RESEARCH CULTURE SURVEY 2021

Gender Report

Report No. 2

RESEARCH CULTURE INITIATIVE TEAM

September 2022

RESEARCH CULTURE UCD

CULTURE.EXCELLENCE.INTEGRITY

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Foreword

This is the second formal report on the UCD Research Culture survey, carried out in November 2021. The report analyses the quantitative data provided by respondents by gender. Research Culture encompasses the way we do our research, our behaviours and attitudes to each other in our work, how we value the contributions of others involved in our research and how our research is communicated. It underpins both research excellence and research integrity, describing how individuals, teams, research performing organisations, funders, publishers and other stakeholders interact and support each other in the conduct of research. As UCD has signalled in its research strategy, fostering a supportive research culture underpins our ambitious aims in *Shaping the Future*. This survey is an important step in achieving these aims. We are grateful to all who participated in the survey, and to Professor Orla Feely, Vice-President for Research, Innovation and Impact, for supporting UCD's Research Culture Initiative.

The Research Culture Team

Executive Summary

This survey of Research Culture at UCD was conducted in October – November 2021, targeting all the UCD research community. The overall response rate was 19% (see Report number 1). Survey participants were given the choice of identifying with one of five options in the voluntary survey question on gender. Nearly half of all respondents (49%) identified as female, while 41% of respondents identified as male. Eighty-five individuals, or 8%, selected "Prefer not to say".

Respondents generally indicated a high degree of satisfaction with UCD's supports in a range of areas including open research, mentorship, good authorship practice, research integrity and research impact, with little difference between % male and female responses. The largest differences between the responses are in the areas of discussion of personal and professional development, mentorship and being able to undertake continuous professional development activities.

Background and Introduction

At UCD, we care about the culture in which our research is generated. We recognise that a supportive Research Culture underpins research excellence, that collegiality and collaboration are often undervalued measures of esteem, and that promotion of a positive, supportive and productive Research Culture requires collective action from teams and individuals.

With this sentiment, UCD embarked on a Research Culture initiative in July 2021, a project planned to run through to the end of 2022, with an ambitious set of activities and outputs. The first step was to conduct a survey of the UCD research community. A series of World Cafés followed the close of the survey to provide opportunities to discuss points raised by the survey in greater depth.

The initiative is also piloting a 360° Review process, recruiting a small number of researchers who will volunteer to receive anonymous feedback on their contributions to research and the research environment from their networks of mentors, mentees, Technical and Professional colleagues, and peers. The review is intended as a reflective exercise benefiting career development. Follow-on feedback provides a gauge for its benefits and drawbacks, contributing to the assessment made on the value of a wider roll-out for this type of review. We have organised a Conference on Research Culture in September 2022, showcasing our initiative externally, and sharing best practices with other leaders in this field, as well as with funding agencies and other research stakeholders. Based on these findings, we are producing a roadmap for the future development of Research Culture at UCD.

Methodology

The Research Culture Survey opened on 18 October 2021 and was open for six weeks, closing on 30 November 2021. It was directed to all of those involved in research, encompassing faculty, PDRAs, research fellows, graduate research students, research assistants, as well as Researcher Managers and Administrators and Technical Officers. Our survey, modelled with permission on one conducted at the University of Glasgow in 2019, comprised fifteen questions in four sections. It was designed to be finished in five to ten minutes. More than half of the respondents (64%) completed the survey in ten minutes or less.

Section One solicited responses on a Likert scale to two questions. The first asked how respondents perceived University support for programmes and positions that feed into positive research culture. The second gauged the individual experience of positive research culture in terms of support from colleagues and infrastructure and recourse to advice on best practice.

Section Two inquired into the awareness of eleven elements of best practice in research, collecting multiple-choice responses that allowed the individual to select as many as appropriate. The first question asked if the respondent knew where to go for information and support on these topics and the second asked which topics they would like to know more about.

Section Three focused on specifics of Research Culture at UCD, asking if research culture had improved at UCD in the last three years, and seeking qualitative feedback on practical solutions to improve positive research culture at the University in free-text responses.

Section Four solicited demographic information on a voluntary basis. The survey was conducted anonymously; no email addresses, IP addresses, or other identifying data were collected by any means. Instead, the final six questions of our survey requested data pertaining to the school,

research institute, administrative unit, role, and gender of the respondent. Each question gave the survey-taker the option to decline to answer.

To confirm that survey participants were members of the UCD community, the final step before submitting the survey was to log into an active UCD Connect account. Details were not collected, only the validity of the UCD Connect credentials were verified. This validation process was highlighted for participants in the survey preamble and again in the final message.

The full list of the survey questions, (Section 1) along with complete data visualisations (Section 2), is presented in Supplementary Information.

Response Rate and Characteristics

A total of 1028 respondents completed the survey and provided a total of 3318 text comments. Overall, 19% of the targeted University community submitted responses to the survey, calculated based on the University statistics for academic, research, and support staff as well as for graduate research students as of November 2021. The true response rate was likely to be higher but cannot be determined with more precision due to the method of categorization for support staff (Technical Officers and Research Managers and Administrators are grouped under this heading). In the University statistics, this category includes all administrative and other support staff, a total of 1845, the majority of whom would not be considered as working in research. An accurate count of all Technical Officers working in research and Research Managers and Administrators would therefore be likely to increase the calculated response rate. It has become a standard for comparable survey research to expect a response rate of approximately 20% and the Research Culture Survey accordingly can be considered to have met this benchmark.

The response rate may also have been impacted by a perception that the survey was aimed only at faculty/student researchers and not the network of other staff who support research. Qualitative responses alluded to this with some respondents declining to answer text response questions on the basis that they are not researchers. In follow-up World Café events, this sentiment was echoed by Technical Officers and Research Managers and Administrators who felt that the types of questions asked in the survey were geared for researchers rather than those who support them.

Results by Gender
Survey participants were given the choice of identifying with one of five options in the optional survey question on gender. The choices were:
- Female
- Male
- Non-binary / third gender
- Prefer not to say
- Self-declare

Nearly half of all respondents (49%) identified as female (Figure 1 and Table 1), while 41% of respondents identified as male. Eighty-five individuals, or 8% selected "Prefer not to say" and this may have been due to concerns about anonymity.
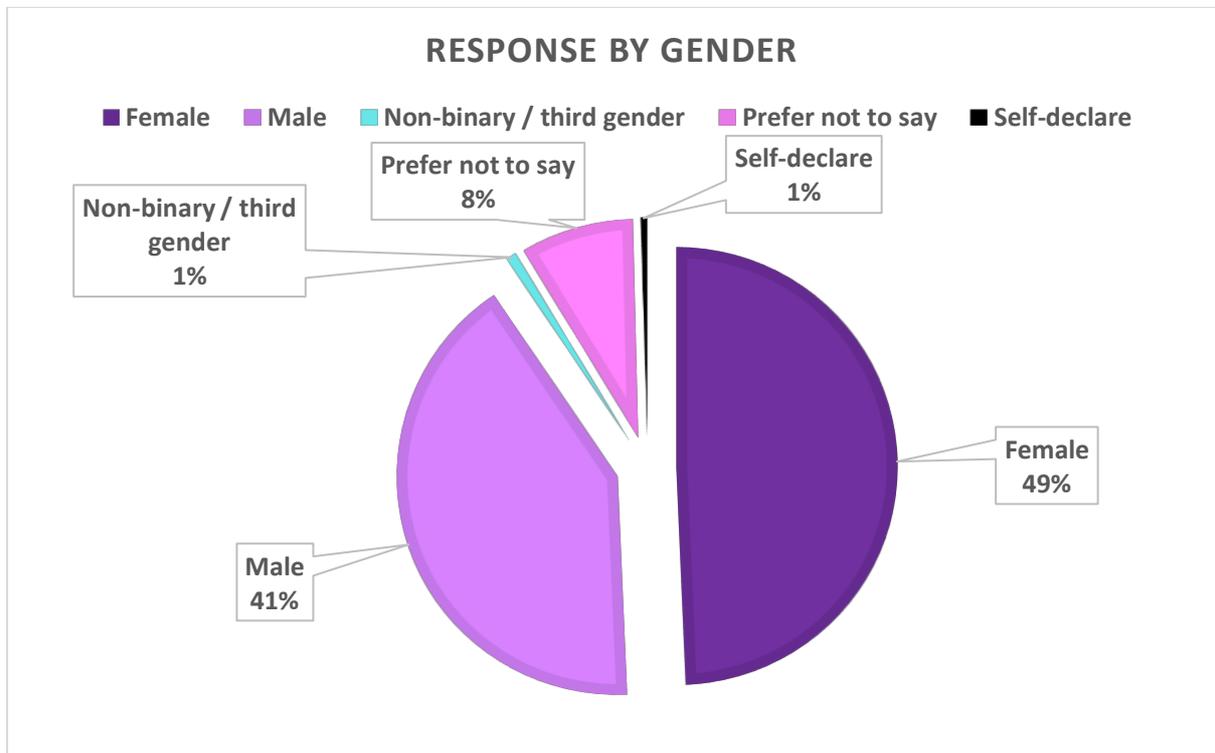
Figure 1 Pie Chart of % survey responses by Gender

Gender	Number of responses	% of total
Female	507	49%
Male	424	41%
Prefer not to say	85	8%
Non-binary / third gender	8	<1%
Self-declare	4	<1%
Total	**1,028**	**100%**

Table 1 Number and % survey responses, broken down by Gender

Due to the low number of responses (n<10) received from those who identified as Non-binary / third gender (8 individuals) or Self-declare (4 individuals), these data are not represented in subsequent figures throughout the rest of this report.

