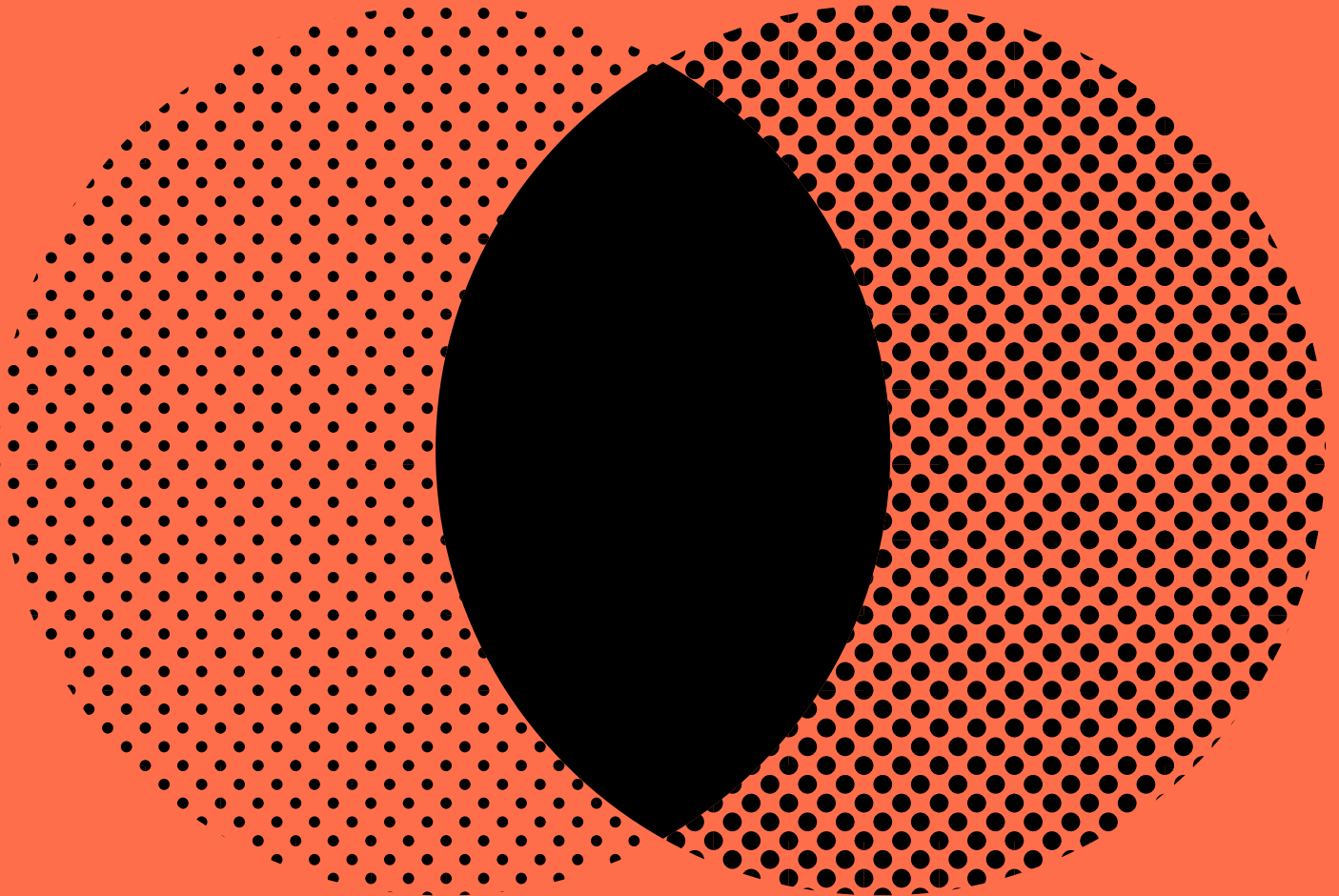


# Irish Survey of Student Engagement

## Results of qualitative data analysis projects

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Report 4 of 5





## Results of qualitative data analysis projects

**Name of Report:** PGR StudentSurvey.ie - Qualitative Data Analysis Report

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**Organisation/ Institution:** <sup>1</sup> Trinity College Dublin, <sup>2</sup> Marino Institute of Education

### Foreword

The StudentSurvey.ie Steering Group is pleased to publish the results of five research projects analysing the qualitative data generated by the free-text response questions in StudentSurvey.ie and PGR StudentSurvey.ie. The results contained within this report make up one part of this research series.

Five projects were funded by research bursaries offered by StudentSurvey.ie in October 2020. The aim of the bursary awards was to promote greater ownership and encourage wider use of the StudentSurvey.ie and PGR StudentSurvey.ie data. Proposals for the analysis of the qualitative data emerging from StudentSurvey.ie and PGR StudentSurvey.ie were invited from members of the research community within the participating institutions, as well as commercial data analysis companies. The projects were completed in May 2021.

Each project is an independent project undertaken by qualified and experienced researchers on behalf of StudentSurvey.ie. Each project took a unique approach. Some projects involved analysis of all the qualitative data for a given year(s), and some homed in on a subset of the data. Some undertook a qualitative methodology, while others applied quantitative methods to qualitative data. The commonalities between all five projects are that they all utilised well-grounded methodologies, offer mechanisms for replication of the analysis in future years, and are innovative and authentic.

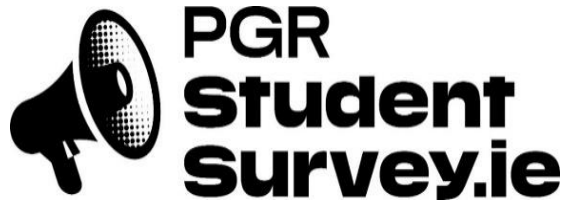
These results are the first of their kind for StudentSurvey.ie and PGR StudentSurvey.ie and we hope they are the first of many research projects involving the qualitative results of these surveys.

### What are StudentSurvey.ie and PGR StudentSurvey.ie?

StudentSurvey.ie (the Irish Survey of Student Engagement) is an annual national survey of student engagement among first year undergraduate, final year undergraduate and taught postgraduate students in higher education institutions in Ireland.

PGR StudentSurvey.ie (the Irish Survey of Student Engagement for Postgraduate Research Students) is a biennial national survey of student engagement among Masters by Research students and PhD students in higher education institutions in Ireland.

Both surveys are designed to focus on student engagement, namely the amount of time and effort that students put into meaningful and purposeful educational activities, and the extent to which institutions provide such opportunities and encourage students to engage with them. The data collected reflect students' self-reported perceptions of their experiences.



**PGR StudentSurvey.ie**

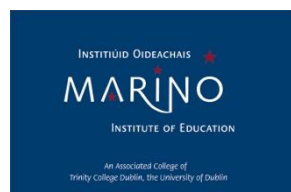
## **Qualitative Data Analysis Report**

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The full text of this publication is available at: [www.studentsurvey.ie](http://www.studentsurvey.ie)

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Suggested citation:

When referencing this document please use the following citation:

Share, M, Delaney, C and Mc Daid R (2021) PGR StudentSurvey.ie Qualitative Data Analysis Report. StudentSurvey.ie. Dublin.

June 2021

## Contents

<b>Background, context and design .....</b>	<b>5</b>
Research design .....	5
Stage one analysis .....	6
Stage two analysis.....	6
Report structure.....	7
<b>Section 1: Stage one analysis .....</b>	<b>8</b>
Responses to open-ended questions (9 domain specific) .....	8
Themes and sub-themes.....	10
Responses to non-domain specific open-ended questions.....	15
Interpretive analysis.....	17
Institutional structures and supports .....	17
Supervision experience .....	25
Development opportunities.....	28
The affective domain .....	32
Summary: stage one analysis.....	37
<b>Section 2: Composite case study narratives.....</b>	<b>39</b>
Method for development of the composite case studies .....	39
Seb: Full-time, Irish PhD Student .....	40
Mai: Full-time, International PhD Student.....	41
Tessa: Full-time research master's student.....	43
Ben: Part-time research master's student.....	45
Interpretation .....	46
<b>Section 3: Writing and thesis production.....</b>	<b>48</b>
Introduction .....	48
A mysterious process .....	50
Thesis presentation and production.....	50
Writing for publication.....	51
Writing and the role of the supervisor .....	52
Supervisor feedback practices .....	52
Institutional responsibilities and writing .....	55
Modules for writing support.....	55
Physical space for writing .....	55
Interpretation .....	56
Summary and conclusion.....	57

<b>Section 4: Issues for consideration for future PGR StudentSurvey.ie.....</b>	<b>59</b>
Survey design .....	59
Wording .....	59
Relevance of questions .....	59
Closing the feedback loop.....	60
<b>References .....</b>	<b>62</b>

## Figures

Figure 1 Responses to open-ended survey questions .....	8
Figure 2 Number of responses to nine open-ended questions by programme type .....	9

## Tables

Table 1 Research Infrastructure.....	10
Table 2 Supervision .....	10
Table 3 Research Culture .....	11
Table 4 Induction, progression arrangements and assessment.....	11
Table 5 Development Opportunities .....	12
Table 6 Research Skills Development .....	13
Table 7 Development of Other Transferable Skills .....	13
Table 8 Student Staff Responsibilities .....	14
Table 9 Personal Outlook.....	14
Table 10 What aspects/elements of your research degree are most valuable (1417 responses)? .....	15
Table 11 What aspects of your research degree could be improved? (1352 responses) .....	16
Table 12 Themes and sub-themes .....	17
Table 13 Themes and sub-themes.....	50

## Background, context and design

The National Strategy for Higher Education to 2030 (DES, 2011) recommended that Higher Education Institutions (HEIs) should develop systems to capture student feedback and use these to inform institutional and programme management, as well as national policy. One of the key components of this recommendation was the establishment of a national student survey system with a commitment to publish the survey results. The importance of capturing students' views in relation to the quality of their educational experience has been well established (Richardson, et al., 2007; Thiel, 2019). StudentSurvey.ie provides Irish HEIs with increasing information to support policies and practices that can lead to greater student retention, academic achievement and overall higher satisfaction with their educational experience. The PGR StudentSurvey.ie provides an important opportunity for postgraduate research students (PGRS) to report on their experiences in relation to the amount of time and effort that students put into meaningful and purposeful educational activities and the extent to which institutions provide such opportunities and encourage students to engage with them (StudentSurvey.ie, 2021).

In November 2020, StudentSurvey.ie invited proposals for the analysis of the qualitative data component of the 2019 PGR StudentSurvey.ie. Following a competitive tendering process, one of the contracts to undertake the research was awarded to Dr Michelle Share, Principal Investigator [PI] (School of Education, Trinity College Dublin in collaboration with Dr Rory Mc Daid, Marino Institute of Education. Dr Caitriona Delaney, joined the team as a data analyst. The research design described below formed the basis of that successful research tender.

## Research design

The research brief indicated that approximately two thousand postgraduate research students answered open-ended questions on the 2019 PGR Student survey.ie. The open-ended question 'if you have any further comments about . . . ' is applied to the nine survey domains<sup>1</sup>. The survey also provides two other non-domain specific open-ended questions:

- What aspects/elements of your research degree programme are most valuable?
- What aspects of your research degree experience could be improved?

Our proposal suggested a two-stage approach to the analysis of PGR StudentSurvey.ie (2019). The first stage comprised a quantitative content analysis followed by a qualitative interpretation of the free-text data across the nine survey domains and the two non-domain specific open-ended questions. The second stage involved the application of a specific research question to the free-text data 'What are postgraduate research students' experiences with writing and thesis production?'

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<sup>1</sup> Research infrastructure and facilities; supervision; research culture; induction and progression; development opportunities; research skills development; other transferable skills; student -staff responsibilities; personal outlook

### *Stage one analysis*

The objective of stage one of the analysis was to develop themes and sub-themes from the text associated with the nine open-ended questions and the two non-domain specific open-ended questions. Upon receipt of the PGR StudentSurvey.ie data file, all free-text responses to all open-ended questions were checked for responses that were redundant/not meaningful. These included responses such as: Not applicable/N/A Don't know/???. Once the data file was cleaned, the survey data file [Excel spreadsheet] was exported to NVivo qualitative data analysis software. The following steps were then taken:

- Text associated with open-ended questions was auto-coded according to the survey domain in which the response was made. Each of the survey domains were designated as content categories
- The number and percentage of responses by domain and programme type were calculated
- The questions that preceded the open-ended questions were used as *a priori* codes for the analysis of the text within the survey content categories. In some instances there was overlap and so the number of codes was reduced
- A text exploration for the most frequently occurring words in answer to the two non-specific open-ended questions was undertaken; text searches were also conducted around the context each of the words.

Following the completion of the content analysis phase, each theme and subtheme was subjected to interpretive analysis for the purposes of identification of more nuanced sub-themes.

### *Stage two analysis*

In stage two of the free-text analysis a specific research question was applied to the data set:

What are postgraduate research students' experiences with writing and thesis production?

Although PGR StudentSurvey.ie does not specifically ask students about their thesis writing experiences, the free-text comments were examined to identify where students mentioned writing, what they had to say about it, and in what context. Themes and sub-themes on writing and thesis production were identified through keyword searching across the free-text responses to the nine survey domains and the two open-ended questions. NVivo qualitative data analysis software was used for text searching and the identification of themes.



## Report structure

The report is presented in **four sections**.

**Section one** describes the results of stage one of the data analyses: the quantitative content analysis of the nine survey domains and the analysis of the two non-domain specific open-ended questions.

Section one also includes the interpretive analysis of the data derived from the quantitative content analysis phase. Here we present four key themes: institutional structures and supports; supervision experience; development opportunities, the affective domain, and related sub-themes.

**In section two** we use composite case study narratives to illustrate the main themes derived from the qualitative data analysis through the stories of Seb, an Irish PhD student, Mai, an international PhD student, Tessa, a full-time research master's student and Ben, a part-time research master's student.

