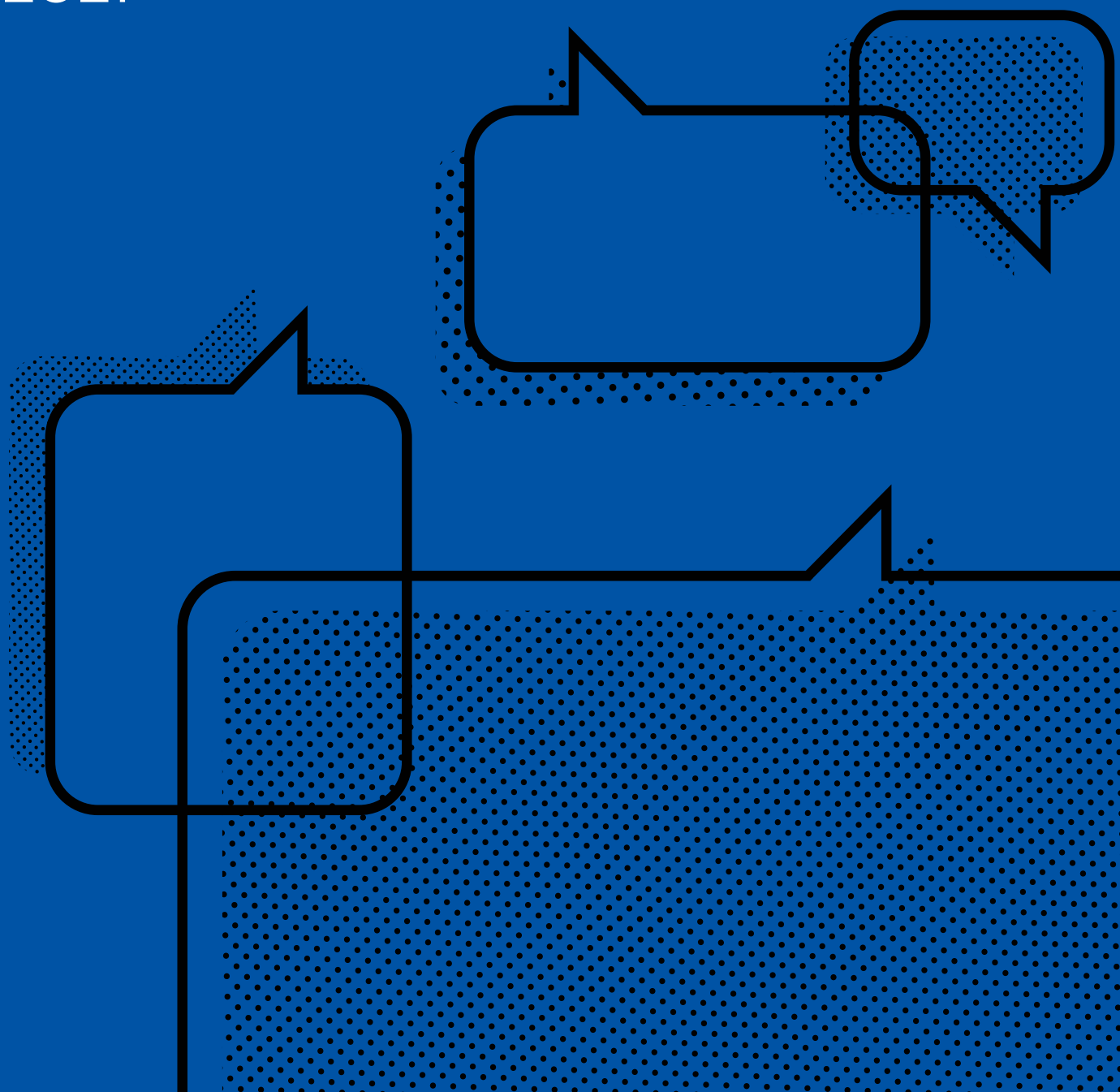
PGR Student Survey.ie

The Irish Survey of Student Engagement for Postgraduate Research Students National Report 2021



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The Irish Survey of Student Engagement for Postgraduate Research Students National Report
2021

Suirbhé na hÉireann ar Rannpháirtíocht na Mac Léinn do Mhic Léinn Taighde Iarchéime

HEA HIGHER EDUCATION AUTHORITY AN tÚDARÁS um ARD-OIDEACHAS

iua IRISH UNIVERSITIES ASSOCIATION

thea TECHNOLOGICAL HIGHER EDUCATION ASSOCIATION

USI Union of Students in Ireland Aontas na Mac Léinn in Éirinn

StudentSurvey.ie
November 2021

Glossary

Respondent

Any student who began the survey

PGR student

postgraduate research student (including Masters by Research and PhD students)

PGR cohort size

respondents categorised by enrolment in a higher education institution with a PGR student population of a particular size, i.e., PGR students enrolled in institutions with a PGR cohort of greater than 250 students, or students enrolled in institutions with a PGR cohort of fewer than 250 students

Research degree programme type

respondents categorised by research degree programme type, i.e., NFQ Level 9 (Masters by research) degrees, or NFQ Level 10 (PhD) degrees

Mode of study

respondents categorised by nature of enrolment, i.e., full-time or part-time

Field of study

respondents categorised by broad ISCED field of study, i.e., Generic programmes and qualifications; Education; Arts and humanities; Social sciences, journalism, and information; Business, administration, and law; Natural sciences, mathematics, and statistics; Information and Communication Technologies (ICTs); Engineering, manufacturing, and construction; Agriculture, forestry, fisheries, and veterinary; Health and welfare; or Services

Country of domicile

respondents categorised by country of permanent address prior to entry to their programme of study, i.e., Irish domiciled students (students for whom Ireland, including Northern Ireland, is their country of permanent address) or internationally domiciled students (students for whom another country is their country of permanent address)

Effect size

any measure of the strength of a relationship between two variables. Large numbers of respondents make it more likely that any small difference will be statistically significant. Effect size attempts to measure real-world significance. The National Survey of Student Engagement (NSSE) proposed reference values for the interpretation of effect sizes from benchmark comparisons[1]:

Small	**0.1**	Large	**0.5**
Medium	**0.3**	Very Large	**0.7**

[1] NSSE (2007). Contextualizing NSSE Effect Sizes: Empirical Analysis and Interpretation of Benchmark Comparisons. Available from: https://pdfs.semanticscholar.org/35a1/604af3043e9347e8238f10a403d24f3ceab6.pdf

Acknowledgements

The PGR StudentSurvey.ie National Report Editorial Group wishes to thank the 3,541 students who gave their valuable time and insights in their participation in the 2021 PGR StudentSurvey.ie, and whose views form the results in this report. The group is grateful for the strong partnership of the Higher Education Authority (HEA), the Irish Universities Association (IUA), the Technological Higher Education Association (THEA), and the Union of Students in Ireland (USI) in steering the project, in conjunction with the StudentSurvey.ie Steering Group, the StudentSurvey.ie Communications Group, the StudentSurvey.ie Analysis and Impact Group, and the StudentSurvey.ie PGR Working Group. The StudentSurvey.ie National Report Editorial Group thanks the lead staff and student representatives in each of the participating higher education institutions who champion the survey in their institution.
Finally, we are grateful for the effort and support of all staff, faculty, and senior management in the participating institutions, whose support continues to be instrumental to the success of PGR StudentSurvey.ie and its positive impact on the higher education and research and innovation landscape in Ireland.

Go raibh míle maith agaibh go léir.

Contents

What students said

What aspects / elements of your research degree programme are most valuable?

These quotes have been randomly selected to give an insight into the number of students who provide a response to this question, and the types of activities they value. Qualitative data analysis has not been carried out, and the quotes were not chosen deliberately to represent the most common themes in the results.

- The possibility to explore a subject beyond current knowledge boundaries and interacting with researchers to elaborate hypotheses, imagine experiment designs and get more knowledge about new techniques.
- I am doing structured PhD and it is very good.
- Understanding the scientific process behind the work.
- I am hosted in an external publicly funded agricultural research institution and I believe this balance of working with full time professionals from outside higher education and working with my institution has made me a better researcher. Working in the applied sciences has made me enjoy my research more.
- Data Analysis and Python experience.
- Good laboratory equipment, Cutting Edge research, supportive and approachable supervisors with great insight and advice, interesting research topics, prospects.
- Good supervision.
- Close contact with supervisors; opportunity to work with and learn from scientific experts.
- The training I received.
- Autonomy and responsibility for my own work.
- Tutor support.
- Availability of funding which brings a lot of opportunities with it as long as one knows what to do with it.
- It gives as freedom while not leaving us stranded.
- Sharing research experience applicable to subjects taught to undergraduate students - Accessible Ripple effect.
- The time to be able to consider issues, in depth; the (few) seminars which have been made available to student researchers - which is more about providing network links.
- Positive relationship with supervisor.
- A supportive network of supervisors and lecturers, opportunities to teach and attend conferences, to improve my research skills, to disseminate my research.
- My research degree program is most valuable because it involves research practice which is carried out for the betterment of human beings that too in the lower income settings.
- Tutor support. I feel support overall is more accessible post-grad than undergrad.
- Feedback and support from supervisors. Connection to other research students.
- Good colleagues, good supervisor, good supports, interesting subject, good social aspect.
- Improved critical analysis skills. Interesting learning environment. Very much enjoy the teaching aspect.
- Flexibility and intellectual challenge.
- The independence.
- Support from supervisor, opportunity to develop research skills in new areas (e.g. systematic reviews, particular analysis methods) and to develop autonomy in research (I was quite comfortable with research when starting the programme).
- Forward-looking and innovative.
- Collaborations, knowledge of industry, transferable skillset.
- Improve critical skills. Become competent researcher. Opportunity to teach/ demonstrate. Opportunity to present research at conferences and publish work in academic journals.
- The qualification at the end and the doors it can open.
- Exploratory process for a new domain, critical evaluation of solutions, Feedbacks to improvise the solution from Mentors.
- Conferences/ collaboration with industry.
- The thinking, the approach of problems, self-studying, an environment for my learning.
- Connection with other researchers.
- My supervisors were very good about having me be in control of all aspects of my PhD development and research. They step in with advice/assistance when needed, but the independence is extremely valuable.
- Modules taken, learning from my supervisor, friends made.
- The training by fellow research students in my area.
- Getting relevant feedback and advice from my supervisors.
- The training and guidance I receive from my supervisor.
- The multidisciplinary approach is novel and engaging, though it can be difficult to understand where I belong institutionally.
- Lots of access to workshops, lectures, seminars, funding etc.
- Facilitating my research.
- A good supervisor, research friends for support.
- Flexibility.
- The knowledge and input from my supervisor and the project itself.
- My research – it's important and fulfilling.
- Critical thinking, communication and technical skills that I have developed.
- I hope it will open up opportunities for a good research career.
- The ongoing learning and support.
- I made 1 very good friend here. I suppose it does provide career prospects if I finish.
- Being able to avail of transferable skills modules.
- The professional training along with the supervision.
- Links with external networks and programs. Refinement of research skills.

Executive Summary

Purpose

PGR StudentSurvey.ie (Irish Survey of Student Engagement for Postgraduate Research Students; Suirbhé na hÉireann ar Rannpháirtíocht na Mac Léinn do Mhic Léinn Taighde Iarchéime) invites responses from postgraduate research (PGR) students on a biennial survey cycle. PGR StudentSurvey.ie asks students directly about their experiences of higher education in Ireland, including their academic, personal, and social development. In 2021, 3,541 students in 21 higher education institutions participated.

Postgraduate research students are a vital group in the context of national research and innovation in Ireland and any strategy must include supporting and empowering these early career researchers. In 2018, there were 8,626 permanent academic staff and 2,294 postdoctoral staff (Government of Ireland, 2018)[2]. They are outnumbered by the over 10,000 doctoral and research Masters students in Irish higher education institutions. PGR students are a key cohort of researchers currently undertaking valuable research and are also the future talent who will lead on projects in the coming decades.

It is essential for Ireland's national research system that those who carry out research here, from the very beginnings of their career, receive an educational experience that equips them with the capability and confidence to conduct their research to the highest possible standards. Underpinning the quality of postgraduate research degree provision is Ireland's *National Framework for Doctoral Education*. A complementary *Framework of Good Practice for Research Degree Programmes* was launched by Quality and Qualifications Ireland (QQI) and is organised around the key principles in the *National Framework for Doctoral Education*. The information gathered in PGR StudentSurvey.ie will greatly advance the objectives of these policies, in providing key evidence for both HEIs themselves but also the broader higher education and research and innovation system to enhance the quality of postgraduate research degree provision in Ireland.

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2. Government of Ireland (2018). *Higher Education Research & Development Survey 2018-2019.* A report prepared by the Department of Enterprise, Trade and Employment.

COVID-19 and Irish higher education institution

Early evidence from reports by organisations such as QQI (2020)[3], USI (2020)[4], and AHEAD (2020)[5] suggested that the impact of COVID-19 on the lives of students in higher education was significant and far-reaching. This and institutional evidence led the StudentSurvey.ie Steering Group to include additional specific COVID-19 questions in StudentSurvey.ie and PGR StudentSurvey.ie 2021. The results serve as a powerful measure of the national taught and research student experience during the COVID-19 pandemic and should inform local and national efforts to mitigate the negative impacts on students.

Structure of the survey

The focus of the survey is on student engagement with learning, rather than student satisfaction. PGR StudentSurvey.ie addresses each of the following engagement aspects:

- Research Infrastructure and Facilities
- Supervision
- Research Culture
- Progress and Assessment
- Development Opportunities
- Research Skills
- Other Transferable Skills
- Responsibilities and Supports
- Personal Outlook
- Motivations
- Career Aspirations
- Overall Experience

Those interested in consulting the full set of questions are directed to https://studentsurvey.ie/survey-questions.

The COVID-19 questions consist of five multiple choice questions and two open-ended questions. The development of the additional COVID-19 questions involved significant consultation across all of the participating HEIs and stakeholder organisations. The questions were piloted with 64 students across six participating HEIs, and their feedback informed determination of the final questions.

There is a second survey, StudentSurvey.ie (the Irish Survey of Student Engagement; Suirbhé na hÉireann ar Rannpháirtíocht na Mac Léinn), designed for first and final year undergraduate students and taught postgraduate students, and it runs annually. The results for 2021 are contained in the StudentSurvey.ie National Report 2021.

3. QQI (2020). *The Impact of COVID-19 Modifications to Teaching, Learning and Assessment in Irish Further Education and Training and Higher Education.* A report prepared by Quality and Qualifications Ireland.
4. USI (2020). *National Report on Students and COVID-19.* A report prepared by the Union of Students in Ireland.
5. AHEAD (2020). *Learning from Home During Covid-19: A Survey of Irish FET and HE Students with Disabilities.* A report prepared by the Association for Higher Education Access & Disability.

34%

Overall national response rate 2021.

Summary of 2021 results

A total of 3,541 students responded to the 2021 survey, which represents a national response rate of 34%.

Chapter 2 presents responses to question items grouped according to different engagement aspects of postgraduate research experience. The percentage of students agreeing with each statement compared to 2019 varied by aspect of the experience. The results presented in Chapter 3 represent a curated exploration of variance between groups.

Chapter 4 offers a closer examination of the impact of COVID-19 on PGR students. The COVID-19 pandemic has caused major disruption to many people in all walks of life, and PGR students have been no different. Since the first closure of higher education institutions on 12 March 2020 and the two subsequent Level 5 nationwide lockdowns, PGR students have had to deal with restrictions that have impacted on their ability to carry out research. The long-term effects of the pandemic are still unclear and as it continues, so too does the impact on PGR students. Chapter 4 explores whether the COVID-19 pandemic is negatively impacting specific cohorts of PGR students in carrying out research in different ways and in completing their studies, and whether it is affecting their development opportunities, with a focus on field of study (Arts, Humanities and Social Science (AHSS) PGR students compared to Science, Technology, Engineering and Maths (STEM) PGR students) and gender.

Further observation and next steps

Chapter 5 offers some overall observations about the data and considers potential future analysis.

It will have a very tangible contribution towards the society.

Demonstrating to the undergrads, free workshops.

Good modules and seminars available, experience gained from teaching.

As a international student, the most valuable aspect of my research degree, is the fact I am doing it outside of my country. Additionally, performing a PhD in a high standard University will help a lot my career.

It's a new world for me, enjoy being pushed out of my comfort zone, revisiting my research capabilities and a I am inspired by the expertise and meaningful contributions of my two supervisors in this field.

Learning to think critically and work independently.

A thirst for knowledge being maintained even in the challenging time of Covid.

The topic is one of the trending topics in research.

Research findings

My colleagues and my supervisor.

Developing transferable skills, such as problem solving, team-work and project management . Developing my communication skills also such as becoming competent in scientific writing and being able to present my research in a manner that is accessible to both experts and lay people.

Specialist knowledge and skills.

Data collection and analysis.

Knowledge of science.

Possibility to exchange experiences and learn from professionals who dominate their fields.

Being able to work in 2 universities has given me the chance to develop not only my research skills but also my communication skills and work under pressure. At the same time nowadays with the pandemic that is held behind and it feels more stressful regarding my research goals and schedule.

Continuous learning, engaging with other researchers, having the opportunity to demonstrate in undergraduate courses.

Self-learning.

The process of learning fascinating things.

Clinical therapies.

First and foremost, supervision. Secondly, the funding available and the opportunities it affords me to pursue my research and avail of additional supports and services. Thirdly, the research community is very inclusive and feel part of a network within the IoE.

Collaborative research, interesting studies.

Connections and training on the job.

Practical experience in more methods.

It concentrates the mind.

Sharing ideas with other academics.

Thus far the data analysis skills.

The importance of my personal and professional work.

The unravelling of the research questions and projecting the impact of the outcome on the participant and policy.

Freedom to pursue own ideas.

Increased knowledge in subject, building connections in industry and in my academic institution.

Independent research project management.

The insights I am uncovering.

Flexibility, resources available (materials and equipment).

Conducting research what will be valuable for the community. The opportunity to take classes such as Teaching and Learning.

My research can help treatment strategies for DFU, so I would be delighted if I can be of any help to society.

Independence, access to varied facilities, research support.

Developing critical thinking and other skills related to research.

Ability to experience a variety of different laboratory techniques.

I really appreciate the breadth of modules we are given to choose from. I believe that I had exceptionally limited Stats knowledge entering the PhD and feel that the modules offered have dramatically improved my skills.

My supervisors were excellent mentors and teachers. I don't think they realise how much I learned from them but their influence on my learning and enjoyment of my PostGrad experience has been immense.

Valuable - the projects that give you understanding, exciting - conferences.

Working within a research group with colleagues who are very highly regarded in their field.

Personal development, managing own work, presenting at conferences and learning how to network.

Motivation and encouragement to learn something new, develop yours skills to perform experiments, understand/ interpret data and critically evaluate results.

Having a proactive and engaging supervisor is critical for your own development.

Supervisorship, knowledge gain.

The relationship between students within the degree and the support from staff.

Variety of applicable advanced subjects on what I'm interested in. Close connections with the industry my research is progressing in.

The progress meeting with my supervisor.

Getting to work with my supervisors, who are leaders in their field.

I am learning so much about my chosen field.

Show that I am capable of my work and my research is important.

Transferable lab skills and deep understanding of scientific concepts. Time to read broadly and develop research ideas are also important.

Attaining a deep scientific knowledge of my work area (addiction treatment in homelessness) from an entirely different setting.

Conducting research and producing own work.

Writing my thesis.

Achoimre Feidhmiúcháin

Cuspóir

Cuireann PGR StudentSurvey.ie (Irish Survey of Student Engagement for Postgraduate Research Students; Suirbhé na hÉireann ar Rannpháirtíocht na Mac Léinn do Mhic Léinn Taighde Iarchéime) fáilte roimh fhreagraí ó mhic léinn iarchéime taighde (PGR) ar shraith suirbhé dhébhliantúil. Cuireann PGR StudentSurvey.ie ceisteanna díreacha ar mhic léinn faoina n-eispéireas san earnáil ardoideachais, lena n-áirítear a bhforbairt acadúil, phearsanta, agus shóisialta. Ghlac 3,541 mac léinn in 21 institiúid ardoideachais páirt in 2021.

Is grúpa ríthábhachtach mic léinn iarchéime taighde i gcomhthéacs an taighde agus na nuálaíochta náisiúnta in Éirinn agus ní mór go n-áireofar tacaíocht do na taighdeoirí luathghairme sin, mar aon lena gcumasú, in aon straitéis. In 2018, bhí 8,626 comhalta foirne acadúil buan and 2,294 comhalta foirne iardhochtúireachta ann (Rialtas na hÉireann 2018)[6]. Is líonmhaire ná iad an bhreis is 10,000 Mac Léinn Dochtúireachta agus Máistreachta Taighde in institiúidí ardoideachais na hÉireann. Is cohórt taighdeoirí ríthábhachtach iad mic léinn iarchéime taighde atá i mbun taighde luachmhar agus is iad an grúpa cumasach sin a bheidh ag stiúradh tionscadal as seo go ceann deich, scór, tríocha bliain.

Tá sé riachtanach do chóras taighde náisiúnta na hÉireann go bhfaigheann na daoine siúd a dhéanann taighde anseo, ó thús a ngairme, eispéireas oideachais a chuireann ar a gcumas a gcuid taighde a dhéanamh go hábalta agus go muiníneach ar an gcaighdeán is airde. Faoi bhun sholáthar na céime iarchéime ar ardchaighdeán tá Creat Náisiúnta d'Oideachas Dochtúireachta na hÉireann. Sheol Dearbhú Cáilíochta agus Cáilíochtaí Éireann (QQI) creat comhlántach mar atá Creat Dea-Chleachtais do Chláir Chéime Taighde agus leagtar amach é de réir na bpríomhphrionsabal in Creat Náisiúnta d'Oideachas Dochtúireachta. Cuirfidh an t-eolas a bhaileofar in PGR StudentSurvey.ie cuspóirí na bpolasaithe seo go mór chun cinn, trí bhíthin fianaise thábhachtach á sholáthar ní hamháin do na hInstitiúidí Ardoideachas féin ach don chóras ardoideachais agus taighde agus nuálaíochta níos leithne chomh maith céanna le feabhas a chur ar chaighdeán an tsoláthair iarchéimeanna taighde in Éirinn.

6. Rialtas na hÉireann (2018) *Suirbhé ar Thaighde agus ar Fhorbairt Ardoideachais 2018-2019.* Tuarascáil arna hullmhú ag an Roinn Fiontair, Trádála agus Fostaíochta

COVID-19 agus institiúidí ardoideachais na hÉireann

De réir luathfhianaise tuarascálacha le heagraíochtaí amhail Dearbhú Cáilíochta agus Cáilíochtaí Éireann (QQI) (2020)[7], Aontas na Mac Léinn in Éirinn (USI) (2020)[8], agus an Cumann um Rochtain Ardoideachais agus Míchumas (AHEAD)(2020)[9] bhí tionchar COVID-19 ar shaol mac léinn san ardoideachas suntasach agus leitheadach. Thug an méid sin agus fianaise institiúideach ar an nGrúpa Stiúrtha de chuid StudentSurvey.ie ceisteanna breise sainiúla maidir le COVID-19 a áireamh i StudentSurvey.ie agus PGR StudentSurvey.ie 2021. Feidhmíonn na torthaí mar thomhas cumhachtach ar eispéireas náisiúnta na mac léinn múinte agus taighde le linn phaindéim COVID-19 agus ba chóir go gcuirfidís bonn eolais faoi iarrachtaí áitiúla agus náisiúnta leis na hiarmhairtí diúltacha ar mhic léinn a mhaolú.

Leagan amach an tsuirbhé

Is ar rannpháirtíocht mac léinn leis an bhfoghlaim atá an suirbhé dírithe, agus ní díreach ar shástacht na mac léinn. Tugann PGR StudentSurvey.ie aghaidh ar na gnéithe rannpháirtíochta seo a leanas:

- Infreastruchtúr agus Áiseanna Taighde
- Maoirseacht
- An Cultúr Taighde
- Dul Chun Cinn agus Measúnú
- Deiseanna Forbartha
- Scileanna Taighde
- Scileanna Inaistrithe Eile
- Freagrachtaí agus Tacaíocht
- Dearcadh Pearsanta
- Spreagadh
- Uailmhianta Gairme
- Taithí ar an Iomlán

Treoraítear iad siúd ar spéis leo an tsraith iomlán ceisteanna a fheiceáil chuig https://studentsurvey.ie/survey-questions.

Sna ceisteanna a bhaineann le COVID-19 tá cúig cheist ilroghnacha agus dhá cheist oscailte. Bhain comhairliúchán suntasach ar fud gach Institiúid Ardoideachais agus eagraíocht páirtithe leasmhara rannpháirteach le forbairt na gceisteanna breise maidir le COVID-19. Triaileadh na ceisteanna ar bhonn píolótach agus cuireadh ar 64 mac léinn as sé Institiúid Ardoideachais rannpháirteacha iad, agus chuir a gcuid aiseolais siadsan bonn eolais faoi dheimhniú na gceisteanna deiridh.

Tá suirbhé eile ann, StudentSurvey.ie (Suirbhé na hÉireann ar Rannpháirtíocht na Mac Léinn), atá deartha do mhic léinn fochéime de chuid na chéad bhliana agus de chuid bhliain na céime agus do mic léinn iarchéime mhúinte, agus reachtáiltear go bliantúil é. Tá torthaí na bliana 2021 le fáil i dTuarascáil Náisiúnta StudentSurvey.ie 2021.

7. QQI (2020). *The Impact of COVID-19 Modifications to Teaching, Learning and Assessment in Irish Further Education and Training and Higher Education.* Tuarascáil arna hullmhú ag Dearbhú Cáilíochta agus Cáilíochtaí Éireann.
8. USI (2020). *National Report on Students and COVID-19.* Tuarascáil arna hullmhú ag Aontas na Mac Léinn in Éirinn.
9. AHEAD (2020). *Learning from Home During Covid-19: A Survey of Irish FET and HE Students with Disabilities.* Tuarascáil arna hullmhú ag an gCumann um Rochtain Ardoideachais agus Míchumas

34%

Ráta rannpháirtíochta náisiúnta 2021.

Achoimre ar thorthaí 2021

D'fhreagair 3,541 mac léinn san iomlán suirbhé 2021, agus is ionann sin agus ráta freagartha náisiúnta 34%.

I gCaibidil 2 cuirtear i láthair freagraí ar cheisteanna atá rangaithe de réir gnéithe rannpháirtíochta éagsúla de chuid an eispéiris taighde iarchéime.

Is ionann na torthaí a chuirtear i láthair i gCaibidil 3 agus scrúdú córasach ar dhifríocht idir ghrúpaí.

I gCaibidil 4 déantar grinnscrúdú ar thionchar COVID-19 ar mhic léinn iarchéime taighde. Chuir paindéim COVID-19 go mór isteach ar an iomad daoine as gach cúlra, agus níor thaise do mhic léinn iarchéime taighde é. Ó dúnadh institiúidí ardoideachais an chéad uair ar an 12 Márta 2020 agus sa dá dhianghlasáil náisiúnta a lean ina dhiaidh sin, b'éigean do mhic léinn iarchéime taighde déileáil le srianta a chuaigh i gcion ar a gcumas taighde a dhéanamh. Ní léir fós iarmhairtí fadtéarmacha na paindéime agus í ar siúl i gcónaí agus is amhlaidh an scéal é maidir leis an tionchar ar mhic léinn iarchéime taighde. I gCaibidil 4 scrúdaítear a mhéad agus atá paindéim COVID-19 ag dul i bhfeidhm go diúltach ar chohóirt shainiúla mac léinn iarchéime taighde, má tá, ó thaobh thaighde a dhéanamh ar bhealaí éagsúla, ó thaobh a gcuid taighde a chríochnú agus ó thaobh an tionchar ar a ndeiseanna forbartha, le béim ar an réimse staidéir (e.g. mic léinn fochéime taighde de chuid nDána, na nDaonnachtaí agus na nEolaíochtaí Sóisialta (AHSS) i gcóimheas le mic léinn fochéime taighde de chuid na hEolaíochta, na Teicneolaíochta, na hInnealtóireachta agus an Matamaitice (STEM)) agus ar inscne.

Tuairimíocht bhreise agus na chéad chéimeanna eile

I gCaibidil 5 tugtar roinnt tuairimí foriomlána ar na sonraí agus déantar machnamh ar anailís a d'fhéadfaí a dhéanamh amach anseo.

Understanding discourse of developing country about one of hot issues of current times climate change.

Networking and support from IOE and supervisor.

Freedom and flexibility.

Supervisors are very helpful.

Learning to overcome problems.

The lab work and my fellow PhD students.

The lab work itself.

Developing new skills, making new contacts and gaining career experience.

The time and project management skills, and critical and analytical thinking and problem solving.

Learning to self manage my work-flow and to meet deadlines completely on my own outside of a team. Getting to see how the research field works around the area I am going to work in long term.

Teaching, public outreach, research, transferable skills.

The hands-on experience.

Methodology, Elective module, creative process (for performances).

The hands on teaching from my supervisors and close contact with them.

Department support.

Research methods, understanding evidence, project planning

The programme is professional and student-oriented.

The quality of supervision is second to none; the support provided by the graduate research and library staff has also been excellent.

Continually growth and learning.

Cohort set-up, the skills I develop.

Getting the certificate to say I'm finished.

Personal satisfaction, being able to discuss science with peers, professional prospects.

The relationship I have built with my supervisor.

Ability to work independently and own my research topic. Although I would like more input from my supervisors I can only look at the positive side.

Collaborating with a research cluster in my university.

Interesting in find good result on two dimensional materials.

Academic Skills acquisition and knowledge.

Experimental works.