Responses and Analysis

Quantitative analysis of the survey questions by Role and by College has been previously published in the Research Culture Survey Report number 1 and are not repeated here. The survey questions are included in Appendix I of this report. In addition, the figures of responses by Gender to each of the survey questions are presented in Appendix II.

In the main, more males than females had a positive response to the 12 topics covered in questions 1&2, with the exception of the statement about Collaboration and the ability to spend time on Continuous Professional Development activities, as can be seen from Table 2 below and Figures 6 to 17 in Appendix II.

| TOPICS	Agree/Strongly Agree		Neither Agree nor Disagree		Disagree/Strongly Disagree	
	Female%	Male%	Female%	Male%	Female%	Male%
Open Research	60	68	27	24	11	6
Research Integrity	77	77	16	18	7	5
Personal Development	56	62	17	20	26	17
Quality>Quantity	43	45	26	29	29	25
Collegiality	58	58	21	20	21	20
Collaboration	58	51	21	28	20	21
Mentorship	64	75	14	12	18	9
Authorship	85	91	8	5	4	4
Research Impact	77	82	10	13	11	4
Grant application support	41	48	21	17	24	22
Post-award support	30	33	23	25	25	23
Continuous Professional Development	43	38	16	26	39	31

Note: Gender non-binary and self-declare genders are not presented here as n <10

Table 2 Overall responses by Gender to the 12 topics in survey Questions 1 and 2

Support for Personal and Professional Development

The responses by gender to the question: To what extent do you agree that UCD supports a culture of discussion of personal and professional development, are presented in Figure 2. While there is not a very large difference between the overall positive response to this question (56% and 62%, female and male respectively), it is notable that over a quarter of females either disagree or strongly disagree with this statement, compared to 17% of males. There is an even stronger negative response to this question in the cohort who preferred not to reveal their gender.
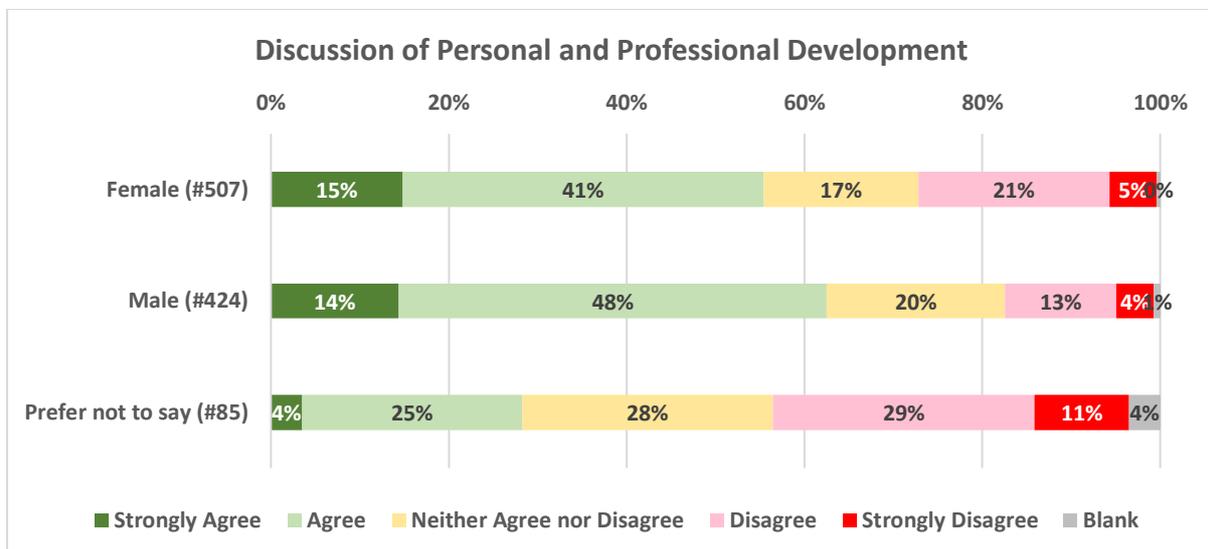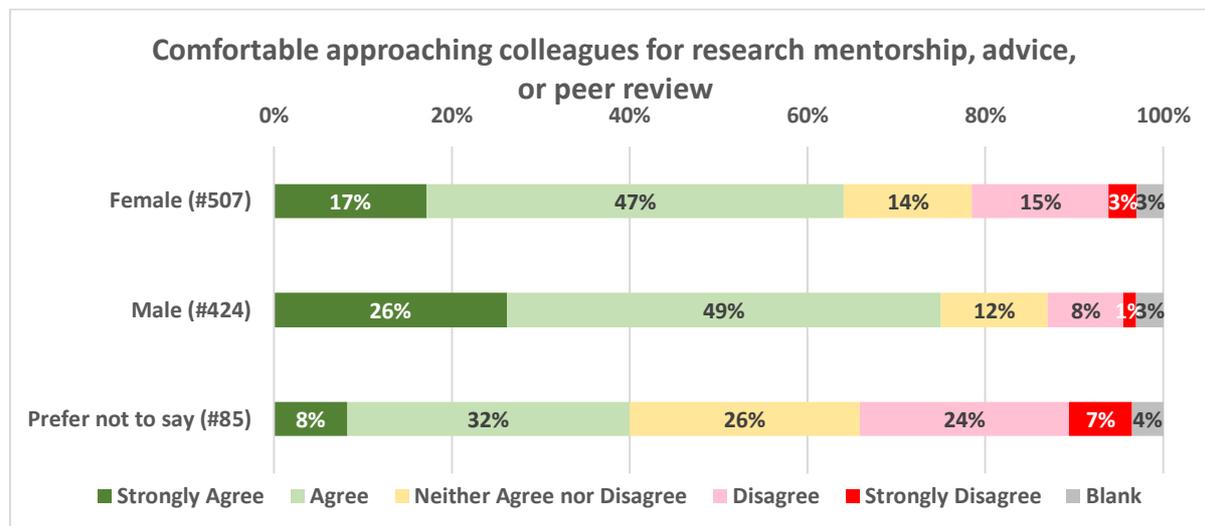

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 2 Response by Gender to the question: To what extent do you agree that UCD supports a culture of discussion of personal and professional development

Mentorship

When it comes to feeling comfortable approaching colleagues for research mentorship, advice or peer review, 75% of males agreed or strongly agreed with this statement, compared to 64% of females, and over 15% of females disagreed with this statement (Figure 3).
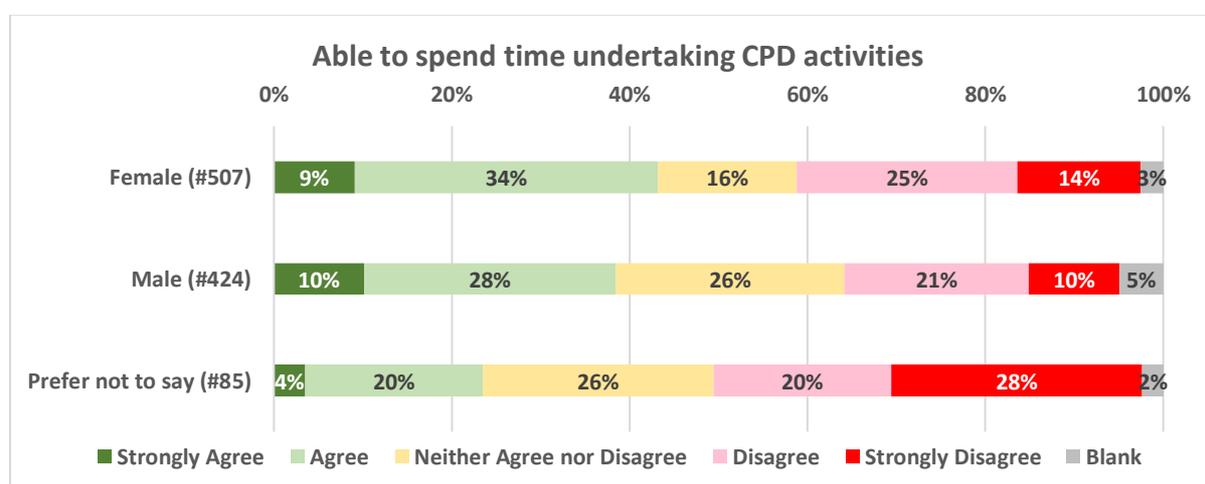
Comfortable approaching colleagues for research mentorship, advice, or peer review

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	17%	47%	14%	15%	3%	3%
Male (#424)	26%	49%	12%	8%	1%	3%
Prefer not to say (#85)	8%	32%	26%	24%	7%	4%

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 3 Response by Gender to the question: To what extent do you agree with the following statement: I feel comfortable approaching colleagues for research mentorship, advice or peer review

Continuing Professional Development

43% of females felt able to spend time undertaking Continuous Professional Development (CPD) activities that are relevant to their career aspirations, according to our survey results (Figure 4), while 38% of males felt the same way. However, overall there is a strongly negative sentiment (approximately one third) to this question, across the board. Notably, 26% of males were ambivalent about this statement, compared with 16% of females.