**In section three** the findings from stage two of the data analysis are presented: *Writing and Thesis Production*. This section describes and interprets PGRS' experiences with the process of writing at various points in their candidature and pays particular attention to thesis production. The analysis is presented across three key themes: a mysterious process; writing and the role of the supervisor, and institutional responsibilities. **Section four** concludes the report with some issues for consideration in the future design and implementation of PGR StudentSurvey.ie

## Section 1: Stage one analysis

### Responses to open-ended questions (9 domain specific)

A total of 2495 responses were provided to the nine open-ended questions. Topics that attracted interest in rank order are:

1. Research infrastructure and facilities: (n=478; 19.15%)
2. Personal outlook: (n=400; 16%)
3. Development opportunities (including teaching and demonstration): (n=371; 14.8%)
4. Supervision: (n=351; 14%)
5. Research culture: (n=250; 10%)
6. Induction and progression: (n=235; 9.4%)
7. Student staff responsibilities: (n=195; 7.8%)
8. Research skills development: (n=126; 5%)
9. Other transferable skills: (n=89; 3.5%)

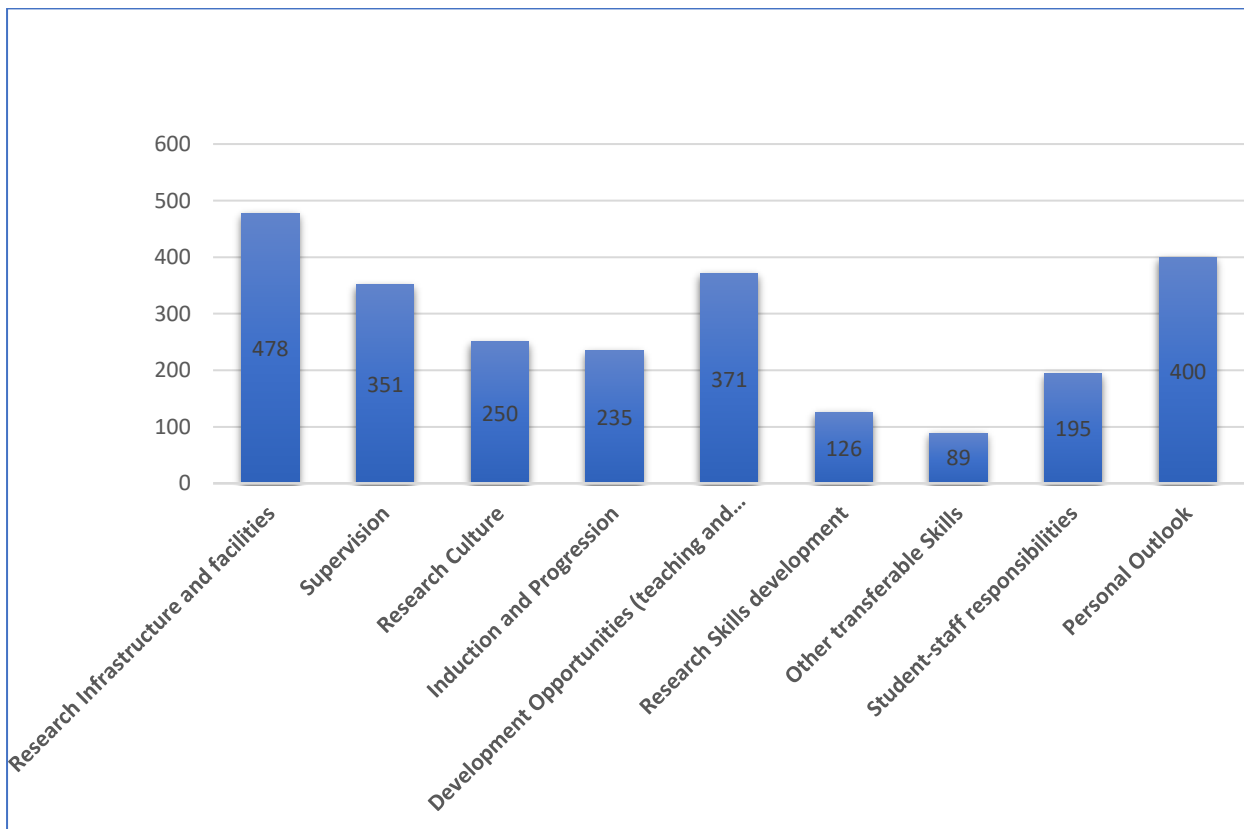


Figure 1 Responses to open-ended survey questions

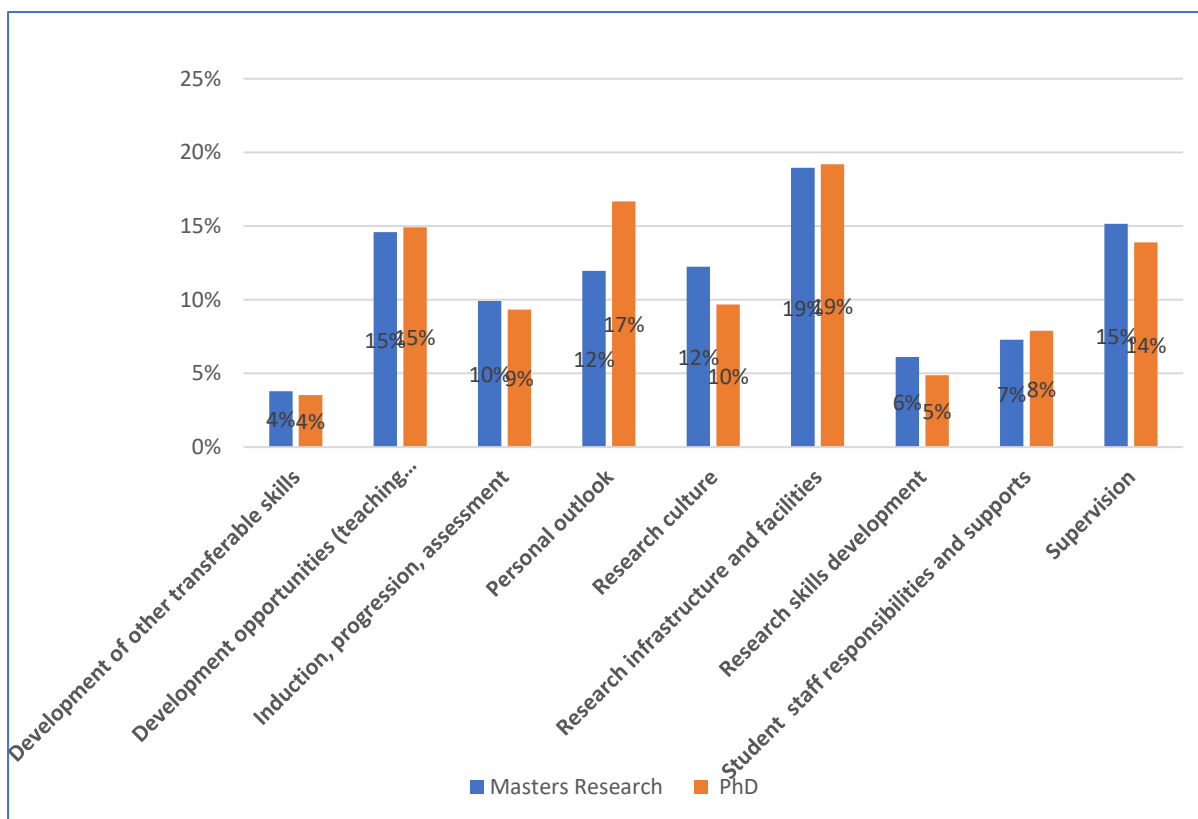


Figure 2 Number of responses to nine open-ended questions by programme type (Masters n= 343; PhD n= 2152)

Not all students responded to the open-ended questions: 136 Masters by research students (32% of cohort) and 928 PhD students (40% of cohort).

When ranked in order of the themes that attracted most responses, the two cohorts respond similarly. However, for two themes, there is a slight difference between the cohorts. Proportionally Master's students provided more responses to themes of supervision and research culture while PhD students were more likely to comment on personal outlook. For both groups, the highest proportion of responses was provided for the research infrastructure and facilities theme (19% n= 478).

Text responses for each of the nine open-ended questions were then examined to determine the content of each response. The items that preceded the open-ended questions were used to guide this analysis. As there was overlap in some of the items in the preceding questions, some thematic areas have been combined. The process was aimed at reduction and the generation of themes and sub-themes that could be explored further in the interpretive analysis.

## Themes and sub-themes

Table 1 Research Infrastructure

<b>Research Infrastructure<sup>b</sup></b> <b>N= 478</b>	
Finance matters	153
Library, computing, specialist resources	189
Working space	125
Other	48
<b>Total</b>	<b>515a</b>

*Table notes:*

<sup>a</sup> Total number of responses exceed 478 as responses may apply to more than one category

<sup>b</sup> Research Infrastructure and facilities preceding items:

- I have a suitable working space
- There is adequate provision of computing resources/facilities
- There is adequate provision of library facilities (including physical / online resources)
- I have access to the specialist resources and facilities necessary for my research

Table 2 Supervision

<b>Supervision<sup>b</sup></b> <b>N= 351</b>	
Supervision Positive	176
Supervision Critique	172
Ambiguous/NA	30
<b>Total</b>	<b>378<sup>a</sup></b>

*Table notes:*

<sup>a</sup> Total number of responses exceed 351 as responses may apply to more than one category

<sup>b</sup> Supervision

preceding items:

- 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
- My supervisor(s) help me to identify my training and development needs as a researcher

Table 3 Research Culture

<b>Research Culture<sup>b</sup></b> <b>N= 250</b>	
Research ambience	108
Discuss work with other students	45
Seminar programme	29
Wider research community	42
Ambiguous/NA	35
Part-time student issues	20
Total	279 <sup>a</sup>

Table notes:

<sup>a</sup> Total number of responses exceed 250 as responses may apply to more than one category

<sup>b</sup> Responses to Research Culture

preceding items:

- 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
- I have opportunities to become involved in the wider research community, beyond my department

Table 4 Induction, progression arrangements and assessment

<b>Induction, progression arrangements and assessment<sup>b</sup></b> <b>N= 235</b>	
Understanding of what is required	133
Orientation and induction <b>critique</b>	80
Orientation and induction <b>positive</b>	44
Ambiguous/NA	14
Part-time student issues	6
Total	277 <sup>a</sup>

Table notes:

<sup>1</sup> Total number of responses exceed 235 as responses may apply to more than one category.

<sup>2</sup> Responses to induction, progression and assessment

preceding items:

- I received an appropriate induction / orientation to my research degree programme
- I understand the requirements and deadlines for formal monitoring of my progress
- I understand the required standard for my thesis
- The final assessment procedures for my research degree are clear to me

Table 5 Development Opportunities

Development Opportunities <sup>b</sup> N = 317		
Teaching and demonstration	Critique	196
Teaching and demonstration	Positive	44
Ambiguous/NA		80
Too early in programme		33
Unaware/Not available		30
Career guidance		12
Conferences		10
Part-time student issues		7
Total		405 <sup>a</sup>

*Table notes:*

<sup>a</sup> Total number of responses exceed 317 as responses may apply to more than one category.

<sup>b</sup> Responses to teaching and demonstration dominate as these terms are included in the question wording.

Development opportunities also applied to the preceding items:

- Agreeing a personal training or development plan
- Receiving training to develop my research skills
- Receiving training to develop my other transferable skills
- Receiving advice on career options
- Taking part in a placement or internship
- Attending an academic research conference
- Presenting a paper or poster at an academic research conference
- Submitting a paper for publication in an academic journal or book
- Communicating your research to a non-academic audience
- Receiving training in entrepreneurship and innovation
- Putting training in entrepreneurship and innovation into practice e.g. submitting an invention disclosure or filing a patent
- Working as part of a team
- Working collaboratively with industry
- Working collaboratively with a civil society organisation or public organisation
- Spending time abroad as part of your research degree
- Whether you have taught (or demonstrated) at your institution during your research degree programme:

Table 6 Research Skills Development

<b>Research Skills Development <sup>b</sup></b> <b>N= 126</b>	
Research skills development positive	17
Research skills development critique	61
Modules	18
Creativity and innovation	8
Too early in programme	8
Ambiguous/NA	27
Total	139 <sup>a</sup>

Table notes:

<sup>a</sup> Total number of responses exceeds 126 as responses may apply to more than one category

<sup>b</sup> Research Skills Development preceding items:

- My skills in applying appropriate research methodologies, tools and techniques have developed during my programme
- My skills in critically analysing and evaluating findings and results have developed during my programme
- My confidence to be creative or innovative has developed during my programme
- My understanding of research integrity (e.g. rigour, ethics, transparency, attributing the contribution of others) has improved

Table 7 Development of Other Transferable Skills

<b>Development of other transferable skills <sup>b</sup></b> <b>N= 89</b>	
Development other transferable skills positive	16
Development of other transferable skills critique	31
Came equipped with skills/self-developed	26
Too early in programme	8
Ambiguous/NA	11
Total	92 <sup>a</sup>

Table notes:

<sup>a</sup> Total number of responses exceeds 89 as responses may apply to more than one category

<sup>b</sup> Development of other transferable skills preceding items:

- My ability to manage projects has developed during my programme
- My ability to communicate information effectively to diverse audiences has developed during my programme
- I have developed contacts or professional networks during my programme
- I have increasingly managed my own professional development during my programme

Table 8 Student Staff Responsibilities

<b>Student staff responsibilities and supports<sup>b</sup></b> <b>N= 195</b>	
Student supports	103
Feedback	51
Supervisor	12
Ambiguous	30
Part-time student issues	13
Total	209 <sup>a</sup>

Table notes:

<sup>a</sup> Total number of responses exceed 195 as responses may apply to more than one category

<sup>b</sup> Student staff responsibilities and supports preceding items:

- I understand my responsibilities as a research degree student
- I am aware of my supervisor
- Other than my supervisor(s), I know who to approach if I am concerned about any academic aspect of my research degree pr
- Who / what unit would you approach? (please provide the unit or role rather than an individual name)
- How aware are you of the various student supports available? (Recreation, healthcare, counselling, etc)
- My institution values and responds to feedback from research degree students

Table 9 Personal Outlook

<b>Personal outlook <sup>b</sup></b> <b>N= 400</b>	
Someone in institution to talk about day-to-day problems	191 <sup>2</sup>
Life satisfaction	19
Life satisfaction within institution	106
Research degree programme worthwhile	18
Work life balance	56
Ambiguous	21
Total	411 <sup>a</sup>

Table notes:

<sup>a</sup> Total number of responses exceeds 400 as responses may apply to more than one category

<sup>b</sup> Personal outlook preceding items:

- 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
- I feel that my research degree programme is worthwhile

<sup>2</sup> Although personal outlook contains a large proportion of responses, within this category are a large number (191/47.5%) of responses that name an area or designated position where students would turn to for help with day-to-day problems.



## Responses to non-domain specific open-ended questions

The final part of PGR StudentSurvey.ie contains two open-ended questions:

- What aspects /elements of your research degree are most valuable?
- What aspects of your research degree could be improved?

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

The text responses to the question ‘what aspects of your research degree are most valuable’ were analysed for the 30 most frequently occurring words. The words on this list<sup>3</sup> were then examined separately within their originally coded context to discern the relevance and meaning associated with the words. This resulted in the removal of nine words: new; PhD; project; development; working; learning; field; academic; access and the combination of supervisor, supervisors and supervision. The final list comprised the 10 most frequently occurring words/combinations of words in responses to aspects/elements of the research degree most valuable (Table 10):

*Table 10 What aspects/elements of your research degree are most valuable (1417 responses)?*

<b>Word</b>	<b>Count</b>
Skills/training/knowledge professional development	467
Research	416
supervisor/s/ion	350
Project	87
Students	86
Teaching	68
Department	52
modules	50
Self	49
Conferences	45

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<sup>3</sup> Research; skills; supervisor; support; work; supervisors; Learning; opportunities; project; students; training; working; development; access; experience; academic; teaching; good; opportunity; phd; department; supervision; time; modules; new; self; professional; knowledge; conferences; field

### *What aspects of your research degree could be improved?*

The text responses to the question ‘What aspects of your research degree could be improved?’ were analysed for the 30 most frequently occurring words. These words were separately examined<sup>4</sup> within their original coded context to discern the relevance and meaning associated with each word. This resulted in the removal of 16 words<sup>5</sup>, and the combination of others: modules and training, supervisor, supervisors, supervision, time; space and facilities; information and communication. The context coding for ‘Work’ (165 words) crossed a number of topics; however, around one third of the text was associated with comments pertaining to work-life balance. For this reason, ‘work’ has been renamed work-life balance and combined with ‘time’.