Knowledgeable and involved supervisor.

Getting regular feedback and positive support.

The in class learning and groupwork was invaluable for experience and to share ideas as a group. The in class discussions varied each day, and listening to peers who had a shared interest but a different background was interesting.

Lab experience.

Good research support unit. Those who are there to help us, always listen when we ask for things. The people around the postgraduate students are very supportive and want to see us all do well.

Self-directed learning combined with post grad training modules.

The interactive working environment and support from fellow students and academic staff.

Multidisciplinarity.

Teaching elements have been very useful and helped my development in enhancing my understanding of the philosophical underpinnings of various methodologies and applying a higher level of analysis. There is a lot of research conducted which is also quite inspiring.

Literary criticism, critical thinking, professional and research development.

Personal development, learning new skills.

The independence. Our lab group puts quite a lot of responsibility in the students hand whereas other institutions wouldn't. This has been a really positive aspect of my degree.

Independent thinking and strong research background.

Consistent lab time and exposure to multiple branches of science/high-end techniques as part of a team whom provide support and expertise in multiples disciplines.

The knowledge I am gaining and the connections I am making.

Extending my academic and industrial career options, improving how to critically analyse information, teaching opportunities.

Exploring data, testing, and a feeling of attempting to achieve something important.

Research group.

My desk, and access to the workshop next to it.

Personal fulfilment, academic achievement.

Development as a researcher (critical thinking, planning, working with team etc.).

Teaching experience.

Library.

Honing critical thinking and analysis.

Developing resilience.

Being actively encouraged and supported financially to publish work to increase profile and visibility of work.

Developing my skills.

I love getting the chance to teach a class.

Flexibility.

Independent fieldwork.

Getting in touch with more people who work in the same research field and enlarging my network.

Library resources very strong - all articles / resources I needed were available.

Having a super supportive and very experienced supervisor.

Valuable opportunities to disseminate research at in house research mornings, and at conferences outside of the college.

Personal problem solving and skill training.

The training.

Getting to work with my supervisor who is a leading scholar in my field.

Chapter 1
Context for the Irish Survey of Student Engagement for Postgraduate Research Students

PGR StudentSurvey.ie (Irish Survey of Student Engagement for Postgraduate Research Students; Suirbhé na hÉireann ar Rannpháirtíocht na Mac Léinn do Mhic Léinn Taighde Iarchéime) invites responses from postgraduate research (PGR) students (including Masters by research and doctoral degree students) in 21 higher education institutions in Ireland on a biennial survey cycle.
There is a second survey, StudentSurvey.ie, which runs annually and is designed for first year undergraduate, final year undergraduate, and taught postgraduate students.

1.1 Policy context

The world is experiencing rapid global change, driven by a range of environmental, political, social, and economic phenomena, all of which are accelerated by the ongoing technological revolution. As a result, we are facing a number of major environmental and societal challenges in the broad areas of demographics and health, climate and the environment, energy, transport, and security, all of which require responses from the areas of fundamental and strategic research. The experience of the global COVID-19 pandemic has clearly demonstrated the valuable role that research plays in addressing large-scale challenges (e.g., IUA, 2021[10]), and points to a future strong demand by political and economic leaders and the wider public for research-led solutions to society's most difficult problems.

Likewise, the future of work will also be different. The importance of building resilience in the Irish economy is highlighted in *Future Jobs Ireland* (2019)[11] as key to maintaining our national competitiveness and ability to adapt in this changing global context.

Central to growing our productivity and building resilience is "cultivating a collaborative and dynamic national innovation system facilitated by world-class research institutions and public investment in research, development and innovation".[12] *Innovation 2020*[13], Ireland's strategy for research and development, science and technology, positions Ireland towards becoming a Global Innovation Leader, driving a strong sustainable economy and a better society. The next national strategy for research and innovation, due to be published this year, will likely continue on this path. 2021 saw the launch of Horizon Europe's mission-based approach to research, which also points to research in all disciplines being directed towards greater integration into the very fabric of society regarding large-scale challenges and the meeting of Sustainable Development Goals as identified by the United Nations.

The higher education research system is core to our national strategy and to Ireland's continued participation in international research strategies, both through fundamental research as well as through dynamic partnerships and interactions with enterprise, state agencies and civil society, in order to facilitate knowledge transfer, the development of new business products and services, and solutions to societal challenges. Research-intensive industries in turn are recognised as being more resilient and more productive, as well as generating greater employment, than non-innovative enterprises.[14]

As research plays such a crucial role in developing a knowledge society[15], it is vital that we have a vibrant research community. Investing in our people and the facilities necessary to a healthy research system is essential to delivering the solutions to the many challenges that we face as a society and to ensuring the continued development of new knowledge crucial for long-term growth. When *Innovation 2020* was being developed, enterprise agencies forecasted that the number of research and

10. IUA (2021). *Irish Universities help fight the pandemic*. Available from: https://www.iua.ie/covid-19/universities-help-fight-the-pandemic/
11. Government of Ireland (2019) *Future Jobs Ireland*. Available from: https://dbei.gov.ie/en/Publications/Publication-files/Future-Jobs-Ireland-2019.pdf
12. Government of Ireland (2019) *Future Jobs Ireland*, p. 13.
13. DBEI (2015) *Innovation 2020*. Available from: https://enterprise.gov.ie/en/Publications/Publication-files/Innovation-2020.pdf.
14. Government of Ireland (2019) *Future Jobs Ireland*.
15. Government of Ireland (2019). *Department of Further and Higher Education, Research, Innovation and Science. Statement of Strategy 2021–2023*. Available from: https://assets.gov.ie/125743/0d1fe077-ba66-4ba9-977d-4f0a2f3b0ef1.pdf

development personnel needed in the enterprise sector alone would increase from 25,000 in 2013 to 40,000 in 2020 (the actual figure in 2019 was 27,755)[16,17] *Project Ireland 2040* also highlights the development of skills, talent and innovation capacity as a key strategic pillar under National Strategic Outcome 6: A Strong Economy Supported by Enterprise, Innovation and Skills, stating that delivering this will require increased alignment between research activity and human capital development in both the enterprise and education sectors.[18]

Ensuring the quality of Irish postgraduate research education is paramount in addressing these needs.

The importance of nurturing transferable skills among postgraduate research students is likewise emphasised, to enable graduates to advance their careers across a broad range of employment sectors.[19] This is reinforced by a recent EU publication, which notes the limited number of academic positions and recognises that researchers will need the skillset to work both beyond and within academia.[20] Researcher competences are continually evolving; research integrity and open research/scholarship, for example, are currently to the fore. It is thus essential for Ireland's national research system that those who carry out research here, from the very beginnings of their career, receive an educational experience that equips them with the capability and confidence to conduct their research to the highest possible standards.

Underpinning the quality of postgraduate research degree provision in Ireland is the *National Framework for Doctoral Education*[21], which aims to:

- Facilitate consistent excellence in the quality of postgraduate education and training, including research undertaken at Masters and doctoral levels;
- Enable and encourage higher education institutions to work more closely in the delivery of an improved learner experience and outcome;
- Maximise the employability of doctoral graduates across a broad range of employment sectors by ensuring that the acquisition of discipline-specific knowledge is complemented by the development of transferable skills; and
- Underpin the international standing of the Irish doctoral award.

This Framework has been endorsed by all of the higher education institutions and main research funders in Ireland. An international expert report on the implementation of the Framework, carried out in 2021, commended Irish higher education institutions for ensuring both the standard of awards and the quality of student experience by 'professionalising' the delivery of postgraduate research education and training in Ireland.[22] A complementary *Framework of Good Practice for Research Degree Programmes* was launched by Quality and Qualifications Ireland (QQI) and is organised around the key principles in the *National Framework for Doctoral Education*. Its purpose is to "provide benchmark statements, against which those involved in delivering Research Degree Programmes can consider their own practice and identify areas where enhancement effort and/

16. DBEI (2015). *Innovation 2020,* p. 38.
17. https://data.cso.ie/
18. Government of Ireland (2018), *Project Ireland 2040 – National Planning Framework*, p. 145. Available from: https://npf.ie/project-ireland-2040-national-planning-framework/.
19. DBEI (2015) *Innovation 2020,* p. 37.
20. Council of the European Union (2021). *Council conclusions on "Deepening the European Research Area: Providing researchers with attractive and sustainable careers and working conditions and making brain circulation a reality.*
21. Higher Education Authority (2015). *National Framework for Doctoral Education.* Available from: https://hea.ie/assets/uploads/2017/04/national_framework_for_doctoral_education_0.pdf
22. EUA (2021). *The National Framework for Doctoral Education in Ireland: Report on its Implementation by Irish Higher Education Institutions.* Available from: https://hea.ie/assets/uploads/2021/07/EUA-Solutions-report_HEA_QQI_IUA_THEA_final-and-revised_HEA-PROOF_15_07_21.pdf.

or resources might be focused".[23] Within this *Framework of Good Practice*, point 4.14 expects that "the higher education institution formally considers the outcomes of the Irish Survey of Student Engagement for Postgraduate Research Students" as part of their ongoing practice.[24]

The *National Strategy for Higher Education to 2030* also acknowledges the importance and value of feedback on the student experience:

> **"Higher education institutions should put in place systems to capture feedback from students and use this feedback to inform institutional and programme management, as well as national policy."**[25]

The continued implementation of PGR StudentSurvey.ie will greatly advance these objectives, in providing key evidence not only for higher education institutions themselves, but also for the broader higher education research and innovation system to enhance the quality of postgraduate research degree provision in Ireland. PGR StudentSurvey.ie recognises the need for and importance of capturing the experiences that students undertaking research degree programmes may have, which will be different from those completing predominantly taught programmes.

The 2019 PGR StudentSurvey.ie was completed by 2,721 postgraduate research students and yielded rich insights into various aspects of the student experience. The 2021 PGR StudentSurvey.ie, completed by 3,541 postgraduate research students, will build on this learning and will broaden our awareness and understanding of additional topics, such as student well-being and the impact of COVID-19 on their experience. As well as enabling the continued improvement of our postgraduate research degree provision in Ireland, this will also help to attract talented researchers to our shores and build Ireland's reputation internationally for excellent research and postgraduate education.

1.2 COVID-19 and Irish higher education institutions

Early evidence from reports by organisations such as QQI (2020)[26], USI (2020)[27], and AHEAD (2020)[28] suggested that the impact of COVID-19 on the lives of students in higher education was significant and far-reaching. This and institutional evidence led the StudentSurvey.ie Steering Group to include additional specific COVID-19 questions in StudentSurvey.ie and PGR StudentSurvey.ie 2021.

The consideration of the experiences of undergraduate and postgraduate students during the COVID-19 pandemic offers the opportunity to learn from the unique circumstances. Institutions can be more informed about which aspects of the online/ blended experience could be retained and reflect on the practices that require change. The results serve as a powerful measure of the national

23. QQI (2019) *Framework of Good Practice for Research Degree Programmes.* Available from: www.qqi.ie/Publications/Publications/Ireland%E2%80%99s%20 Framework%20of%20Good%20Practice%20Research%20Degree%20Programmes.pdf#search=Framework%20of%20Good%20Practice%20for%20Research%20Degree%20Programmes%2A
24. QQI (2019) *Framework of Good Practice for Research Degree Programmes*, p. 22.
25. DES (2011) *National Strategy for Higher Education to 2030,* p. 17 https://hea.ie/assets/uploads/2017/06/National-Strategy-for-Higher-Education-2030.pdf
26. QQI (2020). *The Impact of COVID-19 Modifications to Teaching, Learning and Assessment in Irish Further Education and Training and Higher Education.* A report prepared by Quality and Qualifications Ireland.
27. USI (2020). *National Report on Students and COVID-19.* A report prepared by the Union of Students in Ireland.
28. AHEAD (2020). *Learning from Home During Covid-19: A Survey of Irish FET and HE Students with Disabilities.* A report prepared by the Association for Higher Education Access & Disability.

taught and research student experience during the COVID-19 pandemic and should inform local and national efforts to mitigate the negative impacts on students.

It was noted in the StudentSurvey.ie Interim Results Bulletin 2021[29] that there was a common thread through the responses of taught and research students in Irish HEIs to the additional questions specifically addressing the impact of COVID-19 on students' experience of higher education. It is that they want their HEI to recognise the impact COVID-19 has had on them and to show compassion in their response. Everyone has suffered due to the impact of COVID-19, and students are no exception. They have also shown tremendous resilience, with many respondents to StudentSurvey.ie and PGR StudentSurvey.ie 2021 showing positivity and strength in their responses, along with recognising the efforts being made by their HEI to support them in difficult circumstances. They recognise that they are members of a community that includes themselves, as well as academic staff, support staff, and a diverse student body with a diversity of needs.

The results of StudentSurvey.ie and PGR StudentSurvey.ie 2021 are valuable because they provide standardised data from nearly 50,000 students across 25 HEIs in Ireland. The results were all generated during national fieldwork carried out in February-March 2021, during which time Ireland was in Level 5 lockdown. These students included full-time and part-time students, Irish domiciled and internationally domiciled students, students from across a range of fields of study and undertaking a range of programme types (among other student and course characteristics). The StudentSurvey.ie Interim Results Bulletin 2021 on the results for these specific additional questions brings a new and comprehensive evidence base into public view. These results are now being integrated into the analysis of responses to the complete surveys to shed light on further wide-ranging aspects of students' experiences.

1.3 The Union of Students in Ireland perspective

The Union of Students in Ireland (USI) was delighted to see postgraduate research (PGR) students in 21 higher education institutions across Ireland engage in PGR StudentSurvey.ie 2021. PGR students' voices have in the past been lost, possibly due to the isolating nature of research. Completing the survey gives these students a platform to be heard locally within their institution and nationally. The response rate has been heartening, with 34% of the PGR student population responding in 2021. USI looks forward to continuing as a co-sponsoring organisation of StudentSurvey.ie to encourage and promote the survey in order to increase engagement and ensure that student voices are heard. With a third of all PGR students filling out the survey, it is evident that students are actively looking to collaborate with their institutions to develop a high-quality teaching and learning environment.

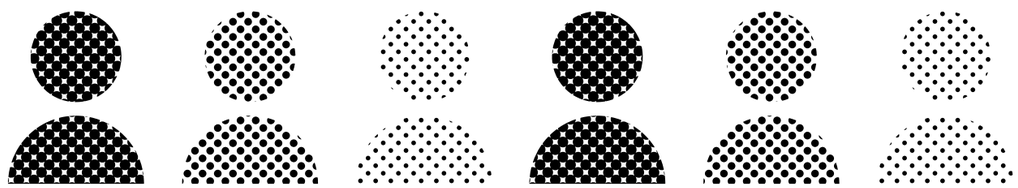
PGR students' higher education experiences are unique and differ from the undergraduate student and postgraduate taught experiences. This makes PGR StudentSurvey.ie essential to capturing PGR student voices. The results give higher education institutions and PGR students reliable data that they can analyse, consulting with a cross-section of stakeholders, to ultimately make tangible positive changes within their respective institutions. There is a valuable opportunity for governing bodies to refer to this resource to measure consistency and review areas where change will positively impact the PGR student experience.

The consensus amongst postgraduate students within Irish higher education institutions was that their experience is positive, given that 74.9% of respondents evaluated their entire research experience at their institution as excellent or good. There are also many areas in which postgraduate students and higher education institutions can collaborate to improve the PGR student experience. One such aspect that is all-encompassing is developing PGR student communities to support the PGR student journey.

It is worth acknowledging that the COVID-19 pandemic and subsequent restriction of access to campuses took effect for some institutions during this period. COVID-19 has seen institutions working to rapidly adapt to an online educational experience in line with government policy. As higher education institutions increase on-campus attendance in September, there is an opportunity to improve and reform learning by retaining practices that worked well and rethinking others. Higher education institutions may find there is a benefit in including a new blended educational experience to retain safe environments for students and staff. A hybrid learning environment may also support growth in higher education due to elements of online learning, teaching and supervision being purposely inclusive in a range of areas. COVID-19 and the restriction of access to higher education institutions have been an isolating experience for undergraduates, taught postgraduates, and PGR students. This has further emphasised how vital a sense of belonging and sharing a community is to students' mental health and their learning journey.

USI is eager for student representatives and HEIs to use the PGR StudentSurvey.ie data to further improve the student experience locally and nationally. We are committed to working in partnership with stakeholders across the higher education sector and student representatives to ensure the survey results are analysed and that meaningful, tangible change occurs to enhance the student learning experience going forward. The continued focus on student partnership at a national level should be mirrored at a local level, and PGR StudentSurvey.ie offers the opportunity for this to be put into practice. The PGR StudentSurvey.ie results place the student experience at the heart of quality enhancement in higher education institutions.

USI supports the PGR StudentSurvey.ie as a valuable addition to the Irish higher education sector. When used collaboratively, it can improve the lived experiences of present and prospective postgraduate research students. Such improvements can contribute to an improved research environment to ensure vital research, development, and innovation growth for the economy.



29. StudentSurvey.ie (2021). *The StudentSurvey.ie Interim Results Bulletin 2021.* Available from: https://studentsurvey.ie/sites/default/files/users/user27/StudentSurvey.ie%20Interim%20Results%20Bulletin%202021_0.pdf.

1.4 Rationale and design

The PGR StudentSurvey.ie questions are largely based on the Postgraduate Research Experience Survey[30] (PRES) in the United Kingdom. PRES is a UK-wide survey of research degree students, organised by the Higher Education Academy, now part of the UK's Advance HE Agency. The PGR StudentSurvey.ie question set shares many common items with the UK PRES whilst also including items specific to the national context, such as elements of the *National Framework for Doctoral Education*.

The focus of the survey is on student engagement with learning, rather than student satisfaction. PGR StudentSurvey.ie addresses each of the following engagement aspects:

- Research Infrastructure and Facilities
- Supervision
- Research Culture
- Progress and Assessment
- Development Opportunities
- Research Skills
- Other Transferable Skills
- Responsibilities and Supports
- Personal Outlook
- Motivations
- Career Aspirations
- Overall Experience

Procedure

Students enrolled on research degree programmes leading to NFQ Level 9 (Masters by Research) or NFQ Level 10 (PhD) degrees were invited to take part in the survey. This included both full-time and part-time[31] PGR students. The survey was delivered online at the same time as StudentSurvey.ie for undergraduate and taught postgraduate students. A survey company managed the survey delivery platform. Collated responses for each individual institution are returned by that survey company to that institution for local analysis at the level of the institution/ faculty/ school/ college/ department, etc.

COVID-19 questions

The COVID-19 questions consist of five multiple choice questions and two open-ended questions. The development of the additional COVID-19 questions involved significant consultation across all of the participating HEIs and stakeholder organisations. The questions were piloted with 64 students across six participating HEIs, and their feedback informed determination of the final questions.

Results of reliability and validity testing of the 2018 question set have been published on www.studentsurvey.ie and largely the same question set was used in 2021.

30. www.heacademy.ac.uk/institutions/surveys/postgraduate-research-experience-survey

31. Part-time encompasses all respondents who are not full-time and includes groups of students who may otherwise be labelled as part-time, remote, engaged in e-learning, or some other description of their enrolment.

I'm doing what I want to do. I enjoyed learning new things and have a well balanced life. My supervisors are also very helpful.

Contact with a supportive Supervisor.

Research knowledge and criticism.

A holistic approach to one's development rather than pumping out papers/ workload.

Having excellent supervisors, training opportunities in the university, conferences.

Exposure to ideas and the availability of experts and resources.

Independent.

Publishing papers.

Access to expert artist/researchers, transferable skills and knowledge for a career outside of academic (in the arts), the degree has massively expanded my research and creativity.

I am part of an international research team which enabled me to build excellent networks.

Very good supervisor. Wide range of modules available.

Just that I'm actually completing a PhD. My program offers me little else than simply a place to be enrolled to do a PhD.

Access.

Developing research connections.

Academic understanding. Ability to self manage particularly admin (e.g. following up that all PGR2 reports from staff were in) and my own ability to seek out funding opportunities and networks with other institutions.

Self-guidance and initiative have been key and are worthwhile skills. The availability of courses from outside the degree is great to learn new applicable skills.

Supervisors, library catalogue.

Group meetings where we discuss problems and recent papers/research in our field.

The novelty and the possible impact.

I am a PhD scholar so, liaising with my supervision team and fellow PhD scholars is invaluable every month. Also taught modules in research practice development develop my skills where I need them. Regular feedback and meetings with my supervision team and feeling supported is invaluable in keeping me motivated during these times. it is hard to sit at a laptop alone all the time and maintain interest and the pace required to continue to meet deadlines and goals. my team take into account the fact that I am a full time nurse in a responsible position, and I never feel overwhelmed with my workload. I have 3 children enduring home schooling also at present, so stress levels are at an all time high. My research has been carefully planned and appropriately structured with realistic time frames to enable me to do justice to my overall goals.

Being able to say you have publications.

The way structure and approach to research is delivered.

Critical thinking, resilience, independent work, planning.

A helpful and nice community in the school.

Independent learning and planning, skills development through modules.

Exposure to researchers with amazing ideas.

Learning, Gaining knowledge, Being aware.

The practical experiences of peer review, the challenges of day to day teaching and administration, and the camaraderie and collegiality of staff and fellow postgraduates.

Workshop.

Networking and working within teams (making collaborations).

Access to expert and supportive Supervisors and very good research infrastructure.

Supervisors of the highest standard.

Ability to perform independent research, including infrastructure/resources and funding.

The knowledge form the research group and the available equipment.

It used to be the ability to access resources otherwise unavailable to the general public. Unfortunately these are no longer available due to COVID.

Cohort set-up and compulsory industry placement.

Moving online- this ensures that I can access extra modules.

Learning to problem slove independently, and the specific lab skills you develop.

Connections available to see high levels of research around me.

Critical thought / analysis of complex data sets.

The, analysis of data, writting and publication of experiments conducted.

The techniques learnt, professional skills and writing skills.

I am on a structured programme which means a cohort of peers, in depth methodological training for my field, and a range of additional supports.

Guidance and resources.

The writing process.

Having a supervisor who is knowledgeable in the the relevant field.

Seminars and supervisor.

Good support from supervisors. Knowledgable people available to discuss ideas with. Funding avilable for conferences/training.

My supervisors support and lab equipment.

The very frequent meetings.

Good supervisor & colleagues, topic, facilties.

Confidence.

Placement.

My collaboration with informative and helpful supervisors.

Looking back now, honestly the supervisor is the most important part. I had heard from lecturers in my previous college that knew her briefly that she would be an excellent supervisor, so I think in this case it is just bad luck. Originally, I thought her absence might have been due to the pandemic, even though I do know other PI's in their labs, but after speaking to some of her other PhD students I realised this was not the case. Some of them were in their final year and had only met her a handful of times in person.

Chapter 2
Results of the 2021 PGR StudentSurvey.ie

2.1 Introduction

This chapter presents results from 2021 fieldwork for PGR StudentSurvey.ie. The first section presents an overview of the demographic profile of respondents alongside the overall postgraduate research (PGR) student population. The second section summarises national-level responses to the survey, grouped according to particular engagement aspects of the PGR student experience. Tables containing the results for all questions are provided in Appendix 3 (supplied in the digital version of the report only). These results are presented alongside results aggregated by research degree programme type and size of the PGR student population in the institution (institutions with a PGR cohort of greater than 250 students and institutions with a PGR cohort of fewer than 250 students; see Appendix 1 for this breakdown).

2.2 Response rates and demographics

A total of 3,541 postgraduate research students responded to PGR StudentSurvey.ie 2021. This represents a national response rate of 34%. This is the highest response rate to date and is particularly reassuring given that there was no fieldwork in 2020 after the survey moved to a biennial fieldwork cycle.

Table 2.1 presents the demographic profile of the national student population. The profile of the 2021 PGR StudentSurvey.ie respondents is also presented. It closely matches the national student population profile, as it has done in previous years.

The response rates for any one year should not be taken as a direct indication of the effort expended to promote participation within individual higher education institutions in that year. Factors such as timing of the fieldwork or other major events within the institution (or even a global pandemic) can influence the response rate. Nevertheless, any institution that notes consistently low response rates should reflect on the nature, tone, and visibility of feedback activities.

It is important that all institutions continue to act meaningfully on the data they have available, rather than "wait" for some target response rate. Students will respond to the survey when it is clear to them that their institution as a whole and the staff they encounter on a regular basis value the resulting data and do something or intend to do something with it. Communication of analysis undertaken, results considered, and actions taken are essential for continued participation in PGR StudentSurvey.ie by students.

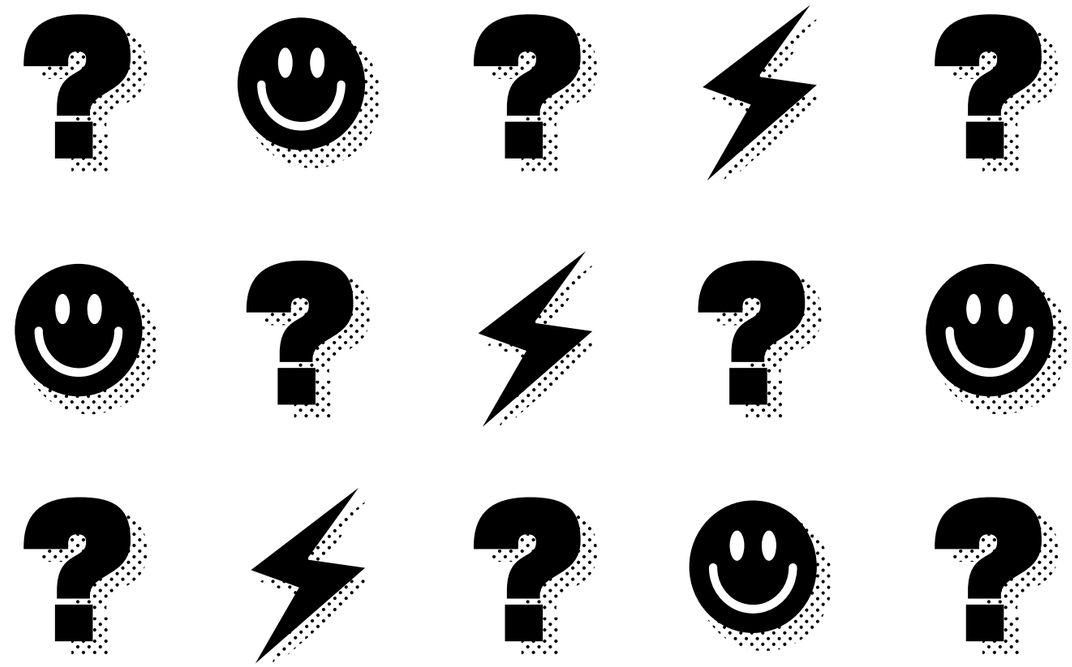


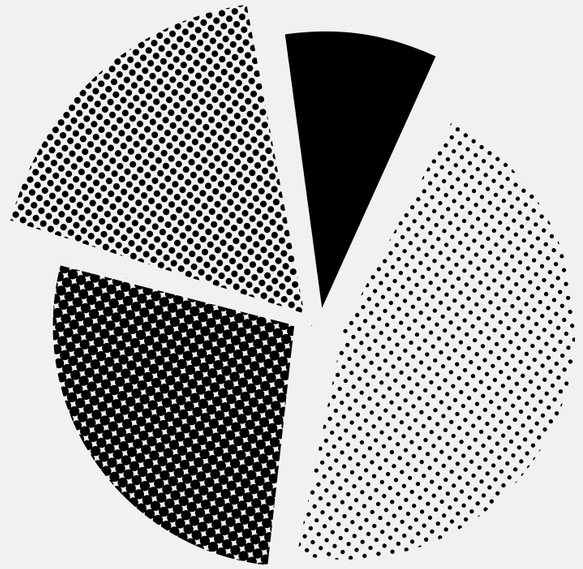
Table 2.1 Demographic profile

	National PGR student population		All respondents		Response rate
	10,454		**3,541**		**33.9%**
PGR cohort size					
PGR cohort of greater than 250 (i.e., >250)	9,443	90.3%	2,904	82.0%	30.8%
PGR cohort of fewer than 250 (i.e., <250)	1,011	9.7%	637	18.0%	63.0%
Mode of study					
Full-time	8,727	83.5%	3,132	88.4%	35.9%
Part-time	1,726	16.5%	409	11.6%	23.7%
Programme type					
NFQ Level 9 (i.e., Masters by research)	1,416	13.5%	538	15.2%	38.0%
NFQ Level 10 (i.e., Doctoral degree)	9,038	86.5%	2,992	84.5%	33.1%
Field of study					
Generic programmes and qualifications	3	0.0%	1	0.0%	33.3%
Education	552	5.3%	175	4.9%	31.7%
Arts and humanities	1,388	13.3%	458	12.9%	33.0%
Social sciences, journalism, and information	1,033	9.9%	343	9.7%	33.2%
Business, administration, and law	774	7.4%	286	8.1%	37.0%
Natural sciences, mathematics, and statistics	2,537	24.3%	941	26.6%	37.1%
Information and Communication Technologies	619	5.9%	200	5.6%	32.3%
Engineering, manufacturing, and construction	1,570	15.0%	551	15.6%	35.1%
Agriculture, forestry, fisheries, and veterinary	250	2.4%	71	2.0%	28.4%
Health and welfare	1,656	15.8%	484	13.7%	29.2%
Services	72	0.7%	27	0.8%	37.5%
Gender*					
Female	4,395	42.0%	1,448	40.9%	32.9%
Male	4,986	47.7%	2,091	59.1%	41.9%
Undeclared	13	0.1%	2	0.1%	0.2%
Country of domicile					
Irish domiciled	6,791	65.0%	2,268	64.0%	33.4%
Internationally domiciled	3,663	35.0%	1,273	36.0%	34.8%

**One HEI did not return Gender category data, which accounts for a shortfall of 1,060 in the population figure.*

2.3 Responses to individual questions

The following sections present percentage responses to questions grouped according to different engagement aspects of the postgraduate research student experience. Results are presented for all respondents nationally. There are supplementary tables in Appendix 3 (supplied in the digital version of the report only) that also provide a breakdown of responses by research degree programme and PGR cohort size.