Able to spend time undertaking CPD activities

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	9%	34%	16%	25%	14%	3%
Male (#424)	10%	28%	26%	21%	10%	5%
Prefer not to say (#85)	4%	20%	26%	20%	28%	2%

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 4 Response by Gender to the question: To what extent do you agree with the following statement: I feel able to spend time undertaking Continuous Professional Development (CPD) activities that are relevant to my career aspirations.
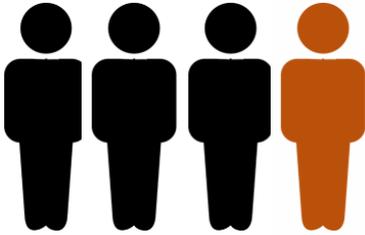
25% of females either disagree or strongly disagree with the statement that UCD supports a culture of discussion of personal and professional development

75% of males feel comfortable approaching colleagues for research mentorship, advice or peer review
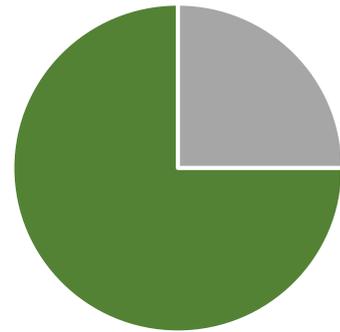
31-39% of survey respondents do not feel able to spend time undertaking Continuous Professional Development (CPD) activities that are relevant to their career aspirations

Information and Support

Respondents were asked whether they knew where to find information and support in the University on a range of areas. There was a variable response by gender to this question (Figure 18 and Figures 20-30 in Appendix II).

The respondents were then asked if they would like to know more about the same list of topics. More females (as a % of total female respondents) wanted to know more about all topics - with the exception of Research Integrity - compared to males or to those who preferred not to specify their gender (Figure 5). The greatest differences were in the topics of Engaged Research and Research IT (11% fewer males than females), writing a good publication (10% fewer males) and assessment of research quality (13% fewer males).

I would like to know more about

Female (#507) Male (#424) Prefer not to say (#85)

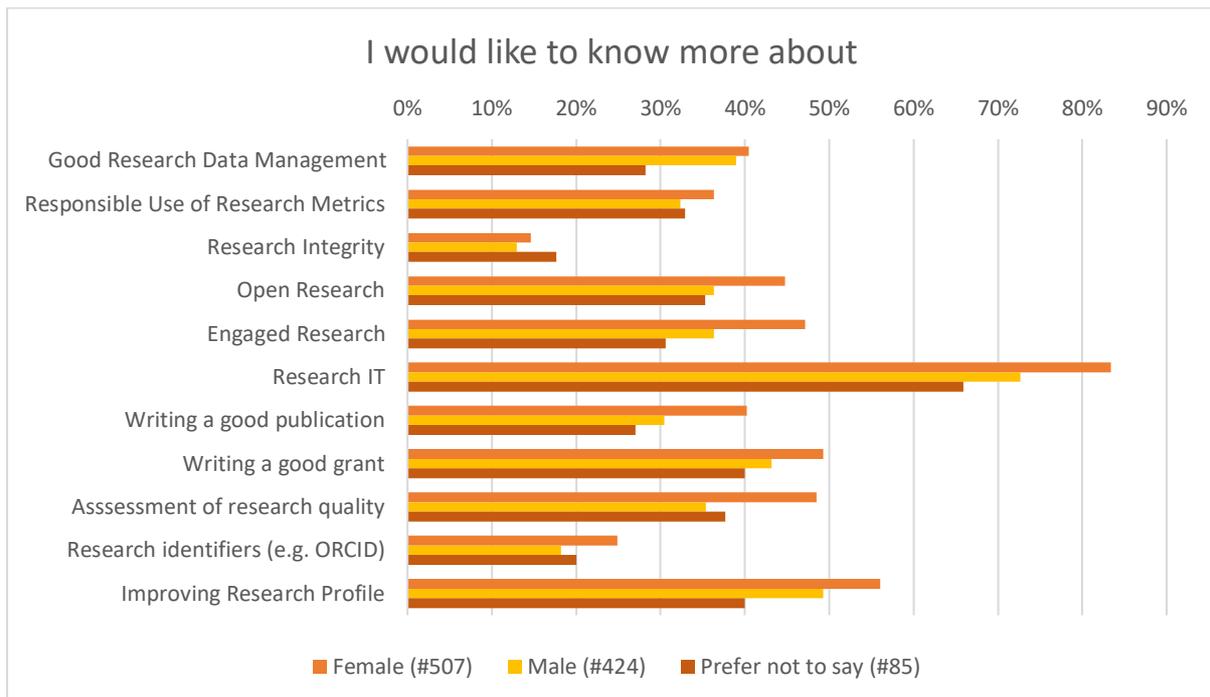Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 5 Response by Gender to the question: Which of the following areas would you like to know more about?

Research Culture Survey 2021

Quantitative Report
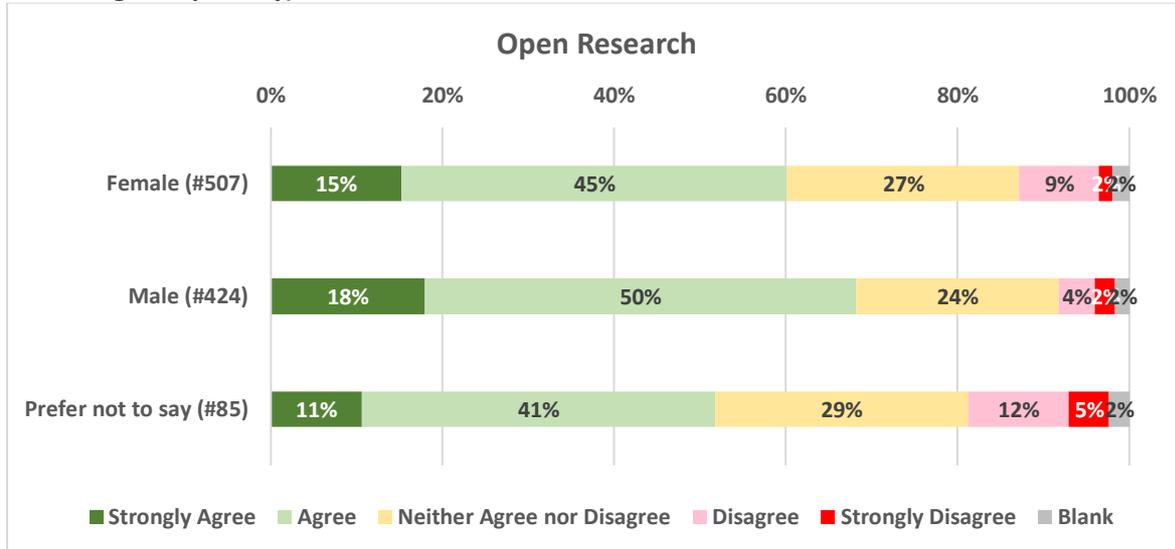### Responses by Gender

Appendices

Appendix I: Research Culture Survey 2021 Questions

Question 1.1	To what extent do you agree that UCD supports a culture of Open research (e.g. open data, pre- print publishing, making research materials or designs publicly available, or other ways of increasing transparency) ?
Question 1.2	To what extent do you agree that UCD supports a culture of Research Integrity (e.g. Good authorship practice, robust study design).
Question 1.3	To what extent do you agree that UCD supports a culture of discussion of personal and professional development.
Question 1.4	To what extent do you agree that UCD supports a culture of valuing quality of publication (or output) over quantity.
Question 1.5	To what extent do you agree that UCD supports a culture of Collegiality in which colleagues support each other to succeed in research
Question 1.6	To what extent do you agree that UCD supports a culture of Collaboration across groups or disciplines
Question 2.1	To what extent do you agree with the following statement: I feel comfortable approaching colleagues for research mentorship, advice or peer review
Question 2.2	To what extent do you agree with the following statement: I understand what constitutes good authorship practice in my discipline.
Question 2.3	To what extent do you agree with the following statement: I understand what constitutes research impact in my discipline.
Question 2.4	To what extent do you agree with the following statement: I have adequate support during the grant application process.
Question 2.5	To what extent do you agree with the following statement: I have adequate support after the award of a grant.
Question 2.6	To what extent do you agree with the following statement: I feel able to spend time undertaking Continuous Professional Development (CPD) activities that are relevant to my career aspirations.
Question 3	I understand where in the University I can go for information or support on the following topics.
Question 4	Which of the following areas would you like to know more about?
Question 5	Has research culture improved over the last 3 years?

Appendix II: Research Culture Survey 2021 - Figures by Question

Question 1.1: To what extent do you agree that UCD supports a culture of Open research (e.g. open data, pre- print publishing, making research materials or designs publicly available, or other ways of increasing transparency) ?