*Table 11 What aspects of your research degree could be improved? (1352 responses)*

<b>Word</b>	<b>Count</b>
modules and training	237
supervisor/s/ion	229
time/worklife balance	211
space and facilities	154
funding	143
information communication	105
teaching	62
skills	56

Following the reduction of the two non-domain specific open-ended questions, the entire dataset was ready for a more inductive approach to analysis. The section that follows provides details on how this analysis was conducted and presents findings according to four overarching themes and a number of sub-themes.

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Research;students;time;Phd;Work;support;funding;training;modules;better;student;supervisor;facilities;department;opportunities;access;supervision;space;available;supervisors;teaching;part;within;communication;skills;university;like;working;improved;information

5 Research; students; PhD; support; better; student; department; opportunities; access; available; part; within; university; like; working; improved

## Interpretive analysis

The text of each theme and sub-theme<sup>6</sup> derived from the previous quantitative content analysis phase was subjected to a fine-grained interpretive analysis. Exploration and coding of text was undertaken by the first author using the querying, text searching and memoing functions in NVivo. Reliability was checked by the second author who reviewed the text coded to documents for each thematic category. Areas of dissonance were noted and amended accordingly. Following this, the data was charted across four overarching themes, each of which contained a number of sub themes (Table 12).

Table 12 Themes and sub-themes

Themes	Institutional structures and supports	Supervision experience	Development opportunities	The Affective Domain
Sub-themes	Induction and orientation	Supervisory relationships	Teaching and demonstrating	Being heard and responded to
	Workspace and facilities	Understanding Student and supervisor roles	Compulsory modules	Respect
	Finance			Isolation
	Communities of practice (including peer support; seminars etc)			

### *Institutional structures and supports*

Institutional Structures and Supports is one of the four overarching themes identified through the interpretive analysis. It contains four subthemes: induction and orientation, workspace and facilities, finance and communities of practice. Although Institutional Structures and Supports is defined as an overarching theme, it also connects to theme 4: the affective domain. On occasion, when students write about matters concerning institutional structures and supports they do so in the context of being heard/not heard, respect, and feelings of isolation.

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<sup>6</sup> See Tables 1 to 11 for themes and sub-themes from quantitative content analysis

### *Induction and orientation*

Research students provided much commentary about their experiences of induction and orientation. Those who reflected on positive experiences emphasised induction/orientation activities that were formal and structured events rather than optional:

*An induction for research postgrads was started just this year. The transfer assessment procedure has been formalised and standardised over the last 18 months, previously it was treated as optional and was mostly unregulated. These are positive changes. (Orientation and Induction, positive Ref 4)*

*I visited the Postgraduate Research Orientation in February because I started outside the regular term. This was a very helpful session explaining all important deadlines, expectations and help infrastructures. (Orientation and Induction, positive Ref 12)*

Other students provided some critique of their orientation and induction experiences. Critique largely concerned the absence of an orientation/induction programme or the limitations of what had been provided:

*I have met other history research students over the months but there was no introduction to other history researchers facilitated by the department, which would have been nice as an orientation event, especially if there are a number of first year students in the same discipline. (Research culture, discuss work with other students, Ref 16).*

*The clarity with which certain requirements and deadlines relating to the degree were communicated, both during orientation and in the normal flow of things, is questionable. (Induction & Progression, critique, Ref 2)*

*The induction and orientation is very broad. Understandably there had to be a general postgraduate induction but there's need to be more specific when it comes to the difference between faculties. The departments themselves should also have a more organized induction. (Induction & Progression, neg., Ref 3)*

*There should be more formal induction days with regards what is expected of you as a researcher, hours, workload, etc. . (Induction & Progression, neg., Ref 5)*

In the absence of structured induction and orientation, many PGRS turn to other students for advice and information on how to navigate their studies:

*Relevant induction is lacking. Most of the important and relevant information is gotten from speaking with other graduate students. This should not be the case. (Induction & Progression, neg., Ref 18)*

*Although an induction for PhD students does take place- much of the 'day-to-day' required information such as how to fill out forms, where to find the forms, who to give them to, how do we get access to the research area of the foundation building or the library and get our cards validated, or the code for after-hours etc. Without having other older PhD students in my area to tell me about the little details I would never know.*

*These things make the transition much easier and less stressful and should be all included either in a booklet or in the induction session (although it might vary per discipline). (Induction & Progression, understanding of what is required, Ref 71)*

*Even though the induction and progress assessment are clearly explained at the start and throughout the studies, there is a lot of mystery and tall tales surrounding the final assessment. Most of the information is gathered from peers that have gone through it, whereas supervisors prefer to keep the mystery. (Induction & Progression, pos., Ref 10)*

Even when PGRS have received an orientation/induction to their programme, they express a desire for ongoing formal orientation. This is particularly the case for those enrolled in full-time and part-time PhD programmes where candidature can span several years and policies and regulations (eg in relation to thesis production; assessment; the viva) may change over the course of a programme. Provision of information on thesis production and assessment at induction may not seem important to students at that time, but as their candidature advances it becomes a topic on which they would like more formal guidance:

*There is a long time between initial induction and dissertation submission. In my department (and I imagine it's not unique) criteria have changed, processes have changed and aside from a long, clunky annual handbook once a year there is very little communication of these kinds of changes. And my funding - the <jobtitle removed> of the scheme don't even have a handbook that can be updated annually which leads to constant confusion and asking questions that they've probably already answered a hundred times! (Induction & Progression, neg., Ref 11)*

*No time-line explained as to when to submit soft bound thesis, arrange viva voce or final submission (length of time needed between these steps). Poor communication at the start to get settled into research programme and department. (Induction & Progression, neg., Ref 78)*

*The graduate office has provided a very helpful induction at the beginning of my PhD. The handbook of the PhD programme provides a useful guide throughout the process. The <jobtitle removed> in our school has also delivered a nice seminar where he shared his insights and experience for intermediate and final examinations. However, I felt that in general students and supervisors as well are still in need for orientation on the examinations processes, preparing and planning for examination so that it can be planned effectively. (Induction & Progression, pos., Ref 9)*

### *Workspace and facilities*

Having a suitable space in which to work, and access to facilities and equipment to undertake research are important for postgraduate research students (Kolmos, et al., 2008). Students' comments about workspaces and facilities were made in direct response to the survey domain 'Research Infrastructure'; however responses also cut across the domains of 'Research Culture' and 'Staff Student Responsibilities'.

Students' comments illustrated that the availability and quality of workspaces and facilities

impacts on their capacity to carry out research and on their overall sense of connectedness to peers and to the department/school/research centre.

PGRS wrote about their workspaces and facilities in terms of the lack of a place to work, and the quality of the space and facilities (printers, kitchen space etc):

*My working space is not adequate at all. It is below 10 degrees in the winter and I have to spend 8 hours a day there, I frequently wear a hat and gloves indoors. I spent my own money on buying a chair as the back fell off the old one and college would not buy a replacement. (Research Infrastructure, workspace, Ref 114)*

*The room is extremely stuffy and has no air circulation. It is windowless apart from a skylight that reflects sunlight directly onto the computer screens at various times throughout the day. As researchers we would often work through our lunch or into the evening, having a sink to wash a cup would be a huge advantage. (Research Infrastructure, workspace, Ref 1)*

*The quality of the PhD office areas varies greatly across campus. With some students having bright modern spaces but others having poor quality space. We are situated in the [Anonymised location] and the carpet badly needs to be replaced and cleaned, the office air quality needs to be improved the dividers replaced as they are shabby. I also think we should be issued dual monitors where available. (Research Infrastructure, workspace, Ref 96)*

*Inadequate working space, I get by on the good will of permanent staff who lend me their offices when not in use. Our shared office space is noisy and difficult to work in and has outdated PCs with no printing facilities. Specialist equipment is not available in my department, I have to buy it myself at considerable cost. (Research Infrastructure, workspace, Ref 5)*

Students' comments on the suitability of their work environment provided insight on how the condition of the space curtailed opportunities for peer support and networking. This occurred when they had no access to appropriate work space, for example, having to work in large communal spaces or avail of hot desking arrangements:

*This is related to office space. If you don't have a permanent place from which to work, how are you supposed to integrate yourself in a research community. Moreover, again in the [Anonymised location], there is not adequate communal space. The closure of the [Anonymised location] common room was a mistake and will have a detrimental effect on the research culture of the departments housed in the [Anonymised location]. (Research Culture, wider research community, Ref 17)*

*I have access to a hot desk in a noisy office. I generally work from home, as this is not suitable. The disadvantage is that being based mostly at home for work/ research purposes can be a bit isolating at times. (Research Infrastructure, workspace, Ref 48)*

*The main issue in the Department is that there is simply too few spaces to accommodate the large numbers of researchers currently employed/studying. There have been no meaningful attempts to solve this issue and as a result, some researchers are forced to use the main library or work from home, damaging the community of peers and scholars*

*that should form the core of a research department. (Research Infrastructure, workspace, Ref 38)*

For some PGRS the library was their workspace. Students in this context faced challenges related to the lack of a designated space, maintaining their space and with noise levels in open-plan seating areas:

*My only complaint is that although I have a carrel in the library, it is not in protected space. I often arrive to find my work put aside and someone using my desk. (Research Infrastructure, workspace, Ref 89)*

*Being a PhD scholar without a designated space to work in, it becomes a tedious time looking for a quiet space to work in the library. The research rooms are all booked out and the library is noisy and full. It would be great if PhD students from the English department could have designated office spaces like scholars from other departments. (Research Infrastructure, workspace, Ref 42)*

Also, in the context of their working space, PGRS reflected on the need for suitable communal eating spaces and where they could meet other students. Interestingly, support, isolation and loneliness are mentioned in the context of facilities. Specifically, PGRS consider the importance of having physical space for the development of peer support communities:

*Need more support in terms of access to facilities-there is no access to kitchen facilities (e.g., microwave, fridge, kettle) for postgraduate students. Access is limited to staff however a dispensation should be made for postgraduate researchers who can spend 8+ hours a day in an office and may not live locally. (Staff Student Responsibility, student supports, Ref 66)*

*The work space is very isolating. There is nowhere to meet up casually with other post grads. No communal post grad 'tea room'. (Research Infrastructure, workspace, Ref 7)*

*The provision of a common room would really help with these, four years of research can be very lonely and the ability to have a community is a big miss. (Research Infrastructure, workspace, Ref 78)*

PGRS undertaking laboratory-based research experienced challenges with access to labs as they were used for undergraduate teaching during the daytime. This meant that they had to work during the evenings:

*A lot of Science research students need access to teaching laboratories to use equipment and instruments but cannot access these labs if teaching labs are happening at the same time and must wait until after 6pm frequently. This means work must be done late in the evenings regularly, separating them from other students and daytime activities. Not all research students at [HEI] have assigned lab space to do research as there is a lack of space for research students. (Research Infrastructure, workspace, Ref 83)*

*Lab space is a major issue. Too many undergraduate students taking up space, using common areas etc. Make more specialised undergraduate labs! Also little to no common space for PhD students to have lunch etc. Bad for stress and mental health. (Research Infrastructure, workspace, Ref 59)*

*Unsuitable working conditions in labs (molecular lab, histology labs) in [HEI], major health and safety issues being flagged daily during the summer as indoor temperatures reaching >30 deg C. This has caused accidents and students and staff to feel unwell and even faint. Completely unacceptable and nothing is being done to fix this. Issue has been flagged multiple times. (Research Infrastructure, workspace, Ref 113)*

### Finance

The PGRS responded across several of the survey domains with comments related to finance. Comments concerned student fees; stipends, funding for conference attendance and equipment. The finance sub-theme illustrates that finance issues have a ripple effect on PGRS' skills development. Lack of finance can inhibit conference attendance and associated networking opportunities, and the opportunity to engage with a wider research community:

*I struggle to find funding so that I can attend and present at conferences. Presentation is a requirement of my thesis, so this is very frustrating. (Research Infrastructure, finance matters, Ref 5)*

*I haven't had the opportunity to attend any conferences which I think is a real shame, but as my scholarship wouldn't cover the costs it is not possible to attend. (Research Infrastructure, finance matters, Ref 143)*

*If you have enough funding it's possible to do a lot more networking, going to conference, but without enough funding for travel it can make getting involved in the wider research community that bit harder. (Research culture, wider research community, Ref 03)*

*Funding bodies and schools seem to have issues with allowing us to spend money on conferences, yet as part of our research programme, we are expected to disseminate our work at conferences. Conference fees and travel is expensive so I don't see how we are supposed to fulfil this requirement if we are not fully supported in doing so. The stipends are very meagre, we can barely survive on them as is but we are expected to somehow pay for our own conference travel. (Research Infrastructure, finance matters, Ref 13)*

For some PGRS, financial challenges impacted on their capacity to carry out their research. They reported having to fund specialist equipment or training that was not available to them at their institution and, in cases of externally-funded students, could not be drawn from their research award:

*Students on scholarships need access to specific training on using Agresso and on procurement rules. I have regularly had to spend my own money on research items because it is so much cheaper to do so and procuring them through [HEI] would annihilate my budget. E.g., I had originally planned to purchase a laptop for working on and a tablet for using as an assistive device with my research participants (people with*



*intellectual disabilities) and had costed this to fit with my IRC budget. However, [HEI] rules meant I had to stick to recommended devices and the laptop alone wiped my budget. This removed my ability to use assistive technology with my participants. I understand the issues of transparency & accountability but research students need more flexible arrangements if they are to get value for money from their funding. (Research Infrastructure, finance matters, Ref 53)*

*The computer equipment is lacking in the computer science department. Engineering has better computers in their open access lab. I've spent roughly €2,000 of my own money on necessary equipment. Personally, I need Intel CPUs with TSX extension technologies (in case you're wondering), while others need GPUs. If we didn't spend our own money on top of what our scholarship grants us we wouldn't have the equipment we have today. (Research Infrastructure, finance matters, Ref 19)*

*[I] need a SQUID (the only real way of analysing magnetism) for my magnetism research chemistry masters and it was promised that the SQUID that we have (and have had for years, out of commission) would be brought back into commission mid-way through my masters but there is no sign of that happening. It very stressful as it makes it difficult to complete my project. Also, I am paying €7000 for my self-funded masters and yet none of that goes to research materials. My supervisor has to use his own money and if he doesn't have the money? Then I can't do it. So, it feels like I'm paying €7000 and getting very little back from that money. Certainly, nothing tangible, like basic research materials. I understand it helps keep the lights on but if none of it goes towards the specific degree that I'm paying for and as such I can't do everything I need/should be able to do in my masters because I can't afford any chemicals. I'm paying enough, that I or my supervisor shouldn't go out of pocket just so I can do my research. (Research Infrastructure, finance matters, Ref 79)*