Research Infrastructure and Facilities

68.2% mostly/ definitely agreed that they have a suitable working space.

64.3% mostly/ definitely agreed that there is adequate provision of computing resources/ facilities.

68.2% mostly/ definitely agreed that there is adequate provision of library facilities (including physical/ online resources).

61.9% mostly/ definitely agreed that they have access to the specialist resources and facilities necessary for their research.

59.9% are funded by a scholarship.

6.8% are funded by a scholarship (fees only).

18.3% are self-funded.

18.6% are funded by a grant.

8.2% are employer-funded.

95.6% have funding that covers fees.

76.6% have funding that covers a stipend.

55.2% have funding that covers research materials.

52.0% have funding that covers travel to conferences.

26.4% have funding that covers other travel (labs/ other institutions).

25.4% have funding that covers specialist training.

Supervision

43.5% are being supervised by one supervisor.

44.0% are being supervised by two supervisors.

12.6% are being supervised by three supervisors or more.

85.3% mostly/ definitely agreed that their supervisor(s) provides the appropriate level of support for their research.

86.3% mostly/ definitely agreed that they have regular contact with their supervisor(s), appropriate for their needs.

86.5% mostly/ definitely agreed that their supervisor(s) provides feedback that helps them to direct their research activities.

75.3% mostly/ definitely agreed that their supervisor(s) help them to identify their training and development needs as a researcher.

Development Opportunities

44.3% had agreed a personal training or development plan.

76.5% had received training to develop their research skills.

60.0% had received training to develop their other transferable skills.

33.9% had received advice on career options.

13.5% had taken part in a placement or internship.

69.4% had attended an academic research conference.

59.1% had presented a paper or poster at an academic research conference.

48.8% had submitted a paper for publication in an academic journal or book.

41.4% had communicated their research to a non-academic audience.

15.7% had received training in entrepreneurship and innovation.

8.0% had put training in entrepreneurship and innovation into practice.

63.9% had worked as part of a team.

24.9% had worked collaboratively with industry.

21.4% had worked collaboratively with a civil society organisation or public organisation.

17.2% had spent time abroad as part of their research degree.

63.1% had taught (or demonstrated) at their institution during their research degree programme.

67.3% mostly/ definitely agreed that the teaching/ demonstration they delivered enhanced their overall research experience.

55.4% mostly/ definitely agreed that they have been given appropriate support and guidance for their teaching/ demonstration.

Research Culture

68.0% mostly/ definitely agreed that their department provides access to a relevant seminar programme.

57.4% mostly/ definitely agreed that the research ambience in their department stimulates their work.

47.0% mostly/ definitely agreed that they have frequent opportunities to discuss their research with other research students.

44.8% mostly/ definitely agreed that they have opportunities to become involved in the wider research community, beyond their department.

Progress and Assessment

66.2% mostly/ definitely agreed that they received an appropriate induction/ orientation to their research degree programme.

79.0% mostly/ definitely agreed that they understand the requirements and deadlines for formal monitoring of their progress.

75.2% mostly/ definitely agreed that they understand the required standard for their thesis.

68.1% mostly/ definitely agreed that the final assessment procedures for their research degree are clear to them.

Research Skills

87.4% mostly/ definitely agreed that their skills in applying appropriate research methodologies, tools and techniques have developed during their programme.

86.8% mostly/ definitely agreed that their skills in critically analysing and evaluating findings and results have developed during their programme.

72.6% mostly/ definitely agreed that their confidence to be creative or innovative has developed during their programme.

88.1% mostly/ definitely agreed that their understanding of 'research integrity' (e.g., rigour, ethics, transparency, attributing the contribution of others) has developed during their programme.

Other Transferable Skills

74.5% mostly/ definitely agreed that their ability to manage projects has developed during their programme.

71.5% mostly/ definitely agreed that their ability to communicate information effectively to diverse audiences has developed during their programme.

63.3% mostly/ definitely agreed that they have developed contacts or professional networks during their programme.

76.3% mostly/ definitely agreed that they have increasingly managed their own professional development during their programme.

Responsibilities and Supports

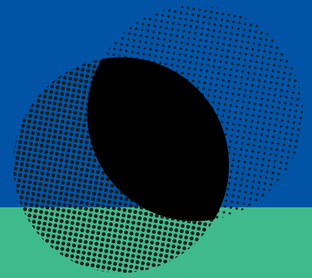
89.6%
mostly/ definitely agreed that they understand their responsibilities as a research degree student.

84.7%
mostly/ definitely agreed that they are aware of their supervisor(s)' responsibilities towards them as a research degree student.

69.1%
mostly/ definitely agreed that other than their supervisor(s), they know who to approach if they are concerned about any academic aspect of their research degree programme.

36.6%
are quite a bit/ very much aware of the various student supports available (recreation, healthcare, counselling, etc.).

45.3%
mostly/ definitely agreed that their institution values and responds to feedback from research degree students.



Motivations

As their first, second or third priority motivation for pursuing a research degree:

75.6%
chose their interest in their subject.

57.7%
chose improving their career prospects for an academic/ research career.

37.0%
chose improving their career prospects outside of an academic/ research career.

20.3%
chose encouragement from a former academic tutor/ supervisor.

27.0%
chose that the funding was available.

39.3%
chose that it felt like a natural step for them.

11.5%
chose that they felt inspired to work with a particular academic.

26.2%
chose professional development or training.

3.9%
chose another motivation.

Career Aspirations

As their first, second or third priority career for when they finish their research degree:

68.4%
chose academic career in higher education (either research and teaching, or teaching only).

52.2%
chose research career in higher education.

13.9%
chose other career in higher education.

55.9%
chose research career outside higher education (e.g., in a private research organisation, a charity or in an industrial environment).

10.5%
chose teaching (at a level below higher education).

9.7%
chose returning to, or remaining with, employer who is sponsoring their degree.

7.5%
chose returning to, or remaining with, employer who is not sponsoring their degree.

17.8%
chose self-employment (including setting up their own business).

24.8%
chose any other professional career.

20.7%
chose not sure or not decided yet.

5.9%
chose another career aspiration.

Personal Outlook

56.6%
mostly/ definitely agreed that they are satisfied with their life nowadays.

54.3%
mostly/ definitely agreed that they are satisfied with their life within their institution nowadays.

46.0%
mostly/ definitely agreed that they are satisfied with their work-life balance.

45.0%
mostly/ definitely agreed that there is someone in their institution they can talk to about their day-to-day problems.

80.4%
mostly/ definitely agreed that they feel that their research degree programme is worthwhile.

Overall Experience

74.9%
evaluated as good/ excellent their entire research experience at this institution.

69.9%
are confident that they will complete their research degree programme within their institution's expected timescale.

64.1%
have not seriously considered withdrawing.

14.3%
have seriously considered withdrawing for financial reasons.

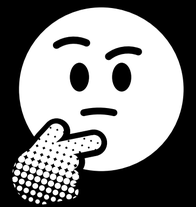
16.0%
have seriously considered withdrawing for personal or family reasons.

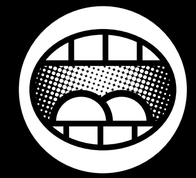
9.2%
have seriously considered withdrawing for health reasons.

6.9%
have seriously considered withdrawing for employment reasons.

4.2%
have seriously considered withdrawing to transfer to another institution.

6.6%
have seriously considered withdrawing for another reason.





The journey of self-discovery i.e. true potential and expanding my outlook in the future research field and in life.

Planning and being responsible for my own trials, developing first hand experience of research (and development in the case of my project).

Developing my own scheduling skills and self-drive.

Lectures and one to one supervisory meetings.

The ability to collaborate with individuals from all over the world.

Freedom of doing work.

Deeply developing my PhD thesis towards the completion in time.

Good relationship with supervisor.

Conducting the research and understanding how it complete.

Undertaking collaborative research together with my supervisor.

Again because of Covid my entire experience so far has been sitting in my bedroom either doing virtual lectures instead of a hands on training program, or trying to read papers. I think the training program in the prestigious university would have been extremely valuable in normal times, but the virtual lectures we received instead did not feel useful. And I have experienced no other real aspects so its hard to say.

Validation of results of my study - I now can say with confidence that my innovation process works and I will know that the work I do in the future will have successful outcomes. Without this Phd I would not have had the tools and more importantly the time without pressure from others to explore and find answers to important questions.

The new research experiences.

Teaching, creating a contact network and disseminating my research within the academic world.

Getting my publications.

It is an original research.

Lectures by suitably qualified postdocs or academic staff (as opposed to research assistants who are not at doctoral level).

Being able to thrash out ideas with other researchers and my supervisors as I feel this had help become more creative and manage my own better.

I was able to minimize the time spent on courses and instead jump straight into research.

The professional opportunities I was provided in terms of teaching, upskilling, and development of transferable skills.

The novel research I can carry out.

Being able to affiliate myself with the university and having access to more resources as a result.

Access to additional learning opportunities.

Collaboration, Methodology and simulation.

Autonomous as well as Teamwork, Professional development, Networking possibilities.

Minority Entrepreneurship.

Connections, supervisors,research skills.

I would not really know what to pick,but I really enjoyed my time on campus and I am sad that the pandemic has prevented me to return.

My relationship with my supervisors and the freedom to work on a project which I have a deep interest in.

I think the most valuable part of my research is to be able to publish my research work in a reputable peer-reviewed journal.

The network I have developed.

Being an international student will have a great positive impact on my research as well as my future career. It gives me the opportunity to conduct my research in an institution that provides great support and resources that keep me updated about research in my field, thus continuously progress in my work.

The ability to analyse situations effectively.

Personal development as a confident researcher.

The international network, the experience in the field.

The qualification at the end is the main item of value with this program.

The relationship and the network created with my colleagues and supervisor; having learnt how to design a research and manage the field work activities; the skills acquired in the usage of some program and software; skills developed in communicating my research and in writing papers; the knowledge about pollinators and about the impact of habitat on insect communities.

Very scientifically active and successful department community.

Research integrity.

Development new skills.

Interest in the subject and relationship with supervisor and work colleagues are most important to me.

Developing as an independent researcher - someone who can work on their own initiative and problem solve without any major guidance.

The program has been developed with industry in mind. It is an exciting area with a great future. There are great collaborations with industry.

Personal development, basically growing up as a researcher.

Constant personal and professional development.

Modules.

Learnings and experience on the UX design, and dealing with medical professionals for development of medical devices.

Time.

I regard my research as valuable...although not groundbreaking it high lights area currently underfunded.

The knowledge gained throughout my study and how it is preparing me for the industry.

Interactions/conversations with students and teachers.

Independent research skills developed through working with an experienced research academic.

Personal development, independence, critical thinking.

Speaking with others in department, seminars

Chapter 3
A curated exploration of variance between groups

3.1 Introduction

The PGR StudentSurvey.ie National Report Editorial Group, which authored this report, recognises that this is only the third year of fieldwork for PGR StudentSurvey.ie, and more data will be needed before we can begin to identify meaningful trends. Furthermore, the number of postgraduate research students studying in Ireland in 2021 is approximately 10,500, which is quite small for the purposes of a national survey of all students in the PGR student population where participation is voluntary. Finally, the results of PGR StudentSurvey.ie have depth and breadth beyond what can be captured in one static report.

The results presented in Chapter 3 of the National Report are a curated exploration of variance between groups. The following are some of the results the PGR StudentSurvey.ie National Report Editorial Group found interesting due to their importance for national policy, the magnitude and nature of the statistically significant differences between groups, or the consistency with which groups varied (or indeed, did not vary).

3.2 Research degree programme type

This section of Chapter 3 examines the experience of students undertaking NFQ Level 9 (i.e., Masters by Research) and NFQ Level 10 (PhD) degrees. The results here were quite varied. For instance, where a given aspect, e.g., *Progress and Assessment*, had four questions, one of the differences by programme type was significant, while the other three were not. For many aspects there was no strong pattern of differences evident within the questions relating to that aspect.

Comparison of the results by research degree programme type did not result in significant differences in the case of all engagement aspects. No statistically significant differences emerged between groups in relation to *Research Infrastructure and Facilities* (excluding Funding), and *Overall Experience*. For *Motivations,* the groups only differed on one item of a total of nine.[32]

Some structural differences emerged in the results. NFQ Level 10 respondents were more likely than NFQ Level 9 respondents to report being in receipt of a scholarship (NFQ9 51.0%, NFQ10 61.5%), but NFQ Level 9 respondents were more likely than NFQ Level 10 respondents to be in receipt of a scholarship that covered fees only (NFQ9 10.2%, NFQ10 6.2%). NFQ Level 9 respondents were also more likely than NFQ Level 10 respondents to be self-funded (NFQ9 23.1%, NFQ10 17.4%). This funding was more likely for NFQ Level 10 respondents than NFQ Level 9 respondents to cover fees (NFQ9 92.4%, NFQ10 96.2%), a stipend (NFQ9 61.4%, NFQ10 79.3%), research materials (NFQ9 47.0%, NFQ10 56.6%), travel to conferences (NFQ9 39.7%, NFQ10 54.3%), other travel to labs/ other institutions (NFQ9 20.9%, NFQ10 27.5%), and specialist training (NFQ9 19.0%, NFQ10 26.7%). NFQ Level 10 respondents were more likely than NFQ Level 9 respondents to have one supervisor (NFQ9 38.2%, NFQ10 44.4%). A higher percentage of NFQ Level 10 respondents reported having taught/ demonstrated (NFQ9 47.9%, NFQ10 65.9%). However, the NFQ Level 9 respondents reported higher levels of agreement that they had been given appropriate support for their teaching/ demonstrating (NFQ9 60.1%, NFQ10 54.7%).

Differences in the development of these two cohorts of researchers also emerged. The difference between the groups was significant for the majority of *Development Opportunities*, and in all but one case the NFQ Level 10 respondents indicated more frequently than the NFQ Level 9 respondents that they had availed of a given *Development Opportunity*.

32. This was for "Improving my career prospects for an academic / research career", where NFQ Level 9 respondents chose this Motivation as their Priority 1 more often than NFQ Level 10 students.

Research Culture

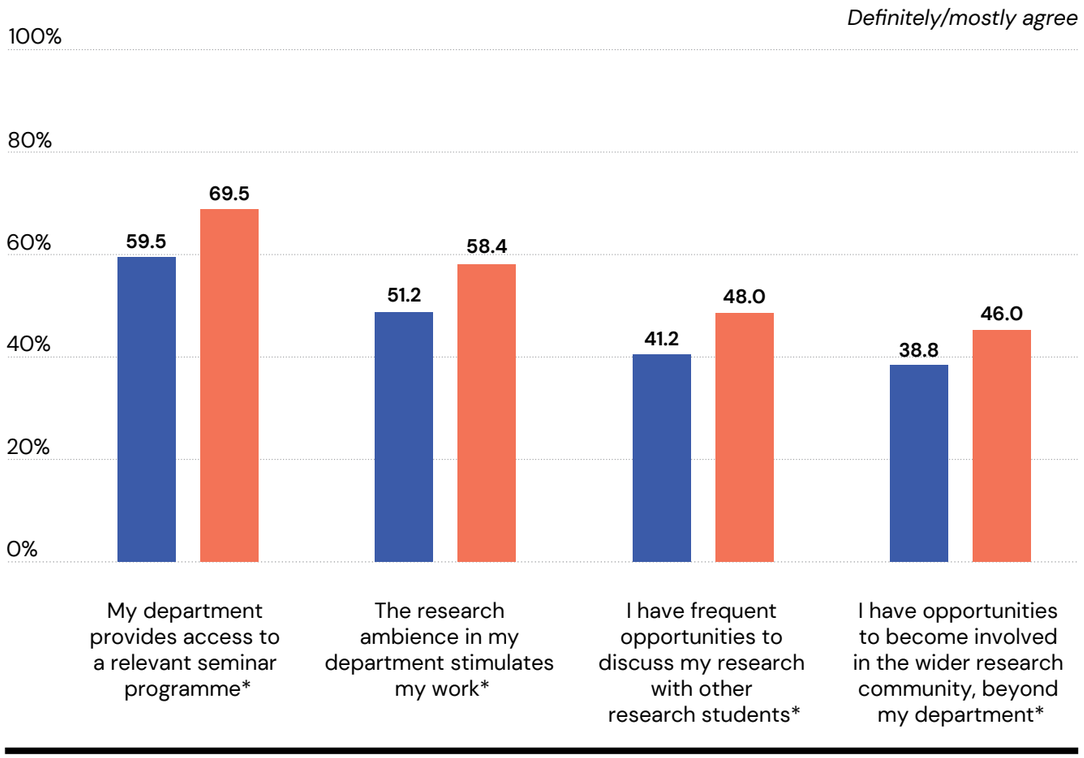


Fig. 3.1 *Research Culture* questions by research degree type

One aspect in which consistent differences did emerge was for *Research Culture*. For all questions, including "my department provides access to a relevant seminar programme", "the research ambience in my department stimulates my work", "I have frequent opportunities to discuss my research with other research students" and "I have opportunities to become involved in the wider research community, beyond my department", NFQ Level 10 respondents were statistically significantly more likely than NFQ Level 9 respondents to definitely or mostly agree.

Research Skills

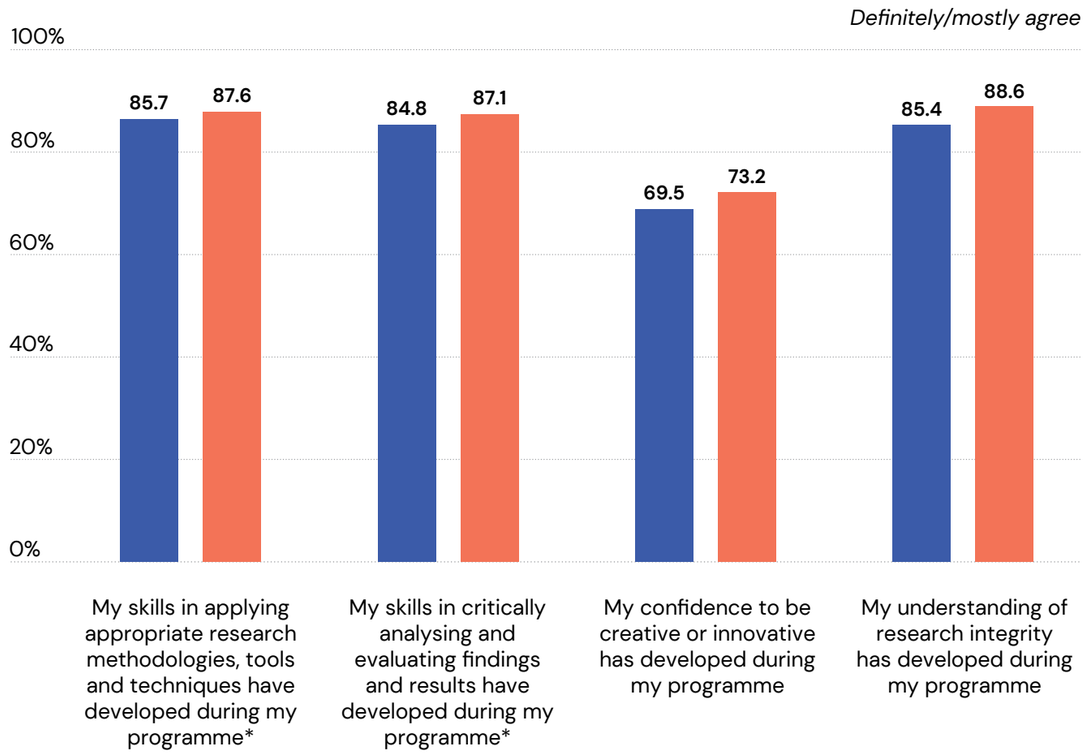


Fig. 3.2 *Research Skills* questions by research degree type

Consistent differences emerged for *Research Skills*. For "my skills in applying appropriate research methodologies, tools and techniques have developed during my programme" and "my skills in critically analysing and evaluating findings and results have developed during my programme", NFQ Level 10 respondents were statistically significantly more likely than NFQ Level 9 respondents to agree with these statements. The difference between the groups for "my confidence to be creative or innovative has developed during my programme" and "my understanding of research integrity has developed during my programme" was not statistically significant but appeared to follow the same pattern.

Other Transferable Skills

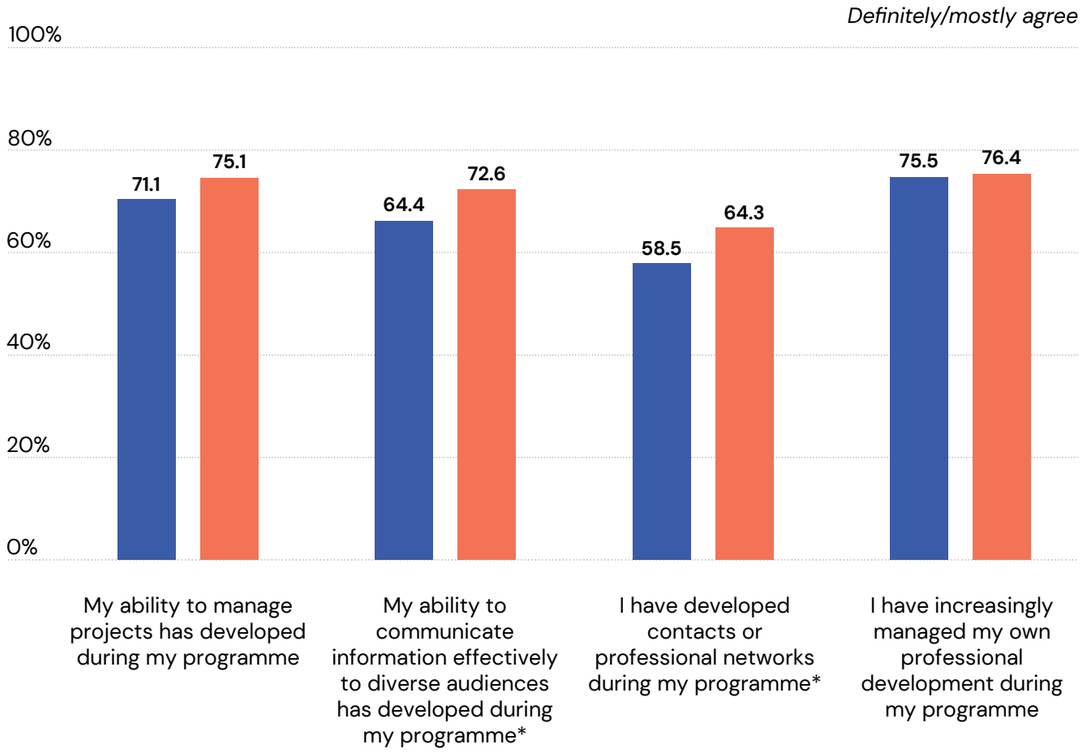


Fig. 3.3 *Other Transferable Skills* questions by research degree type

Finally, consistent differences emerged for *Other Transferable Skills*. For "my ability to communicate information effectively to diverse audiences has developed during my programme" and "I have developed contacts or professional networks during my programme", NFQ Level 10 respondents were statistically significantly more likely than NFQ Level 9 respondents to agree with these statements. The difference between the groups for "my ability to manage projects has developed during my programme" and "I have increasingly managed my own professional development during my programme" was not statistically significant but appeared to follow the same pattern.

3.3 PGR cohort size

This section examines differences between the respondents based on their enrolment at an institution with a PGR cohort of greater than 250 students or at an institution with a PGR cohort of fewer than 250 students.

No statistically significant differences emerged by PGR cohort size in relation to *Research Infrastructure and Facilities* (excluding Funding), *Research Skills, Other Transferable Skills,* or *Overall Experience*. For *Motivations* and *Career Aspirations,* the groups only differed on one item of a total of nine[33] and eleven[34] (respectively). For all other engagement aspects, statistically significant differences emerged.

Where these significant differences emerged, there was some consistency in the results. It was more frequent for respondents in institutions with a PGR cohort of fewer than 250 students to definitely or mostly agree with statements than respondents in institutions with a PGR cohort of greater than 250 students. For instance, PGR students in institutions with a PGR cohort of fewer than 250 students definitely or mostly agreed more strongly that their supervisor(s) provides the appropriate level of support for their research (<250 86.3%, >250 85.1%), and that their supervisor(s) help them to identify their training and development needs as a researcher (<250 79.0%, >250 74.6%). However, this pattern reversed for responses to the question of whether their department provides access to a relevant seminar programme (<250 57.4%, >250 70.4%).

33. For *Motivations*, this was for "Improving my career prospects for an academic / research career", where respondents in institutions with a PGR cohort of fewer than 250 students chose this Motivation as their Priority 1 more often than respondents in institutions with a PGR cohort of greater than 250 students.

34. For *Career Aspirations*, this was for "Returning to, or remaining with, employer who is sponsoring your degree", where respondents in institutions with a PGR cohort of fewer than 250 students chose this Motivation as their Priority 1 more often than respondents in institutions with a PGR cohort of greater than 250 students.

COVID-19 questions

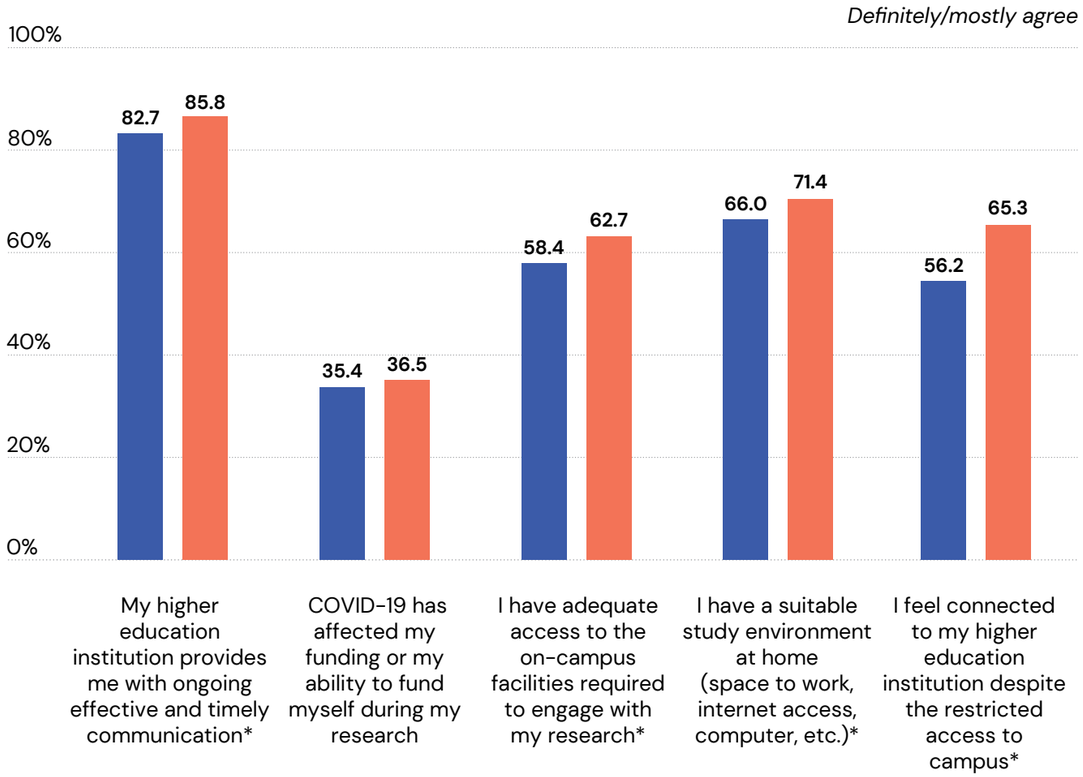


Fig. 3.4 COVID-19 questions by PGR cohort size

Questions pertaining to the impact of COVID-19 on PGR students were included in PGR StudentSurvey.ie in 2021. Consistent differences emerged in the results. For "my higher education institution provides me with ongoing effective and timely communication" "I have adequate access to the on-campus facilities required to engage with my research", "I have a suitable study environment at home (space to work, internet access, computer, etc.)", and "I feel connected to my higher education institution despite the restricted access to campus", respondents in institutions with a PGR cohort of fewer than 250 students were statistically significantly more likely than respondents in institutions with a PGR cohort of greater than 250 students to definitely or mostly agree with these statements. The difference between the groups for "COVID-19 has affected my funding or my ability to fund myself during my research" was not statistically significant but appeared to follow the same pattern.