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 6 Response by Gender to the question that UCD supports a culture of Open Research

Question 1.2: To what extent do you agree that UCD supports a culture of Research Integrity (e.g. Good authorship practice, robust study design).
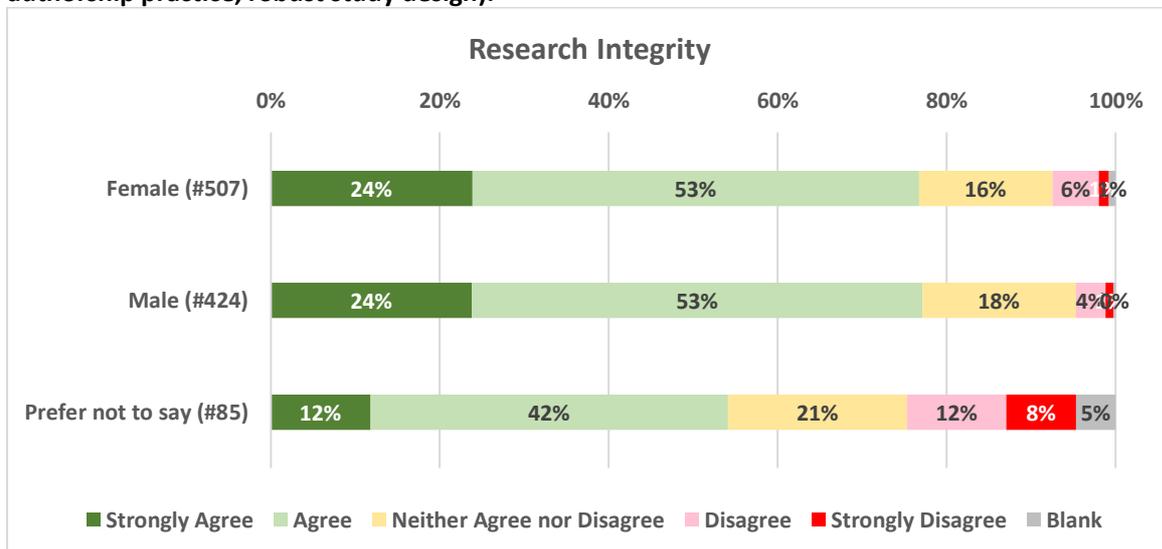
Note: Gender non-binary and self-declare genders are not presented here as n <10
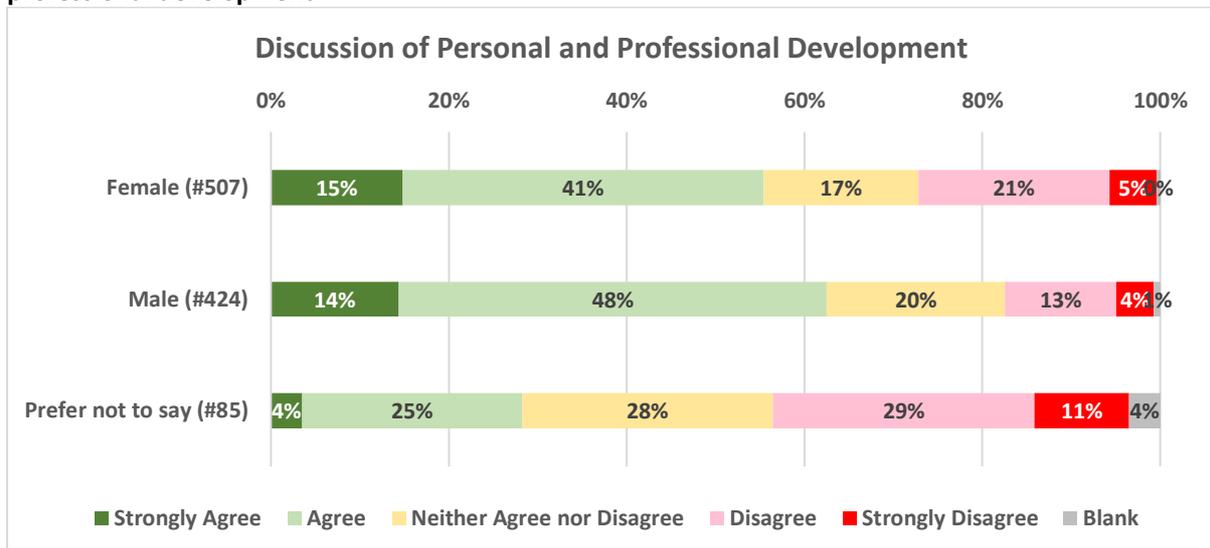
Figure 7 Response by Gender to the question that UCD supports a culture of Research Integrity
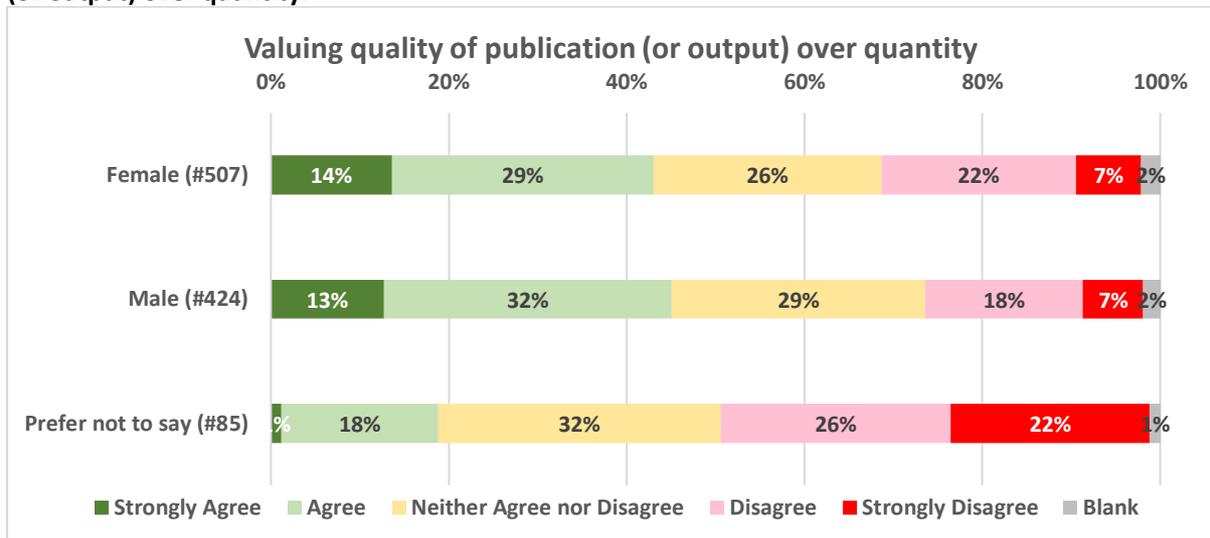
Question 1.3: To what extent do you agree that UCD supports a culture of discussion of personal and professional development.

Discussion of Personal and Professional Development

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	15%	41%	17%	21%	5%	%
Male (#424)	14%	48%	20%	13%	4%	%
Prefer not to say (#85)	4%	25%	28%	29%	11%	4%

■ Strongly Agree ■ Agree ■ Neither Agree nor Disagree ■ Disagree ■ Strongly Disagree ■ Blank

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 8 Response by Gender to the question that UCD supports a culture of discussion of Personal and Professional Development

Question 1.4: To what extent do you agree that UCD supports a culture of valuing quality of publication (or output) over quantity.

Valuing quality of publication (or output) over quantity

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	14%	29%	26%	22%	7%	2%
Male (#424)	13%	32%	29%	18%	7%	2%
Prefer not to say (#85)	%	18%	32%	26%	22%	1%

■ Strongly Agree ■ Agree ■ Neither Agree nor Disagree ■ Disagree ■ Strongly Disagree ■ Blank

