings of the MGA's *National Postgraduate Student Satisfaction Survey 2024*, the MGA recommends the following actions be taken to improve the graduate research student experience in the Faculty of Information Technology:

Improving industry exposure

Improving students' access to industry exposure through Professional Development, seminars or internships would be beneficial to an IT cohort who identified this as an area for improvement.

Career planning to be incorporated into the PhD program

Building an initial career planning session, as well as annual reviews, with a professional career counsellor who is experienced working with PhD students, into the requirements of candidature would serve to address the gap in students' expectations, improve satisfaction and potentially lead to improved outcomes for research degree graduates.

Please note, career planning sessions may not be relevant to certain candidates e.g. mature-aged students. As such, a self-exclusion or "opt-out" mechanism must be built in to any new systems.

Appendix 1: Demographics

Academic Unit	Respondents
Data Science and Artificial Intelligence	26 (53%)
Human-Centred Computing	11 (22%)
Malaysia IT	3 (6%)
Software Systems and Cybersecurity	9 (18%)

Campus	Respondents
I do not regularly attend campus	2 (4%)
Clayton	37 (71%)
Caulfield	4 (8%)
Peninsula	0 (0%)
Parkville	0 (0%)
Malaysia	3 (6%)
Suzhou	7 (14%)
other	3 (6%)

Domestic/International	Respondents
Local student (Australian or New Zealand citizen/permanent resident)	4 (8%)
International student	49 (93%)

Study load	Respondents
Full-time	52 (96%)
Part-time	2 (4%)
On leave from study	0 (0%)

Study location	Respondents
Entirely on-campus	24 (45%)
Multi-modal	24 (45%)
Entirely off-campus	5 (9%)
Other	0 (0%)

Time since last degree	Respondents
Less than 1 year	14 (26%)
1-5 years	34 (64%)
6-10 years	3 (6%)
11+ years	2 (4%)

Course progress	Respondents
First year	30 (57%)
Second year	10 (19%)
Third year and beyond	13 (25%)

Study hours	Respondents
Less than 5	1 (2%)
6-10	2 (4%)
11-20	3 (6%)
21-30	12 (23%)
31-40	17 (32%)
Over 40 hours	18 (34%)

English proficiency	Respondents
Fluent	12 (23%)
Advanced	23 (43%)
Intermediate	16 (30%)
Elementary	2 (4%)
Beginner	0 (0%)

Gender	Respondents
Woman	26 (49%)
Man	24 (45%)
Non-binary/gender diverse	1 (2%)
Prefer to self-describe	0 (0%)
Prefer not to say	2 (4%)

LGBTIQA+	Respondents
Yes	2 (4%)
No	42 (79%)
Prefer not to disclose	9 (17%)

Indigenous (domestic students only)	Respondents
Yes	0 (0%)
No	4 (100%)
Prefer not to disclose	0 (0%)

Disability	Respondents
Yes	3 (6%)
No	50 (94%)
Prefer not to disclose	0 (0%)

Registered disability with DSS	Respondents
Yes	2 (67%)
No	1 (33%)

Age	Respondents
24 or under	8 (15%)
25-29	25 (48%)
30-39	18 (35%)
40 and over	1 (2%)

Employment status	Respondents
Full-time	8 (15%)
Part-time	5 (10%)
Casual	10 (19%)
Unemployed and looking for work	6 (12%)
Not employed and not looking for work	24 (46%)

Work hours	Respondents
Less than 5	3 (13%)
6-10	8 (35%)
11-20	5 (22%)
21-30	2 (9%)
31-40	4 (17%)
More than 40	1 (4%)