Development Opportunities & Teaching

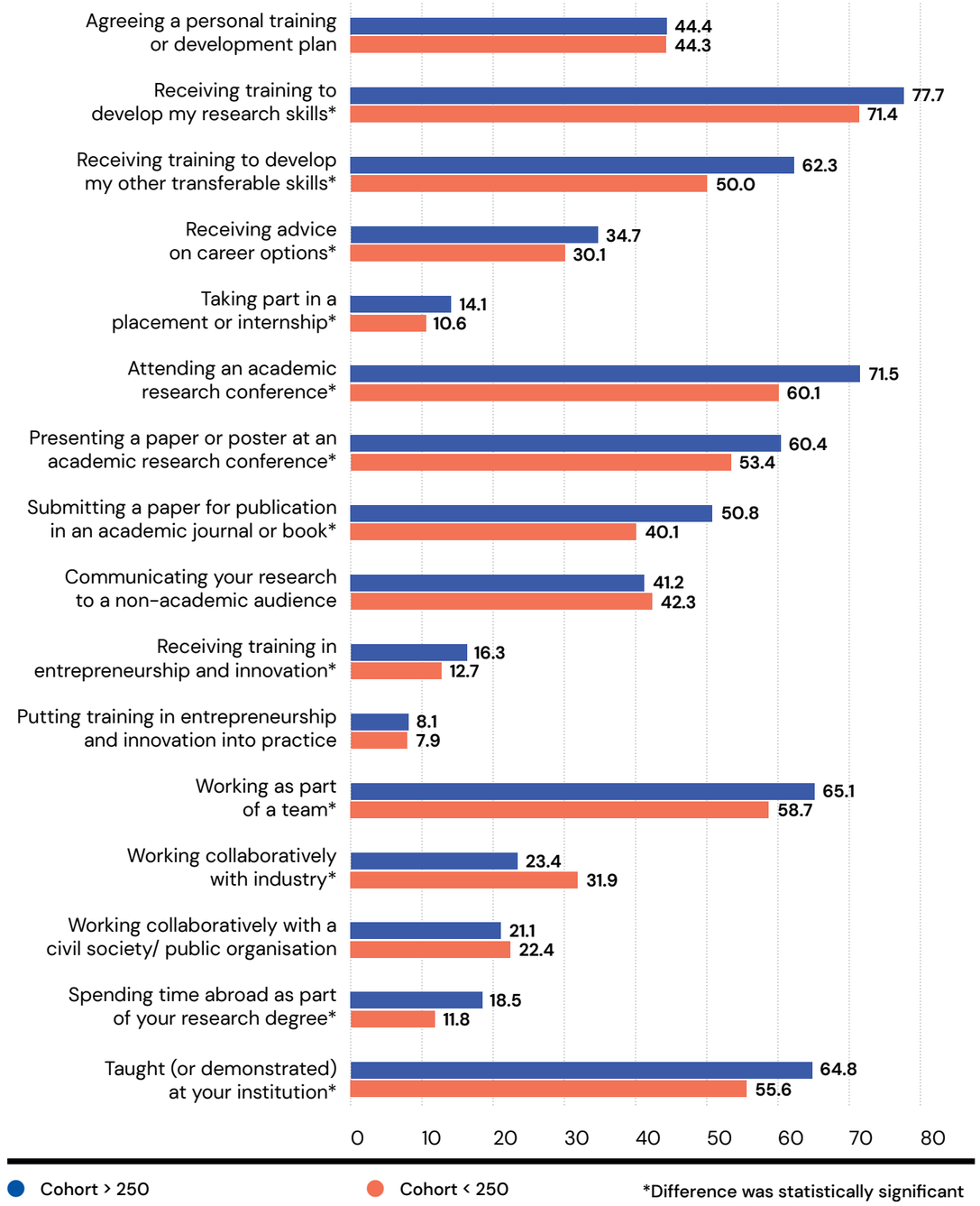


Fig. 3.5 *Development Opportunities* questions by PGR cohort size

Respondents did not differ statistically significantly for all *Development Opportunities*. Where they did, in all instances bar one, the respondents in institutions with a PGR cohort of greater than 250 students were statistically significantly more likely than respondents in institutions with a PGR cohort of fewer than 250 students to indicate that they had availed of the *Development Opportunity*. The exception was for "Working collaboratively with industry", where the opposite result was found.

Development Opportunities & Teaching

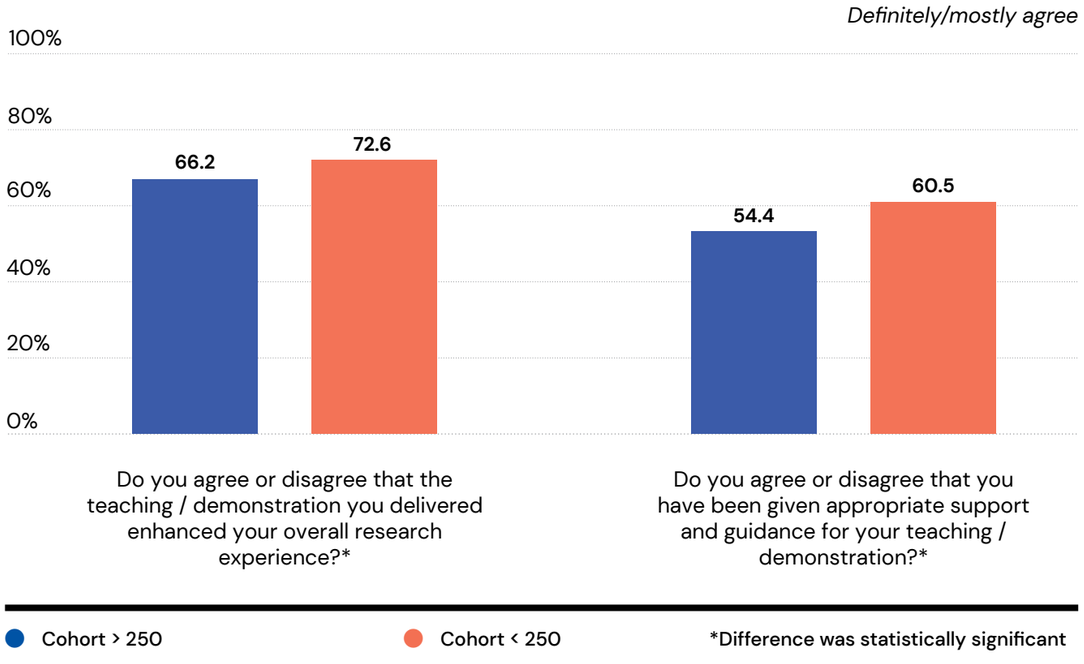


Fig. 3.6 *Teaching/ Demonstrating* questions by PGR cohort size

The questions relating to teaching/ demonstrating were extracted, as they relate to a specific aspect of the PGR experience. Respondents in institutions with a PGR cohort of fewer than 250 students were statistically significantly more likely than respondents in institutions with a PGR cohort of greater than 250 students to definitely or most agree that the teaching/ demonstration they delivered enhanced their overall research experience and were also more likely to agree that they had been given appropriate support and guidance for their teaching/ demonstrating.

Personal Outlook

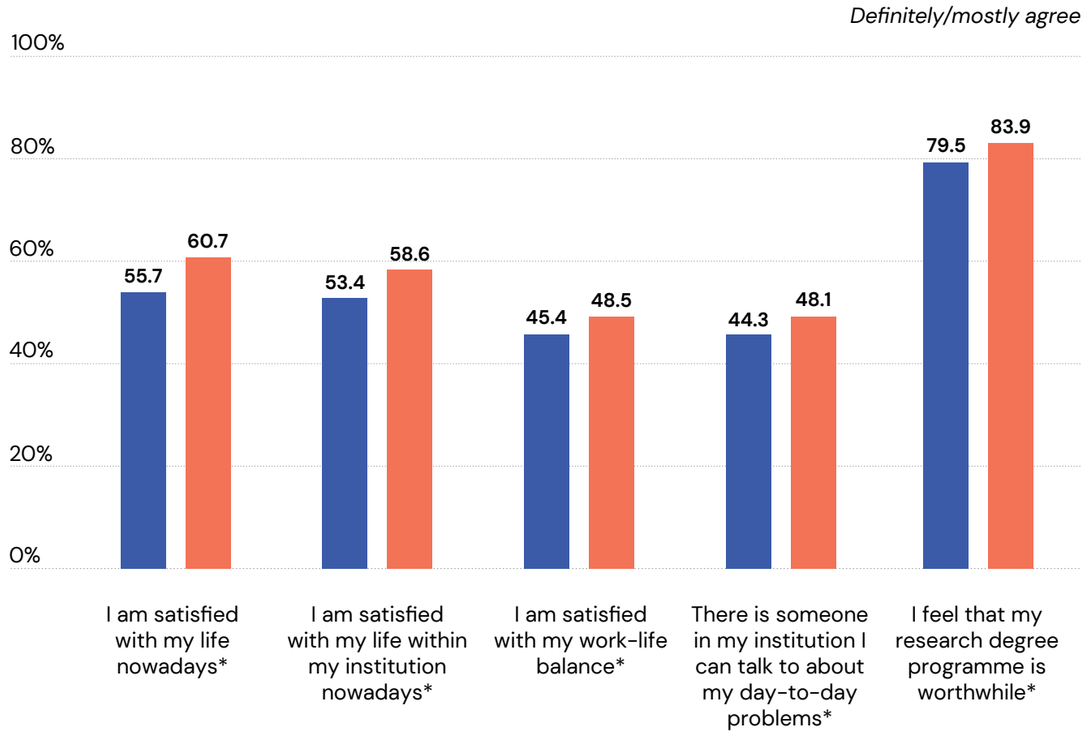


Fig. 3.7 *Personal Outlook* questions by PGR cohort size

Finally, looking to *Personal Outlook*, the difference by PGR cohort size was statistically significantly different for all questions. For "I am satisfied with my life nowadays", "I am satisfied with my life within my institution nowadays", "I am satisfied with my work-life balance", "there is someone in my institution I can talk to about my day-to-day problems" and "I feel that my research degree programme is worthwhile", respondents in institutions with a PGR cohort of fewer than 250 students were statistically significantly more likely than respondents in institutions with a PGR cohort of greater than 250 students to definitely or most agree with all statements.

3.4 Mode of study

Currently, there are varied definitions of what constitutes part-time study across the Irish higher education sector. For the purpose of PGR StudentSurvey.ie, students were not required to indicate their mode of study, and higher education institutions provided this information in advance of fieldwork. For clarity in the following sections, the term part-time encompasses all respondents who are not full-time, and therefore includes groups of students who may otherwise be labelled as part-time, remote, engaged in e-learning, or some other description of their enrolment.

Comparison of the results by mode of study did not result in significant differences in the case of all engagement aspects. No statistically significant differences emerged between groups in relation to *Research Infrastructure and Facilities* (excluding *Funding*), *Research Skills*, and *Responsibilities and Supports*. For *Supervision,* the only difference was for the number of supervisors a respondent had. For *Motivations*, the groups only differed on one item of a total of nine.[35]

Where significant differences did emerge, some suggested that part-time students were more engaged than full-time students. For *Progress and Assessment*, part-time students mostly/ definitely agreed more strongly than full-time students that they had received an appropriate induction/ orientation to their research degree programme (part-time 69.3%, full-time 65.9%), that they understood the requirements and deadlines for formal monitoring of their progress (part-time 80.7%, full-time 78.8%), that they understood the required standard for their thesis (part-time 77.9%, full-time 74.8%), and that the final assessment procedures for their research degree were clear to them (part-time 38.4%, full-time 29.4%). For *Personal Outlook*, part-time students mostly/ definitely agreed more strongly than full-time students that they were satisfied with their life nowadays (part-time 70.9%, full-time 54.8%), that they were satisfied with their life within their institution nowadays (part-time 63.1%, full-time 53.3%), and that they felt that their research degree programme was worthwhile (part-time 88.1%, full-time 79.4%).

Conversely, the difference between full-time and part-time students was significant for uptake of nearly all *Development Opportunities*, and in every case of statistically significant difference the full-time students were more likely to have availed of that development opportunity.

35. This was for "Improving my career prospects for an academic / research career", where part-time students chose this Motivation as their Priority 1 more often than full-time students.

COVID-19 questions

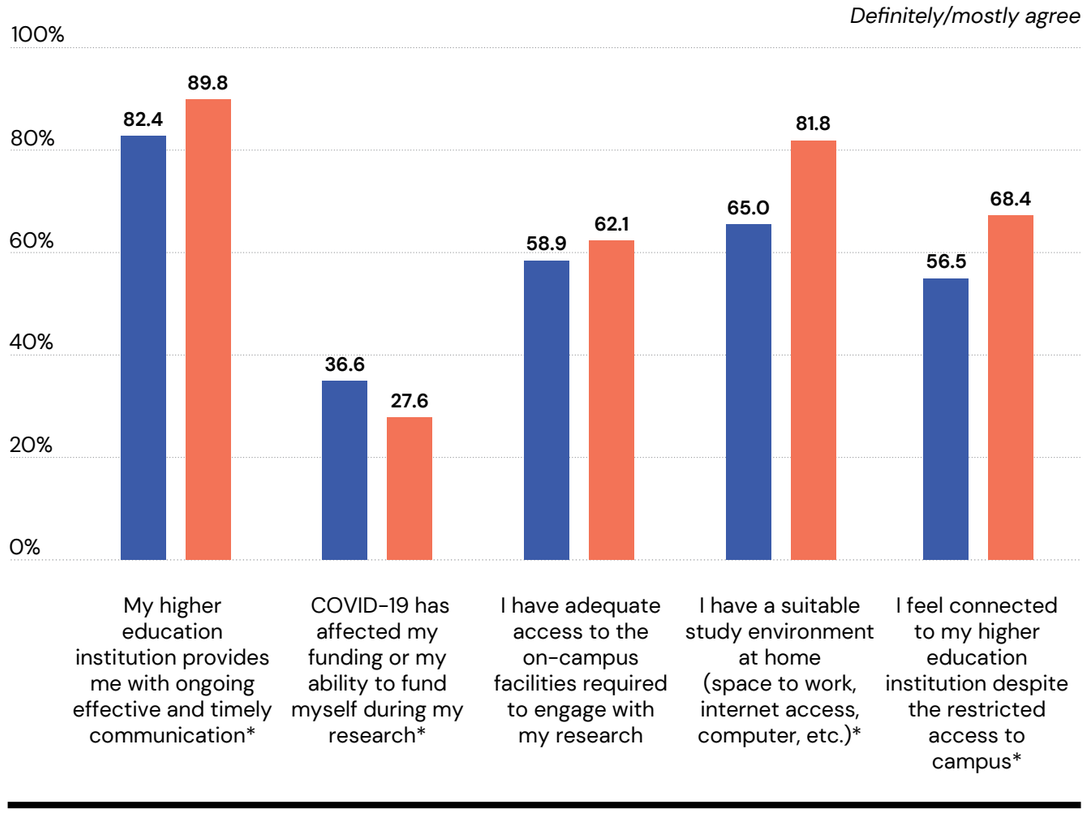


Fig. 3.8 COVID-19 questions by mode of study

Questions pertaining to the impact of COVID-19 on PGR students were included in PGR StudentSurvey.ie in 2021. Varying differences emerged in the results. For "my higher education institution provides me with ongoing effective and timely communication", "I have a suitable study environment at home (space to work, internet access, computer, etc.)", and "I feel connected to my higher education institution despite the restricted access to campus", part-time respondents were statistically significantly more likely than full-time respondents to definitely or mostly agree with these statements. The difference between the groups was not statistically significant for "I have adequate access to the on-campus facilities required to engage with my research" but appeared to follow the same pattern.

For "COVID-19 has affected my funding or my ability to fund myself during my research", full-time respondents were statistically significantly more likely than part-time respondents to definitely or mostly agree with this statement.

Funding

Source of funding

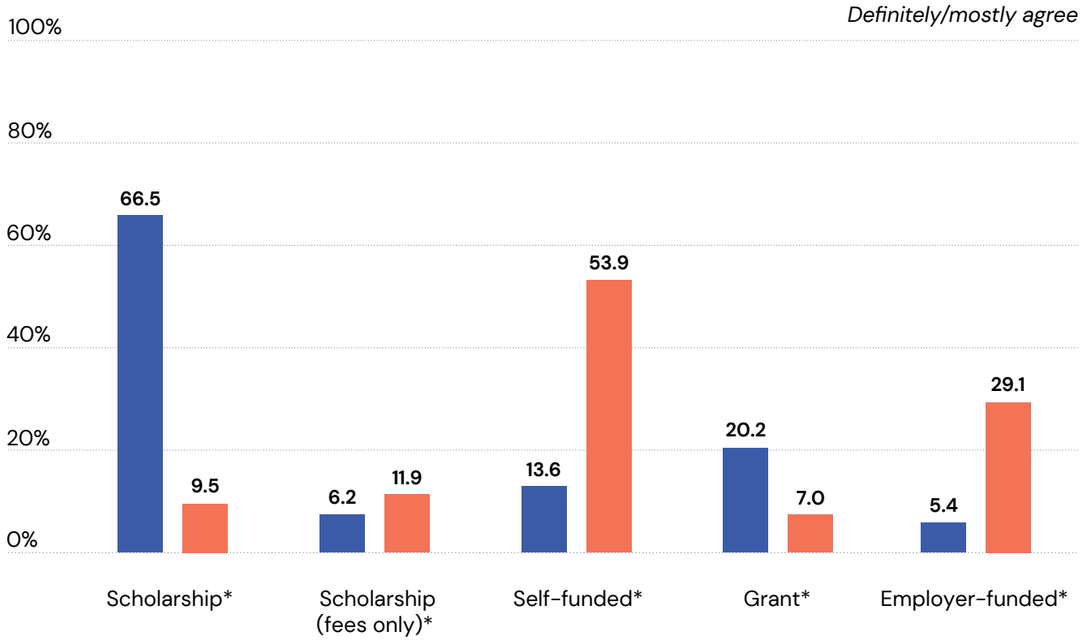


Fig. 3.9 Source of funding questions by mode of study

The differences between full-time and part-time students in terms of funding are significant across all funding sources. More full-time students reported being in receipt of a scholarship or grant. More part-time students reported being in a) receipt of a scholarship which paid their fees only, b) being self-funded, or c) being employer-funded.

Funding

Funding covers

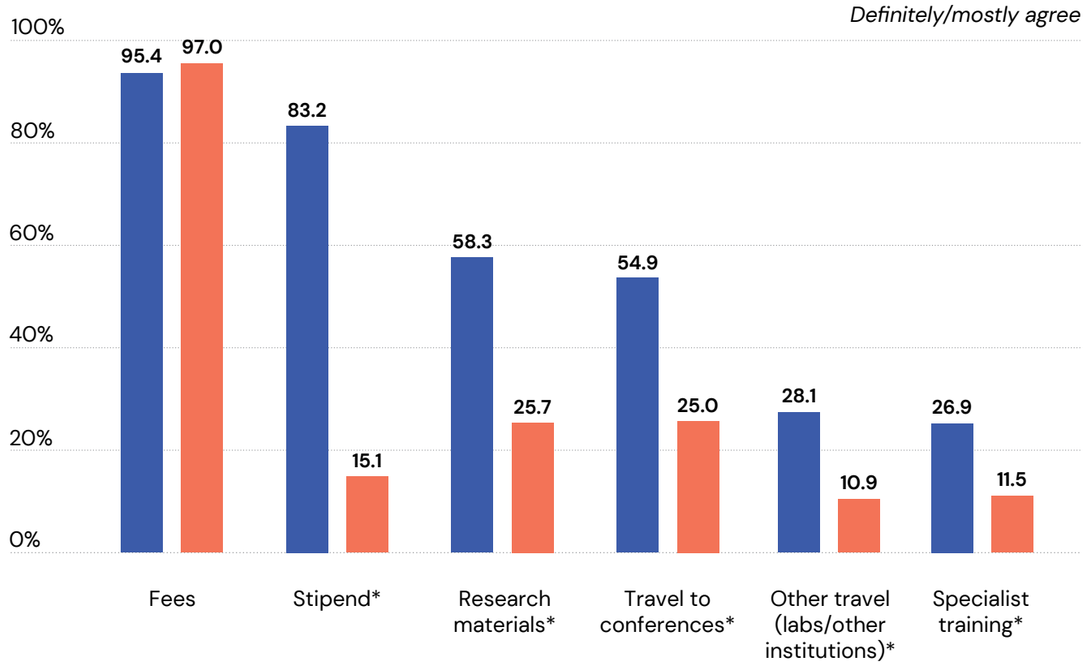


Fig. 3.10 Funding covers questions by mode of study

Significant differences also emerged for nearly all questions related to what their funding covers. While no significant difference emerged for fees, significantly more full-time students than part-time students reported that their funding covers a stipend, research materials, travel to conferences, other travel (labs/other institutions) and specialist training.

3.5 Field of study

The following commentary explores the data using broad fields of study as defined by the International Standard Classification of Education.[36] These are listed in Table 2.1. Where the number of respondents in a field of study represented less than 1% of respondents, this group was excluded from the analysis. This resulted in the exclusion of respondents in Generic programmes and qualifications (n = 1) and Services (n = 30).

Overall, significant differences emerged for each of the aspects of PGR StudentSurvey.ie by field of study. This in itself is not unexpected, given the range of engagement experiences encountered by those in the wide range of fields of study available in most of the participating higher education institutions. The three aspects chosen for further analysis were *Supervision, Progress and Assessment* and *Personal Outlook*. Several other variables will be examined by field of study in Chapter 4 (Impact of COVID-19, *Research Infrastructure and Facilities,* including *Funding, Development Opportunities, Overall Experience - Withdrawal*), and repetition across the two chapters is avoided.

Note for the interpretation of the results of the statistical analyses

Due to the nature of the data and the methods used to analyse them[37], the level at which two groups needed to differ in order to be deemed statistically significantly different was very conservative. However, given the number of respondents, it warrants being conservative in drawing interpretations from any differences.

36. https://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education_(ISCED)
37. Kruskal Wallace test followed by multiple Mann Whitney U tests using a Bonferroni correction (α = .00138)

Supervision

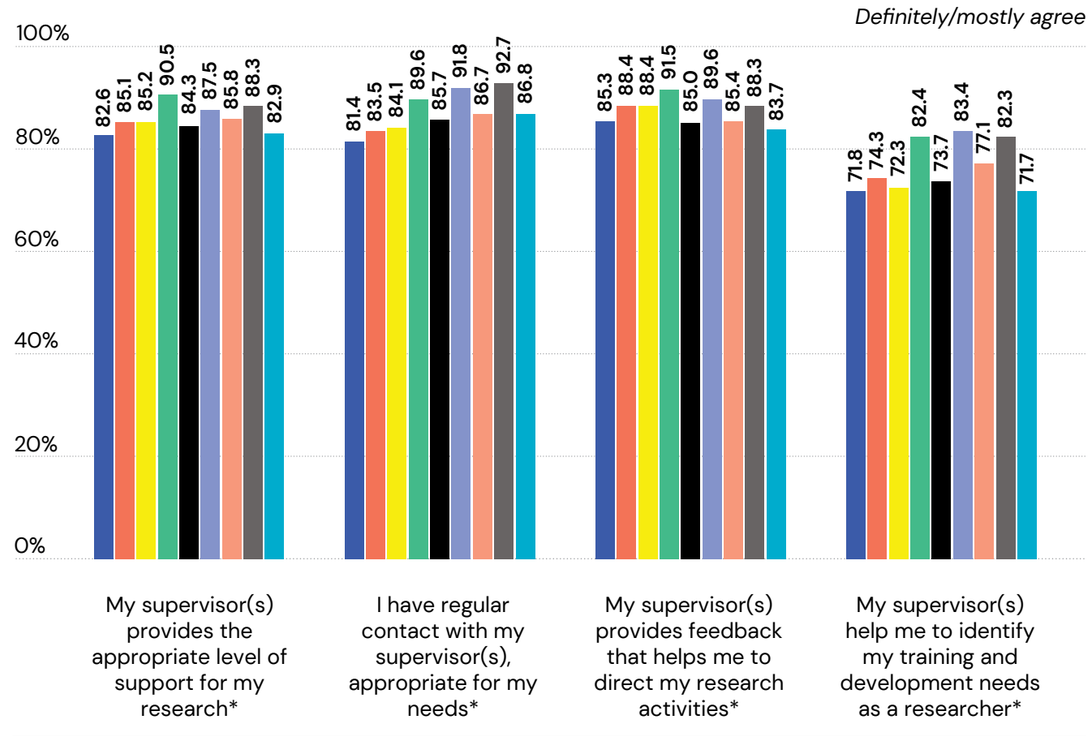


Fig. 3.11 *Supervision* questions by field of study

While the test of statistical significance by field of study for each of these questions was significant, when a conservative value was used to run multiple non-parametric pairwise comparisons between each of the fields of study to determine which ones differed significantly from each other, most of the differences were due to the score for Business, administration and law students being higher than other groups. The difference emerged for statements such as "My supervisor(s) provides the appropriate level of support for my research" and "My supervisor(s) provides feedback that helps me to direct my research activities". The statement "My supervisor(s) help me to identify my training and development needs as a researcher" had somewhat more variation, as Information and Communication Technologies (ICTs) students had significantly higher scores than Social sciences, journalism and information students, Natural sciences, mathematics and statistics students, and Health and welfare students.

Progress and Assessment

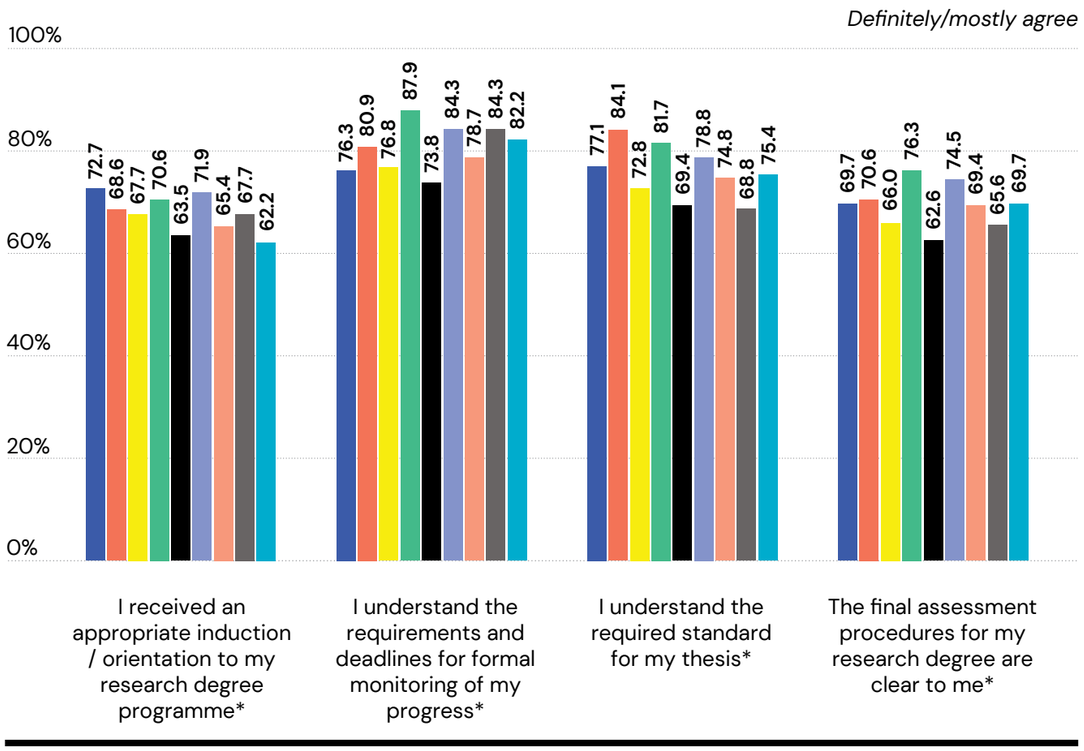


Fig. 3.12 *Progress and Assessment* questions by field of study

Again, the significant differences for *Progress and Assessment* mainly related to Business, administration and law students having significantly higher scores than other fields of study, in particular Natural sciences, mathematics and statistics students (where the difference was significant for all four statements), and Engineering, manufacturing and construction students (where the difference was significant for "I understand the requirements and deadlines for formal monitoring of my progress", "I understand the required standard for my thesis", and "the final assessment procedures for my research degree are clear to me"). The most variance between fields of study occurred for responses to the statement "I understand the required standard for my thesis". Business, administration and law students had significantly higher scores than Social sciences, journalism and information students, Natural sciences, mathematics and statistics students, Engineering, manufacturing and construction students, Agriculture, forestry, fisheries and veterinary students, and Health and welfare students. Additionally, Arts and humanities students had significantly higher scores than Social sciences, journalism and information students and Natural sciences, mathematics and statistics students.

Personal Outlook

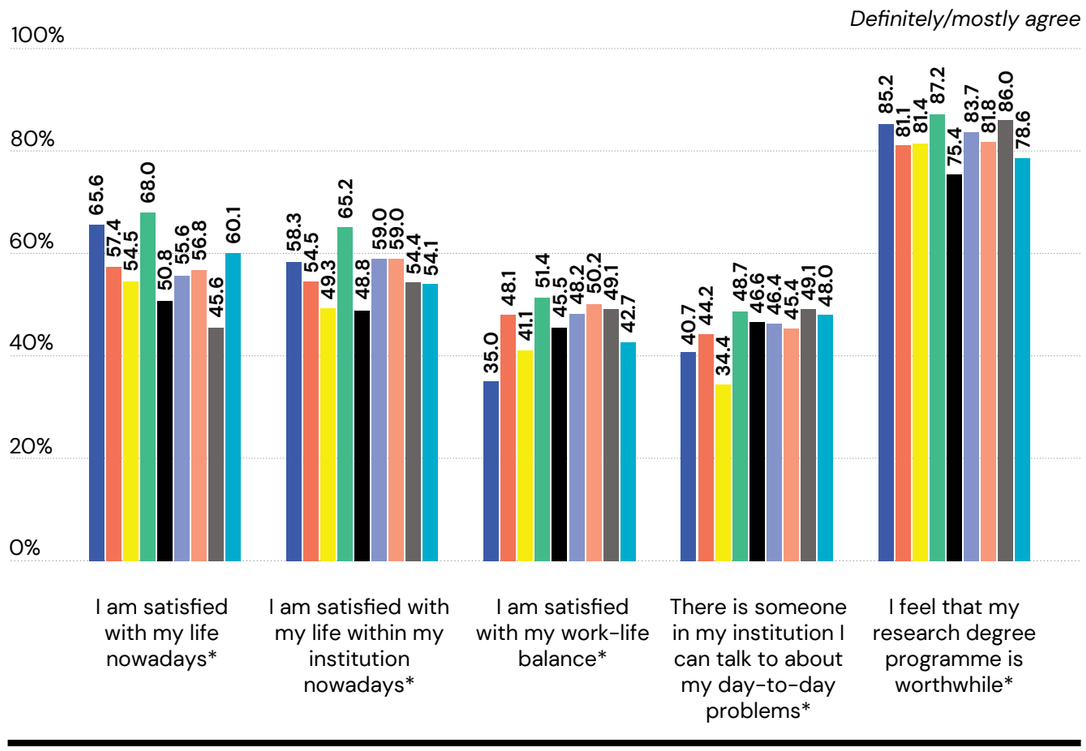


Fig. 3.13 *Personal Outlook* questions by field of study

The difference between Business, administration and law students and other groups, particularly Natural sciences, mathematics and statistics students, emerged for "I am satisfied with my life nowadays", "I am satisfied with my life within my institution nowadays", "There is someone in my institution I can talk to about my day-to-day problems", and "I feel that my research degree programme is worthwhile". Other notable differences were for Engineering, manufacturing and construction students, who had significantly higher scores than Social sciences, journalism and information students for "I am satisfied with my life within my institution nowadays", "I am satisfied with my work-life balance", and "There is someone in my institution I can talk to about my day-to-day problems". These students also had higher scores than Education students for "I am satisfied with my work-life balance". Finally, for "There is someone in my institution I can talk to about my day-to-day problems", Social sciences, journalism and information students had significantly lower scores than Business, administration and law students, Natural sciences, mathematics and statistics students, Information and Communication Technologies (ICTs) students, Engineering, manufacturing and construction students, and Health and welfare students.