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 9 Response by Gender to the question that UCD supports a culture of Valuing Quality of Publication (or Output) over Quantity
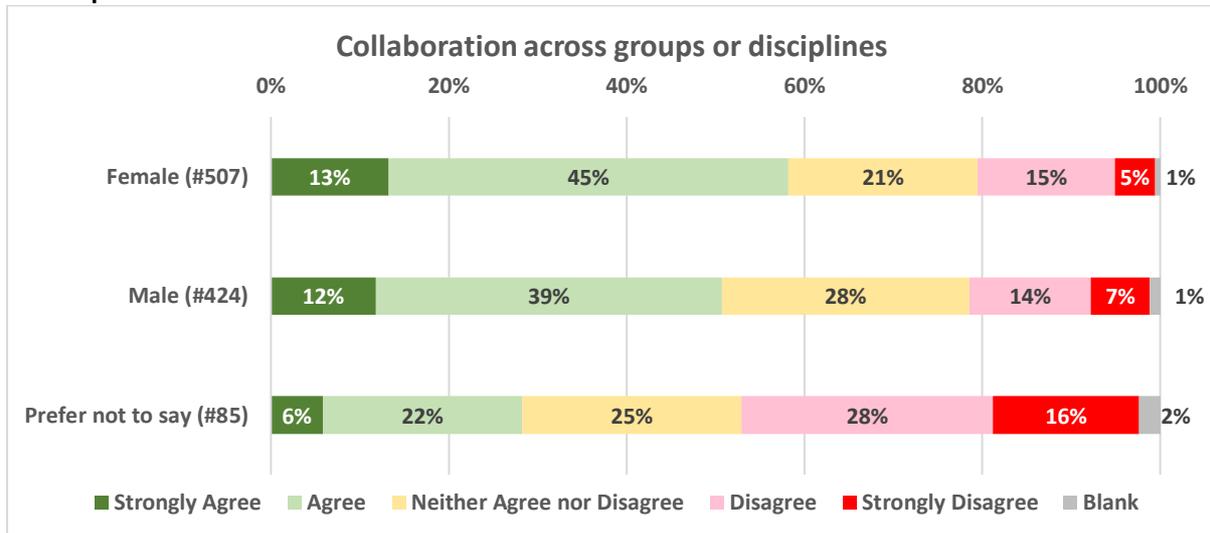
Question 1.5: To what extent do you agree that UCD supports a culture of Collegiality in which colleagues support each other to succeed in research
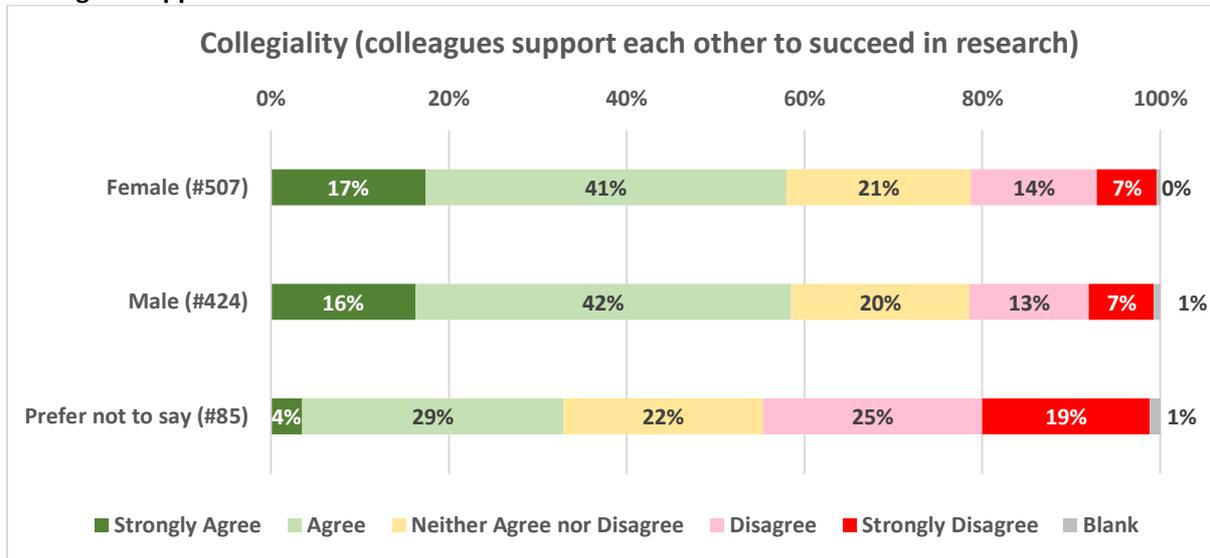
Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 10 Response by Gender to the question that UCD supports a culture of Collegiality in which colleagues support each other to succeed
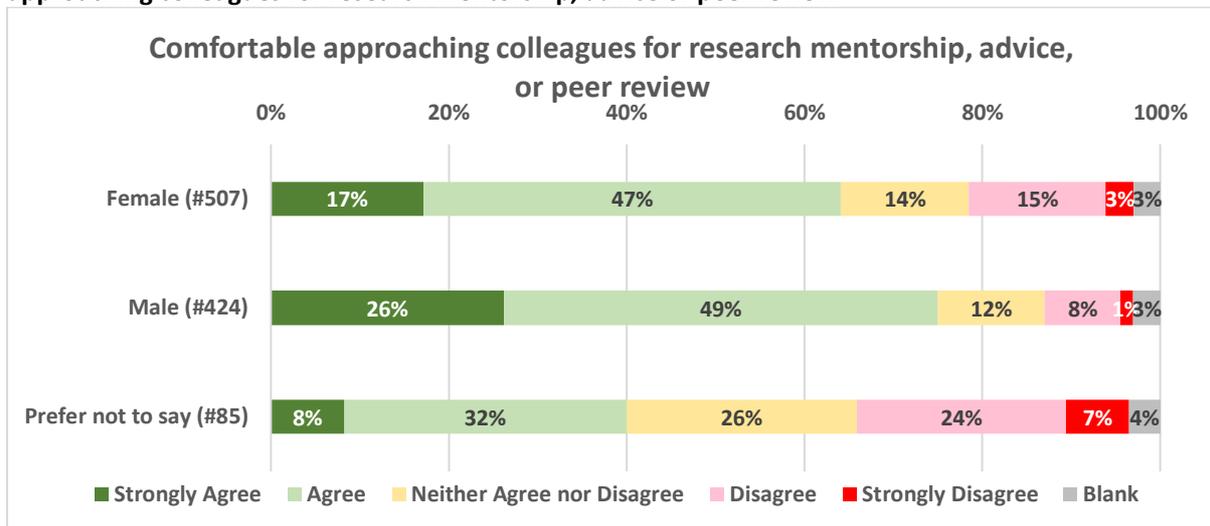
Question 1.6: To what extent do you agree that UCD supports a culture of Collaboration across groups or disciplines

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 11 Response by Gender to the question that UCD supports a culture of Collaboration across groups or disciplines
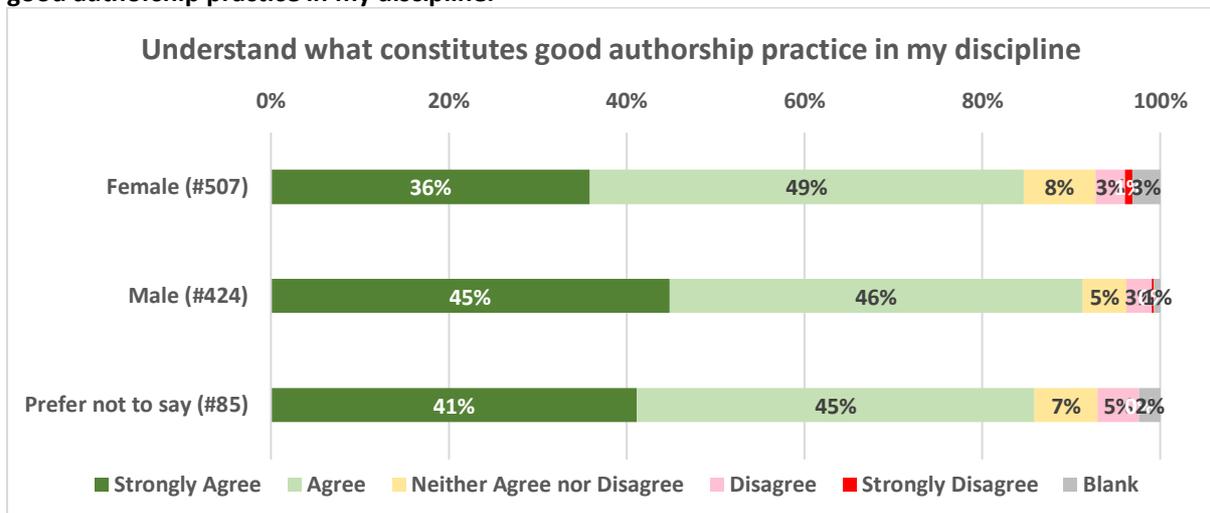
Question 2.1: To what extent do you agree with the following statement: I feel comfortable approaching colleagues for research mentorship, advice or peer review

Comfortable approaching colleagues for research mentorship, advice, or peer review

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	17%	47%	14%	15%	3%	3%
Male (#424)	26%	49%	12%	8%	1%	3%
Prefer not to say (#85)	8%	32%	26%	24%	7%	4%

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 12 Response by Gender to the statement – I feel comfortable approaching colleagues for research mentorship, advice or peer review
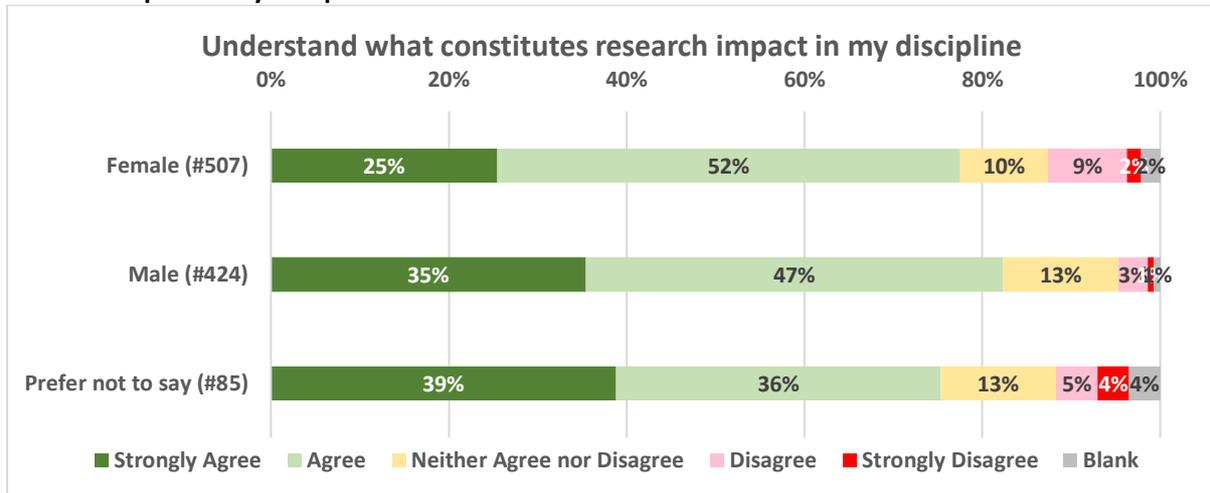
Question 2.2: To what extent do you agree with the following statement: I understand what constitutes good authorship practice in my discipline.