*University does not have licenses for some important software packages needed for research and taught modules. Students have to buy pricey personal licenses for software installation, which does not obtain in other universities in EU. (Research Infrastructure, finance matters, Ref 11)*

Financial difficulties as a result of having, not having, or having an insufficient stipend impacted on PGRS' everyday living circumstances and the extent to which they needed to take on additional paid employment:

*My funding is insufficient to cover all travel necessary for my PhD, it also doesn't cover [HEI] postgraduate fees which means my school (Anonymised) must make up the difference, as a result they don't pay for lab demonstrating by their research students, this has a serious impact on our financial situation, given that the cost of living in Dublin has risen substantially while our stipend remains unchanged. Most of us now work extra hours in Maths teaching, correcting or other part-time work. This leaves us drained of time, energy, while we still struggle financially. (Research Infrastructure, finance matters, Ref 141)*

*I work as a teaching assistant (22 hours teaching weekly) in order to fund my PhD. There is always uncertainty as to whether or not I will have a contract each year and whether or not my fees will be cover by the department I teach for. (Research Infrastructure, finance matters, Ref 126)*

### *Communities of practice*

PGRS' comments in the survey domains of 'Research Culture' and 'Research Infrastructure' highlighted the importance to them of peer support. Students wrote about the extent to which they had opportunities to discuss their work with other students, to attend seminars, the general ambience of their school/department and their connection with a wider research community:

*All the researchers in research hub really helped me a lot by sharing their knowledge and experience in the lab and research world generally. There were so many times that I solved my research problem through their fruitful opinions. (Research Culture, discuss work with other students, Ref 7)*

*The School of [Anonymised] enables me to liaise with other PhD students at our group supervision sessions. These meetings help us to talk things out in a safe and supportive environment. It is invaluable to me to have such contact with my colleagues. (Research Culture, discuss work with other students, Ref 26)*

Peer study groups are considered beneficial to postgraduate research students as they provide opportunities for co-learning, sharing knowledge and resources (Devenish et al., 2009) and for overcoming the isolation that often accompanies postgraduate research studies. The systematic inclusion of study groups in postgraduate research programmes is also regarded as valuable for students (Ahmad, 2020; Meschitt, 2019). In the present study students indicate that they have largely developed such peer groups/communities of practice themselves:

*The researchers at my university set up our own coffee mornings once a week to chat and discuss our progress. It could be a good idea for other locations. (Research Culture, discuss work with other students, Ref 12)*

*I am a member of a small peer review writing group set up by 2 PhD candidates and this is a mainstay of support, motivation and opportunities for exchange on research relevant to mine. (Research Culture, discuss work with other students, Ref 22)*

Although some PGRS provided positive commentary about their peer networks and communities of practice, for many there was an absence of institutional support for forming such networks:

*Any opportunities I have had around research culture I have created myself- no support around same within department but perhaps this is a skill to learn about networking and being self-directed. However, I do think schools and departments should offer more structure and planned activities around same. (Research Culture, research ambience, Ref 88)*

*Collaboration is weak in my field in [HEI]. My PI allows me to collaborate where I can and is supportive of this, but as a whole [HEI] does not foster collaboration well. (Research Culture, wider research community, Ref 28)*

*I have driven engagement with other research students by seeking dissemination & engagement opportunities. Most of this is external to the university. My school has ceased their research seminars which I think is a significant loss of the programme. (Research Culture, seminar programme, Ref 6)*

### *Supervision experience*

In the second overarching theme, supervision experience, PGRS provide extensive commentary about relationships with their supervisors and supervisory practices. There is an expansive research literature on postgraduate research students and their supervision experience that focuses on the nature of student-supervisor relationships, supervision quality assurance processes in institutions and disciplinary and institutional differences in how supervision is delivered and received (Gurr, 2001; Halse and Bansel, 2012; Johansen, 2019; Lee, 2008; Leonard and Becker, 2009). Notwithstanding that it was surprising to find that a minority of students reported not having a supervisor, the focus of PGRS' comments was on the nature of the supervisory relationship. Comments were categorised as positive or negative experiences. PGRS also provided positive perspectives on supervision but added some critique of processes. As with the theme of 'Institutional Structures and Supports', some elements of PGRS' comments aligned with the theme: the affective domain.

### *Supervisory relationships*

#### *'Feeling lucky'*

Interestingly, many PGRS with positive commentary about their supervision experience considered that it was a matter of luck. Their responses were often contextualised by pointing to the experiences of others:

*While my relationship with my supervisor has been excellent, I feel I am somewhat lucky in this regard and, in general, the responsibilities of a supervisor are ill-defined and allow substantial risk of research students being left uninformed (or even misinformed) by uncommunicative or uncooperative supervisors. Research students are also at risk of being taken advantage of with regard to the unpaid labour of teaching and grading. (Staff Student Responsibilities, supervisor, Ref 12)*

*Personally, I am very lucky to have a good working relationship with both of my supervisors and they have always been very helpful in guiding me and giving me opportunities- but I am aware that I am one of the lucky ones and this isn't the case across all students both inside and outside of my department. (Supervision, positive Ref 111)*

*I think I am an exception to the rule from what I gather speaking to other students. I am very lucky with my supervisors. (Supervision, positive, Ref 19).*

*Very lucky with my supervisor, this is my third research project for him to oversee and he is extremely supportive and knowledgeable. (Supervision, positive, Ref 67)*

*[I]am very fortunate to have a hands-on supervisor who is looking out for me and my career as a successful researcher in the future. I believe that this is an unusual find according to my peers. (Supervision, positive, Ref 36)*

#### *'Feeling unlucky'*

Like the PGRS who reported positive supervisory relationships and regarded themselves as 'lucky', those with critical commentary about their supervision experience referred to luck:

*I feel I am very much left to my own devices - sink or swim - but some of my peers have had much better experiences and have weekly meetings with their supervisors. I think I am just unlucky. (Supervision, negative, Ref 87)*

*The students are at the mercy of the particular style of the supervisor, and the 'luck' of getting one that suits their learning needs. (Supervision, negative, Ref 161)*

*Only in year 3, has he been regularly in contact - well since Jan 2019. Lucky my external supervisor has saved me. (Supervision, negative, Ref 63)*

For some PGRS the positive experiences of supervision contrasted with the level of institutional supports for PGRS and for supervisors themselves:

*I have the best supervisors a student could ask for. Unfortunately, they are restricted by lack of finances and support from the University, and this holds us back in terms of research opportunities and progression. (Supervision, positive, Ref 12)*

*The high quality of my supervisors is the sole reason I am remaining as a student in the [HEI]. The lack of supports from their Grad Office is so low and so poor, I would have left [HEI] years ago except for my supervisors. (Supervision, positive, Ref 34)*

*My supervisor is able to make up for deficits in other areas of the institution's provision of services for postgrads, but this should not fall back on them. (Supervision, positive, Ref 59)*

#### *Having more than one supervisor*

PGR StudentSurvey.ie (2019) reports that 52% of respondents had more than one supervisor (of the 52%, 10% had three or more) (StudentSurvey.ie, 2019). Balancing relationships in supervisory teams can be problematic for students (Sambrook et al., 2008). While PGRS reported positively about their relationship with one supervisor, they also illustrated an unbalanced relationship because of the action/inaction of the second supervisor:

*The level of supervision varied considerably between my two supervisors. One was very quick to respond with feedback and gave it in writing or annotations. The second supervisor only gave feedback verbally which meant that many useful points were missed. They were also very slow to respond to emails, in some cases not responding at all. (Supervision, positive, Ref 79)*

*My academic supervisor is excellent and provides all appropriate support and regular meetings. My clinical supervisor lacks understanding of process, structure and is rarely available - hence the mostly agree responses. (Supervision, positive, Ref 93)*

*My primary supervisor is unhelpful and unsupportive. I dread meeting them. My co-supervisor is supportive and fully understands what I need to attain my PhD. However, their guidance sometimes clashes with what my primary supervisor thinks. (Supervision, positive, Ref 124)*

*I have one on-site supervisor and one in another institution. I have very little contact with my supervisor in the other institution. (Supervision, positive, Ref 125)*

*I am in a multi-disciplinary field, and therefore I have three supervisors. The issue is that although they are very kind and supportive of my research none of them has effectively taken leadership in the supervision of the project. I am in fact left to do it on my own, which has taught me an awful lot, but also has diverted me many times from doing my actual work and left me feeling like I couldn't really debate my ideas or concerns efficiently. (Supervision, positive, Ref 33)*

#### *Understanding student and supervisor roles*

Students' comments about their supervision experiences reveal that for many there is a lack of clarity about the roles and responsibilities of students and supervisors in the supervisory relationship. In addition to the critique of their supervision experience in the supervision domain of the survey, PGRS also critiqued aspects of their supervision experience across the survey domains 'Staff Student Responsibilities'; 'Induction and Progression'. As we have seen earlier in the context of 'Induction and Orientation', PGRS consider that they would benefit from more formal structured and ongoing support as they progress. They reflected on their need for greater understanding of student and supervisor roles:

*Could be clearer as to what the student and supervisor's role is at the beginning of the programme i.e., a guidelines document? FAQ's'. (Staff Student Responsibility, Supervisor, Ref 6)*

*The supervisory supports and relationship was positive but more training or guides for research students on 'how to make the most of the supervision' would help. (Supervision, positive, Ref 23)*

*For a PhD student it is difficult to judge what the supervision should entail. It is clear that supervision is an individual matter, the practice which varies from one supervisor to another. Perhaps clear guidelines should be provided for supervisors what supervision should entail. Those guidelines should be relayed to students. (Supervision, negative, Ref 47)*

*A manual specifically outlining supervisor roles would be helpful for the research student at the start of their studies to understand what they are allowed to expect of their supervisors i.e., how many annual meetings a PhD student can expect, frequency of*

*contact, timeline for feedback etc. In the case of more than one primary supervisor, it would be helpful for one supervisor to take the lead on organising collaborative meetings with other supervisors to reduce the likelihood of delayed feedback for the student. (Supervision, negative, Ref 142)*

While PGRS emphasised the need for more structured orientation over the course of their programmes, they also point to the need for structures for ongoing training and monitoring of supervisors:

*The research skills of academic supervisor must be evaluated too. Sometimes lecturers hold a teaching position because the small number of graduates in some degrees, rather than for having a successful and prestigious career. This negatively impacts on the direction of a research and researchers because a low-qualified researcher is managing others researchers. (Staff Student Responsibility, supervisor, Ref 10)*

*[...] I felt that in general students and supervisors as well are still in need for orientation on the examinations processes, preparing and planning for examination so that it can be planned effectively. (Induction & Progression, understanding..., Ref 49)*

*My supervisors have regular contact, but their advice is not always useful. This is in part because they have been out of the lab too long, and therefore have little working knowledge on lab procedures. They rarely give advice on training needs as they aren't trained in the techniques I use and think that certain training is unnecessary because it takes me out of them lab. A lot of this stems from the fact that supervisors receive no formal training on how to project manage. This is something which is sorely lacking among supervisors in Ireland. (Supervision, negative, Ref 35)*

*Training for supervisors is definitely needed for a set list of things they need to do with new students such as giving them the handbook, setting key deadline dates etc. (Supervision, negative, Ref 138)*

### *Development opportunities*

The third overarching theme: Development Opportunities cuts across survey domains of 'Research Skills Development' and 'Development of Other Transferable Skills'. In the survey, the domain 'Development Opportunities' is preceded by 16 wide ranging items, however, much of the commentary about 'Development Opportunities' concerns teaching and demonstrating. In terms of commentary about 'Research Skills Development' and 'Development of Other Transferable Skills', PGRS have provided insight on the structured elements of their programmes, particularly, compulsory modules.

### *Teaching and demonstrating*

Students with positive commentary about teaching and demonstrating opportunities emphasised gaining beneficial skills and professional experience:

*Teaching has not enhanced my research experience, but it does make me more employable and provide much needed additional cash, so I think it's a good thing, even if it takes from my research rather than adding benefit. (Development Opportunities, negative, Ref 3)*

*While teaching/demonstration has not enhanced my RESEARCH, it has enhanced my career development. (Development Opportunities, positive, Ref 12)*

For some, however, critical commentary related to not having the opportunity to teach/demonstrate, whereas others were critical of teaching and demonstrating as compulsory:

*Would like to take part in teaching/ demonstrating. I have not been made aware of any opportunities I could avail of. (Development Opportunities, negative, Ref 192)*

*I believe teaching training and opportunities should be more available. Researchers should be paid for all teaching and demonstrating. (Development Opportunities, negative, Ref 6)*

*120 hours 'voluntary' teaching contribution is expected from each student every year, except their last. This is done with little training or thanks and is hugely time consuming and distracting. (Development Opportunities, negative, Ref 4)*

*Teaching is non-optional and can take up time that is really needed for research. Excessive non-paid teaching hours (enforced by [Anonymised Location]) mean I have to end up working through evenings and have been burnt out on multiple occasions. (Development Opportunities, negative, Ref 5)*

*Numerous times it has been brought to the faculty that demonstrating in excess directly negatively impacts on a postgraduates research. Yet the university continues to increase the number of undergrads in labs .... increasing the demonstrating workload of all postgrads in the school. In particular this is impacting final year postgrads who now 'MUST' demonstrate each semester in which they are registered and not just the first three years as written in the regulations. (Staff Student Responsibilities, Ref 30)*

Although some PGRS consider that teaching/demonstrating is beneficial for professional development, they also emphasise its constraints in terms of the time required for preparation and delivery. This aspect of teaching/demonstrating can lead to stress and less time to dedicate to their own research:

*Demonstrating and tutoring does give an insight into education and being able to communicate knowledge efficiently to others but the time it can take away from research can be a hindrance and have no relevance to the research as such. (Development Opportunities, negative, Ref 1)*

*I have worked both as a tutor on a Teaching assistant contract and as a part-time lecturer. This was necessary to help me fund my PhD. However, the time necessary to perform my role has had a negative impact on my research. I also feel that our role was not valued by the college, though it was within my department. I do not agree that I was adequately compensated financially for my work. Being paid for contact hours only. (Development Opportunities, negative, Ref 36)*

Students also commented extensively on the extent to which teaching/demonstrating is remunerated. Whereas many PGRS report having to teach/demonstrate without receiving payment others consider that the payment received is not commensurate with the hours required for preparation:

*Teaching is a great opportunity as a graduate student. BUT academia seems to be the only setting where payment is in the form of 'it will be great for your CV'. We carry out the jobs of lecturers who are paid substantial wages where we are on stipends that barely allow us to live. It is unconstitutional and unjust. We are in such a vulnerable position that we have no leverage to mediate with higher powers. Please address this for future graduate students. (Development Opportunities, negative Ref 42).*