3.6 Gender

As part of the non-sensitive demographic information securely transferred by the participating higher education institutions to the survey company prior to fieldwork as part of the normal procedure of PGR StudentSurvey.ie, institutions indicate the gender of each student as it appears on their student record systems. As per institutions' HEA return, the four options are female, male, prefer not to say, and gender non-binary. Due to the relatively low numbers in the latter two categories compared to the large number in the former two categories, the survey company grouped the latter two categories into one category named 'Undeclared'. As the number of respondents in this category in 2021 was less than 10, it was deemed inadvisable to include them in the statistical analysis.

Gender was the variable that least frequently generated statistically significant differences between groups in 2019. However, in 2021, differences emerged in areas such as *Research Infrastructure and Facilities, Supervision*, and *Research Culture*. There had been differences in *Funding* and *Development Opportunities* in 2019 and they appear to have widened in 2021.

No statistically significant differences emerged between female and male students in relation to *Progress and Assessment*[38], *Other Transferable Skills, Motivations*[39], *Career Aspirations*[40], and *Overall Experience*.

Differences by gender will be examined further in Chapter 4; however, two areas are highlighted in this chapter.

38. The difference between males and females was significant (p = 0.049) for "I received an appropriate induction / orientation to my research degree programme".
39. The only difference was for "The funding was available".
40. The only difference was for "Returning to, or remaining with, employer who is sponsoring your degree".

Supervision

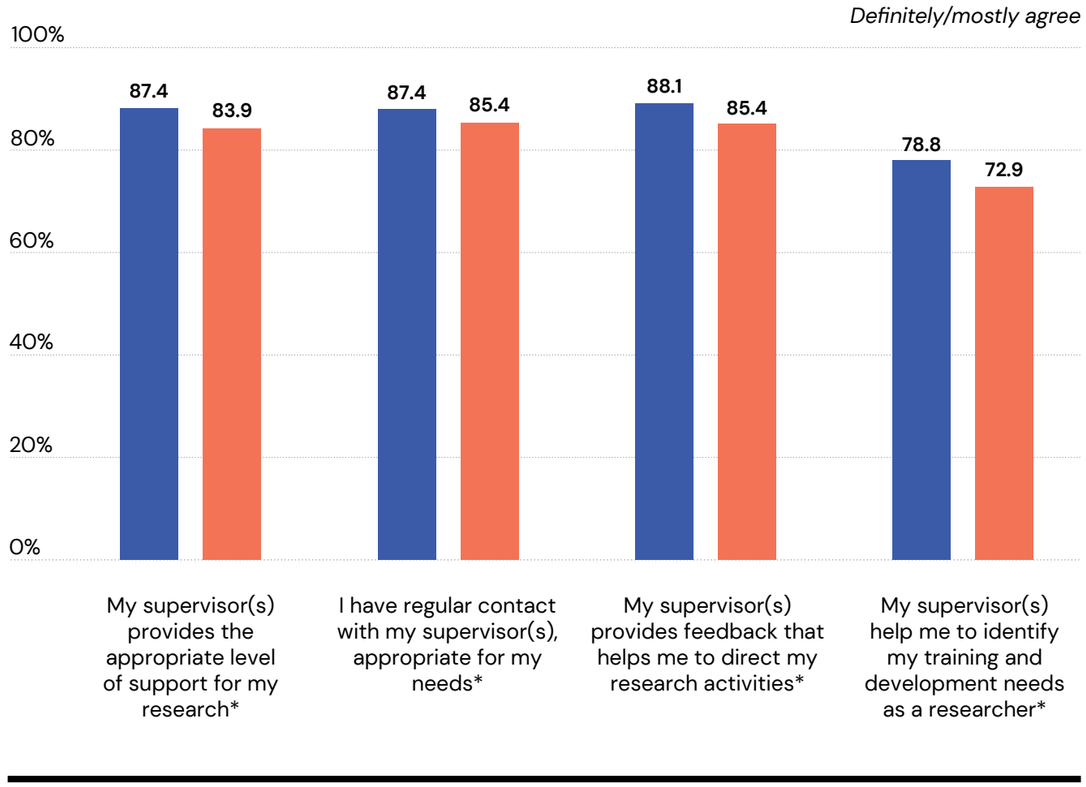


Fig. 3.14 *Supervision* questions by gender

For all questions, including "My supervisor(s) provides the appropriate level of support for my research", "I have regular contact with my supervisor(s), appropriate for my needs", "My supervisor(s) provides feedback that helps me to direct my research activities", and "My supervisor(s) help me to identify my training and development needs as a researcher", male respondents were statistically significantly more likely than female respondents to definitely or mostly agree.

Questions related to industry and innovation

Development Opportunities

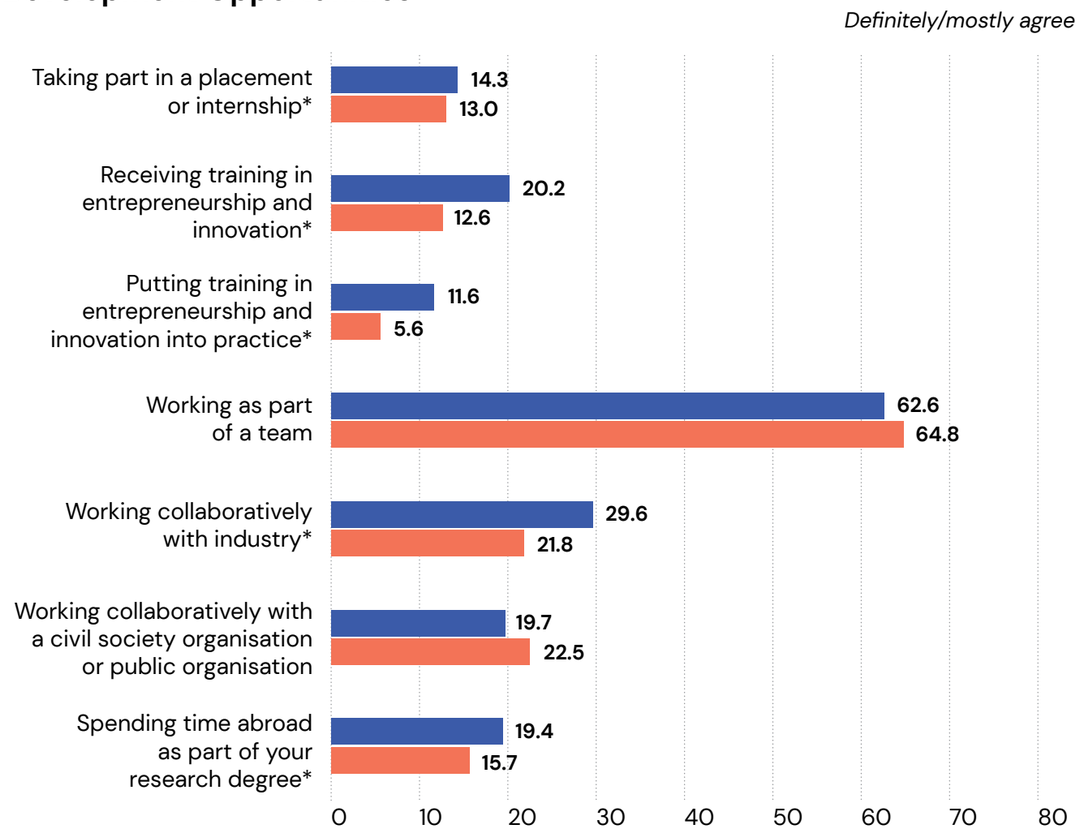


Fig. 3.15 *Development Opportunities* questions by gender

Questions related to industry and innovation

Research Skills

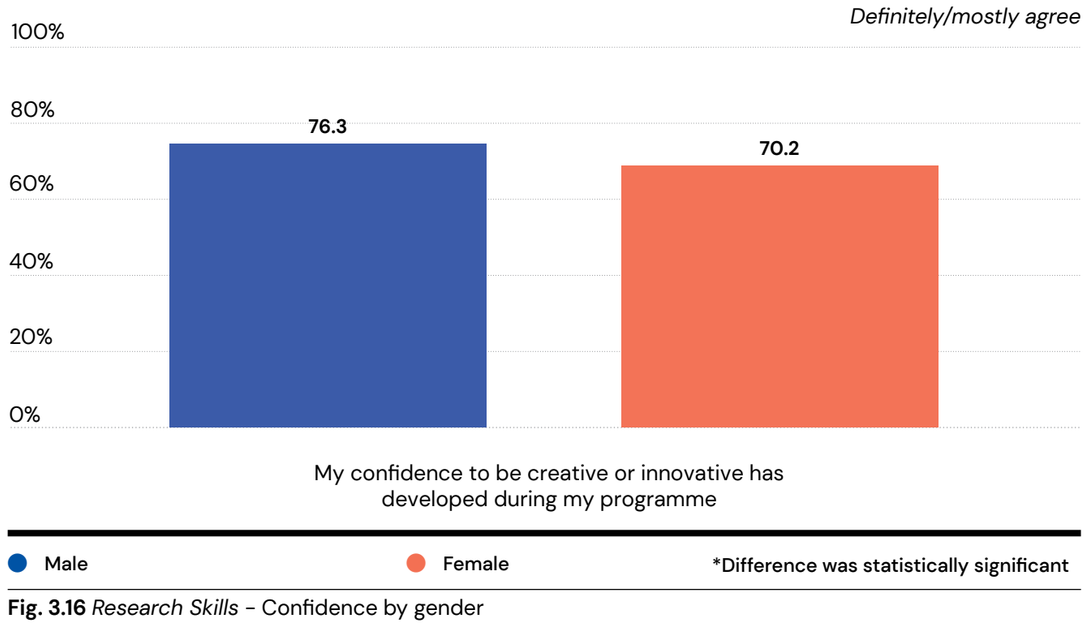


Fig. 3.16 *Research Skills* - Confidence by gender

Research Culture

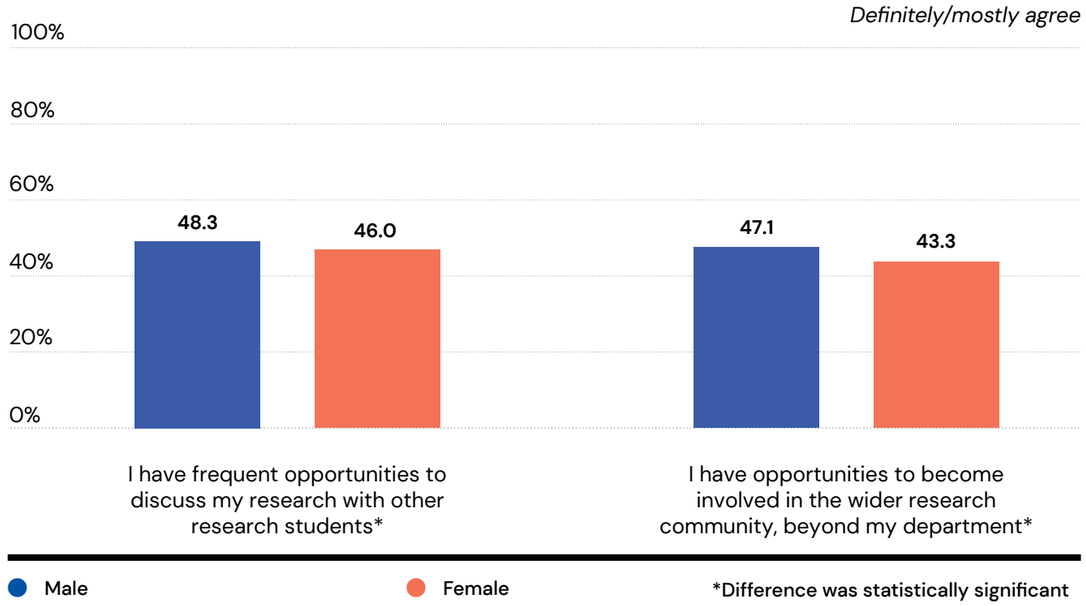


Fig. 3.17 *Research Culture* – Discussion with students and beyond department by gender

A number of questions which pertain to experience in and preparation of working in industry were selected as they potentially highlight a trend in the responses. Looking first to *Development Opportunities,* male respondents indicated statistically significantly more frequently than female respondents that they availed of the opportunity to "take part in a placement or internship", "receive training in entrepreneurship and innovation", "put training in entrepreneurship and innovation into practice", "work collaboratively with industry", and "spend time abroad as part of their research degree". More female respondents indicated that they have availed of the opportunity to "work as part of a team" and "work collaboratively with a civil society organisation or public organisation", but the difference between them and the male respondents was not significant.

One of the questions related to *Research Skills* asks respondents to indicate their agreement with the statement "My confidence to be creative or innovative has developed during my programme". Male respondents agreed with this statement significantly more than female respondents.

Finally, two relevant questions were extracted from *Research Culture*. Here, male respondents agreed more strongly than female respondents to the statements "I have frequent opportunities to discuss my research with other research students" and "I have opportunities to become involved in the wider research community, beyond my department".

These questions were selected because they relate to respondents' experience in and preparation for working in industry, and because they highlight differences by gender in this area that did not emerge in the results from PGR StudentSurvey.ie 2019. It is too early to point to these as trends in the data, but nevertheless they add to the available data relating to the gendered impact of COVID-19, in this instance on PGR students.

3.7 Country of domicile

Country of domicile refers to a student's country of permanent address prior to entry to their programme of study. A dichotomous variable that distinguishes between Irish (including Northern Irish) students and all other internationally domiciled students is used.

As was the case in 2019, the variable that revealed the most differences between groups was country of domicile. In 2019, this led to the decision to examine the questions raised in Chapter 4 relating to *Development Opportunities, Research Skills, Other Transferable Skills, Motivations*, and *Career Aspirations* through the lens of country of domicile. The current short analysis does not have the scope to replicate the same level of detail; therefore, the most significant differences are selected and presented below.

The only Aspect that revealed no difference by country of domicile group was *Other Transferable Skills*. For *Motivations*, the groups only differed on two items of a total of nine[41]. For *Career Aspirations*, the groups only differed on two items of a total of eleven[42].

Where differences emerged, the overwhelming pattern in the responses was for the internationally domiciled respondents to agree more strongly with statements relating to their engagement than the Irish domiciled students, suggesting that internationally domiciled students perceive themselves to be more engaged than Irish domiciled students. For instance, in relation to *Research Culture*, internationally domiciled respondents definitely or mostly agreed more strongly than Irish domiciled students that their department provides access to a relevant seminar programme (internationally domiciled 71.5%, Irish domiciled 66.2%), the research ambience in their department stimulates their work (internationally domiciled 62.2%, Irish domiciled 54.6%), they have frequent opportunities to discuss their research with other research students (internationally domiciled 51.7%, Irish domiciled 44.2%), and they have opportunities to become involved in the wider research community, beyond their department (internationally domiciled 49.2%, Irish domiciled 44.2%).

41. For *Motivations*, this was for "My interest in my subject" and "Improving my career prospects outside of an academic / research career".

42. For *Career Aspirations*, this was for "Returning to, or remaining with, employer who is sponsoring your degree" and "Any other professional career".

COVID-19 questions

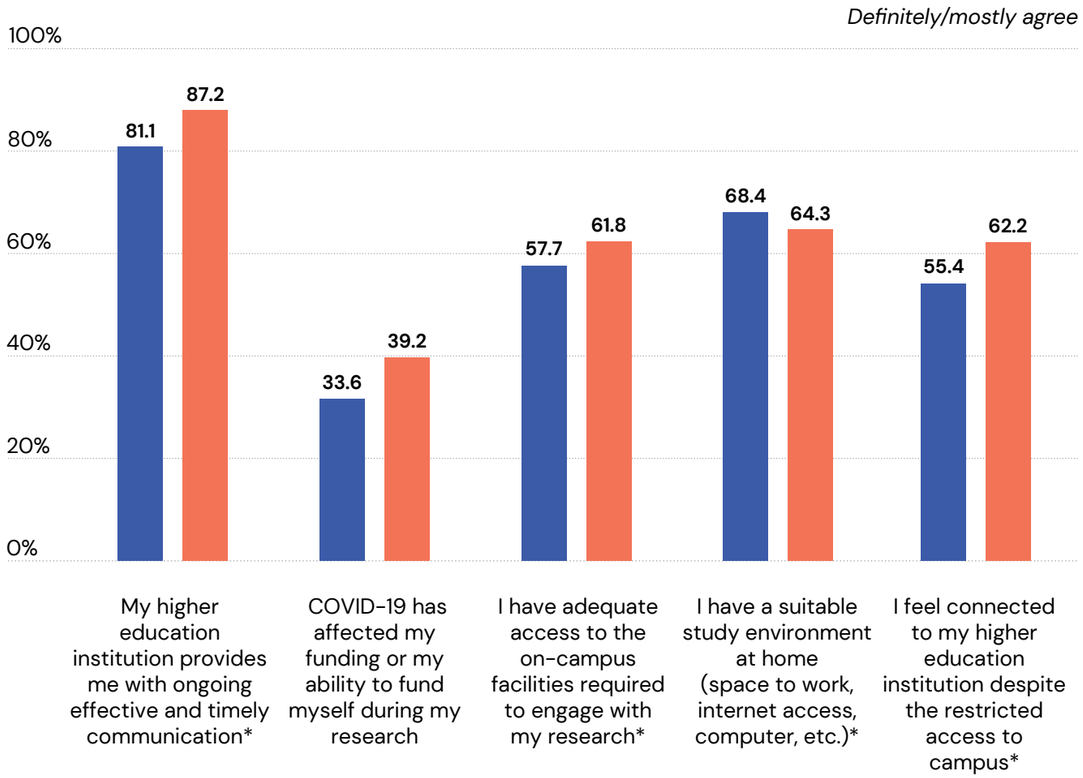


Fig. 3.18 COVID-19 questions by country of domicile

Questions pertaining to the impact of COVID-19 on PGR students were included in PGR StudentSurvey.ie in 2021. Varying differences emerged in the results. For "My higher education institution provides me with ongoing effective and timely communication", "I have adequate access to the on-campus facilities required to engage with my research", and "I feel connected to my higher education institution despite the restricted access to campus", internationally domiciled respondents were statistically significantly more likely than Irish domiciled respondents to definitely or mostly agree with these statements.

For "COVID-19 has affected my funding or my ability to fund myself during my research", internationally domiciled respondents were also more likely than Irish domiciled respondents to definitely or mostly agree with this statement, but the difference was not statistically significant.

However, for "I have a suitable study environment at home (space to work, internet access, computer, etc.)", Irish domiciled respondents were statistically significantly more likely than internationally domiciled respondents to definitely or mostly agree with this statement.

Quality of teaching, the Core technologies programme.

Time management and social activities.

Good support from supervisors.

Department of Anthropology is wonderful place to do it.

My relationship with my supervisors and their support and feedback.

The training I have received through Graduate Training Elements and the guidance I have received from my supervisors.

I am very interested in my thesis subject.

Developing my research topic, the people I've met along the way.

The possibility to develop a research proposal during the first year.

My excellent supervisory team and colleagues, but not a whole lot else.

Exploring a new research that is Ethnic Minority business, which was not done much previously.

Group sessions, excellent input from teachers.

I really likes the people I worked with on the project.

Developing contacts with academics and industry professionals.

Teaching training.

Independence, learning and gaining new skills.

Placements within the health sector which allow you to develop your skills.

Having a more analytical approach to work rather than just a manufacturing/ production (numbers) approach.

Freedom given by my supervisor.

Good science facilities.

Contact with world-class academics and an example of excellence.

Hands on experience, networking skills development, foreign collaborations.

Induction day.

Being able to perform my research in an easily accessible way.

My creation of a new research methodology.

Data analysis.

Learning to work independently.

Learning to think critically.

My colleagues and other postgraduate research students.

Connection and support with other researchers and postgraduate students, opportunities to engage with teaching and learning, opportunities to treat my research as a professional endeavour, opportunities to learn about and engage in various avenues of dissemination.

Talking with labmates and helping each other out.

Ability to carry out specialised research that cannot be learned anywhere else in Ireland.

Good research training.

Placement/supervised experience.

I think personal growth as a researcher, building professional connections through attending and disseminating research at conferences.

My research career.

Personal growth, the value to human experience of scientific research.

Transferable skills learned, conceptual development.

Philosophical community with real resources and that takes concrete and prompt action in improving learning conditions.

The quality of the academic and technical staff. The hub of high quality researchers from a range of fields creates a good environment to do good research.

It is challenging, it is in an innovative field and it is focused on the future.

Huge amount of flexibility and self directed learning.

Contact with other students. Being able to teach at the same time.

The process.

Independence to develop the research myself and conduct the experiments in a manner that suits me.

The project itself.

Interactions and conversations with supervisor.

Being able to create change. Supporting students within the institution.

Link to industry.

Good communication with the institution and supporting research environment.

I am working on a subject which is quite central in the public debate on the impact of new technologies. I hope that this will give me the opportunity to impact in a positive way the society.

Exploring new methods and analysing the results.

I work in cancer research which i think is a valuable use of time.

The topic, the opportunity to work with scholars experts in the field, learning and discovering new things.

Research network.

Being able to manage unsatisfying work and being unsupported in my work. Persevering.

Collaboration with other students/groups, access to lab equipment etc, taught modules.

Critically reading published research and analysing raw data.

Series of seminars provided by library and research office.

I'm developing tools that could have positive impacts on peoples' lives as well as giving myself the opportunity for a better future.

Ability to investigate, explore topics related to the theme of the research study.

Learning to take my own work under my control, learning more about science communication, learning more scientific techniques.

Introduced to wide network of researchers.

Flexibility and freedom to chose the contents of my studies and academic/ research development.

Chapter 4
Looking Deeper: A closer examination of the impact of COVID-19 on PGR students

4.1 Introduction

The COVID-19 pandemic has caused major disruption to many people in all walks of life, and PGR students have been no different. Since the first closure of higher education institutions on 12 March 2020 and the two subsequent Level 5 nationwide lockdowns, PGR students have had to deal with restrictions that have impacted on their ability to carry out research. Laboratory, archive and library closures, difficulty accessing participants, and restrictions around travel are examples of some of the issues that have disrupted PGR students' research and prevented its progression. Emergency funding such as the HEA Support for COVID-19 Related Costed Extensions, introduced in October 2020, has offered PGR students nearing the end of their studies the opportunity to ensure that they completed successfully and offered financial assistance to PGR students who may have been at risk of withdrawing due to financial constraints.

The long-term effects of the pandemic remain difficult to predict. In order to add some insight on how COVID-19 may be impacting PGR students, this chapter will explore how the COVID-19 pandemic is potentially impacting specific cohorts of PGR students in carrying out research and in completing their studies, and how it is potentially affecting their development opportunities.

The results will be examined along the dimensions of field of study and gender. The impact of COVID-19 on Arts, Humanities and Social Science (AHSS) PGR students as compared with Science, Technology, Engineering and Maths (STEM) PGR students will be examined. The potential for a gendered impact of the pandemic on research students will also be explored. For the purpose of this analysis, the two field of study groups were grouped as follows:

AHSS, Business, and Education

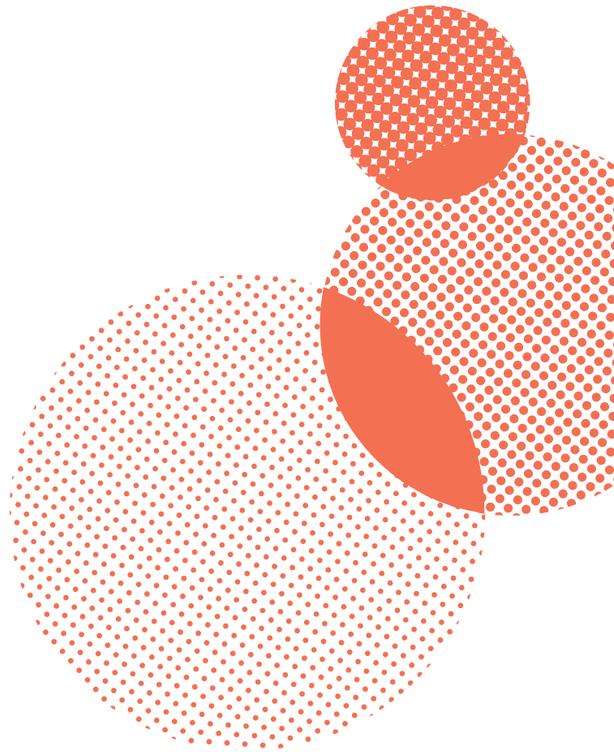
- Arts and humanities
- Social sciences, journalism and information
- Business, administration and law
- Education

STEM, including Health and Agriculture

- Natural sciences, mathematics and statistics
- Information and Communication Technology (ICTs)
- Engineering, manufacturing and construction
- Agriculture, forestry, fisheries and veterinary
- Health and welfare

Generic programmes and qualifications (n = 1) and Services (n = 30) were excluded.

In this analysis, the focus will be on questions surrounding Impact of COVID-19, *Research Infrastructure and Facilities,* including Funding, *Development Opportunities,* and *Overall Experience - Withdrawal.* It is important to note that this analysis is exploratory. It is hoped that the findings presented will help to give an indication of the impact the COVID-19 pandemic across AHSS and STEM and by gender and may help to guide further research on the subject.



4.2 AHSS and STEM students

COVID-19 questions

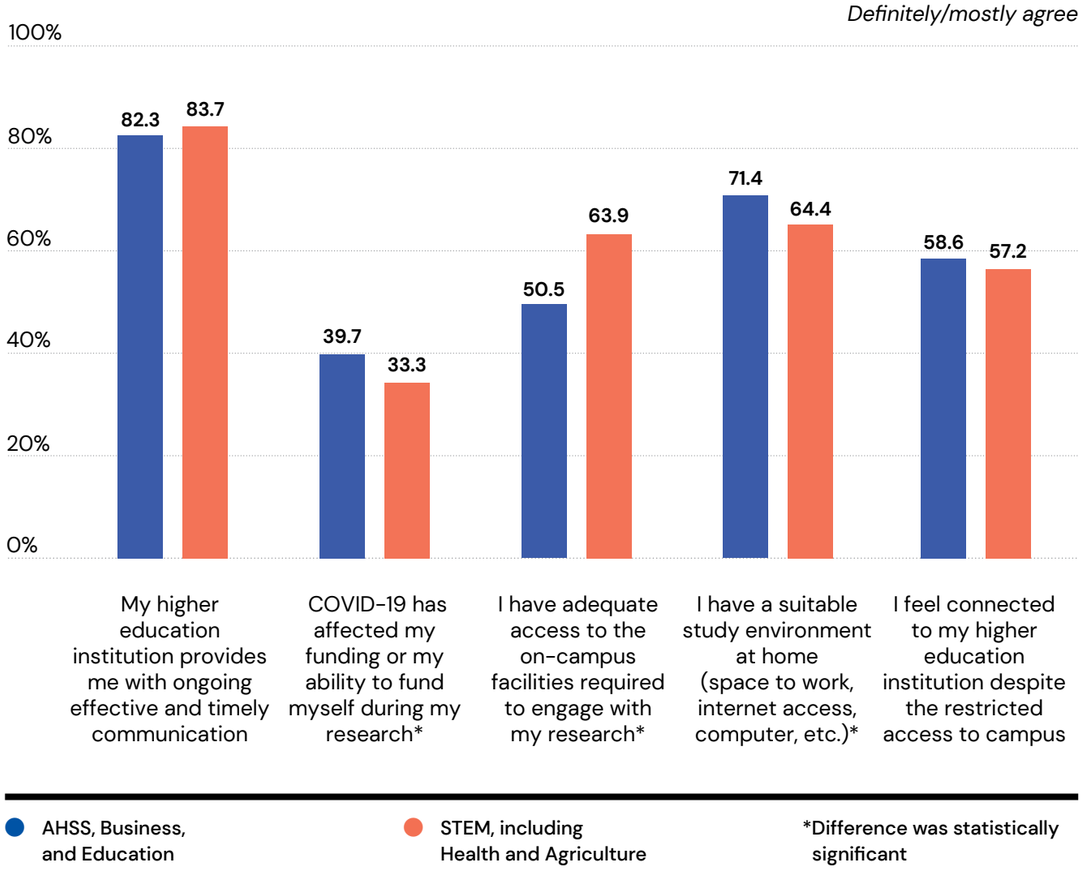


Fig. 4.1 COVID-19 questions for AHSS and STEM students

Results from the COVID-19 questions showed differences in responses between the AHSS and STEM groups. In response to "COVID-19 has affected my funding or my ability to fund myself during my research" and "I have adequate access to the on-campus facilities required to engage with my research", the STEM group was statistically significantly more likely to definitely or mostly agree with these statements than the AHSS group. The opposite was true for the question "I have a suitable study environment at home (space to work, internet access, computer, etc.)" with the AHSS group statistically significantly more likely to definitely or mostly agree with this statement. The difference between AHSS and STEM groups for "my higher education institution provides me with ongoing effective and timely communication" and "I feel connected to my higher education institution despite the restricted access to campus" was not statistically significant.