Understand what constitutes good authorship practice in my discipline

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	36%	49%	8%	3%	1%	3%
Male (#424)	45%	46%	5%	3%	1%	
Prefer not to say (#85)	41%	45%	7%	5%	2%	

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 13 Response by Gender to the statement – I understand what constitutes good authorship practice in my discipline
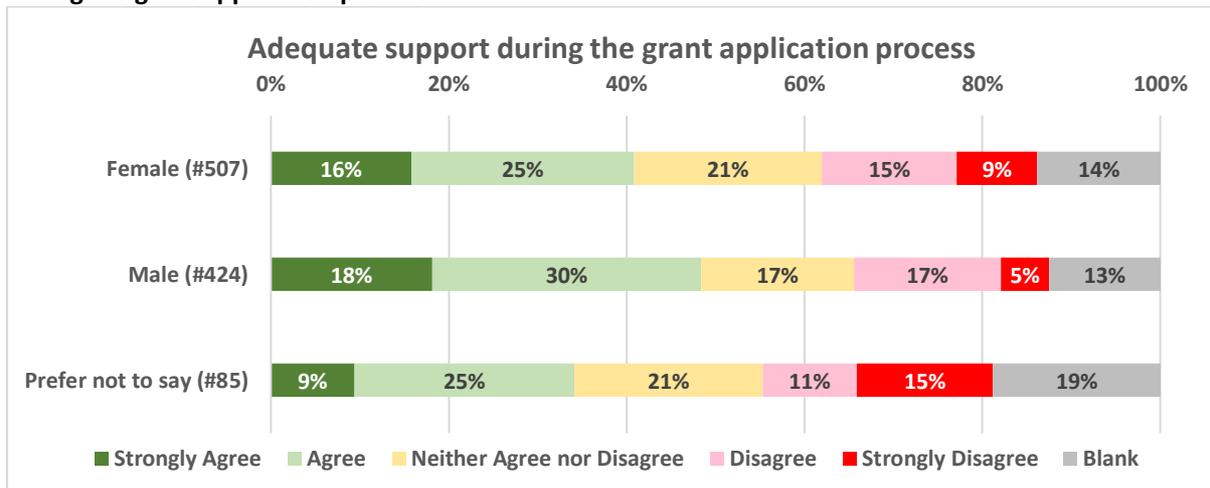
Question 2.3: To what extent do you agree with the following statement: I understand what constitutes research impact in my discipline.

Understand what constitutes research impact in my discipline

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 14 Response by Gender to the statement – I understand what constitutes research impact in my discipline
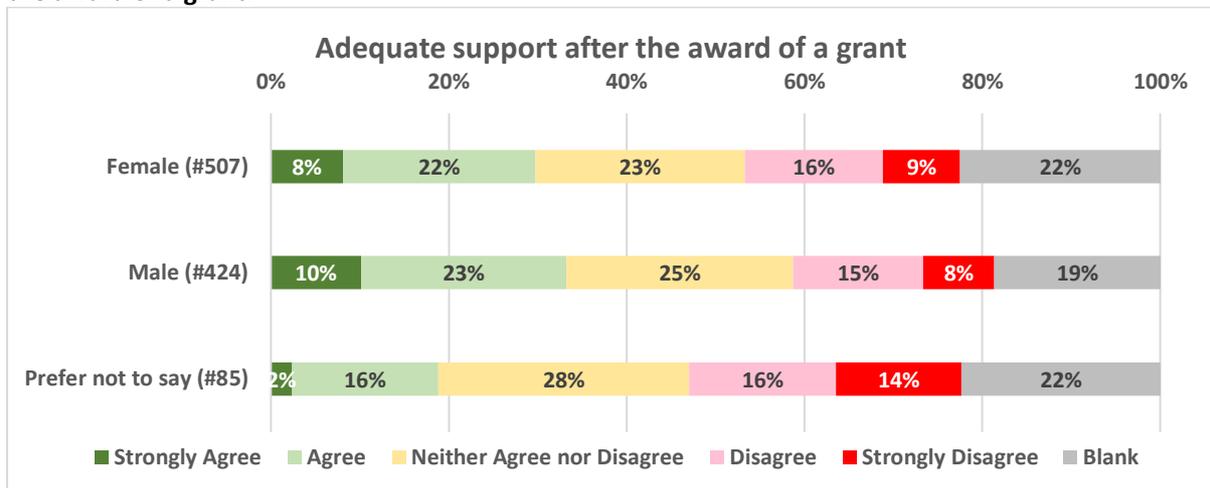
Question 2.4: To what extent do you agree with the following statement: I have adequate support during the grant application process.

Adequate support during the grant application process

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 15 Response by Gender to the statement – I have adequate support during the grant application process
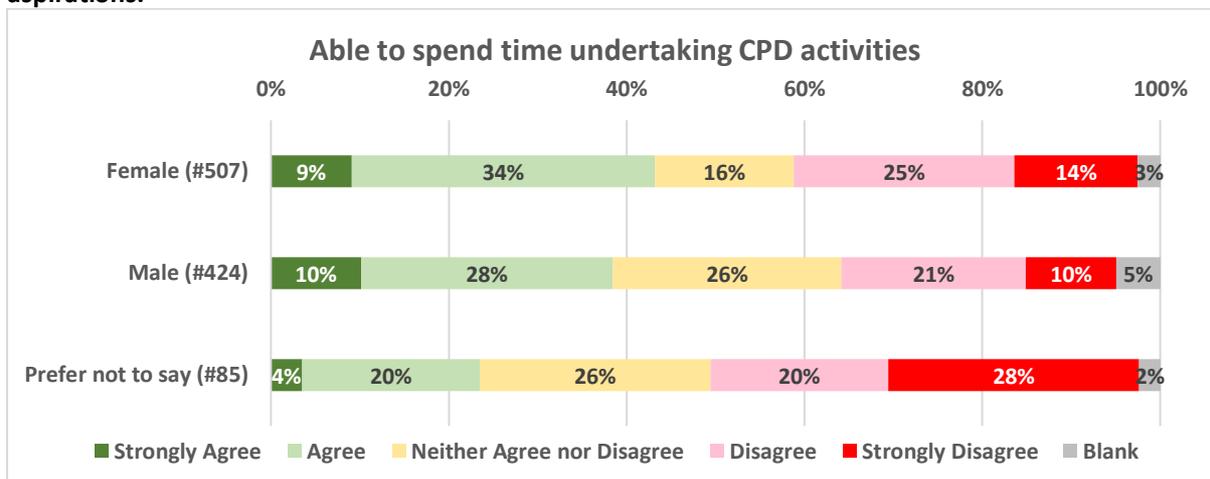
Question 2.5: To what extent do you agree with the following statement: I have adequate support after the award of a grant.

Adequate support after the award of a grant

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	8%	22%	23%	16%	9%	22%
Male (#424)	10%	23%	25%	15%	8%	19%
Prefer not to say (#85)	2%	16%	28%	16%	14%	22%

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 16 Response by Gender to the statement – I have adequate support after the award of a grant

Question 2.6: To what extent do you agree with the following statement: I feel able to spend time undertaking Continuous Professional Development (CPD) activities that are relevant to my career aspirations.

Able to spend time undertaking CPD activities

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Blank
Female (#507)	9%	34%	16%	25%	14%	3%
Male (#424)	10%	28%	26%	21%	10%	5%
Prefer not to say (#85)	4%	20%	26%	20%	28%	2%

Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 17 Response by Gender to the statement – I feel able to spend time undertaking Continuous Professional Development (CPD) activities that are relevant to my career aspirations