*Teaching as a postgrad student is highly taxing and horribly underpaid at this university. While I enjoy teaching and need the money to support myself, I find that teaching pays very little which means that I have to take additional classes to make ends meet which in turn limits the amount of time I can spend on my research. The university definitely needs to pay tutors and occasional lecturers better considering we do the bulk of the teaching in this university. At the moment it almost seems like tutors subsidise the lifestyle of permanent staff. Additionally, there have also been times in the past when the department's [I] work for have 'forgotten' to pay me for my services. This has happened to me at least thrice in the last three years and is highly unacceptable. (Development Opportunities, negative, Ref 31).*

*With regard to teaching - I am glad I had the opportunity to lecture and create modules - but this work is not sufficiently paid. PhD candidates fall between two stools - we are neither fully staff nor fully students. There should be payment for prep time. A one-hour lecture can take up to 10 hours to prepare. And you are not paid for that preparation. (Development Opportunities, pos., Ref 14)*



When PGRS write about their teaching/demonstrating experience they do so also in the context of whether they have received appropriate support to undertake this role. While some comment about receiving support for teaching/demonstrating by availing of structured training, others point to the lack of appropriate training for this task:

*The teaching at third level module that is available in [Anonymised Location] is excellent. (Development Opportunities, pos., Ref 16)*

*I taught briefly at [Anonymised location] which was to cover my supervisors' trip abroad and not for my own development. At my current institution I have been given support and guidance for teaching. (Development Opportunities, neg., Ref 4)*

*The teaching experiences are definitely worthwhile and a great opportunity, however, it was daunting at the start as I was asked to take a class on my own, without any training and my I wasn't massively familiar with the subject area either. This semester I was asked to deliver a module as would be done by a normal member of staff, but it was made difficult as I had no access to Moodle to upload content, or mark attendance. I was also expected to grade portfolios but didn't have access to gradebook and had to rely on another staff member to input the grades for me. I felt it was unfair to the other member of staff and to me. Other researchers typically do lab demonstrations with another lecturer; however, I have always taken a class on my own. I am happy to do so but feel like I should be treated the same as a member of staff if I'm expected to do the same job, even if it is just a few hours each week. I would also like to see training opportunities for researchers to receive teaching certificates. This would massively boost our CVs upon completion of the PhD. (Development Opportunities, neg., Ref 34)*

*I enjoyed my teaching experience and learnt a lot. But I was offered absolutely no advice or guidance. I find it shocking that someone with no teaching experience is allowed to teach students without first receiving some form of training! (Development Opportunities, neg., Ref 34)*

### *Compulsory modules*

Many PGRS reported positively about the modules taken as part of a structured research degree programme:

*The modules as part of the structured PhD are practical and helpful. (Most valuable aspects of research degree prog., Ref 1)*

*I like that it is a structured PhD and that I can take modules that are relevant to my research. (Most valuable aspects of research degree prog., Ref 133)*

Conversely, others reported dissatisfaction with compulsory modules that they deemed not relevant to their research and that took up a lot of their time:

*The modules requirements imposed on part-time PhD are too heavy, mostly irrelevant to the research undertaken and are honestly the reason why I would abandon my PhD. The fact that any module undertaken outside the institution is self-funded is another problem that makes the whole exercise an ill-thought and quickly executed box-ticking formality with very little regard to the actual learning experience. (Modules, Ref 3)*

*The structured PhD modules are a massive drain on my time. I find them thoroughly unnecessary. I'd much rather spend this time doing my own research. I find that the standard of instruction in these modules is below par and is far inferior to the quality of the modules I did for my MPhil. The structured PhD program makes my PhD unnecessarily stressful and burdensome. (Modules, Ref 1)*

*Although many of the modules I have undertaken were interesting, I feel that I have not gained much worthwhile experiences and knowledge from doing them and that the time I have spent attending them and preparing assignments for them would be better spent on my own research. I strongly feel attending modules is not suitable for everyone doing research programmes and should be optional. (Modules, Ref 7)*

In addition to the relevance of the modules, PGRS also pointed to the internal processes for enrolment, assessment, feedback and credit transfers:

*Module Opportunities and selection remain mandatory for post-grad students of all types (MPhil, Masters, PhD, Post-Doc), yet college professors and authorities provide little resources for completion. (Staff Student Responsibility, Ref 11)*

*Major difficulties encountered re: ECTS recognition from other institutions. (Staff Student Responsibility, Ref 15)*

*School of postgraduate studies asks for feedback after each course/module it runs however there has never been any changes implemented off the back of these suggestions, so the courses/modules have not improved over time. (Staff Student Responsibility, Ref 32)*

*Module registration might benefit from improvements, as it is difficult for a PhD student to find suitable modules and, when modules have been identified, it is difficult to register (confusing process, lack of articulation between services of registration, etc). (Modules, Ref 8)*

### *The affective domain*

The fourth overarching theme, the affective domain, is a cross-cutting theme derived from the analysis of all domains but particularly the domain, 'Personal Outlook'. Across each of the survey domains where students have been asked to provide additional comments, and in the final questions where they are asked about improvements, the emotional work involved in undertaking a postgraduate degree programme is evident. Emotional demands, specifically issues with social integration and isolation, interaction with faculty and administrative staff, and the overall writing project, can impact on the postgraduate experience (Blaney and Mulkeen, 2008; Cotterall, 2013; Kevern et al., 1999). Indeed, the results of the UK Postgraduate Research Experience survey (Williams, 2019) has shown consistently that the theme of research culture, which encapsulates opportunities for student interaction, seminar programmes and involvement in a wider research culture, is ranked lowest by students.

Financial insecurity, the precarious nature of work in academia and pressure to obtain a work-life balance are amongst stressors noted by PGRS (Levecque et al., 2017). Part-time doctoral students face particular challenges with work-life balance and inclusion in their institutions (Gardner and Gopaul, 2012). Higher Education Institutions are increasingly acknowledged as being 'a pressurised environment for staff and students, and concerns around mental health issues and wellbeing are widespread' (Metcalf et al., 2018 in Brown and Collins, 2018: 195). Such issues are visible in PGRS' comments and are reflected in the sub-themes of 'being heard and responded to', 'respect' and 'isolation'. The sub-themes 'being heard and responded to', 'respect' and 'isolation' are interlinked.

### *Being heard and responded to*

A topic of concern to many PGRS is not feeling heard. This relates specifically to the feedback provided by them and the wider issue of receiving feedback from their supervisor(s). For many, constructive and regular feedback is one of the most valued aspects of their degree experience and most often reported in the context of overall support. The quotes below reflect aspects of what some respondents note as being particularly valuable during their research programmes:

*The direction, support and feedback from my supervisors. (Most valuable aspects of research degree prog., Ref 293)*

*Available support and feedback. (Most valuable aspects of research degree prog., Ref 326)*

*RGS Skills training Seminars Access to my supervisors & their feedback on my work The progression meetings process was invaluable to me in keeping me on track and in gaining insight and feedback from others on my work. (Most valuable aspects of research degree prog., Ref 527)*

Although many PGRS report satisfaction with feedback on their progress, for others this is not the case. The impact of not being responded to and of feeling unheard is illustrated below:

*My supervisor has not been overly helpful - there has not been a great effort on my supervisor's part to understand my project, and so any feedback has been repetitive and unhelpful. He is not a specialist in the area that I am working in. (Supervision, negative, Ref, 25)*

*My supervisor has refused me permission to publish results that he feels may be of financial benefit to himself, and has consistently refused to provide feedback on my completed thesis. (Supervision, negative, Ref, 46)*

*More trust and positive feedback desirable!! I feel like an assembly line worker receiving many instructions and mostly feedback on errors rather than a co-creator or leader of the research. (Supervision, negative, Ref, 53)*

*It is not easy to meet my supervisor or get feedback from him. When I write to him, he does not respond immediately. He often changes or cancels our meetings. It's very difficult to complete my research with him. (Supervision, negative, Ref, 129)*

Whereas many PGRS report positively about being heard and responded to in the context of supervision and school/department relationships, they do not always feel that this is mirrored within their wider institutions:

*I have given feedback directly, through this survey and by other means and I have never seen meaningful action to make change towards any aspect of the graduate student program across the whole university. The change first needs to come from seeing us as an investment and as adults. We are students by training, but we also teach and do the job of lecturers. This culture needs to change, and we need to be supported in terms of our career development. We usually bring in our own funding and are a valuable asset - please treat us accordingly. (Staff Student Responsibility, feedback, Ref 15)*

*I have offered to help with feedback and evaluation, offered insight to some problems regarding developing a more onsite 'research community' and it has been ignored! - to be honest, despite being happy with teaching, supervision etc, I really feel undervalued and sometimes not respected! (Staff Student Responsibility, feedback, Ref 9)*

*Many issues have been brought up (stipend, teaching, opportunities, orientation, resources) and have always been met with a 'there is nothing we can do'. A huge lack of responsiveness. (Staff Student Responsibility, feedback, Ref 38)*

*It depends on the area when it comes to the institution valuing feedback from postgrads. While our School staff are excellent at asking for our views and including us when anything new comes up, I don't get that impression from the institution beyond the school. For the institution in terms of how concerns of the student population are dealt with, it can seem tokenistic at best. (Staff Student Responsibility, feedback, Ref 22)*

*The unit to which I am attached is responsive to feedback, but I don't see a lot of change at an institutional level. (Staff Student Responsibility, feedback, Ref 19)*

### *Respect*

The sub-theme respect cuts across much of PGRS' commentary in relation to domains of 'Research Infrastructure', 'Research Culture', 'Development Opportunities', 'Staff Student Responsibilities' and 'Personal Outlook'. In the latter domain, students have largely reflected on their experience of life within their institution.

Many PGRS value their research degree programme and through their descriptions illustrate a respectful, collegiate environment that derives from positive interactions, inclusion among staff and peers, and having their own working space:

*Email from DOGS is brilliant - The <jobtitle removed> in SOM is brilliant - Feeling valued by college community. (Most valuable aspects of research degree prog., Ref 965)*

*I enjoyed day-to-day life in my research group. The atmosphere was brilliant and everyone is so respectful of each other. This applies to the highest academic to the newest student in the group. (Most valuable aspects of research degree prog., 101)*

*Having my own desk in college in an healthy environment where research can be discussed with peers (other PhD students or researchers). (Most valuable aspects of research degree prog., Ref 1253)*

Earlier we have noted that PGRS value opportunities for teaching and demonstration. Nonetheless, they appear to receive mixed messages about how this work is valued when they relate their perspectives on the pay and conditions associated with teaching responsibilities:

*PhDs are only valued in so far as they can take on some teaching. Even when you publish under the name of your school/research centre (thus helping in the rankings) there is little to no recognition. (Staff Student Responsibilities, Ref 19)*

*Overall, my experience at [HEI] has been positive but there are issues with pay equality, research ambience and support programmes/initiatives from my department. (Personal Outlook, life within Inst., Ref 27)*

*I feel my research is innovative and indeed necessary. But it also appears obvious to anyone, judging by the amount of funding and scholarships available to humanities, that the university does not hold such opinions. The market and job growth should not be the only contributing factors to tailoring the structure of the University. If I worked in a private enterprise, I would get paid, be shown personal respect, receive performance bonuses and not live life in a totally precarious state. Worry and good research do not go hand in hand. (Personal Outlook, life within Inst., Ref 11)*

The theme of respect also underpins PGRS' comments about research culture. Some report feeling unvalued and pressured and individualistic work environments:

*I am basically considered a research assistant who is getting a PhD on the side. My development isn't prioritised, only the work. My research methodologies and research approach do not seem to be utilised widely within my department and I sometimes feel that my research choices are not valued within the overall climate of the institute. (Research Culture, research ambience, Ref 74)*

*There is a very intense research environment in my department. Hours and personal investment in work is high, however discussion of work, contact between different research fields and any involvement of external, relevant corporate or industry partners is not focussed on. (Research Culture, research ambience, Ref 75)*

*The atmosphere within my department is disastrous. Permanent staff members don't get along with each other, there is no sense of identity or collegiality. There is also a lack of transparent communication. This has an impact mostly on any teaching I do and doesn't foster collaboration in research. (Research Culture, research ambience, Ref 91)*

## *Isolation*

Many PGRS have commented on their student experience in terms of loneliness/isolation. Loneliness or isolation is mentioned within the context of the general research ambience of PGRS' research centre/department/institution and the extent of supports at department/school/centre. It is also an issue which is raised when PGRS offer suggestions for what could be improved:

*This research has been a lonely journey. (Research Culture, research ambience, Ref 27)*

*PhD student role is a very solitary one. You are neither staff nor part of an evident PhD student body. More opportunities to network on [...] campus would be helpful. (Research Culture, research ambience, Ref 92)*

*The morale is so low among many research students, a lot of people are very anxious, which can create a negative attitude towards research. (Research Culture, research ambience, Ref 33)*

*I feel that there is not much support for research students. This is because when we start, we were told that we aren't quite students, we are employees of the college. So, in most cases we are not entitled to entail of the student services, e.g. councillor. It can be very isolating as a research student. (Staff Student Responsibility, student supports, Ref 42)*

*Very lonely - could benefit from more opportunities to engage with other students. (What aspects could be improved, Ref 40)*

*A lot more peer engagement between other research students to alleviate the strong isolation and impact of doubt on mental health. (What aspects could be improved, Ref 465)*

*Due to the nature of the work in my department, most of my colleagues work off campus, leading to feelings of isolation and a lack of support which is essential for postgraduate research. There is little or no consistent research ambience in my department. My research facilities are shared with colleagues from other departments, leading to even more feelings of isolation/awkwardness as I am the only representative from my department using the allocated research facilities. . (Research Culture, research ambience, Ref 21)*

*Research culture sorely lacking. No communication within the department. I try to gather people together but there is little will. I suffer from isolation. (Research Culture, research ambience, Ref 100)*

While feeling isolated is noted as a concern by many PGRS, others reflected positively about their experience noting the development of both personal and professional connections:

*Mostly I'm thankful for the people I've met along the way and the growth I've seen in myself. There are not many aspects of the programme that support this, but this is beginning to change (PhD lunches where we can meet each other, beginnings of increasing awareness of supports). (Most valuable aspects of research degree prog., Ref 389]*

*Working alongside other research students in our postgrad room. Having the chance to chat with them, socialise, have lunch together, bounce ideas off each other keeps me motivated at times when research work gets stressful. (Most valuable aspects of research degree prog., Ref 570]*

*Critical thinking, learning how to deal with other people and the structures of power and hierarchy within academia, having wide access to team-work building opportunities, having access to both research and teaching outreach, availability of opportunities towards self-development as a human being and as a professional, connections and friendships made. (Most valuable aspects of research degree prog., Ref 157]*

### Summary: stage one analysis

So far, we have presented stage one of the analysis of the free-text data associated with the nine open-ended questions and the two non-domain specific open-ended questions in PGR StudentSurvey.ie (2019). A rigorous process of data reduction was conducted across the survey domains, which resulted in the identification of the most frequently occurring topics within PGRS' free-text comments. This allowed for a closer examination and resulted in a more nuanced interpretation of the text associated with these topics. This process resulted in the identification of four themes: institutional structures and supports; supervision experience; development opportunities, and the affective domain. Within these a number of sub-themes were identified: induction and orientation; workspace and facilities; finance; communities of practice (including peer support; seminars etc); supervisory relationships; understanding student and supervisor roles; teaching and demonstrating; modules; training; being heard and responded to; respect; and isolation.