Research Infrastructure and Facilities

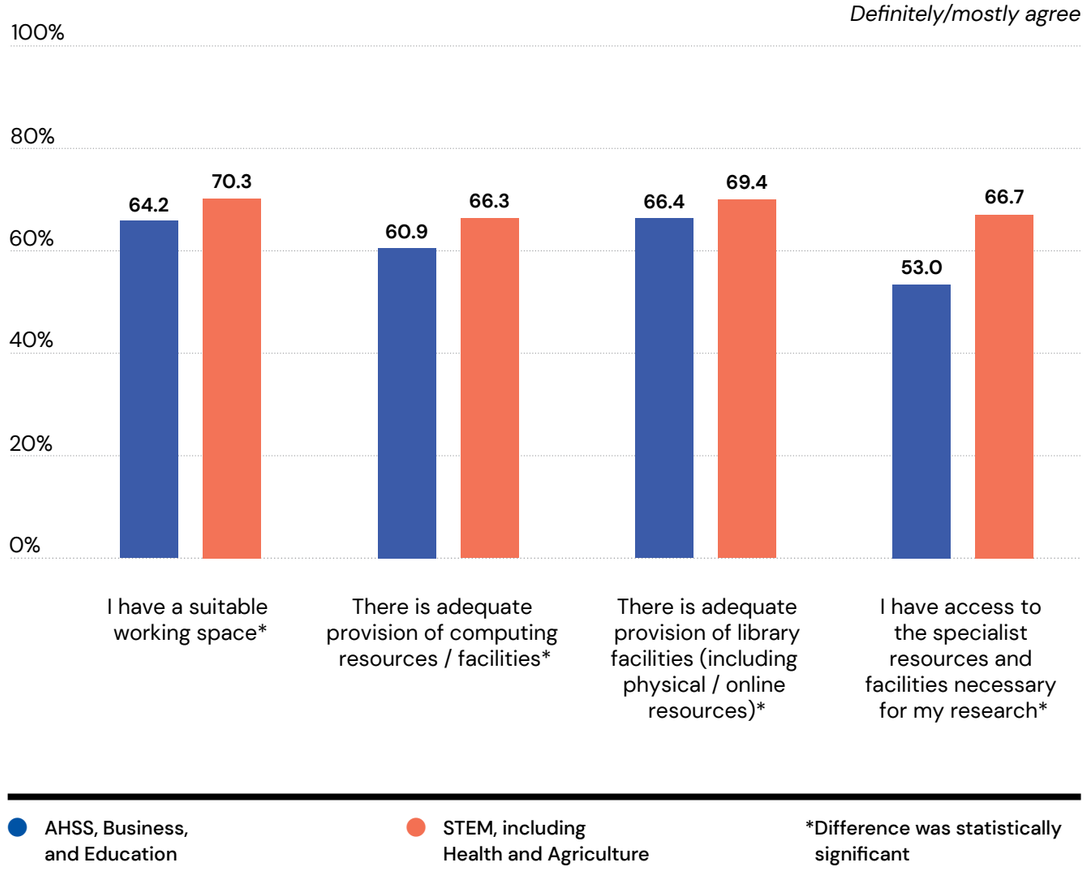


Fig. 4.2 *Research Infrastructure and Facilities* for AHSS and STEM students

The questions relating to *Research Infrastructure and Facilities* all showed statistically significant differences in responses between the AHSS and STEM groups. For "I have a suitable working space", "I have access to the specialist resources and facilities necessary for my research", "There is adequate provision of computing resources / facilities", and "There is adequate provision of library facilities (including physical / online resources)", the STEM group was statistically significantly more likely than the AHSS group to definitely or mostly agree with these statements.

Funding

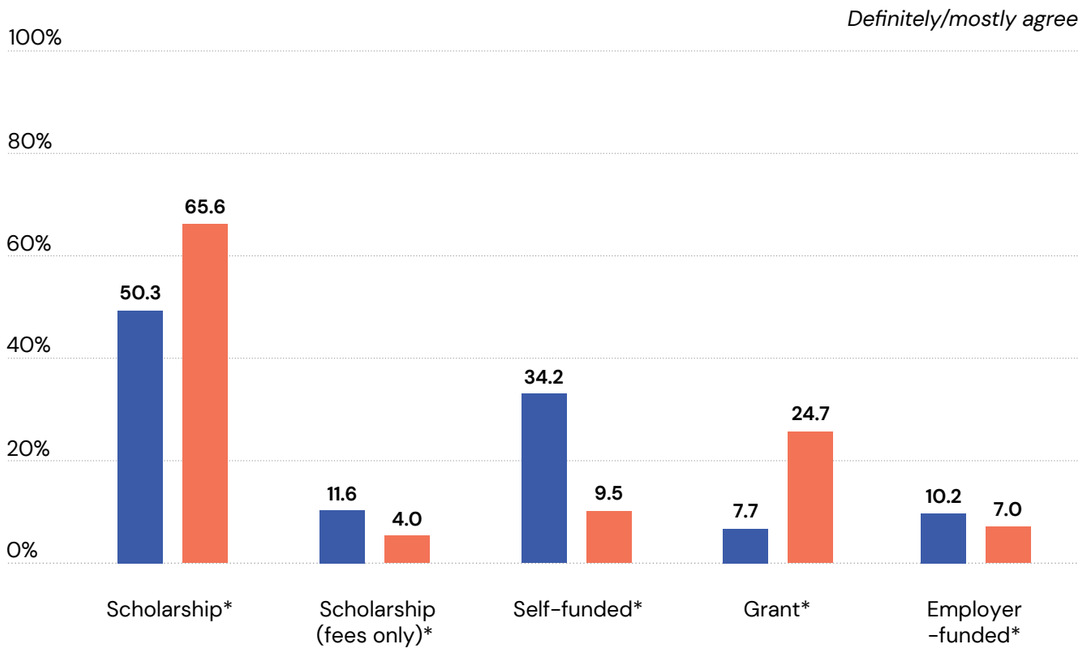


Fig. 4.3 Source of funding for AHSS and STEM students

More respondents in the STEM group reported being in receipt of a scholarship or grant. More respondents in the AHSS group reported being in a) receipt of a scholarship that paid their fees only, b) being self-funded, or c) being employer-funded.

Withdrawal

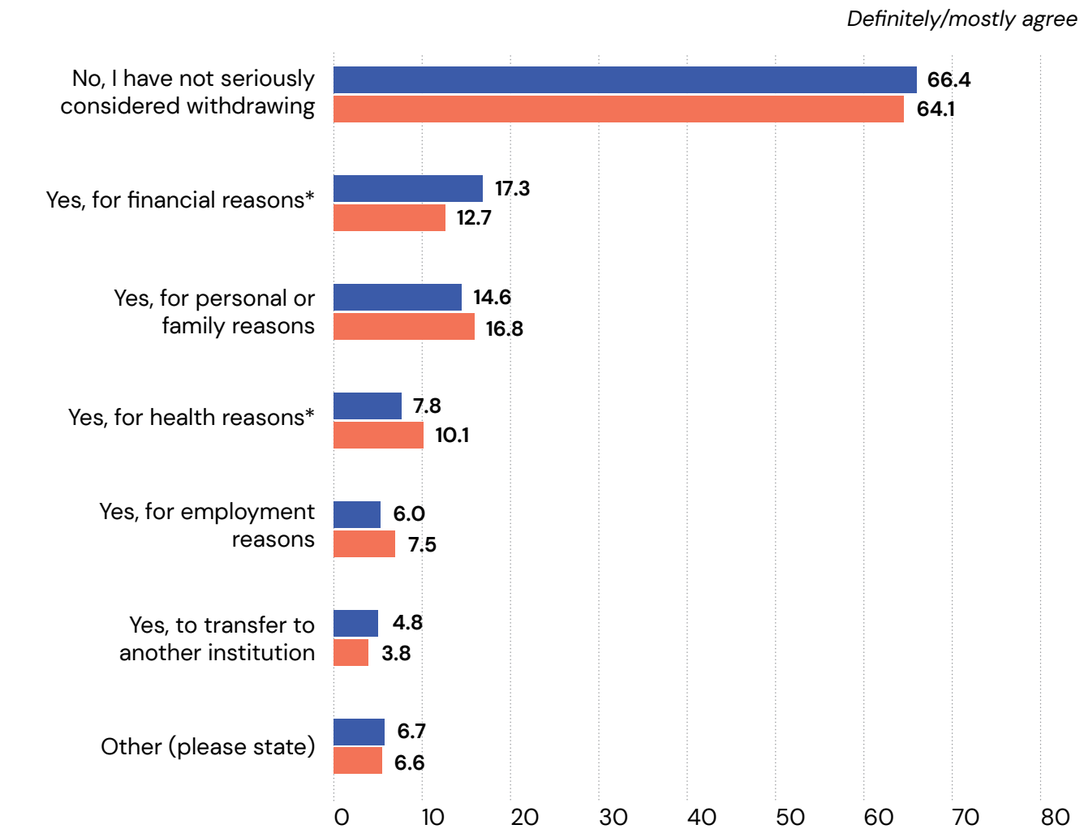


Fig. 4.4 *Withdrawal* for AHSS and STEM students

The differences between the AHSS and STEM groups to the question asking if they ever seriously considered withdrawing were statistically significant for “Yes, for financial reasons” and “Yes, for health reasons”. More respondents in the AHSS group said that they have seriously considered withdrawing for financial reasons, while more in the STEM group considered withdrawing for health reasons.

Development Opportunities

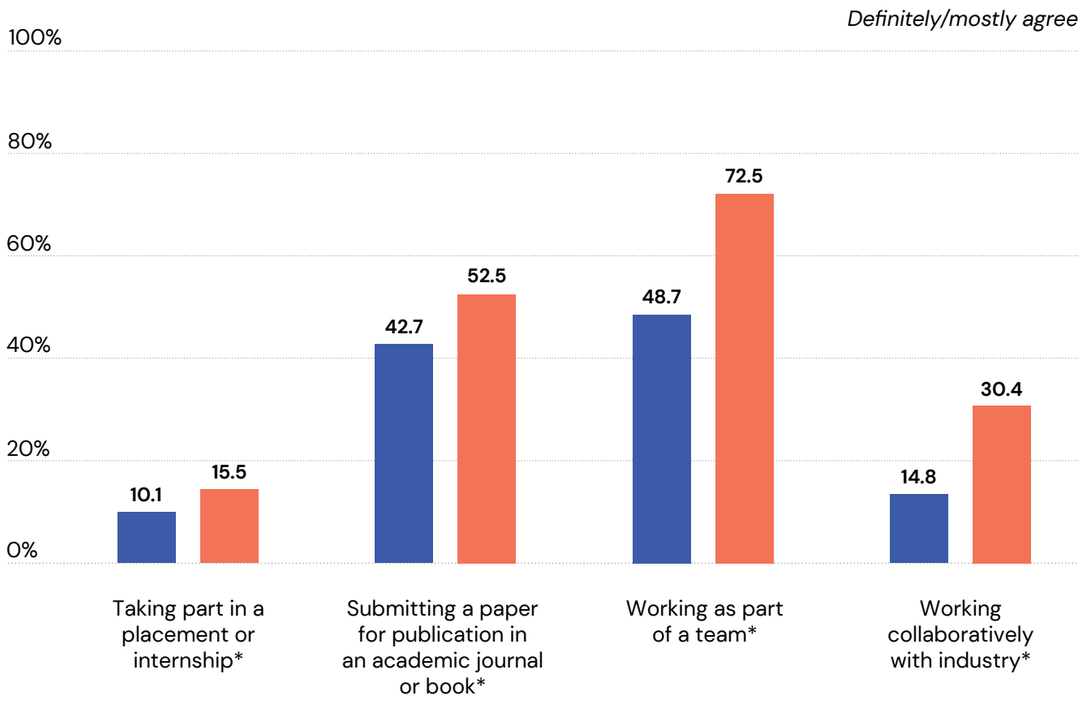


Fig. 4.5 *Development Opportunities and Facilities* for AHSS and STEM students

In looking at the responses of the AHSS and STEM groups in relation to the *Development Opportunities* questions, a number of statistically significant differences were found. In particular for the questions "taking part in a placement or internship", "submitting a paper for publication in an academic journal or book", "working as part of a team" and "working collaboratively with industry", the results indicated that respondents in the STEM group were significantly more likely to have availed of these development opportunities than the AHSS group.

Commentary

The responses from the COVID-19 questions point to significant differences between the AHSS and STEM groups in relation to funding, on-campus facilities, and a suitable study environment at home. Attention is drawn in particular to the possible greater impact that COVID-19 has had on AHSS students in relation to their access to the on-campus facilities required to engage with their research. This is suggested by the finding that 63.9% of STEM respondents had adequate access to the on-campus facilities required to engage with their research, while only 50.5% of AHSS respondents had adequate access. This result correlates with the results for *Research Infrastructure and Facilities*, where STEM respondents again indicated that they have had better access to resources and facilities to help them carry out their research. However, as these results relate to one year only, caution should be exercised in interpreting the results.

The pandemic has disrupted all PGR students' capacity to carry out their research, but it may be the case that STEM students, albeit with limited access to laboratories, etc., are in a better position to progress their research than AHSS students, who have faced longer library and archives closures, disruptions in access to human participants, and travel restrictions to complete their fieldwork. The types of interruptions that AHSS students have faced in carrying out their research have been referenced by several HEIs as part of their progress reports for the HEA Support for COVID-19 Related Costed Extensions fund. Furthermore, the limitations on access to university facilities and lack of access to human participants have been highlighted in two case studies involving AHSS students in the IUA brochure on the *Positive Impact of the HEA COVID-19 Fund on Researchers in the University Sector,* which was released in May 2021.

When the source of funding for AHSS and STEM students was examined, 34.2% of AHSS students reported being self-funded, as compared to 9.5% of STEM students. Under normal circumstances, the financial strain on self-funded students is typically considerable, but during a pandemic, this is even more pronounced by the limitations on opportunities for part-time casual work. Interruptions to research and the extension of time needed to complete their research is adding to the financial pressure being felt by PGR students. It is speculated that these financial factors may come to bear more heavily on the self-funded AHSS students, causing them to assess their position regarding the continuation of their studies. This speculation is supported by the finding that 17.3% of AHSS students have considered withdrawing for financial reasons, as compared to 12.7% of STEM students.

Finally, in relation to questions on the development opportunities available for students during the pandemic, the results indicate that STEM students have been able to avail of opportunities more readily than AHSS students, which may mean that they are better prepared for their careers after their studies.

This limited preliminary analysis should be interpreted with caution. Future analysis of PGR StudentSurvey.ie 2023 data will allow for more confident comparison of pre-COVID-19 data from surveys in 2018 and 2019, data gathered during COVID-19 from the 2021 survey, and the post-COVID-19 data anticipated in 2023.

4.3 Gender

COVID-19 questions

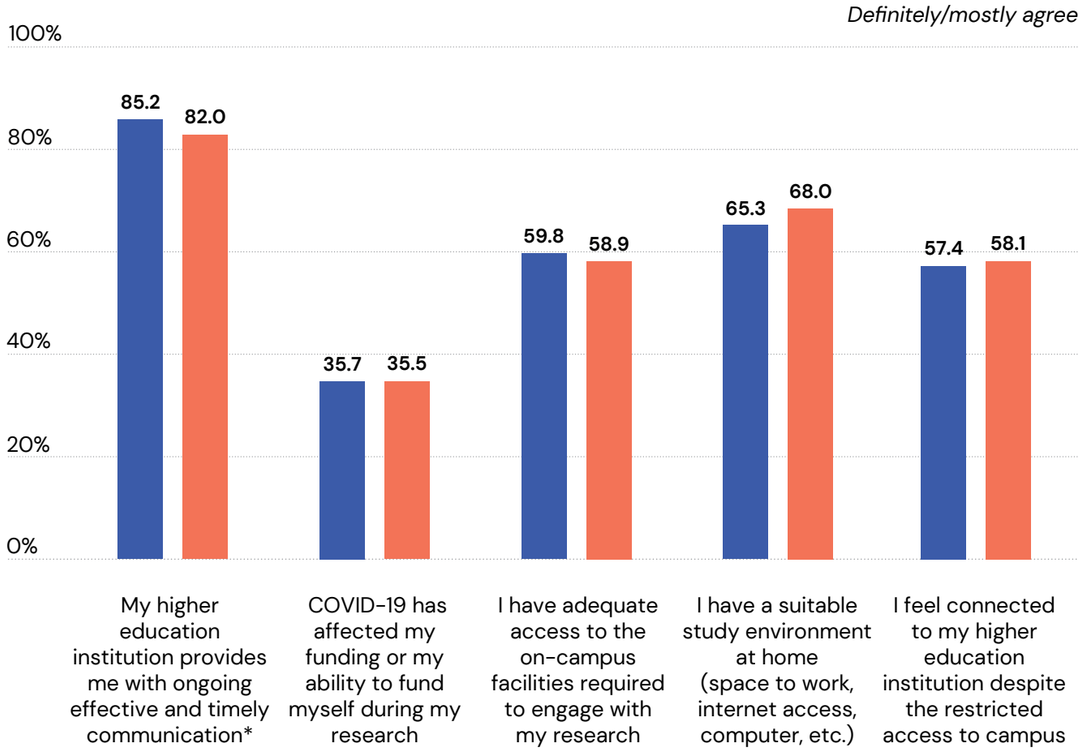


Fig. 4.6 COVID-19 questions by gender

Results from the COVID-19 questions across male and female respondents showed only one statistically significant difference; this was in the "My higher education institution provides me with ongoing effective and timely communication" question, with males statistically significantly more likely to definitely or mostly agree with this statement.

Development Opportunities

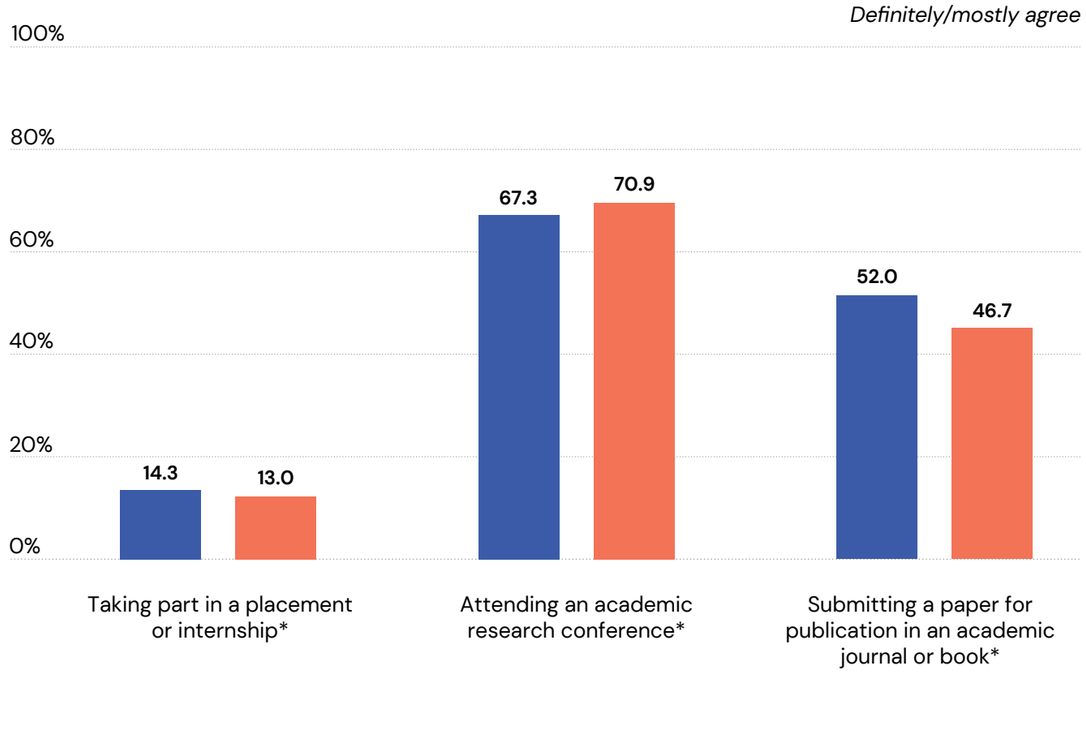


Fig. 4.7 *Development Opportunities* by gender

Some results for *Development Opportunities* showed several statistically significant differences between male and female respondents. For "taking part in a placement or internship" and "submitting a paper for publication in an academic journal or book", male respondents availed of these development opportunities statistically significantly more than females.

Withdrawal

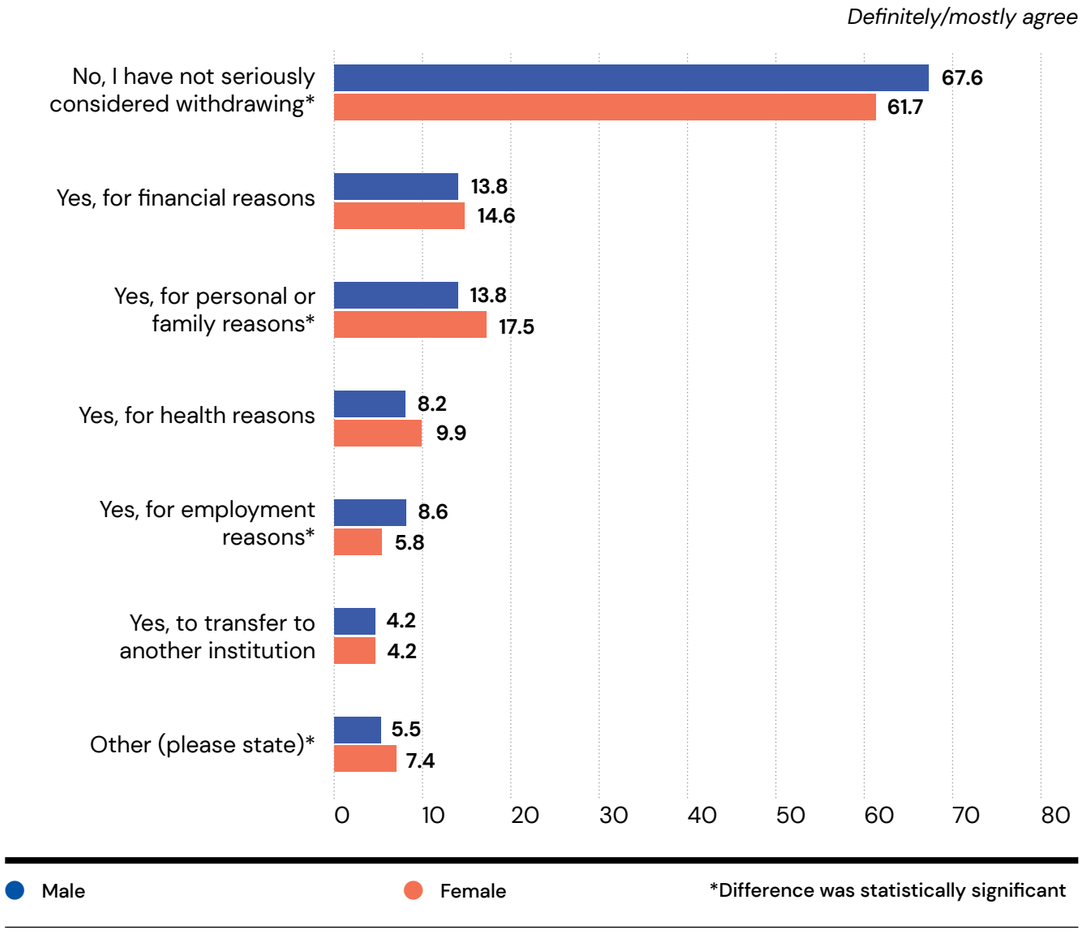


Fig. 4.8 *Withdrawal* by gender

The final question examined along the dimension of gender was the consideration of withdrawal. Statistically significantly more female respondents had considered withdrawing from the research programme than female students. In parallel, differences also emerged for the reasons for considering withdrawal by male and female respondents. Male respondents were more likely to consider withdrawing for employment reasons, while female respondents were more likely to consider withdrawing for personal or family reasons.

Commentary

Looking at the COVID-19 questions added for 2021, there were few differences between male and female responses, with only one significant difference on PGR students' perceptions on the timeliness and effectiveness of communication from their HEI. However, looking at *Development Opportunities* and *Overall Experience - Withdrawal*, there may be early indications that female PGR students have been more affected than male PGR students by the COVID-19 pandemic. A position paper from the ERAC Standing Working Group on Gender in Research on "the current COVID-19 outbreak and gendered impacts on researchers and teachers"[44] suggests that female researchers are impacted more by additional caring and schooling responsibilities than their male counterparts. In particular, it claims that

> ***"there is a significant risk that this inequality will be further reinforced due to the additional care and schooling work now being undertaken in households. The situation is exacerbated for single parents (mostly mothers) and also includes those who have the responsibility of caring for adults",***

and that

> ***"first evidence is emerging that there is a gender gap in paper submission to scientific journals during the COVID-19 outbreak period, with women researchers submitting fewer papers than men or in instances where women's submission rates have remained the same compared to last year, men's have soared, especially with regard to solo-authored papers".***[45 46]

As neither the age range nor the caring responsibilities of respondents to PGR StudentSurvey.ie are known, it is difficult to estimate whether respondents carry as many caring or schooling responsibilities as the researchers/ teachers mentioned in the ERAC paper. Nevertheless, some of the results from PGR StudentSurvey.ie 2021 are in line with what has been suggested in the ERAC paper. For instance, 52% of male respondents to PGR StudentSurvey.ie indicated they have submitted a paper for publication in an academic journal or book, while the equivalent result for female respondents was 46.7%. Responses to the question on *Overall Experience - Withdrawal* point to significant differences between male and female respondents, with 17.5% of female respondents having considered withdrawing due to personal or family reasons compared to 13.8% of male respondents.

These results point to the possibility of a gendered aspect to the COVID-19 pandemic, which could affect the career progression of female PGR students.

Some of the questions raised in this chapter related to gender differences in the responses to PGR StudentSurvey.ie may not be resolvable until a more long-term comparison can be made with PGR StudentSurvey.ie data in 2023 (when the next fieldwork takes place). In the meantime, readers are advised to engage with the results of a national survey by the HEA, Irish Research Council, and Science Foundation Ireland on the impact of COVID-19 on researchers and academic staff to be released in 2021.

44. ERAC Standing Working Group on Gender in Research and Innovation (2020). *Standing Working Group on Gender in Research and Innovation Position paper on the current COVID-19 outbreak and gendered impacts on researchers and teachers.* Available from: https://genderaction.eu/wp-content/uploads/2020/06/SWGGRI_Position-paper-on-COVID-19.pdf

45. Flaherty, C. (2020). *No Room of One's Own.* Available from: https://www.insidehighered.com/news/2020/04/21/early-journal-submission-data-suggest-covid-19-tanking-womens-research-productivity#.XqClyP1kLnI.email

46. Kitchener, C. (2020). *Women academics seem to be submitting fewer papers during coronavirus. 'Never seen anything like it,' says one editor.* Available from: https://www.thelily.com/women-academics-seem-to-be-submitting-fewer-papers-during-coronavirus-never-seen-anything-like-it-says-one-editor/

4.4 Conclusion

This chapter aimed to provide preliminary insights into the potential impacts that COVID-19 has had on STEM and AHSS PGR students, as well as explore the potentially gendered effects of COVID-19 on PGR students. The analysis has provided some beneficial insights into how COVID-19 restrictions have affected AHSS and STEM students and the different experiences that each cohort has had in progressing their research throughout the pandemic. The results from PGR StudentSurvey.ie suggest that AHSS students have had more difficulty in progressing their research due to a lack of access to on-campus facilities and human participants required to engage in their research. Other factors, such as fewer development opportunities being availed of by AHSS students and the financial constraints faced by the proportionally greater number of self-funded AHSS students, suggest that STEM students may be in a stronger position in relation to their research post-pandemic.

In investigating the potential impacts that the COVID-19 pandemic may have had on PGR students by gender, looking at the COVID-19 questions added for 2021, there were few differences between male and female responses. However, when analysing the female responses to *Development Opportunities* and *Overall Experience - Withdrawal*, differences did emerge. Based on the results of other research that examined the impact of COVID-19 on researchers, it is possible that additional caring responsibilities being carried by female PGR students could be part of the explanation of these differences, though the Editorial Group notes that this cannot be confirmed by the data available about respondents to PGR StudentSurvey.ie. It is likely that other factors are implicated, and further research is required before firm conclusions can be drawn.