Question 3: I understand where in the University I can go for information or support on the following topics.
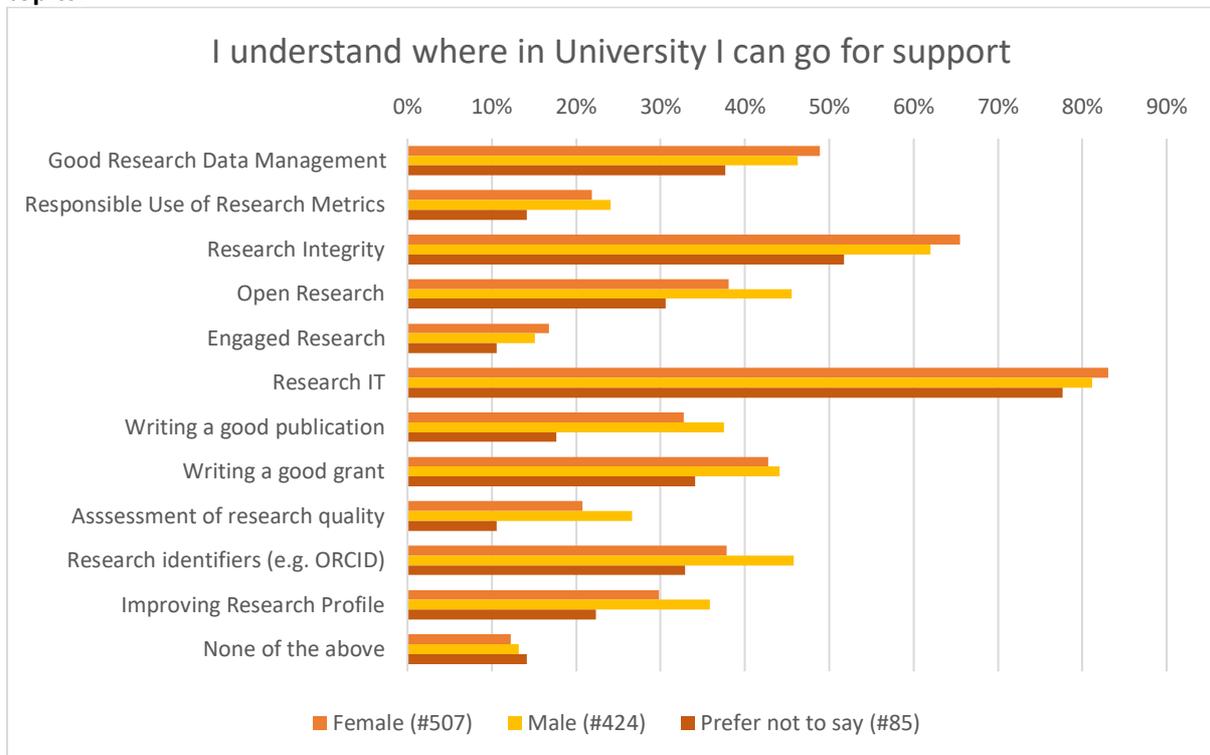
Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 18 Responses by Gender to statement – I know where in UCD I can go for information and support for a list of topics
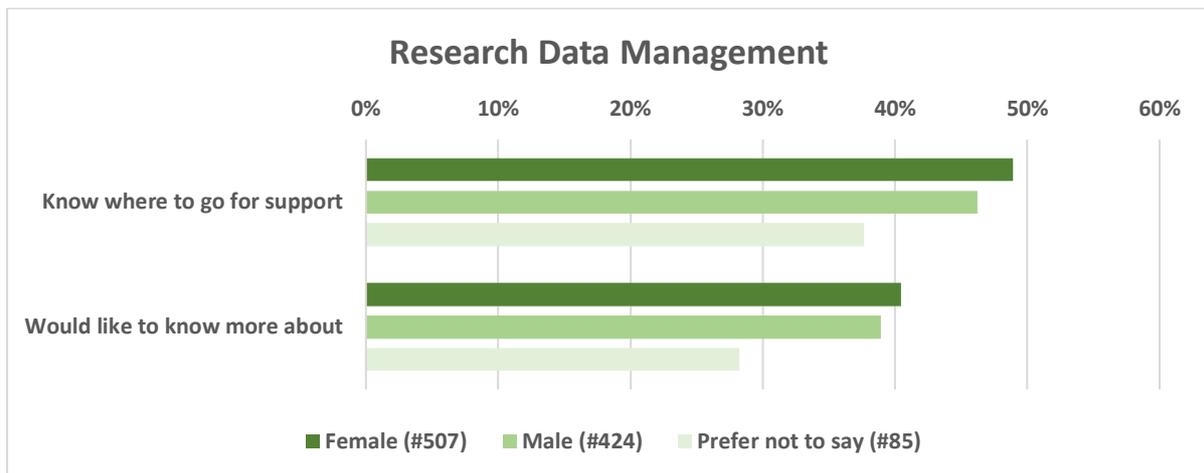
Question 4: Which of the following areas would you like to know more about?
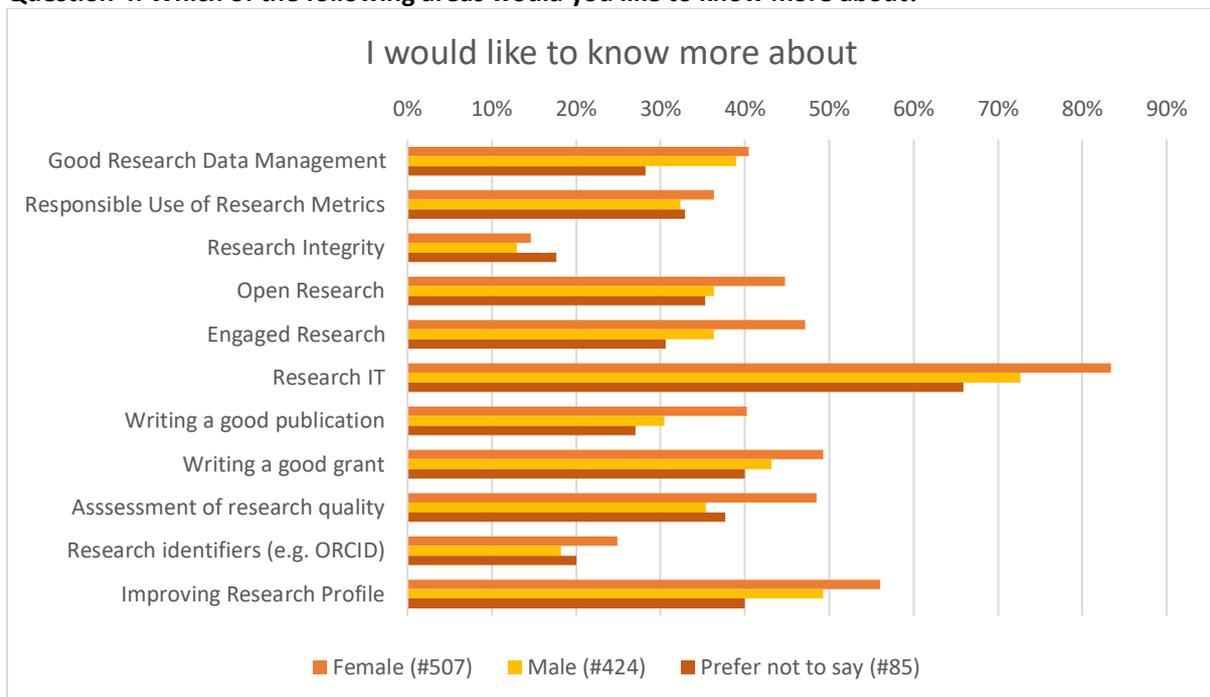
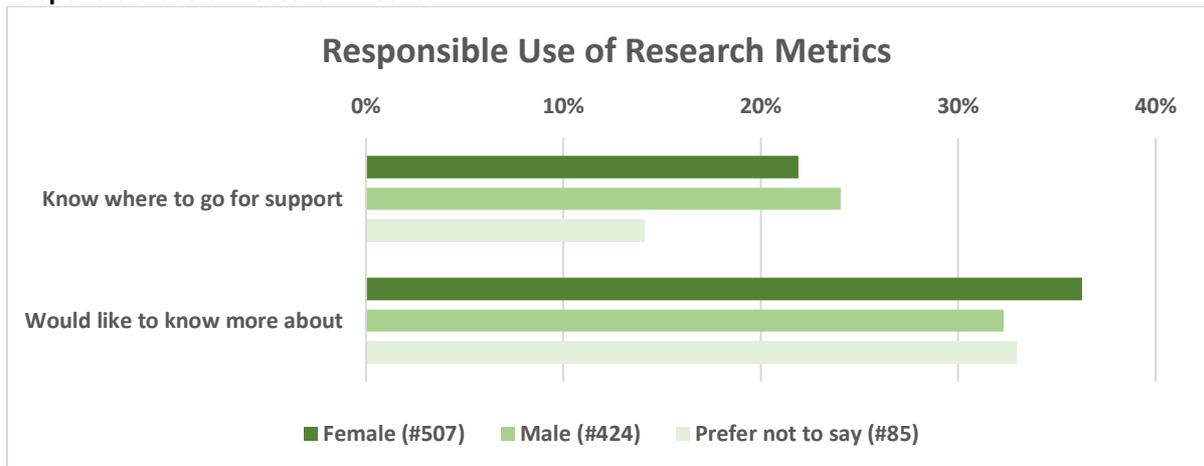Note: Gender non-binary and self-declare genders are not presented here as n <10