The theme of support was identified as an important cross-cutting theme. Support is mentioned by PGRS in relation to day-to-day interactions in their HEIs, ranging from having a suitable workspace to feeling supported in the supervisory relationship. It is interesting to note the interconnections between various themes and sub-themes. Not having a workspace that is comfortable, conducive to work and one that does not enable peer interaction is connected with isolation and loneliness. The importance of supports that might easily be taken for granted, such as access to kitchen facilities, can enable peer-interaction, alleviate unnecessary expenditure on food and drink and enhance the overall day-to-day experiences of PGRS.

The role of supervisors, particularly in relation to the timing of and approach to feedback is an important issue for PGRS. This is an area where there is extensive research on best

practice in postgraduate research supervision.

In the section that follows, we provide insight into the experiences of four cohorts of PGRS: PhD; Master's, full and part-time, and international students. Their experiences are illustrated by composite case study narratives. These derive from data that are merged in relation to one of the cohorts and presented on an 'individual' to illustrate the experience of the cohort.



## Section 2: Composite case study narratives

In the following section, we use ‘composite narratives’ to illustrate the main themes derived from the qualitative data analysis. Composite narratives are developed through the combination of data from several interviews, which are then presented as a story from a single individual (Willis, 2019: 472). This approach allows the findings to be communicated to a broad audience and simultaneously provides a picture of the group as a whole (Willis, 2019: 473). The experiences of research master’s students, PhD, part-time and international students in Irish HEIs are contextualised with details such as: programme of study and age. These details are derived from the anonymised demographic data in PGR StudentSurvey.ie.

It is important to note that the composites are not contrived or fictional accounts. The term ‘narrative’ is used as opposed to, for example, ‘fiction’ to underline the fact the ‘composite narratives’ are drawn directly from the data (Willis, 2019). In Willis (2019) interview data is used to construct composite narratives, however, as the PGR survey data is structurally different to Willis’s data, their process has been slightly adapted and is outlined below:

### Method for development of the composite case studies

1. Following the thematic analysis of all the data associated with the open-ended questions, themes and sub-theme were categorised according to the four student cohorts identifiable within the dataset: international research students, part-time research students, Masters’ research students and PhD students.
2. The ‘composite’ comprises data from several respondents within the same cohort as if they were from a single individual (Willis, 2019: 475)
3. It is also important to present contradictory or even complementary data. We do this through the inclusion of experiences that have been told to the case study student by their friend. This ensures that nuances within the data are presented and the composites are not used as vehicles for a single story.
4. Judgement on the respondents’ experiences and opinions is avoided. Any comments of this nature in the narrative are taken directly from the respondents’ written words. For example, in the composite narrative of international student, ‘Mai’, concerns are raised about induction and progression. In the narrative, this is reported as follows: ‘Mai feels the induction she received is not focused enough on the experience and specific needs of international postgraduate students’, showing that this is her reading of events, not the researchers’ interpretation.

Employing the steps above ensures ‘that there is a clear link between the original [data] and the final narratives. These procedures establish a robustness in approach and ensure the composite narratives are rooted solidly in the data. As a result, they provide an excellent vehicle by which to ‘convey the range of positions and views that the data revealed’ (Willis, 2019: 475). This approach illuminates the experiences of PGRS in Irish HEIs and allows for synthesis of the key themes (McElhinney and Kennedy, 2021) identified in the free-text

responses in the PGR StudentSurvey.ie data. We begin with Seb, an Irish PhD student before we move to Mai, an international PhD student. We then introduce Tessa, a full-time research master's student and conclude with Ben, a part-time research master's student.

*Seb: Full-time, Irish PhD Student*



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'Seb', is 33-years-old (mode age of PhD students in the dataset is 27), and a PhD student in Humanities. He is in the third year of his study and is hoping to submit his thesis in the year ahead. Seb comments on many of the topics pertinent to other PhD students. For example, he mentions his experience of induction, supervision, teaching, and access to workspace and facilities.

Seb's narrative points to positive aspects of his PhD experience, while also reflecting on some of the pronounced challenges and the complexity of the PhD journey.

Seb's experience of induction has been positive. The handbook provided at the start of his programme has been a useful guide as he moves through his postgraduate degree. He commented on departmental support such as the seminars provided by departmental academics when he began his research. These provided insight into the postgraduate experience. However, in general Seb feels that:

*Students and supervisors as well are still in need for orientation on the examinations processes, preparing and planning for examination so that it can be planned effectively. (Induction & progression, pos., Ref 9)*

Seb has two supervisors, and his experience of supervision is mainly positive. He feels 'lucky' in this regard as some of his fellow research students have had problems with supervision. Seb considers that having two supervisors works well. He knows that some of his peers with just one supervisor have experienced problems and have received very little support with this:

*There should be a system of co-supervisors' mandatory for all departments, if not a panel, at the very least. If left with just one supervisor, in the event that it is an unhealthy relationship and there is no supervision support actually taking place, there should be automatic fall-backs instead of leaving the student with a very uncomfortable situation of reporting the supervisor. There needs to be better mechanisms to report racism and sexism by supervisors that are in built to the supervision system that don't place the burden of 'outing' on the student. (Supervisor, neg., Ref 141)*

Conversely, a friend of Seb's has two supervisors and finds it difficult as one supervisor is very engaged while the other one is not. He also received conflicting advice from them.

Seb enjoys teaching with his department. He feels teaching provides him with experience that will help his post PhD career. However, one of his friends who is also doing a PhD often complains about the time pressures that accompany teaching and that this is detrimental to his research. For Seb:

*[T]eaching is worthwhile, it helps you think about your research in a new way, and you need to be able to speak in plain English about your overall area. This is very difficult, so it was good to teach and learn how to communicate effectively. (Development opportunities, pos., Ref 5)*

Another friend, who studies in a different school, was not offered a desk at the start of his PhD, and must work in a poorly-lit space with inappropriate seating. His situation is stress-inducing as he spends long days at his desk. Seb finds it inconvenient that he does not have access to his own workspace at weekends and bank holidays. Commenting on sharing a workspace with other research students Seb notes:

*While there are a number of benefits to this arrangement, including the excellent social support from others in the room, at this stage in my PhD it would be preferable to have my own private workspace.*

#### *Mai: Full-time, International PhD Student*

'Mai' is an international PhD student who has been living in Ireland since 2017. She is now in the second year of her PhD programme in Science. Mai is 29 years old (mode age of PhD students in the dataset is 27). Mai relates the experience of her induction which she found

to be insufficiently focused on the experience and specific needs of international PGRS:



*I've found the provision of information regarding structure, timing, and evaluation of degree progress to be underwhelming. The communication of relevant information for international students generally has been poor. (Induction & Progression, Understanding..., Ref 117)*

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In addition to the challenges of navigating the early days as a PGRS at her HEI, Mai also comments about difficulties she encountered outside her HEI, such as trying to find out about the Irish public health care system. As a PhD student from a different country, Mai feels that more respect and a warmer welcome would have improved her early days at her HEI. Mai comments:

*The [HEI] have a horrible approach to international PhD Students. No insurance, no guidance. I won't recommend the university to anybody. (Staff Student Responsibility, student supports, Ref 59)*

The financial implications of studying as an international student are very considerable for Mai. As a non-EU PGRS Mai pays what she considers to be very high fees in addition to other costs such as visa charges. She challenges what she sees as the inequity of this system:

*... [the HEI] is good for the Irish student but not for the international students. (Research Infrastructure; finance matters, Ref 66)*

Living very far from home puts financial strain on Mai. She feels that the financial strain is compounded by a lack of social and familial networks in Ireland. The fee level for international research students is a contentious issue for Mai and for her peers. Within her social circle of international students some people receive scholarships from their own governments covering fees and support for living costs while others struggle to pay rent. This requires them to supplement the deficit between funding and fees. Mai outlines her experience in relation to finance:

*My fees are only covered at 5750 euros per year, which is slightly less than the EU-rate of fees for the PhD at my university. [As] an international student ... the fees are just over 10,000 euros per year. I have to save a little over 4,000 (which is more than 1/4 of my stipend) to pay for the difference in fees because my school/university do not cover or waive fees even if you bring in external funding (as mine is). I currently live on less than 12,000 a year while paying rent (not including bills) of 8,400 euros per year. The lack slightly more than 4,000 euros a year should be a pittance to my school/university, but it is making life nearly unliveable for me. I cannot wait to leave Ireland as the housing crisis has made living here miserable. You pay well over one thousand euros a month so that you can get something that isn't completely substandard, but you still have to contend with damp, cold and black mould. I don't know how people choose to stay here when they're done. (Research Infrastructure, finance matters, Ref 117)*

One of Mai's friends, who is also an international research student, is married with children. This individual has shared with Mai that she feels she should have more support with accommodation costs due to the price of rent in the area surrounding their HEI:

*In terms of the tuition fee, it just covers half of it and the stipend should be paid for the accommodation. Moreover, IRC or other scholarships doesn't consider that the accommodation and stipend for a married scholar are more expensive. (Research Infrastructure; finance matters, Ref 66)*

Currently Mai's friend has a long daily commute which impacts on the time she can spend in the lab specifically and more generally the time available for her wider research. Mai expresses frustration at the lack of workspace and facilities for international students.

Despite Mai's concerns about the expense of her programme, and her expectations for better facilities, she relates positive academic experiences. These include: being able to choose modules that benefit her research; the enhancement of her written English and developing critical thinking skills; acquiring transferable skills and lab experience (for example, learning about new software, new tests, new standards and procedures). Mai feels satisfied with the training and development opportunities she has received so far. In relation to the most valuable aspects of her postgraduate experience, she commented on having opportunities such as:

*Learning how to solve problems... The skill to resolve actual problems like searching for information online and find other colleague's help [and] learning to write in English ... but also all general skills (organisation, writing, etc..) (International students, Aspects most valuable, Ref 10)*

Furthermore, Mai reflected that:

*Demonstrating was an important part of the programme as it allows me an invaluable opportunity to evaluate my teaching abilities at a higher-level setting. (International students, Aspects most valuable, Ref 110)*

#### *Tessa: Full-time research master's student*



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Tessa is 24-years-old (mode age of research master's students in the dataset is 24) and a full-time research master's student in Chemistry. In her second year, Tessa receives a bursary and capacity building grant and credits these as enabling her to study. She found the induction to the programme beneficial but noted it took place several months after her course had commenced:

*I commenced my [programme] in January, induction did not happen until Sept/Oct at the start of the new academic year. While timing was off, once I received induction it was beneficial. (Induction & Orientation, pos., Ref 11)*

Tessa has a positive and supportive relationship with her supervisor. They have regular contact, and she describes how their support has helped her to become an independent learner. Tessa finds the regular and swift feedback particularly helpful. Tessa notes that her supervisor:

*[H]as been a fantastic support and shows good enthusiasm for the research topic. He has also given me excellent opportunities to teach and demonstrate and has widened my network of peers in related topics. (Supervisor, pos., Ref 21)*

Although she is satisfied with the opportunities her supervisor provides, Tessa is aware of other research master's students (from other departments) who feel that the research culture within their areas of study is limited to working with their supervisors and a small selection of research students. Tessa considers that her research benefits from having regular contact with senior members of staff and a wide range of graduate students. Coffee mornings for researchers are amongst the networking opportunities that Tessa enjoys and finds beneficial. She recommends that other departments should hold similar events. Access to and the quality of workspace and facilities have been a challenge for Tessa:

*The research infrastructure and facilities need to be improved. The department is overcrowded, and the masters' students do not have office space and some work in labs that are not suitable. (Research Infrastructure, workspace and facilities, Ref 36)*

Overcrowding and issues with faulty equipment (e.g., lab equipment and printers) are often discussed by her fellow research master's students. Tessa and her peers also find it difficult not having access to kitchen space. Limited access to kitchen space curtails their opportunities for peer interaction and having to purchase food and drinks adds to financial stress for some students.

*Ben: Part-time research master's student*



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Ben is a 34-year-old (mode age of research master's students in the dataset is 24) research master's student in a Social Science faculty. Below he reflects on the induction and orientation process:

*I am very clear on the structure of progression. It is harder as [a] part time [research student] to fit into such a structured system. (Induction & orientation, pos., Ref 1*

Ben would like the assignment submission dates to be communicated earlier in recognition of the various commitments of part-time research students. He has experienced difficulties with online access in his institution and has had to use a colleague's login details. It was frustrating for him to discover after starting his programme that no modules were available in the evening:

*I didn't know that I had to pick modules online with a system and I didn't know that there were no modules available in the evenings. I assumed that's what part time meant. It should have been made clear that even when part time ... modules run Monday to Friday 9-5. (Staff student responsibility, feedback, Ref 45)*

As a part-time research student who also works full-time, Ben's access to a regular quiet study space is limited. He lives in a house shared with his parents and two younger siblings. The quote below highlights several challenges faced by Ben, specifically in relation to workspace, isolation, finance and information flow. The link between isolation and not having access to/appropriate workspace is a recurring theme in PGRS' accounts of their experiences:

*Since I am a part-time student, I do not have a workspace other than the library, which is not a suitable environment for research, so I do all of my research and work at home in isolation. I was never told what the allocated budget was for materials and training to complete the research so I only asked for the bare minimum to get the research going, knowing how much you are allowed spend would be helpful. I also spent a few hundred euro of my own money for online server facilities. (Research Infrastructure, workspace and facilities, Ref 32)*

Ben's sense of isolation is compounded by not being regularly on campus due to his part-time status:

*Since I am a part-time student, after I finished the required classes with other students and moved onto the research I am rarely in the institute. I now feel very isolated and largely forgotten about, I have minimal contact with other classmates or <jobtitle removed>. This is hardly a stimulating or collaborative research culture. (Research Culture, research ambience, Ref 36)*

Ben feels that no effort is made to include him in research activities and laments the lack of opportunities to mix with other part-time research students:

*The majority of lectures/workshops/talks/support sessions seem to be aimed towards full-time students only, as they are offered during the day, making it difficult for part-time students (who work during the day) to avail of these supports. (Staff student responsibility, support, Ref 95)*

For Ben, being a part-time student places him at a disadvantage in his HEI, as provision is geared towards full-time learners. He has found that supports such as healthcare are not available for part-time students. Ben also considers that his access to development opportunities is limited due to working, studying and family commitments:

*As a part time student there is little scope for this [Development Opportunities] as we are working and have families. Policy, practice and approach should take into account the difficulties of part time students. Perhaps there should be funding available for part time students to take time off from work to enhance their learning. (Dev opportunities, Ref 3)*

Despite the limitations in relation to development opportunities, Ben is aware of some part-time students who have been able, through taking modules, to link with other part-time research students and present their research to each other. While Ben has experienced challenges mainly at an institutional level, his supervisors have been consistently supportive and recognise the challenges faced by Ben as a part-time student. Ben feels his supervisors see him as a person, treating him as an equal and provide an environment that is welcoming and conducive to learning:

*My supervisors have acted as mentors and offer regular challenges to my work. They have also argued my case when there were questions about whether to continue my study or not. This has been invaluable for me to keep going and to enter this programme as a part-time mature student. (Supervisor, pos., Ref 44)*

## Interpretation

Much of the literature exploring the PhD process and its impact on students notes stressors such as time and financial constraints (Baker and Lattuca, 2010; Hopwood 2010b; Jazvac-Martek et al., 2011; Schmidt and Hanson, 2018). Many of the key issues in the wider literature are visible in Seb's 'composite narrative'.