These results should be seen as preliminary findings that need further investigation and point to trends in the data, rather than concrete findings. As the analysis has centred around results from one year taken in isolation, it is not possible to draw conclusions about the extent of COVID-19's influence on these results. Therefore, it would be beneficial to perform a long-term analysis using data from the PGR Student Surveys from 2018 to 2023, which would capture data before, during and after COVID-19, in order to ascertain whether the findings above could be attributed to the impact of COVID-19. Performing a further analysis in 2023 could also allow the impact of Costed Extensions funding to be taken into closer consideration. Separately, at an institutional level, institutions are encouraged to analyse their own data for 2021 and address the concerns of students as they arise, given the richness of the feedback provided by students to PGR StudentSurvey.ie 2021.

Living in Ireland, learning the country and the culture, and experiencing the landscapes that I am studying is a fantastic experience.

Research Facilities available.

Independent working and project management skills.

The technical skills and increased confidence in writing up for publication.

Understanding the research skills and integrity.

The practical skills I gained such as trouble shooting, project management and problems solving.

The relationship I have with my supervisors means that I am well supported but also challenged and pushed to reach my potential. The atmosphere of conviviality within the department and the school make it a pleasant place to work.

The weekly feedback with my supervisor helps me orient myself right. Research often involves feeling your way in the dark and in the current scenario it feels like dark has a new meaning. When you get a helping hand it is quite vanished and I appreciate the guidance.

I thought it would be the discussions with the faculty and my peers.

Collaborations.

It's more toward the applied nature of research.

Being based in a diverse and social centre of other researchers.

Internship and Training opportunities.

Ability to attend conferences.

I have very supportive and experienced supervisors. And with the nature of my project, I'm gaining a lot of valuable experience working on clinical trials and working with patients.

Learning to self-motivate and self-manage, as well as critical thinking and learning everyday.

My research and my supervisor.

Continually looking to produce work rather than sitting on a topic in the hopes it works out.

Continued feedback on academic writing.

I published my first paper and this made all the hard work and long hours worth it. The people/students I work with who support me day to day get you through the hard days.

Cohort based PhD so I have peers that I can work with and talk to (albeit virtually).

Interdisciplinarity.

My supervisor's support, writing bootcamps, online library access, structured modules.

The ability to contribute to new knowledge in my field and publish this in journal articles. This is highly sought after within third level institutions to increase research output, but to also adopt a research informed teaching approach. More teaching experience would be second on the list but there was not many opportunities.

Exposure received from many field and many researchers, interdisciplinary knowledge, practical implementation of concepts.

International collaboration.

Feedback from my supervisors and interaction with other research students.

The professional development opportunities I have received and the funding I have received. I never could have pursued this pathway without it, it has made such a difference to me. I will finish my PhD with little to no debt and have been given so many incredible opportunities for my own professional development. I feel very lucky compared to other students.

Availability of support and resources.

Getting to work with highly knowledgeable people in my area of interest.

The office space available to me on campus.

Ability to learn new techniques outside of a classroom environment.

Mix with other people in the same subject.

Appreciation, teamwork, honesty, no competitive work environment.

Pick up a lot of skills, makes you self motivate, learn to fail, resilience.

Keeping on track to complete my PhD: regular support and guidance from the supervisor, opportunities although rare to meet, engage and exchange experiences with other PhD students.

The networking, i.e. the professional and academic connections made.

Facilitation of self directed learning.

Workspace, department staff, supervisor.

The knowledge.

My supervisor work ethics.

Self-management, research skills, presentation skills, research communication, adaptability.

Talking with other researchers and faculty.

My ability to independently conduct research and disseminate results.

Talented researchers, good collaboration opportunities and well-recognised degree.

The training and network improvement.

Increasing research skills, time to read and think, supportive supervisor.

UCD's structured PhD programme is exceptional and means I have a huge support network in terms of my supervisor and Research Studies Panel. Through services offered by the PhD advisor and through UCD counselling service, personal development and socialisation opportunities are also available. I have received so many opportunities in UCD in terms of co-authorship, editing, assisting with research projects, lecturing and tutoring.

Interactions with supervisor.

It adds to the gap in literacy, in terms of public opinion, and the work that is done from the top down in Irish and an effort to recommend changes from the research that would help with growing the language.

The networking and ability to work with people and collaborate in other fields to complement the interdisciplinary research I'm doing.

In-depth learning, peer-to-peer support, international conferences.

Lots of resources available.

Cohort Saturdays which enable the research group to get together, share ideas, discuss challenges and engage with educational leaders from Ireland and across the world.

Chapter 5
Further Observations and Next Steps

PGR StudentSurvey.ie is a valuable addition to the Irish higher education sector and has the power to improve the experience of current and future postgraduate research students. This would contribute to an improved research environment for all members of the higher education research community. Postgraduate researcher students are a vital group in the context of national research and innovation, and related strategies and policies must reflect the need to support and empower these early career researchers. They are a key cohort of researchers currently undertaking valuable research and are also the future talent who will lead on projects in the coming decades.

Significant differences by gender in the PGR cohort were not evident in the results of PGR StudentSurvey.ie 2019 or the preliminary analysis of results to questions on the impact of COVID-19 included in PGR StudentSurvey.ie 2021 published in the StudentSurvey.ie Interim Results Bulletin 2021 (available **here**). However, when the rest of the questions in PGR StudentSurvey.ie were analysed for gender differences in Chapter 3 and Chapter 4, the results suggested the possible emergence of varied differences. This is a concerning trend, which is worth further consideration and reversal, if this trend is indeed indicative of growing disparity between the experience of male and female PGR students.

In 2021, about 68% of PGR students chose an academic career in higher education as a career aspiration priority. About 56% chose a research career outside higher education (e.g., in a private research organisation, a charity, or an industrial environment). A very similar result was found in 2019. There is more to be done in equipping PGR students with the skills and expectations to work in more settings than academic careers in higher education. On a related note, only 46% of respondents in 2021 agreed that they are satisfied with their work-life balance (though it should be noted that this fell from nearly 56% in 2019). These results raise questions about the expected workload, working hours, and precarity of researchers, which are possibly being perpetuated among early career researchers coming through the system.

Based on the results of PGR StudentSurvey.ie, the adequacy of the workspace and facilities is understood in practical terms for some, such as the value of having a quiet room to write in. However, it also relates to having the space to learn how to collaborate, to create networks with other early career researchers, or to develop in the company of more senior researchers. In 2021, 68% of respondents agreed that their department provides access to a relevant seminar programme, while 47% agreed that they have

frequent opportunities to discuss their research with other research students. The risks of isolation and loneliness increase when PGR students feel they have no network to participate in.

When asked "How has COVID-19 most impacted on your research?", the theme of disrupted access to necessary facilities came through strongly (see the StudentSurvey.ie Interim Results Bulletin 2021, available here for a full description of these results). The research environment exerts a strong influence on PGR students and is something they value, particularly in relation to the loss of their collegiate environment. The results demonstrated how much PGR students value the research environment for their enjoyment of their job and in terms of their development of networks.

In 2021, about 82% of respondents reported being funded and about 18% reported being self-funded, which is closely in line with the results for 2019 (though there were differences between the fields of study in this regard, as highlighted in Chapter 4). PGR StudentSurvey.ie also asks students what their funding covers. Their funding covers fees for over 95% of respondents, but this drops to 50% for travel to conferences, and to 25% for other travel and specialist training. Students in STEM programmes were significantly more likely to be in receipt of funding that covered items such as travel to conferences, other travel, and specialist training than students in fields of study such as Education and Arts and Humanities. This intersects with equity of access and widening participation, as lack of adequate funding options for PGR students (or having to self-fund with limited options to earn any income) may be pushing out the same students that access and disability offices work to recruit and retain. Furthermore, differences between full-time and part-time students across some dimensions indicated that full-time students are more engaged than part-time students (though it should be noted that the opposite trend emerged for other aspects of the survey). Internationally domiciled students often indicate a higher degree of engagement than Irish domiciled students. The research and innovation system in Ireland, higher education institutions, and all others working with early career researchers should recognise, encourage, and celebrate the diversity of PGR students, and strive to create an equally engaging and fruitful experience for all.

When asked "In what way(s) could your HEI improve its support for you during the current circumstances?" in PGR StudentSurvey.ie 2021, funding featured strongly. Calls for extensions of time and funding often intersected. This aligns with the finding that, in 2021, 30% of respondents reported not being confident that they will complete their research within their institution's expected timescale. PGR students like these are likely going to need more time and more funding in the short term, though it is impossible to know how much of this is directly attributable to the impact of COVID-19.

Research and innovation in Ireland would be significantly diminished without the energy, ability and creativity of PGR students. The results of PGR StudentSurvey.ie, which represent the feedback, experiences, and opinions of these early career researchers, are a valuable and indicative evidence base upon which to build policies and plan for the future.

5.1 Future iterations of PGR StudentSurvey.ie

The StudentSurvey.ie Steering Group, in conjunction with the StudentSurvey.ie PGR Working Group, decided in 2019 to adopt a biennial survey fieldwork cycle for PGR StudentSurvey.ie. Consequently, fieldwork for PGR StudentSurvey.ie is anticipated to take place in spring 2023.

Future iterations of PGR StudentSurvey.ie over the coming years will contribute to the expansion of a rich dataset. These data will be extremely valuable when considering trends and patterns in PGR student engagement over time. An exploration of such trends could be undertaken once an appropriate number of iterations of the survey have

taken place and the data are sufficiently robust to allow for comment on longitudinal patterns of PGR students' experiences. This examination of the data over time will also offer the opportunity to consider what impact the results of PGR StudentSurvey.ie have had on the participating institutions, and how those institutions have used the feedback provided in PGR StudentSurvey.ie to enhance the experience of PGR students. As noted in Chapter 4, the PGR StudentSurvey.ie National Report Editorial Group also anticipates the opportunity offered by the 2023 fieldwork to examine the long-term impact of COVID-19 on the experience of PGR students by examining data from three timepoints: data from 2018 and 2019 as pre-COVID-19 points in time, data from the 2021 iteration as the COVID-19 context, and data from what we hope will be a post-COVID-19 context in 2023.

5.2 Analysing data and achieving impact

In the meantime, the growing dataset can and should be interrogated at national and local level by those working in the areas of policy, funding, communications, student support services, and academia and by students themselves, to name only a few who could benefit from using this rich source of information and insight. As PGR StudentSurvey.ie has moved to a biennial fieldwork cycle, the lifecycle of the survey now offers more time to analyse the data from a given year, to communicate the results of the survey back to students, staff and faculty, and to act on the opportunities for enhancement of the PGR student experience identified by PGR student themselves.

Considerable efforts are made by those who implement the survey in the 21 participating higher education institutions, including staff and students, to ensure that a high response rate is achieved and that all PGR students feel welcomed and encouraged to take the survey. The next steps for the survey are necessarily focused on similar efforts to interrogate and draw meaning from the results.

One example of the StudentSurvey.ie initiative's commitment to continued enhancement of the experiences of students, alongside increasing transparency with regard to the data generated by the survey, is the establishment of the StudentSurvey.ie Analysis and Impact Group. The objectives of the Analysis and Impact Group include investigating ways of achieving a baseline level of analysis of the StudentSurvey.ie data within all participating institutions and finding effective ways of disseminating the results of the analyses in order to better close the feedback loop. This enables understanding of the short-term and ongoing impacts of changes and new practices brought in in response to the survey data. The aims of the Group are to ensure the results are used to enhance the student experience, and that the students who completed the survey know that their feedback is being listened to, is important and is bringing about positive change.

Some examples of the work undertaken by this group include the production of the StudentSurvey.ie Report Templates and Guide, to encourage greater analysis of the results by programme directors and heads of school (download **here**), as well as five funded research projects to analyse the qualitative data emerging from the two surveys (access all five **here**), and the StudentSurvey.ie Time Series Research 2016-2020. The Group is now focused on developing report automation and data visualisation tools for data analysts within the participating institutions, as well as creating corresponding PGR StudentSurvey.ie Report Templates and Guide.

There are many more possibilities for further analysis of the data than can be carried out by participating institutions and/ or the central StudentSurvey.ie project management function. Contact the Project Manager at info@studentsurvey.ie to discuss these possibilities or to propose ideas for future research.

Appendices

Appendix 1
Participation in the 2021 StudentSurvey.ie

The following higher education institutions participated in 2021 PGR StudentSurvey.ie.

PGR cohort of greater than 250	PGR cohort of fewer than 250
Dublin City University	Athlone Institute of Technology
Maynooth University	Dundalk Institute of Technology
National University of Ireland Galway	Galway-Mayo Institute of Technology
Trinity College Dublin	Institute of Art, Design and Technology, Dun Laoghaire
Technological University Dublin	Institute of Technology Carlow
University College Cork	Institute of Technology Sligo
University College Dublin	Letterkenny Institute of Technology
University of Limerick	Limerick Institute of Technology
	Mary Immaculate College, Limerick
	Munster Technological University*
	National College of Art and Design
	Royal College of Surgeons in Ireland
	Waterford Institute of Technology

*The two campuses of the Munster Technological University were treated as two separate institutions for fieldwork in 2021. They will be treated as one institution hereafter and will be grouped with the institutions with a PGR cohort of greater than 250. Furthermore, the changing landscape of higher education institutions, in particular the formation of Technological Universities, will continue to be reflected in future reports.

Appendix 2
Membership of the StudentSurvey.ie National Report Editorial Group 2021

Jenna Barry	USI Postgrad Officer 2021-2022 and PGR StudentSurvey.ie Working Group
Jennifer Brennan	THEA and PGR StudentSurvey.ie Working Group
Stephen Cassidy	MTU and PGR StudentSurvey.ie Working Group
Emer Cunningham	UCD and PGR StudentSurvey.ie Working Group
David Denieffe	IT Carlow and StudentSurvey.ie Steering Group
Suzanne Guerin	UCD and PGR StudentSurvey.ie Working Group
Sue Hackett	QQI and StudentSurvey.ie Analysis and Impact Group
Niall Kelly	HEA and PGR StudentSurvey.ie Working Group
Anne-Julie Lafaye	IRC and PGR StudentSurvey.ie Working Group
Siobhán Nic Fhlannchadha	StudentSurvey.ie Project Manager
Deirdre Quinn	HEA

Appendix 3
Tables to accompany Chapter 2

Questions relating to *Research Infrastructure and Facilities*

Table 6.1 *Research Infrastructure and Facilities*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**
I have a suitable working space	Definitely disagree	7.3	8.4	7.1	7.1	6.2	7.1	8.4	9.6	7.1
	Mostly disagree	12.8	12.1	13.0	13.1	11.3	13.3	11.4	12.5	10.2
	Neither agree nor disagree	11.6	11.9	11.6	11.6	11.3	11.6	11.8	12.2	11.3
	Mostly agree	36.3	35.8	36.4	36.9	39.5	36.7	33.4	33.7	33.2
	Definitely agree	31.9	31.9	31.9	31.3	31.6	31.2	35.0	32.1	38.2
There is adequate provision of computing resources/ facilities	Definitely disagree	6.6	4.2	7.1	7.1	4.8	7.3	4.4	3.9	5.0
	Mostly disagree	12.0	12.4	11.9	11.8	11.9	11.7	13.1	12.7	13.5
	Neither agree nor disagree	17.0	18.9	16.7	17.1	21.4	16.8	16.7	17.6	15.7
	Mostly agree	35.5	36.8	35.3	35.7	35.1	35.8	34.7	37.8	31.3
	Definitely agree	28.8	27.6	29.0	28.3	26.8	28.4	31.1	28.0	34.5
There is adequate provision of library facilities (including physical/ online resources)	Definitely disagree	5.0	5.9	4.9	5.0	7.5	4.9	5.0	5.1	4.9
	Mostly disagree	10.6	10.8	10.5	10.6	12.6	10.5	10.3	9.8	10.8
	Neither agree nor disagree	16.2	15.5	16.3	16.7	18.4	16.6	14.0	14.0	13.9
	Mostly agree	38.5	39.5	38.3	38.4	39.1	38.3	39.0	39.7	38.3
	Definitely agree	29.7	28.2	30.0	29.3	22.4	29.8	31.7	31.4	32.1
I have access to the specialist resources and facilities necessary for my research	Definitely disagree	6.7	6.1	6.8	6.9	6.3	6.9	6.0	6.1	5.9
	Mostly disagree	13.6	12.7	13.8	13.2	10.2	13.5	15.2	14.1	16.4
	Neither agree nor disagree	17.8	24.2	16.6	17.1	25.0	16.5	20.7	23.7	17.4
	Mostly agree	36.8	34.8	37.2	37.1	36.9	37.1	35.6	33.7	37.6
	Definitely agree	25.1	22.1	25.6	25.7	21.6	25.9	22.5	22.4	22.6

Table 6.2 Research funding source

		All responses %			Cohort > 250 %			Cohort < 250 %		
Question	**Responses**	**Total**	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**
Scholarship	Yes	59.9	51.0	61.5	59.7	43.5	60.9	61.0	55.2	67.5
Scholarship (fees only)	Yes	6.8	10.2	6.2	6.4	8.2	6.3	8.7	11.3	5.8
Self-funded	Yes	18.3	23.1	17.4	19.1	33.2	18.0	14.8	17.5	11.9
Grant	Yes	18.6	16.3	19.0	18.8	14.1	19.1	17.9	17.5	18.3
Employer-funded	Yes	8.2	8.6	8.1	8.2	12.0	7.9	8.2	6.7	9.8

* Multiple responses allowed. Table shows averages of non-blank responses.

Table 6.3 Research funding uses

		All responses %			Cohort > 250 %			Cohort < 250 %		
Question	**Responses**	**Total**	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**
Fees	Yes	95.6	92.4	96.2	96.1	93.3	96.4	93.1	91.9	94.5
Stipend	Yes	76.6	61.4	79.3	77.8	59.8	78.9	71.5	62.3	82.1
Research materials	Yes	55.2	47.0	56.6	54.9	42.7	55.7	56.4	49.4	64.5
Travel to conferences	Yes	52.0	39.7	54.3	51.8	31.7	53.3	53.0	43.9	63.4
Other travel (labs / other institutions)	Yes	26.4	20.9	27.5	26.2	20.1	26.7	27.3	21.3	34.1
Specialist training		25.4	19.0	26.7	25.1	15.9	25.8	26.8	20.6	33.7

* Multiple responses allowed. Table shows averages of non-blank responses.

Questions relating to *Supervision*

Table 6.4 *Supervision*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**	**Total**	**NFQ 9**	**NFQ 10**
I am being supervised by...	One supervisor	43.5	38.2	44.4	47.8	52.7	47.4	24.6	29.9	18.7
	Two supervisors	44.0	45.3	43.7	42.1	35.3	42.5	52.3	50.9	53.7
	Three or more supervisors	12.6	16.5	11.9	10.2	12.0	10.1	23.1	19.1	27.6
My supervisor(s) provides the appropriate level of support for my research	Definitely disagree	3.3	3.2	3.3	3.4	3.8	3.3	2.9	2.8	3.1
	Mostly disagree	5.4	4.0	5.7	5.8	3.8	5.9	3.8	4.1	3.4
	Neither agree nor disagree	6.0	6.2	5.9	5.8	2.7	5.9	7.0	8.1	5.8
	Mostly agree	23.9	20.1	24.6	24.7	23.1	24.8	20.5	18.4	22.7
	Definitely agree	61.4	66.5	60.5	60.4	66.5	60.0	65.8	66.6	64.9
I have regular contact with my supervisor(s), appropriate for my needs	Definitely disagree	3.3	3.0	3.3	3.3	2.7	3.3	3.3	3.1	3.5
	Mostly disagree	5.5	4.6	5.6	5.7	4.4	5.8	4.5	4.7	4.2
	Neither agree nor disagree	5.0	4.8	5.0	5.1	2.2	5.3	4.8	6.3	3.1
	Mostly agree	23.3	20.2	23.8	23.3	19.8	23.6	23.1	20.4	26.0
	Definitely agree	63.0	67.4	62.2	62.6	70.9	62.1	64.4	65.4	63.2
My supervisor(s) provides feedback that helps me to direct my research activities	Definitely disagree	2.9	2.8	2.9	2.7	1.6	2.8	3.5	3.4	3.5
	Mostly disagree	4.7	4.4	4.8	4.9	4.4	4.9	4.1	4.4	3.8
	Neither agree nor disagree	5.9	5.2	6.0	5.9	2.7	6.1	5.8	6.6	4.9
	Mostly agree	23.5	21.8	23.8	23.8	22.0	23.9	22.4	21.6	23.3
	Definitely agree	63.0	65.9	62.5	62.7	69.2	62.3	64.3	63.9	64.6
My supervisor(s) helps me to identify my training and development needs as a researcher	Definitely disagree	4.5	4.2	4.5	4.5	2.8	4.6	4.4	5.0	3.8
	Mostly disagree	9.6	6.0	10.3	10.2	7.2	10.5	6.9	5.3	8.7
	Neither agree nor disagree	10.6	10.0	10.7	10.8	12.2	10.7	9.7	8.8	10.8
	Mostly agree	26.1	24.8	26.3	26.1	22.8	26.2	26.5	25.9	27.1
	Definitely agree	49.2	55.0	48.2	48.5	55.0	48.0	52.5	55.0	49.7

Questions relating to *Research Culture*

Table 6.5 *Research Culture*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
My department provides access to a relevant seminar programme	Definitely disagree	4.9	6.4	4.7	4.6	4.0	4.6	6.6	7.8	5.3
	Mostly disagree	10.3	11.1	10.2	9.7	10.9	9.7	12.8	11.2	14.5
	Neither agree nor disagree	16.7	23.0	15.7	15.3	17.2	15.2	23.2	26.4	19.9
	Mostly agree	35.3	34.1	35.5	35.3	32.8	35.5	35.2	34.9	35.5
	Definitely agree	32.7	25.4	34.0	35.1	35.1	35.0	22.2	19.7	24.8
The research ambience in my department stimulates my work	Definitely disagree	6.9	6.3	7.0	6.9	5.4	7.0	6.7	6.8	6.6
	Mostly disagree	12.1	14.6	11.7	11.8	13.9	11.7	13.6	15.0	12.0
	Neither agree nor disagree	23.7	27.9	22.9	23.0	27.1	22.7	26.8	28.3	25.2
	Mostly agree	32.5	28.5	33.1	33.2	28.3	33.5	28.9	28.7	29.2
	Definitely agree	24.9	22.7	25.3	25.1	25.3	25.1	24.0	21.2	27.0
I have frequent opportunities to discuss my research with other research students	Definitely disagree	12.7	17.1	12.0	12.4	15.8	12.2	14.4	17.9	10.6
	Mostly disagree	23.0	25.2	22.6	22.7	24.9	22.5	24.2	25.3	23.0
	Neither agree nor disagree	17.4	16.5	17.4	17.5	17.5	17.4	16.9	15.9	18.1
	Mostly agree	27.5	23.3	28.2	28.1	26.0	28.3	24.6	21.8	27.7
	Definitely agree	19.5	17.9	19.8	19.4	15.8	19.7	19.8	19.2	20.6
I have opportunities to become involved in the wider research community, beyond my department	Definitely disagree	11.5	13.1	11.3	11.5	13.6	11.4	11.5	12.8	10.0
	Mostly disagree	21.0	22.7	20.7	20.7	23.3	20.5	22.3	22.4	22.2
	Neither agree nor disagree	22.6	25.4	22.0	22.1	22.2	22.0	24.9	27.3	22.2
	Mostly agree	27.1	24.2	27.7	27.8	26.7	28.0	23.8	22.7	25.1
	Definitely agree	17.7	14.6	18.3	17.8	14.2	18.1	17.5	14.8	20.4

Questions relating to *Progress and Assessment*

Table 6.6 *Progress and Assessment*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
I received an appropriate induction/ orientation to my research degree programme	Definitely disagree	8.6	7.5	8.9	8.9	8.5	9.0	7.3	6.8	7.8
	Mostly disagree	13.6	15.3	13.2	13.6	15.9	13.3	13.4	15.0	11.7
	Neither agree nor disagree	11.5	12.2	11.5	11.2	11.9	11.2	12.9	12.4	13.4
	Mostly agree	35.8	36.2	35.8	35.6	33.0	35.8	36.8	38.1	35.3
	Definitely agree	30.4	28.8	30.7	30.6	30.7	30.6	29.7	27.7	31.8
I understand the requirements and deadlines for formal monitoring of my progress	Definitely disagree	3.0	4.7	2.7	2.7	5.6	2.5	4.0	4.2	3.9
	Mostly disagree	9.8	11.5	9.5	9.7	11.7	9.5	10.1	11.3	8.8
	Neither agree nor disagree	8.3	10.8	7.8	8.2	12.3	7.9	8.4	10.0	6.7
	Mostly agree	40.7	37.4	41.3	41.0	35.8	41.4	39.2	38.4	40.1
	Definitely agree	38.3	35.6	38.8	38.3	34.6	38.6	38.2	36.1	40.5
I understand the required standard for my thesis	Definitely disagree	3.8	5.9	3.4	3.7	8.9	3.4	3.9	4.2	3.5
	Mostly disagree	10.6	11.7	10.4	10.7	16.2	10.4	10.0	9.1	11.0
	Neither agree nor disagree	10.5	11.1	10.4	10.9	11.7	10.8	8.8	10.7	6.7
	Mostly agree	41.8	37.5	42.4	42.5	33.5	43.1	38.3	39.8	36.7
	Definitely agree	33.4	33.8	33.3	32.1	29.6	32.3	39.0	36.2	42.0
The final assessment procedures for my research degree are clear to me	Definitely disagree	4.5	7.4	3.9	4.3	10.7	3.9	5.1	5.5	4.6
	Mostly disagree	13.5	16.5	13.0	13.4	19.7	13.0	14.1	14.7	13.5
	Neither agree nor disagree	13.9	14.8	13.8	13.9	12.9	14.0	13.8	16.0	11.3
	Mostly agree	37.7	31.3	38.8	39.1	29.2	39.8	31.4	32.6	30.1
	Definitely agree	30.4	29.9	30.5	29.3	27.5	29.4	35.7	31.3	40.4

Appendices

Questions relating to *Development Opportunities*

Table 6.7 *Development Opportunities*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
Agreeing a personal training or development plan	Yes	44.3	38.3	45.5	44.4	37.0	44.9	44.3	39.0	50.2
	No	41.7	44.7	41.2	42.3	46.2	42.0	39.1	43.8	33.9
	Not available	13.9	17.0	13.3	13.3	16.8	13.0	16.6	17.2	15.9
Receiving training to develop my research skills	Yes	76.5	67.0	78.3	77.7	70.3	78.3	71.4	65.2	78.2
	No	18.9	26.2	17.6	18.0	22.9	17.6	23.1	28.1	17.6
	Not available	4.5	6.8	4.1	4.3	6.9	4.1	5.6	6.8	4.2
Receiving training to develop my other transferable skills	Yes	60.0	43.3	63.1	62.3	48.9	63.3	50.0	40.1	60.8
	No	33.1	45.3	30.8	31.6	41.4	30.8	39.5	47.6	30.7
	Not available	6.9	11.4	6.1	6.1	9.8	5.9	10.5	12.3	8.5
Receiving advice on career options	Yes	33.9	28.6	34.9	34.7	29.7	35.2	30.1	28.0	32.3
	No	55.6	59.1	55.0	55.7	62.9	55.2	55.3	57.0	53.5
	Not available	10.5	12.2	10.1	9.6	7.4	9.7	14.6	15.0	14.2
Taking part in a placement or internship	Yes	13.5	7.2	14.7	14.1	7.4	14.7	10.6	7.1	14.5
	No	62.4	66.8	61.6	62.5	69.1	62.0	62.2	65.5	58.5
	Not available	24.1	26.0	23.7	23.4	23.4	23.3	27.2	27.4	27.0
Attending an academic research conference	Yes	69.4	50.1	72.8	71.5	54.3	72.7	60.1	47.7	73.8
	No	24.7	38.8	22.2	23.1	35.4	22.2	31.9	40.6	22.3
	Not available	5.9	11.1	5.0	5.4	10.3	5.1	7.9	11.6	3.9
Presenting a paper or poster at an academic research conference	Yes	59.1	38.6	62.6	60.4	39.1	61.8	53.4	38.4	69.7
	No	34.9	50.0	32.2	33.9	50.6	32.8	39.1	49.7	27.5
	Not available	6.1	11.4	5.1	5.7	10.3	5.4	7.6	11.9	2.8
Submitting a paper for publication in an academic journal or book	Yes	48.8	29.2	52.3	50.8	34.3	52.0	40.1	26.4	55.3
	No	46.0	61.9	43.1	44.2	57.7	43.2	54.0	64.3	42.6
	Not available	5.2	8.8	4.6	5.1	8.0	4.9	5.9	9.3	2.1
Communicating your research to a non-academic audience	Yes	41.4	32.6	43.0	41.2	30.9	41.9	42.3	33.5	51.9
	No	51.6	56.1	50.8	52.2	60.0	51.7	48.9	53.9	43.5
	Not available	7.0	11.3	6.2	6.6	9.1	6.4	8.8	12.6	4.6
Receiving training in entrepreneurship and innovation	Yes	15.7	11.8	16.4	16.3	12.6	16.6	12.7	11.4	14.2
	No	70.0	69.2	70.1	70.2	70.9	70.1	69.0	68.2	69.9
	Not available	14.4	19.0	13.5	13.5	16.6	13.3	18.3	20.5	16.0
Putting training in entrepreneurship and innovation into practice e.g., submitting an invention disclosure or filing a patent application	Yes	8.0	6.0	8.4	8.1	4.0	8.4	7.9	7.1	8.8
	No	74.1	74.2	74.1	74.4	76.6	74.3	72.5	72.9	72.1
	Not available	17.9	19.8	17.5	17.5	19.4	17.3	19.6	20.0	19.1
Working as part of a team	Yes	63.9	52.5	65.9	65.1	57.1	65.6	58.7	49.8	68.4
	No	29.3	36.7	28.0	28.3	29.1	28.3	33.6	41.0	25.5
	Not available	6.8	10.8	6.1	6.6	13.7	6.1	7.6	9.1	6.0
Working collaboratively with industry	Yes	24.9	29.3	24.2	23.4	27.6	23.1	31.9	30.2	33.8
	No	60.4	53.7	61.5	62.1	55.7	62.5	53.0	52.6	53.4
	Not available	14.7	17.0	14.3	14.6	16.7	14.4	15.1	17.2	12.8
Working collaboratively with a civil society organisation or public organisation	Yes	21.4	19.0	21.8	21.1	16.2	21.5	22.4	20.5	24.5
	No	64.7	63.5	64.9	65.3	65.9	65.3	62.0	62.2	61.7
	Not available	13.9	17.5	13.3	13.6	17.9	13.2	15.6	17.3	13.8
Spending time abroad as part of your research degree	Yes	17.2	7.2	19.1	18.5	7.4	19.4	11.8	7.1	17.1
	No	66.9	69.1	66.5	66.8	70.3	66.5	67.3	68.4	66.2
	Not available	15.9	23.7	14.4	14.7	22.3	14.1	20.8	24.5	16.7

Table 6.8 Teaching/ demonstrating

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
Please indicate whether you have taught (or demonstrated) at your institution during your research degree programme:	Yes	63.1	47.9	65.9	64.8	46.7	66.2	55.6	48.6	63.1
	No	36.9	52.1	34.1	35.2	53.3	33.8	44.4	51.4	36.9
Do you agree or disagree that the teaching/ demonstration you delivered enhanced your overall research experience?	Definitely disagree	7.9	7.6	8.0	8.3	8.1	8.3	6.3	7.3	5.4
	Mostly disagree	9.6	6.9	10.0	9.9	7.1	10.1	8.1	6.8	9.4
	Neither agree nor disagree	15.2	17.2	14.8	15.7	22.2	15.2	12.9	14.6	11.4
	Mostly agree	26.7	25.1	26.9	27.5	26.3	27.5	23.1	24.5	21.8
	Definitely agree	40.6	43.3	40.2	38.7	36.4	38.9	49.5	46.9	52.0
Do you agree or disagree that you have been given appropriate support and guidance for your teaching/ demonstration?	Definitely disagree	9.9	6.6	10.4	10.1	5.6	10.4	9.0	7.1	10.9
	Mostly disagree	18.1	14.5	18.7	19.2	18.7	19.3	12.8	12.2	13.4
	Neither agree nor disagree	16.6	18.8	16.2	16.3	20.6	16.0	17.6	17.9	17.3
	Mostly agree	33.2	34.7	33.1	32.9	35.5	32.8	34.9	34.2	35.6
	Definitely agree	22.2	25.4	21.6	21.5	19.6	21.5	25.6	28.6	22.8

Questions relating to *Research Skills*

Table 6.9 *Research Skills*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
My skills in applying appropriate research methodologies, tools and techniques have developed during my programme	Definitely disagree	1.7	1.3	1.8	1.6	0.6	1.7	1.9	1.7	2.1
	Mostly disagree	2.8	2.8	2.9	2.9	2.9	2.9	2.8	2.7	2.9
	Neither agree nor disagree	8.1	10.2	7.7	7.7	8.2	7.7	9.7	11.3	7.9
	Mostly agree	38.2	41.7	37.5	38.8	47.1	38.1	35.9	38.7	32.9
	Definitely agree	49.2	44.0	50.1	49.0	41.2	49.6	49.8	45.7	54.3
My skills in critically analysing and evaluating findings and results have developed during my programme	Definitely disagree	1.7	1.1	1.8	1.6	0.0	1.7	1.9	1.7	2.2
	Mostly disagree	2.9	3.6	2.8	3.0	6.0	2.8	2.4	2.3	2.5
	Neither agree nor disagree	8.6	10.5	8.3	8.7	10.2	8.7	8.3	10.7	5.7
	Mostly agree	38.7	45.5	37.4	38.7	48.5	37.9	38.8	43.8	33.3
	Definitely agree	48.1	39.3	49.7	47.9	35.3	48.9	48.6	41.5	56.3
My confidence to be creative or innovative has developed during my programme	Definitely disagree	3.5	3.2	3.6	3.6	4.2	3.5	3.5	2.7	4.3
	Mostly disagree	7.3	6.9	7.5	7.7	7.7	7.7	5.9	6.4	5.4
	Neither agree nor disagree	16.5	20.4	15.7	16.4	21.4	16.0	16.8	19.8	13.6
	Mostly agree	38.1	36.5	38.4	38.2	36.3	38.3	37.9	36.6	39.3
	Definitely agree	34.5	33.0	34.8	34.2	30.4	34.5	36.0	34.6	37.5
My understanding of research integrity (e.g. rigour, ethics, transparency, attributing the contribution of others) has developed during my programme	Definitely disagree	1.9	1.5	1.9	1.9	1.2	1.9	1.7	1.7	1.8
	Mostly disagree	2.4	2.8	2.3	2.5	2.9	2.5	1.7	2.7	0.7
	Neither agree nor disagree	7.7	10.3	7.2	7.8	10.6	7.6	7.1	10.1	3.9
	Mostly agree	35.5	35.3	35.5	35.7	34.1	35.8	34.8	36.0	33.6
	Definitely agree	52.6	50.1	53.1	52.1	51.2	52.2	54.6	49.5	60.0

Questions relating to *Other Transferable Skills*

Table 6.10 *Transferable Skills*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
My ability to manage projects has developed during my programme	Definitely disagree	3.6	3.5	3.6	3.7	6.1	3.5	2.9	2.1	3.7
	Mostly disagree	6.9	7.1	6.9	6.8	6.7	6.7	7.6	7.3	7.9
	Neither agree nor disagree	15.1	18.3	14.5	14.7	18.9	14.4	16.5	18.0	15.0
	Mostly agree	40.9	37.3	41.5	41.8	36.0	42.2	36.9	38.1	35.6
	Definitely agree	33.6	33.8	33.6	33.0	32.3	33.1	36.2	34.6	37.8
My ability to communicate information effectively to diverse audiences has developed during my programme	Definitely disagree	3.1	3.7	3.0	3.1	5.8	3.0	2.9	2.5	3.3
	Mostly disagree	7.5	8.5	7.4	7.3	8.3	7.3	8.4	8.6	8.2
	Neither agree nor disagree	17.9	23.4	17.0	17.3	23.7	16.9	20.4	23.3	17.5
	Mostly agree	39.4	34.5	40.3	40.6	31.4	41.3	34.5	36.2	32.7
	Definitely agree	32.1	29.9	32.3	31.7	30.8	31.6	33.8	29.4	38.3
I have developed contacts or professional networks during my programme	Definitely disagree	6.6	8.4	6.2	6.4	8.8	6.2	7.3	8.2	6.4
	Mostly disagree	12.7	15.5	12.2	12.7	15.6	12.5	12.7	15.5	9.7
	Neither agree nor disagree	17.4	17.5	17.3	17.4	15.0	17.6	17.2	18.9	15.4
	Mostly agree	35.8	33.0	36.4	36.1	36.3	36.1	34.6	31.3	38.2
	Definitely agree	27.5	25.5	27.9	27.4	24.4	27.6	28.1	26.1	30.3
I have increasingly managed my own professional development during my programme	Definitely disagree	3.5	3.3	3.6	3.6	4.9	3.4	3.3	2.4	4.4
	Mostly disagree	5.8	5.0	6.0	6.0	5.6	6.0	5.3	4.7	5.9
	Neither agree nor disagree	14.4	16.2	14.1	14.4	13.0	14.5	14.2	17.9	10.3
	Mostly agree	40.7	41.0	40.6	40.8	42.0	40.7	40.2	40.5	39.9
	Definitely agree	35.6	34.5	35.8	35.2	34.6	35.4	36.9	34.5	39.6

Questions relating to *Responsibilities and Supports*

Table 6.11 *Responsibilities and Supports*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
I understand my responsibilities as a research degree student	Definitely disagree	1.3	1.5	1.3	1.2	1.2	1.2	1.9	1.7	2.2
	Mostly disagree	3.5	4.7	3.3	3.6	6.0	3.4	3.1	4.0	2.2
	Neither agree nor disagree	5.5	5.8	5.5	5.4	4.2	5.5	6.1	6.6	5.5
	Mostly agree	42.7	41.7	42.8	43.6	44.6	43.5	38.8	40.1	37.5
	Definitely agree	46.9	46.4	47.1	46.2	44.0	46.5	50.1	47.7	52.7
I am aware of my supervisor(s)' responsibilities towards me as a research degree student	Definitely disagree	2.2	3.2	2.0	2.0	4.2	1.9	2.6	2.6	2.5
	Mostly disagree	6.3	7.7	6.0	6.3	8.4	6.1	6.2	7.3	5.1
	Neither agree nor disagree	6.9	7.1	6.9	7.1	4.8	7.3	6.1	8.3	3.6
	Mostly agree	40.7	38.5	41.1	41.1	39.2	41.2	39.0	38.1	40.0
	Definitely agree	44.0	43.6	44.1	43.5	43.4	43.6	46.1	43.7	48.7
Other than my supervisor(s), I know who to approach if I am concerned about any academic aspect of my research degree programme	Definitely disagree	6.5	6.6	6.5	6.6	8.4	6.5	6.2	5.6	6.9
	Mostly disagree	13.5	15.8	13.1	13.5	15.7	13.3	13.7	15.9	11.3
	Neither agree nor disagree	10.9	9.0	11.2	11.2	9.6	11.2	9.7	8.6	10.9
	Mostly agree	33.3	30.3	33.8	33.5	25.9	34.0	32.2	32.8	31.6
	Definitely agree	35.8	38.2	35.4	35.3	40.4	35.0	38.1	37.1	39.3
How aware are you of the various student supports available? (Recreation, healthcare, counselling, etc.)	Very little	16.9	21.1	16.1	16.3	21.6	15.9	19.1	20.8	17.3
	Some	46.6	44.8	46.9	46.5	45.1	46.6	46.8	44.6	49.2
	Quite a bit	26.5	25.5	26.7	27.2	25.9	27.3	23.6	25.3	21.8
	Very much	10.1	8.6	10.3	10.0	7.4	10.2	10.5	9.3	11.7
My institution values and responds to feedback from research degree students	Definitely disagree	8.4	5.3	9.0	9.4	7.4	9.6	3.8	4.1	3.4
	Mostly disagree	13.6	10.3	14.1	14.0	11.0	14.2	11.6	9.9	13.5
	Neither agree nor disagree	32.9	36.9	32.0	33.3	37.4	32.8	31.1	36.6	25.1
	Mostly agree	27.8	24.8	28.3	27.5	27.6	27.6	28.8	23.3	34.8
	Definitely agree	17.5	22.6	16.6	15.8	16.6	15.8	24.7	26.0	23.2

Questions relating to *Personal Outlook*

Table 6.12 *Personal Outlook*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
I am satisfied with my life nowadays	Definitely disagree	8.3	5.8	8.7	9.0	9.8	9.0	5.0	3.6	6.6
	Mostly disagree	17.6	17.8	17.6	18.1	21.3	17.9	15.4	15.8	15.0
	Neither agree nor disagree	17.5	17.3	17.5	17.2	15.9	17.3	18.9	18.2	19.7
	Mostly agree	41.5	43.3	41.2	41.5	39.6	41.6	41.8	45.2	38.0
	Definitely agree	15.1	15.8	14.9	14.2	13.4	14.2	18.9	17.2	20.8
I am satisfied with my life within my institution nowadays	Definitely disagree	8.0	4.1	8.7	8.9	8.8	8.9	4.3	1.7	7.4
	Mostly disagree	17.8	16.0	18.1	18.8	15.6	19.0	13.7	16.2	11.0
	Neither agree nor disagree	19.8	22.0	19.4	19.0	20.6	18.8	23.3	22.8	23.9
	Mostly agree	39.6	38.2	39.9	39.4	33.1	39.8	40.7	40.9	40.4
	Definitely agree	14.7	19.7	13.9	14.0	21.9	13.5	17.9	18.5	17.3
I am satisfied with my work-life balance	Definitely disagree	12.4	8.3	13.2	12.8	11.7	13.0	10.5	6.4	15.0
	Mostly disagree	23.9	25.2	23.6	24.4	23.9	24.3	21.9	25.9	17.6
	Neither agree nor disagree	17.7	17.0	17.8	17.4	14.1	17.6	19.1	18.5	19.8
	Mostly agree	34.6	37.8	34.1	34.6	41.7	34.2	34.6	35.7	33.3
	Definitely agree	11.4	11.7	11.3	10.8	8.6	10.9	13.9	13.5	14.3
There is someone in my institution I can talk to about my day-to-day problems	Definitely disagree	13.3	12.3	13.5	14.4	17.5	14.2	8.5	9.4	7.5
	Mostly disagree	20.7	22.3	20.4	21.0	25.6	20.7	19.2	20.5	17.7
	Neither agree nor disagree	21.0	21.0	21.0	20.3	16.9	20.5	24.2	23.2	25.2
	Mostly agree	28.3	26.5	28.6	28.1	25.6	28.2	29.3	26.9	32.0
	Definitely agree	16.7	17.9	16.5	16.2	14.4	16.3	18.8	19.9	17.7
I feel that my research degree programme is worthwhile	Definitely disagree	3.0	1.9	3.2	3.2	2.4	3.3	2.1	1.7	2.6
	Mostly disagree	4.2	3.2	4.4	4.3	3.0	4.4	3.8	3.3	4.4
	Neither agree nor disagree	12.4	10.1	12.9	13.0	10.9	13.2	10.1	9.7	10.7
	Mostly agree	35.0	35.3	34.9	35.5	40.0	35.2	32.7	32.7	32.7
	Definitely agree	45.4	49.5	44.6	44.0	43.6	44.0	51.2	52.7	49.6

Questions relating to *Motivations*

Table 6.13 *Motivations*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
My interest in my subject	Priority 1	42.6	38.7	43.4	43.9	44.2	43.9	37.2	35.6	38.8
	Priority 2	21.0	21.8	20.8	20.9	17.6	21.1	21.5	24.1	18.7
	Priority 3	12.0	12.4	11.9	12.0	13.3	11.9	11.8	11.9	11.7
Improving my career prospects for an academic/ research career	Priority 1	21.8	25.2	21.1	20.5	18.8	20.5	27.4	28.7	26.0
	Priority 2	22.5	22.0	22.7	22.3	22.4	22.4	23.4	21.8	25.3
	Priority 3	13.4	9.6	14.1	14.0	10.9	14.2	11.1	8.9	13.6
Improving my career prospects outside of an academic/ research career	Priority 1	12.6	14.7	12.3	12.5	15.8	12.2	13.4	14.2	12.5
	Priority 2	12.9	13.0	12.9	12.9	16.4	12.6	13.0	11.2	15.0
	Priority 3	11.5	14.1	11.1	11.4	15.2	11.1	12.2	13.5	10.6
I was encouraged by a former academic tutor/ supervisor	Priority 1	3.3	5.3	2.9	2.9	4.8	2.8	4.9	5.6	4.0
	Priority 2	7.3	7.5	7.3	7.4	6.7	7.4	7.1	7.9	6.2
	Priority 3	9.7	12.4	9.2	8.7	8.5	8.7	14.2	14.5	13.9
The funding was available	Priority 1	3.6	2.6	3.8	3.6	1.8	3.8	3.3	3.0	3.7
	Priority 2	9.2	10.5	9.0	8.6	7.3	8.7	11.6	12.2	11.0
	Priority 3	14.2	15.6	13.9	14.0	17.6	13.7	15.3	14.5	16.1
It felt like a natural step for me	Priority 1	8.5	7.3	8.7	8.8	6.7	8.9	7.3	7.6	7.0
	Priority 2	13.3	10.5	13.8	14.1	13.3	14.1	9.9	8.9	11.0
	Priority 3	17.5	15.2	17.9	18.1	13.3	18.4	14.9	16.2	13.6
I felt inspired to work with a particular academic	Priority 1	1.3	1.1	1.4	1.4	0.6	1.4	1.2	1.3	1.1
	Priority 2	4.2	4.1	4.2	4.4	4.8	4.4	3.1	3.6	2.6
	Priority 3	6.0	6.0	6.0	6.4	9.1	6.3	4.2	4.3	4.0
Professional development or training	Priority 1	4.7	3.8	4.8	4.8	5.5	4.8	4.2	3.0	5.5
	Priority 2	8.4	9.8	8.1	8.2	10.9	8.0	9.4	9.2	9.5
	Priority 3	13.1	12.8	13.1	13.0	9.7	13.3	13.4	14.5	12.1
Other	Priority 1	1.5	1.3	1.6	1.6	1.8	1.6	1.2	1.0	1.5
	Priority 2	0.8	0.9	0.8	0.8	0.6	0.9	0.7	1.0	0.4
	Priority 3	1.6	1.3	1.7	1.5	1.8	1.5	1.9	1.0	2.9

Questions relating to *Career Aspirations*

Table 6.14 *Career Aspirations*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
Academic career in higher education (either research and teaching, or teaching only)	Priority 1	38.7	37.8	38.9	38.5	26.8	39.3	40.0	43.9	35.8
	Priority 2	17.4	17.4	17.4	17.3	20.1	17.1	18.0	15.9	20.3
	Priority 3	12.3	12.9	12.3	12.0	12.8	12.0	14.0	13.0	15.1
Research career in higher education	Priority 1	11.8	9.2	12.2	11.6	11.0	11.7	12.4	8.3	17.0
	Priority 2	29.2	26.2	29.7	29.9	25.6	30.2	26.2	26.6	25.8
	Priority 3	11.2	11.6	11.1	11.3	12.2	11.3	10.5	11.3	9.6
Other career in higher education	Priority 1	1.1	0.6	1.2	1.0	0.0	1.1	1.7	1.0	2.6
	Priority 2	3.6	6.0	3.1	3.3	3.7	3.2	4.9	7.3	2.2
	Priority 3	9.2	10.1	9.0	9.2	11.6	9.1	9.1	9.3	8.9
Research career outside higher education (e.g. in a private research organisation, a charity or in an industrial environment)	Priority 1	20.8	14.8	21.9	22.2	21.3	22.3	14.7	11.3	18.5
	Priority 2	17.5	14.2	18.0	17.9	16.5	18.0	15.6	13.0	18.5
	Priority 3	17.6	15.3	17.9	18.0	17.1	18.0	15.6	14.3	17.0
Teaching (at a level below higher education)	Priority 1	1.4	3.2	1.0	1.2	3.0	1.1	2.1	3.3	0.7
	Priority 2	3.9	5.8	3.5	3.6	3.7	3.6	4.9	7.0	2.6
	Priority 3	5.2	5.6	5.2	5.0	3.7	5.1	6.3	6.6	5.9
Returning to, or remaining with, employer who is sponsoring your degree	Priority 1	3.9	3.7	4.0	3.7	3.0	3.7	5.1	4.0	6.3
	Priority 2	3.3	2.2	3.5	3.3	1.8	3.4	3.3	2.3	4.4
	Priority 3	2.5	1.3	2.6	2.7	0.6	2.8	1.4	1.7	1.1
Returning to, or remaining with, employer who is not sponsoring your degree	Priority 1	2.8	5.4	2.4	2.6	4.3	2.5	3.8	6.0	1.5
	Priority 2	2.4	1.7	2.5	2.3	1.2	2.3	2.8	2.0	3.7
	Priority 3	2.3	2.6	2.2	2.3	2.4	2.3	2.3	2.7	1.8
Self-employment (including setting up your own business)	Priority 1	3.9	7.1	3.3	3.2	6.7	3.0	6.8	7.3	6.3
	Priority 2	6.0	8.2	5.7	5.4	6.7	5.4	8.6	9.0	8.1
	Priority 3	7.9	11.2	7.3	7.2	8.5	7.1	10.7	12.6	8.5
Any other professional career	Priority 1	5.4	7.7	5.0	5.7	12.2	5.2	4.2	5.3	3.0
	Priority 2	8.3	10.5	7.9	8.4	12.2	8.2	7.9	9.6	5.9
	Priority 3	11.1	9.5	11.4	11.1	9.1	11.2	11.0	9.6	12.5
Not sure or not decided yet	Priority 1	7.1	7.7	6.9	7.1	7.3	7.0	7.3	8.0	6.6
	Priority 2	3.1	4.3	2.9	3.1	4.9	2.9	3.5	4.0	3.0
	Priority 3	10.5	10.3	10.5	10.6	10.4	10.7	9.8	10.3	9.2
Other	Priority 1	2.9	2.6	3.0	3.2	4.3	3.1	1.7	1.7	1.8
	Priority 2	1.0	0.4	1.1	1.1	0.6	1.1	0.7	0.3	1.1
	Priority 3	2.0	2.6	1.9	2.0	3.0	1.9	2.1	2.3	1.8

Questions relating to *Overall Experience*

Table 6.15 *Overall Experience*

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
How would you evaluate your entire research experience at this institution?	Poor	5.5	4.3	5.7	5.8	4.8	5.9	4.0	4.0	4.0
	Fair	19.6	19.9	19.6	19.6	19.4	19.7	19.6	20.1	19.0
	Good	49.3	50.2	49.0	49.7	48.5	49.6	47.7	51.2	43.8
	Excellent	25.6	25.6	25.7	24.9	27.3	24.8	28.8	24.8	33.2
I am confident that I will complete my research degree programme within my institution's expected timescale	Definitely disagree	6.3	4.3	6.7	6.6	4.3	6.7	5.1	4.3	5.9
	Mostly disagree	12.3	11.9	12.4	12.2	10.4	12.3	12.9	12.6	13.2
	Neither agree nor disagree	11.5	11.6	11.6	11.1	10.4	11.1	13.6	12.3	15.1
	Mostly agree	38.5	34.9	39.0	39.7	40.5	39.5	33.2	31.9	34.6
	Definitely agree	31.4	37.3	30.4	30.5	34.4	30.3	35.3	38.9	31.3

Table 6.16 Withdrawal

		All responses %			Cohort > 250 %			Cohort < 250 %		
		Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10	Total	NFQ 9	NFQ 10
Have you ever seriously considered withdrawing from your research degree programme? (Select all that apply)	No, I have not seriously considered withdrawing	64.1	64.2	64.0	64.3	67.9	64.0	63.0	62.3	63.9
	Yes, for financial reasons	14.3	12.3	14.7	14.4	9.9	14.7	13.9	13.6	14.2
	Yes, for personal or family reasons	16.0	19.0	15.6	15.8	16.0	15.8	17.2	20.5	13.5
	Yes, for health reasons	9.2	7.5	9.5	9.8	8.6	9.9	6.8	7.0	6.6
	Yes, for employment reasons	6.9	7.8	6.8	6.6	4.9	6.7	8.3	9.3	7.3
	Yes, to transfer to another institution	4.2	3.2	4.3	4.2	2.5	4.4	3.8	3.6	4.0
	Other (please state)	6.6	5.8	6.8	6.8	5.6	6.9	5.9	6.0	5.8

Appendix 4
Project rationale and governance

The *National Strategy for Higher Education to 2030*[47], published in 2011, recommended that higher education institutions put in place systems to capture feedback from students to inform institutional and programme management, as well as national policy. It also recommended that every higher education institution put in place a comprehensive anonymous student feedback system, coupled with structures to ensure that action is taken promptly in relation to student concerns. This recommendation was informed by legislation (namely, reference to the involvement of students in evaluating the quality of their educational experience in the *Universities Act, 1997*, and the *Qualifications (Education and Training) Act, 1999)* and other key policy drivers, such as *Standards and Guidance for Quality Assurance in the European Higher Education Area*[48] and *Common Principles for Student Involvement in Quality Assurance/Quality Enhancement*[49]. The National Strategy report noted in 2011 that "substantial progress (in this area) has been made" but also stated that "students still lack confidence in the effectiveness of current mechanisms and there remains considerable room for improvement in developing student feedback mechanisms and in closing feedback loops."

In 2012, a national project structure was established, which was representative of higher education institutions and relevant organisations, including the Union of Students in Ireland. This project team implemented a pilot national student survey called the Irish Survey of Student Engagement in 2013, involving all Universities, Institutes of Technology, and most Colleges of Education. The national pilot was regarded as successful, leading to an agreement to proceed to full implementation in 2014 and future years. A full report on implementation of the 2013 national pilot and other resources and results from subsequent years' implementation are published on www.studentsurvey.ie.

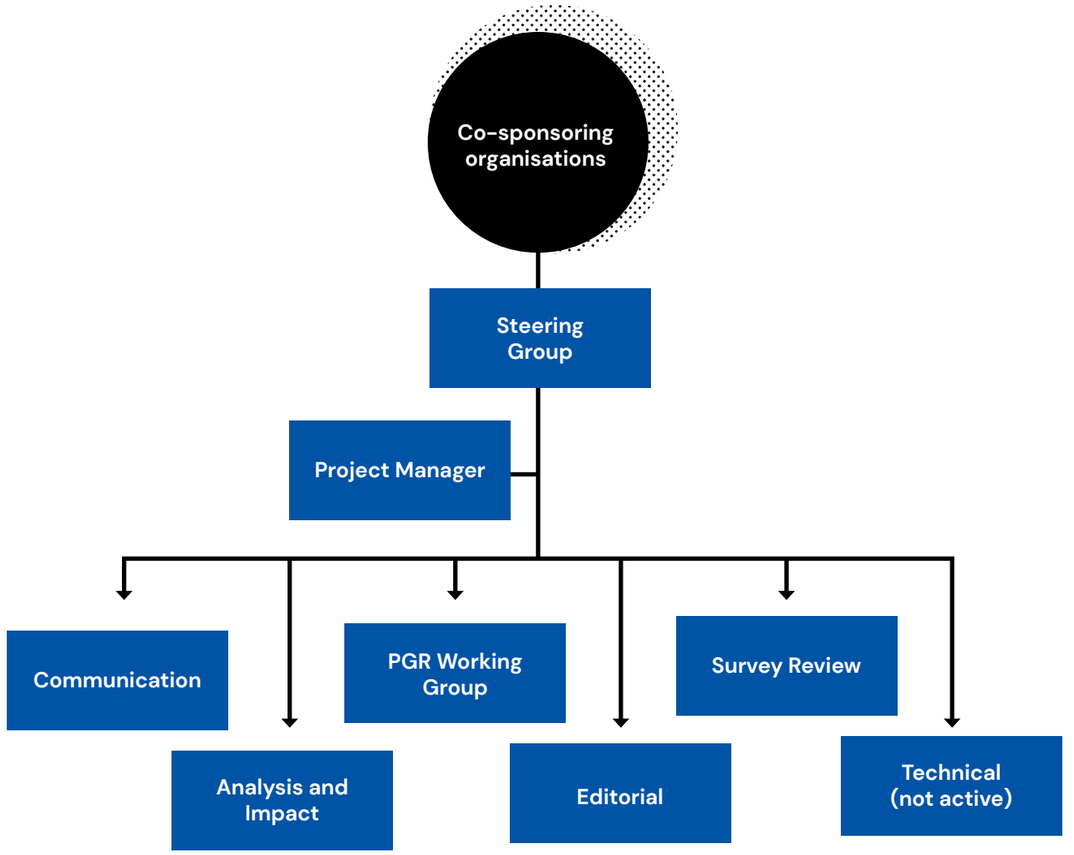
A significant development was achieved in 2018 with the pilot Irish Survey of Student Engagement for Postgraduate Research Students. This discrete question set was offered to the body of students enrolled on programmes leading to postgraduate research degrees. The questions draw extensively from the Postgraduate Research Experience Survey (PRES) used in the UK. The StudentSurvey.ie PGR Working Group continues to oversee the bedding down of the survey.

The Irish Survey of Student Engagement and the Irish Survey of Student Engagement for Postgraduate Research Students were rebranded in 2019 and are now known as StudentSurvey.ie and PGR StudentSurvey.ie respectively.

Implementation of StudentSurvey.ie and PGR StudentSurvey.ie is funded by the Higher Education Authority (HEA) as a shared service for participating institutions. The project is co-sponsored by the HEA, Irish Universities Association (IUA), Technological Higher Education Association (THEA), and Union of Students in Ireland (USI) (Fig. 6.1).

A representative national Steering Group maintains strategic direction for the project. In 2019, this group was reduced in number and the primary focus on strategic direction re-affirmed. It now consists of a representative of each of the co-sponsoring organisations, two representatives from the university sector, two representatives from the technological higher education sector, one representative from Quality and Qualifications Ireland, and the StudentSurvey.ie Project Manager. The group is called the StudentSurvey.ie Steering Group.

In addition, there are a number of Groups addressing specific elements of the project (Fig. 6.1). A full-time StudentSurvey.ie Project Manager leads developments and ensures coherence and consistency between the various elements of the project.



Co-sponsoring organisations

HEA HIGHER EDUCATION AUTHORITY AN tÚDARÁS um ARD-OIDEACHAS
iua IRISH UNIVERSITIES ASSOCIATION
thea TECHNOLOGICAL HIGHER EDUCATION ASSOCIATION
USI Union of Students in Ireland Aontas na Mac Léinn in Éirinn

Fig. 6.1 Governance and management, including co-sponsoring organisations, of StudentSurvey.ie

47. National Strategy for Higher Education to 2030 (www.hea.ie/assets/uploads/2017/06/National-Strategy-for-Higher-Education-2030.pdf)
48. Quality Assurance in the European Higher Education Area (www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf)
49. Student Involvement in Quality Assurance/Quality Enhancement (https://www.ucd.ie/t4cms/iheqncommonprinciplesstudentinvolvementdec2009.doc.pdf)

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HEA HIGHER EDUCATION AUTHORITY
AN tÚDARÁS um ARD-OIDEACHAS

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