Having more than one supervisor may reduce the risk of students 'burning out' and or dropping out of their institution (Corner et al., 2017). Support from one's supervisor/supervisors and institution can positively impact how PGRS engage with their work and their overall wellbeing (Caesens et al., 2014). Many of the PGRS commented on the need for clearer frameworks in relation to supervision roles and responsibilities. This would enable, for example, 'creating an arena for shared meaning using supervisory



contracts' (Stubb et al., 2012: 453).

Training for supervision and mentoring and the creation of frameworks for giving feedback for PGRS by supervisors is also suggested to improve well-being (Hunter and Devine, 2016). Effective feedback experienced as an active dialogical process (Bloxham and Campbell, 2010; McArthur and Huxham, 2013) leads to and encourages students to become 'independent, self-regulating learners able to judge the quality of their own work' (Mackay et al., 2019: 316).

In addition to many of the general challenges faced by PGRS, international students may encounter difficulties that are specifically related to their international status. These may include (not exhaustively): racism and discrimination, stresses associated their new position, problems with language proficiency, missing home, interacting with their HEI and their peers, and academic adjustment (Ahrari, 2019; Novera, 2004; Toyokawa and Toyokawa, 2002). The thematic analysis identified that international PGRS who responded to the open-ended survey questions mainly commented on finance, induction and general areas of inclusion. As noted in the wider literature on international students, the adjustment issues faced by those starting in a new institution are intensified when the individual is also in a new country (Novera, 2004). Such issues are reflected in Mai's comments about induction processes at her HEI.

The benefits of developing peer communities are highlighted in the research literature (Ahmad, 2021; Devenish et al., 2009; Meschitti, 2019). Indeed, establishing communities of research master's students (like those mentioned by Tessa) can promote and foster feelings of 'collective efficacy' through the enhanced collaboration of students (Ward and Dixon, 2012: 178).

Part-time students undertaking postgraduate research degrees are a diverse cohort. Many part-time students combine full-time employment with their studies and have considerable caring and financial responsibilities (Gardner and Gopaul, 2012; Neumann and Rodwell, 2009). Ben's depiction of his supervisory relationship reflects the important process of enculturation that should take place in research supervision (Lee, 2008).

In section 3, that follows, we report on stage two of the qualitative data analysis of PGR StudentSurvey.ie (2019). In this analysis we examined PGRS' free-text comments where they commented on writing and thesis production.

## Section 3: Writing and thesis production

### Introduction

The PGR StudentSurvey.ie data provides an abundance of choice for further data exploration within and across its survey domains. The topic of writing and thesis production was chosen as it is not a topic within the survey, yet it is an issue that has been highlighted in the literature on research supervision where both students and supervisors may experience difficulties (Aitchison, 2016; Aitchison, Kamler & Lee, 2010; Paré 2011). As well as the importance of finding out about PGRS' experiences of writing and thesis production, a key benefit in applying a specific question to the data is that it may reveal hidden patterns that could potentially inform the development of future quantitative questions.

In addition to the quantitative content analysis and interpretive qualitative analysis of the free text comments in PGR StudentSurvey.ie, in stage two of the data analysis, a specific research question was applied to the dataset:

- What are postgraduate research students' experiences with writing and thesis production?

Keyword searches using NVivo qualitative data analysis software were conducted across all nine survey domains and the two open-ended questions. Further searching occurred within the themes and subthemes identified in the stage one analysis. Following the location of text pertinent to writing and thesis production, interpretive analysis was undertaken to find out what students had to say about writing and thesis production and in what context. Themes and sub-themes were identified with reference to key issues from a review of literature on the topic.

Despite the current emphasis in HEIs on research supervision training, there is little emphasis on writing pedagogy and the role of the supervisor in shaping students' knowledge production (Starke-Meyerring, 2011). Indeed, not all doctoral supervisors provide opportunities for constructive dialogue with their students about writing (Cotterall, 2011; Kamler, 2008). Interactions around writing in the supervisory relationship can reveal how discourses of power and a deficit approach contribute to student stress and anxiety about writing (Elton, 2010).

Undertaking a doctorate is a journey of discovery and identity formation and writing is central to this process (Cotterall, 2011; Kamler, 2008). Nonetheless, the practices of thesis writing and the production of quality work often remain hidden from students (Cotterall 2011; Starke-Meyerring, 2011). Assumptions may be made about students' understanding of the disciplinary discourse in which they are undertaking their research and that they know 'the rules of the game' (Wellington, 2010: 137). While the work of writing a thesis might be considered in terms of the cognitive skills required to undertake the task, for PGRS the act of thesis writing is very much tied to the affective domain (Wellington, 2010). How students feel about their writing can be shaped positively or negatively by the way that

supervisors and/or peers respond (Starke-Meyerring, 2011; Wellington, 2010):

One of the most emotional aspects of the process of writing a thesis or an article is the business of awaiting, anticipating, fearing and then receiving feedback (Wellington, 2010: 137).

The development of doctoral writing is a 'social, situated practice' (Aitchinson, 2016) that can be achieved successfully through discursive and experiential learning between student, supervisor, and peers (Elton, 2010). Yet too often the main approach in doctoral supervision is one in which students are pointed to writing deficiencies and ultimately, they may fear asking questions of their supervisor (Starke-Meyerring, 2011). Students may also be encouraged to participate in generic writing workshops to address their writing difficulties. However, such workshops tend to operate in a remedial fashion and do not address the nuances and disciplinary differences found in doctoral education (Elton, 2010; Starke-Meyerring, 2011).

In our analyses of PGRS' free-text comments related to writing and thesis production, we identify three main themes and a number of sub-themes.

The first theme: 'Mysterious process', encapsulates PGRS' comments about not knowing what is required in terms of the structural elements of thesis production, knowing how to approach the writing of it and disciplinary requirements. PGRS also comment on writing for publication as an area where they seek support. The theme highlights that many students feel the process is shrouded in mystery, and that they are presumed to already have the tacit knowledge required to be a research student in their particular discipline in their HEI.

The second theme: 'Writing and the role of the supervisor', reveals student perspectives on writing and thesis production in the context of their supervisory relationship(s). This theme encompasses PGRS' views on supervisor feedback practices and how these can impact their own development as a writer.

The third theme: 'Institutional responsibilities' pertains to PGRS' commentary on supports for writing. Earlier in this report, the importance of physical workspace was identified as a dominant theme in PGRS' experiences of their programme. In the context of writing and thesis production, PGRS relate how lack of appropriate workspace impedes writing and thesis production. They also consider the extent to which structured modules on thesis writing support writing practices.

Table 13 Themes and sub-themes

Themes	A mysterious process	Writing and the role of the supervisor	Institutional responsibilities and writing
Sub-themes	Thesis presentation and production	Supervisor feedback practices	Modules for writing support
	Writing for publication		Physical space for writing

### A mysterious process

The first theme ‘a mysterious process’ captures the confusion felt by students in relation to writing and thesis production. This theme encompasses two sub themes: thesis presentation and production; and writing for publication.

#### *Thesis presentation and production*

Students’ comments point to structural issues in terms of their lack of clarity about thesis production e.g., word counts and thesis layout and not knowing ‘how’ in terms of the literature review and critical writing.

Their comments reflect the research of Starke- Meyerring (2011) who found students felt the process of writing and the expectations of what was required was hidden from them:

*Teaching and educating students about the steps of the research: writing, literature review, methodology, analysis. I felt very lost not knowing how to do the research. (Ref 76)*

*Training is insufficient at the start. Letting new researchers figure out by themselves the method to get a result from published articles is good for their personal development but slow down the development of high-quality research output. (Ref 39)*

*The communication of existing knowledge (how to write communication papers, what a PhD thesis should contain). The need for formal module provision on the institute side. (Ref 23)*

Many PGRs comment on the lack of guidance about the structural aspects of producing their thesis:

*It would be useful to receive a basic guide on how to present your thesis e.g., word count and the viva process. (Ref 1)*

*I didn’t receive any guidance as per how to write and structure my thesis in [HEI]. I only got info from my previous university [HEI] and my friends studying abroad. (Ref 38)*

*Clearer guidelines on thesis by publication. (Ref 77)*

*Induction into Research/thesis writing/referencing/layout and content/information repositories/formatting. (Ref 24)*

### *Writing for publication*

For doctoral students in particular, publishing their research while still a student potentially demonstrates the scholarly nature of their work and the contribution to their discipline or wider field (Stoilsecu and McDougall, 2010). Additionally, publishing outputs from a research thesis post submission may be more challenging as a result of exhaustion and burnout (Francis and Mills, 2009). Yet, writing well for publication is an arduous process which requires time and support and insight into the vagaries of the peer review publication process (Kamler, 2008).

In their free-text comments about what could be improved in their programme, PGRS indicate a lack of support in relation to writing articles and conference papers. The quotes below illustrate requests for support with writing for publication:

*Writing papers for peer-review to work on my written communication skills. Presenting at conferences for my oral communication skills. (Ref 14)*

*How to write papers in my research field. (Ref 29)*

*How to publish my papers. (Ref 35)*

*More supports on developing a publishing portfolio and skills such as preparing for presentations and giving posters and submitting articles to suitable peer reviewed journals etc. (Ref 2)*

*I found a lack of support from my academic supervisor for publishing and writing papers. (Ref 34)*

Research on academic writing emphasises the importance of students developing understanding and competence in writing within their own discipline and of the limits of generic writing skills classes (Elton, 2010; Starke- Meyerring, 2011). Again, the mysterious process surrounding thesis writing is reflected in PGRS' comments about not knowing or understanding what was expected in their discipline:

*Each department seems to have different approaches to how to write the thesis. It is not made very clear how this should be done. However, my supervisors have provided some good guidance on how to tackle this. Further training relevant to my specific department would be welcome. (Ref 6)*

*It needs a structured training program with actual support and training tools i.e., public speaking, communication skills, employability information, writing skills - not vague university ones. We need ones relevant to your field i.e., medical writing/ scientific writing. (Ref 20)*

## Writing and the role of the supervisor

The second theme highlights the importance of the role of the supervisor/s in relation to writing.

### *Supervisor feedback practices*

Earlier in this report PGRS have provided extensive commentary about their supervision experiences. Not surprisingly, their comments about writing and thesis production were also contextualised in terms of supervisory relationships and the role of their supervisor in supporting this aspect of their development. In the following quotes PGRS point to the valuable role of their supervisor in the writing and overall production of their thesis:

*The supervision I have received has proved invaluable. I have benefited enormously from the expertise of my supervisor, as well as my fellow PhD peers. This has enabled me to develop my academic writing and collaborative efforts. (Ref 69)*

*The guidance from my supervisor regarding the timeline, thesis plan, research degree guidelines, ability to feel comfortable asking for help. (Ref 33)*

*Assistance from my supervisor with progression through the thesis. (Ref 42)*

Feedback about their writing is extremely important as is noted by many PGRS. When this process is not constructive it can generate anxiety and fear which can negatively impact students' confidence and future development as a writer (Elton, 2010). This can also contribute to decisions to drop out (Starke-Meyerring, 2011). When the feedback process is constructive and timely it can benefit many aspects of a student's research journey. Where there is an absence of, or poorly timed feedback students can feel directionless (Ali and Kohun, 2007; Lee, 2012; Stubb et al., 2011; Wisker, 2012).

PGRS reporting positive supervisory experiences in the context of writing emphasise the strength of their supervisory relationship and responsiveness in how feedback is provided:

*I have an excellent relationship with my supervisors. They provide really good feedback on any writing I submit to them. They are always on hand when needed and very responsive to messages. (Ref 5)*

Contrastingly, some PGRS experience what Gurr (2001) refers to as 'benign neglect' in their supervisory relationship. In this context, they report difficulties with receiving feedback about their writing, particularly when supervisors are slow to respond, do not respond, or provide little useful feedback:

*I personally like my supervisor. Once I manage to meet them for a face-to-face meeting, I can get good feedback and direction. However, for the most part, they are very slow to respond to requests for meetings or for guidance. They rarely respond to emails, are very slow to give feedback or corrections, and very rarely contacts me first about my research. Meetings are regularly cancelled and postponed. Months can go by without having meetings or constructive conversations about my research. It is rare that I receive*

*a response to my queries in writing - I usually get a response in passing, if I bump into them in the staffroom. I have tried to discuss this with my supervisor and requests for more meetings etc. are usually agreed to, but then not actioned. I feel I have had little effective supervision, which this has prolonged the duration of my research, as well as negatively impacting on my motivation, confidence and mental health during my time in [HEI]. (Ref 7)*

*[M]aintaining positive relationship with supervisor can be challenging. Receiving timely feedback for writing can be difficult. (Ref 26)*

*Although I have often asked supervisors about structure and content of thesis for submission, many questions have been ignored and I have not been consulted in the design of some parts of thesis. (Ref 37)*

Feedback that is destructive underlines the power imbalance in the supervisory relationship and can impact negatively on students' learning experiences (Cotterall, 2011):

*Question below needs comments. I did complete my thesis to my <jobtitle removed> recommendations within the allotted time frame and had it changed by a <jobtitle removed> who called my phone and told me his children could do better. I met both <jobtitle removed> after this incident and was dealt with very unprofessionally. (Ref 49)*

*The level of supervision I receive from my supervisors is entirely inadequate. I rarely meet them (c. 1 per 10 weeks) and they do not provide basic help such as processing travel claims promptly. They find it difficult to make time to meet me when we do meet. They provide retrospective feedback [and] are of limited help in defining research strategies, goals, suggested approaches or in shaping my work. They prefer to wait until I have completed a substantial body of work and then to dismantle it. I am wary of writing new material as a result. (Ref 12)*

*My confidence in my writing is lost. I am a scared and cautious writer now, and I am receiving help to overcome this. (Ref 8)*

As might be expected, the final stages of thesis production can prove to be particularly challenging. Some PGRS directly mention the final stages of thesis production as an isolating time and one where supervisor support has been important:

*This PhD has been a huge learning experience, and one I am grateful for. It has also been incredibly challenging. My PhD changed direction at the end of Year 2. This was a difficult period for me a researcher, it was incredibly isolating. One of my supervisors was inexperienced in this new area and struggled during this time to supervise me. This has continued and presented a number of additional challenges in the final stages of writing up my PhD. We both recently discussed these challenges, and still have a very open and honest relationship. However, it has made the PhD experience in [HEI] very difficult, at times more difficult than it needed to be. I've overcome these challenges as best I can. I am also very fortunate that my other supervisor had the experience to guide me even though he is not based in [HEI]. I am also very grateful for the support of other staff members in [HEI]. They have been incredibly supportive and assisted me in the final few weeks of writing up my PhD. (Reference 18)*

PGRS with more than one supervisor also comment on their experiences of receiving feedback on their writing. They may experience variation between supervisors in the style and timing of the feedback:

*[S]upervisors should be required to participate in a minimum amount of supervision per student per month during the programme with extra support at the end for thesis writing. Having to work with 2 supervisors who each work distinctly different hours of the day is very difficult for students when contact via email/electronically is not encouraged or allowed for thesis writing or lab work updates. (Ref 18)*

*The level of supervision varied considerably between my two supervisors. One was very quick to respond with feedback and gave it in writing or annotations. The second supervisor only gave feedback verbally which meant that many useful points were missed. They were also very slow to respond to emails, in some cases not responding at all. (Ref 11)*

Yet it is important to highlight that PGRS are not a homogenous group. Reflecting the diversity of the PGRS population, it is noteworthy that some cohorts express the need for extra writing support. For example, international students, students with additional needs such as Dyslexia, part time students and those with caring responsibilities:

*I am a mature student with vast experience in teaching/demonstrating therefore the opportunities are (while interesting) somewhat superfluous. Similarly, the training available (and some which I have attended) seems purely focused on those who started an undergraduate degree directly from school and continued to PhD without a break. Likewise, training I have availed of has focused on those who are funded. To be lectured on the importance of writing first thing in the morning and turning off/tuning out all distractions is pretty pointless and frustrating when first thing in the morning one has to do the school run, then go to work, come home later and make dinner - before starting into one's research work. Not all research students are the same, not all are at the beginning of their career therefore the support/experiences/expectations relative to these students are not relevant to all. (Ref 9)*

*It is difficult financially and with childcare to sustain the research, and as I come to writing my PhD I will need a block of time for this, which may prove difficult. But my fee waiver from the department has supported me so far, and I hope to find other supports. (Ref 2)*

*As I am a part time student - there is NO support for my Dyslexia. (Ref 3)*



## Institutional responsibilities and writing

The third overarching theme 'Institutional responsibilities and writing' encapsulates the sub-themes: modules for writing support and physical space for writing.

### *Modules for writing support*

It is commonplace for PGRS to enrol in programme modules as part of their research degree. We have seen earlier that PGRS hold mixed perspectives on the usefulness of compulsory modules and many respondents have commented on the topic. Similarly, they also hold mixed views in relation to modules geared specifically to writing and thesis production. Some PGRS were positive about such modules and mentioned them specifically in response to what was most valuable in their programme:

*We have to do modules in order to progress each year - ABSOLUTELY!!!! Everyone should be made on a compulsory basis to do a module in critical writing. This is one of if not the biggest delay in most PhD researcher's progression. (Ref 21)*

*Taught modules, industry placement, engaging in collaborative writing for academic journals. (Ref 53)*

*I feel the academic writing module extremely useful, however it would be better if it had been conducted before a literature review was commenced. (Ref 48)*

*The writing courses and ECTS on research integrity have been excellent. (Ref 16)*

*The designated space for research is fantastic as it gives you the sense of being part of a group. A research degree can sometimes be a lonely process and it is nice to work in the same environment with others experiencing the same things. The monthly research group is another valuable aspect of the degree programme. Again, gives an opportunity to meet with all research students to discuss any obstacles. I did find the academic writing module extremely useful. (Ref 47)*

Some PGRS reported feeling that their writing skills had improved during their research degrees. Some note the improvement is as a result of being self-driven while others commend writing modules and supervisory feedback and are largely supportive of these. Others join peer support writing groups:

*I am a member of a small peer review writing group set up by 2 PhD candidates and this is a mainstay of support, motivation and opportunities for exchange on research relevant to mine. (Ref 14)*

### *Physical space for writing*

The need for access to a regular, appropriate physical space for writing is a recurrent theme throughout the free-text responses. As we have seen earlier, PGRS often critique not having regular access to desk space, and the physical conditions of their working space. Their comments illustrate how the lack of appropriate space for writing impacts on their work:

*I don't like to share the same office with PostDocs and research assistant, they don't respect the PhD and master students that they want to focus on the writing process. The office should have something to separate between the desks. (Ref 15)*

*It would be nice to have a PhD only centre well equipped with desktop spaces that can be used. While office spaces are good stations, a writing/reading only zone for Phd's is imperative because team PhDs differ and clash with those singularly taking their phds. When it comes to managing teamwork and team meetings in office spaces. Many people recommend BIG headphones, but after a while, your ears begin to burn-uncomfortable. [Name of a place] at [HEI] is good place to get away from the office and write/read silently but one has to book at midnight, and there's a chance of missing a spot. (Ref 20)*

*I am now in 3rd year and since returning two months ago from fieldwork I no longer had a space secured in the postgrad office, since there is only space guaranteed for 1st and 2nd years. So I had to desk share until the department secured me another space to work from last week, which I am now happy with and hope that I can stay until the end of my PhD. But I know it was a hassle for them to find it and generally space seems to be a major issue and it is not ideal for PhD students in 3rd and 4th year when writing up not to have a workspace guaranteed. (Ref 25)*

*The department does not have enough desk space for all the postgrads. Most of the time I need to write and study in the lab and this is not the best environment for focus. Only before the writing of your thesis, you have right a desk space. (Ref 33)*

*Additional facilities required include writing space in the laboratory and writing desks for every student. Currently waiting list for desks and only a few students have them. (Ref 35)*

*I would like to be able to do my writing in an environment that suits my work style as in the reading area there are too many distractions or people to interrupt me. (Ref 30)*

## Interpretation

The writing and production of a thesis should never be regarded as ancillary or secondary to the research project(s) at the heart of student research work. Kamler and Thomson argue that writing is a vital part of the research process and make a very strong claim that 'research is writing' (2006: 12). The issue of writing featured strongly in the free-text comments within the survey data. In our analysis three key themes were identified: 'A mysterious process', 'Writing and the role of the supervisor', 'Institutional responsibilities and writing'. Across these themes, and the sub-themes identified within each one, it is quite clear that students have strong concerns regarding the quality of their experience. Some of these concerns relate directly to the topic of writing itself, with students identifying that they find the whole process of 'writing up' or writing for publication shrouded in mystery. The key concern of students here is that those they hope would provide clues to solving the mystery, their supervisors and/or other relevant supports within their HEI, fail to do so. For some students, this lack of supervisory and institutional support for the writing process is compounded by a lack of access to appropriate physical space for writing. Some cohorts of

students, such as international students, those studying part-time with considerable caring responsibilities and those with particular disabilities, experience these issues more strongly.

While it is clear that many PGRS experience significant impediments with this core aspect of their work, this is not the entire story. The data also reveals many strong examples where PGRS receive strong constructive feedback on the process and products of their writing. We also find that PGRS themselves have creatively addressed gaps in their own knowledge and skills through the generation of peer support groups. The key task emerging from the answers to this particular research question is to extend these experiences more broadly across the entire PGRS cohort. From a quality perspective, this issue demands a more structured approach. Students should not have to consider themselves 'lucky' or 'unlucky' in terms of the supports received for writing.

### Summary and conclusion

This report is based on a two-stage approach to the analysis of PGR StudentSurvey.ie (2019). The first stage comprised quantitative content analysis. This involved data cleaning and reduction across the nine survey domains and the two non-domain specific open-ended questions. This process enabled the extraction of quantitatively derived key themes and sub-themes. These themes and sub-themes were then subjected to qualitative interpretation and resulted in four key themes: institutional structures and supports; supervision experience; development opportunities, and the affective domain. Twelve sub-themes were developed under these four key themes.

The key thematic areas from the stage one analysis were further developed and 'brought to life' through the application of four composite case study narratives. We introduced four students: Seb, an Irish PhD student; Mai, an international PhD student; Tessa, a full-time research master's student and Ben, a part-time research master's student

Section three presented the analysis of PGRS' experiences with writing and thesis production.

Not surprisingly, support is a key theme but it also cuts across other themes: supervision experience; development opportunities and the affective domain. The interconnectivity between themes and sub-themes is revealed in, for instance, how PGRS valued teaching and demonstrating opportunities, but felt undervalued (affective domain) when they are not paid or paid lowly for this work. The importance of workspace (institutional structures and supports) has been noted by PGRS as essential for carrying out their research and for writing (writing and thesis production), and for connecting with peers (communities of practice), yet the conditions of such space, or lack of appropriate space, can lead PGRS to feel unvalued and isolated (affective domain).

The analyses strongly highlighted the importance of induction and orientation to PGRS and of the limits of one-off, none, or untailored responses. It also revealed the crucial role of supervisors in supporting students throughout their PGR journey; however a key finding in

this regard is that feeling supported is perceived by many as being down to 'luck'. This may suggest that PGRS and HEIs place insufficient emphasis on the formal processes surrounding the appointment of supervisors, and the roles, expectations and responsibilities of both PGRs and supervisors.

The composite case study narratives of four cohorts of PGRS: fulltime PhD; international student and full and part-time Master's students attempted to tell the story of being a student from one of these cohorts. While each narrative highlights the main themes and subthemes identified within the overall analysis, the case studies illuminate the particular experiences of international and part-time students. While there are some caveats about what we can present in terms of international students, notwithstanding, there are some important insights into issues of inclusion, finance, orientation and induction, and visas.

Stage two of the analysis uncovered an important area not previously highlighted as a topic for consideration in PGR StudentSurvey.ie: writing and thesis production. For all PGRS writing and thesis production is a core activity and, for the majority, the thesis will be the final assessment for their award. The findings in relation to writing and thesis production highlighted the need for physical space for writing but also PGRS' lack of understanding about what was involved, and presumptions that they come equipped with the skills for writing and thesis production. The emotional aspect of thesis writing was identified, particularly in relation to feedback processes, but also the importance of having appropriate, constructive support for writing from their supervisor.

In section four that follows we outline some issues for consideration for future iterations of PGR StudentSurvey.ie

## Section 4: Issues for consideration for future PGR StudentSurvey.ie

The qualitative analysis of the free-text data in PGR StudentSurvey.ie 2019 provided insight into topics/issues for consideration in future iterations of the survey:

- Survey design
- Closing the feedback loop with survey respondents

The following topics/issues have been illuminated by the survey respondents themselves and through Stage One of the analysis that involved data cleaning and quantitative content analysis.

### Survey design

#### *Wording*

Some PGRS have pointed to difficulties with the wording of specific questions as they do not apply to their particular situation, or are vague:

*These questions are badly put. The development opportunities should be not applicable rather than not available. None are currently applicable as (1) I am already a researcher anyway (2) this project is not developed enough to involve the Qs asked. (Dev Opp., Ref 22)*

*'Not avail.' Is not a very helpful choice. Does it mean 'not availed of (yet)' or 'not available'?' (Dev Opp., ambiguous, Ref 22)*

*I feel that my research degree programme is worthwhile This statement is too broad. Worthwhile in what capacity? My future as an academic? Worthwhile for my personal development? Worthwhile in terms of a cost benefit analysis that although I would get far better training elsewhere, I will finish with non-debt in Ireland so who cares how worthwhile it is, all I need is the letters PhD after my name??? Sort this section out. (Personal Outlook, degree prog. worthwhile, Ref 8)*

#### *Relevance of questions*

##### *Part-time students*

Respondents to PGR StudentSurvey.ie (2018) suggested including questions that relate to mental health issues/well-being, funding and commented on the wording and pertinence of some questions depending on their stage of candidature when completing the survey.

Relevance of questions was also mentioned in relation to part-time research students. The present analyses indicates the experiences of part-time students is not well understood. To this end, consideration might be given to designing questions specifically aimed at capturing the experiences of part-time PGRS:

*Again, the position of P/T students is not considered. Most supports such as healthcare are only for full time students. Even this survey fails to allow for feedback from p/t*

*students as the questions are geared to f/t participation. (Student and staff responsibilities, student supports, Ref 11)*

### International students

Analysis of the free-text responses of international students is somewhat limited due to the way international students are categorised in the demographic section of the survey [domicile = Irish or non-Irish]. Capturing more information regarding PGRS' country of origin and fee status [international fees] would give greater integrity to any data analysis of international postgraduate students in PGR StudentSurvey.ie. Additionally, such a process would contribute to showing the diversity of the postgraduate student body throughout Irish HEIs.

Our analyses highlighted that for international students financial and social issues are important. While these issues affect a wide range of PGRS, the opportunity to gain a greater understanding of the experience of international PGRS would be beneficial so that supports can be specifically tailored to their needs.

### *Specific topic areas*

Stage two of the analysis of PGR StudentSurvey.ie provided new and important insight into students' experiences of thesis writing and production. We suggest that there is convincing evidence in this analysis of PGRS' unmet needs in this aspect of their postgraduate research experience. We suggest that there may be merit in finding out more about PGRS' experiences in this regard by including this topic in the survey.

### Closing the feedback loop

Collecting feedback from PGRS and being seen to act on it is important for both change making and for ensuring student participation in such research. Drawing from and acting on the information from surveys on postgraduate experience can go towards improving experiences for PGRS (Office for Students, 2019; Williams, 2019). Williams (2019) argues:

A way for HEIs to demonstrate their commitment to acting on feedback is to point towards where and how results from surveys like PRES have driven lasting change – thereby closing the feedback loop (Williams, 2019: 29).

Many students who provided free-text responses in PGR StudentSurvey.ie 2019 indicated a weariness about being asked for feedback through such surveys and other institutional surveys. Their main concern was a feeling that there was no discernible change to their experience of life in their HEI as a PGRS:

*People ask for feedback from postgraduates all the time, but nothing changes. I suspect that these sorts of feedback drives are contrived in such a way so as to get positive responses. I think what people actually want from them is to be able to quote from a feedback response in a prospectus somewhere. (Student and staff responsibilities, feedback, Ref 1)*

*I think for the most part these surveys serve no purpose but to create some nice-looking numbers to put in a leaflet for prospective students. Any feedback given by us as postgraduates is ignored. (Student and staff responsibilities, feedback, Ref 4)*

*Gave feedback each year, nothing changed. (Student and staff responsibilities, feedback, Ref 44)*

It is clear from PGRS' feedback that they want their HEIs to proactively engage with the findings from PGR StudentSurvey.ie and other similar surveys. Closing the feedback loop could go some way to assuring students that surveys of their experiences are not market research exercises. Consideration might be given to providing opportunities for focus group discussions on key survey themes following the release of survey results.

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