Figure 19 Responses by Gender to question: Which of the following areas would you like to know more about?
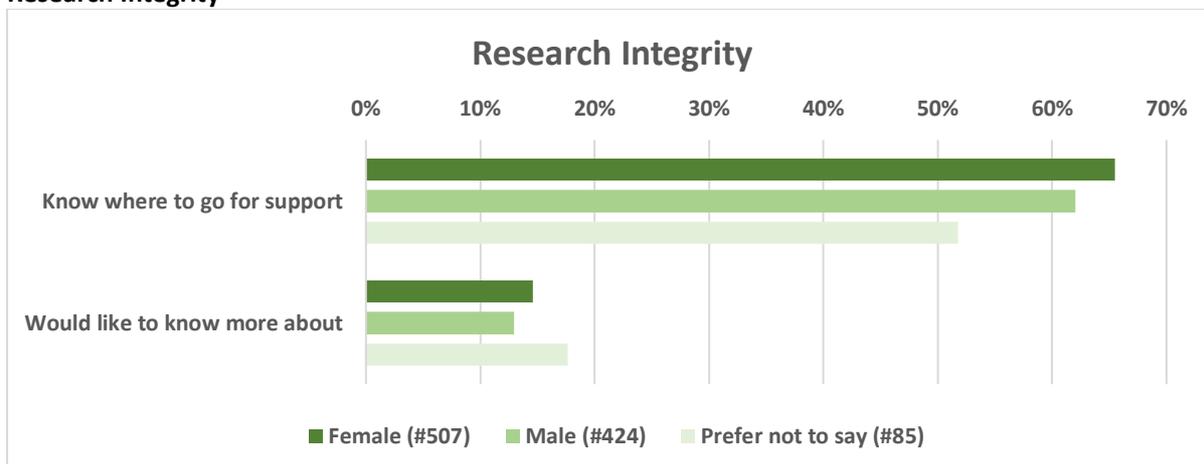
Good Research Data Management

Note: Gender non-binary and self-declare genders are not presented here as n <10
Figure 20 Responses by Gender on Good Data Management
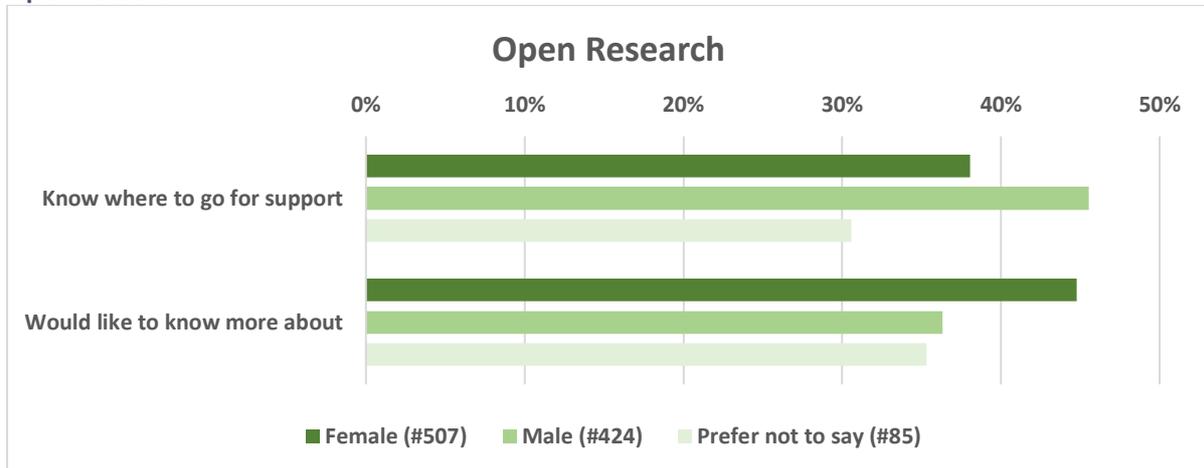
Responsible Use of Research Metrics

Note: Gender non-binary and self-declare genders are not presented here as n <10
Figure 21 Responses by Gender on Responsible Use of Research Metrics

Research Integrity

Note: Gender non-binary and self-declare genders are not presented here as n <10
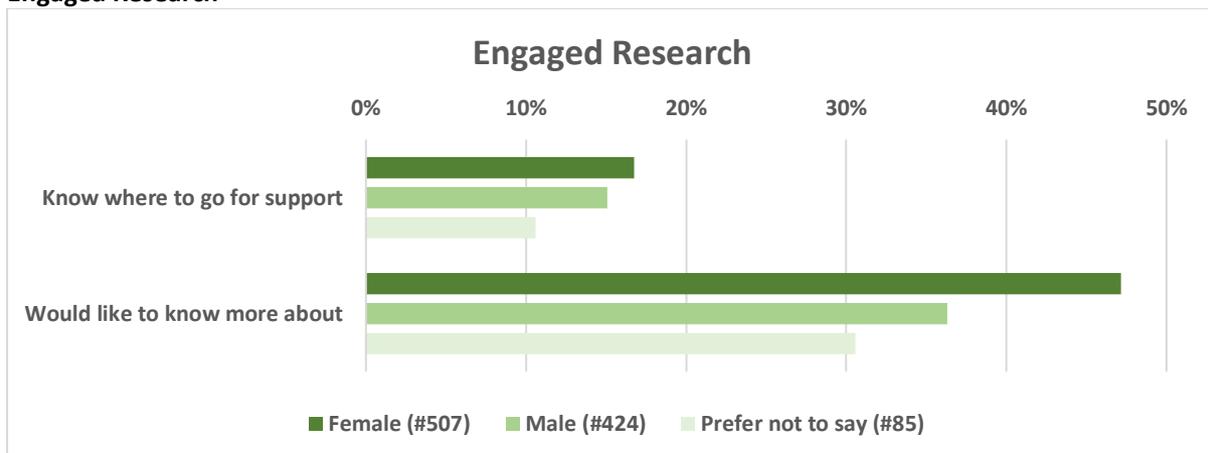*Figure 22 Responses by Gender on Research Integrity*

Open Research

Note: Gender non-binary and self-declare genders are not presented here as n <10
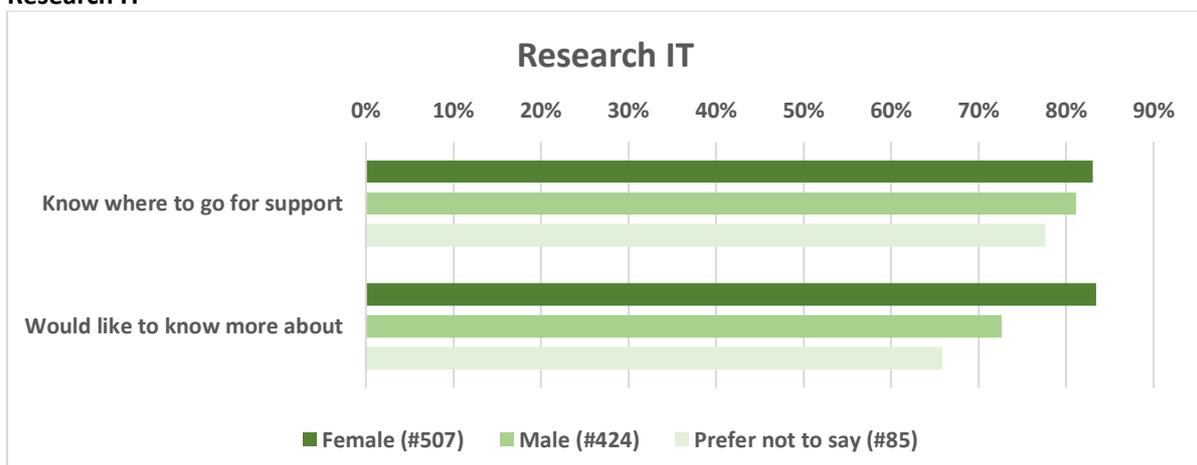*Figure 23 Responses by Gender on Open Research*

Engaged Research

Note: Gender non-binary and self-declare genders are not presented here as n <10
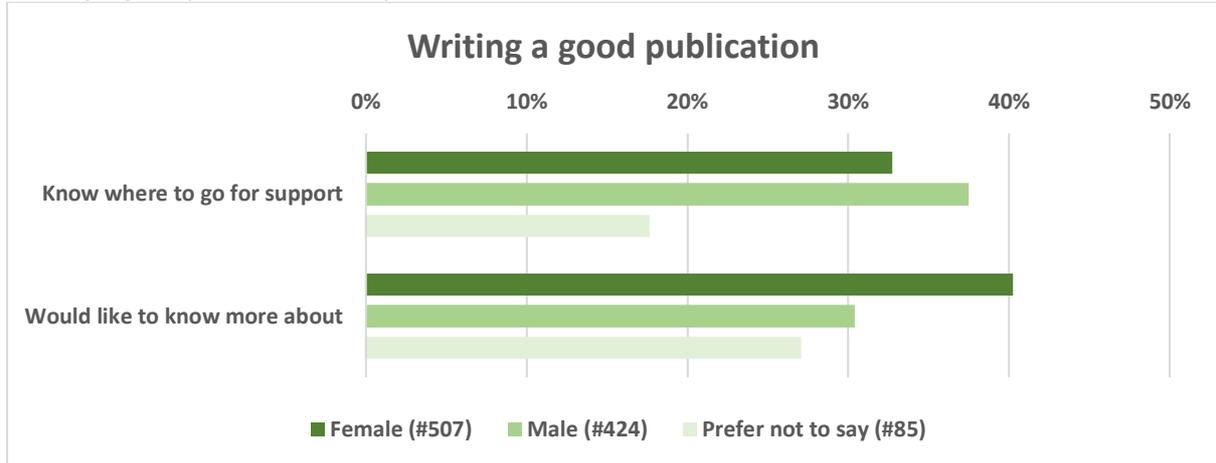*Figure 24 Responses by Gender on Engaged Research*

Research IT

Note: Gender non-binary and self-declare genders are not presented here as n <10
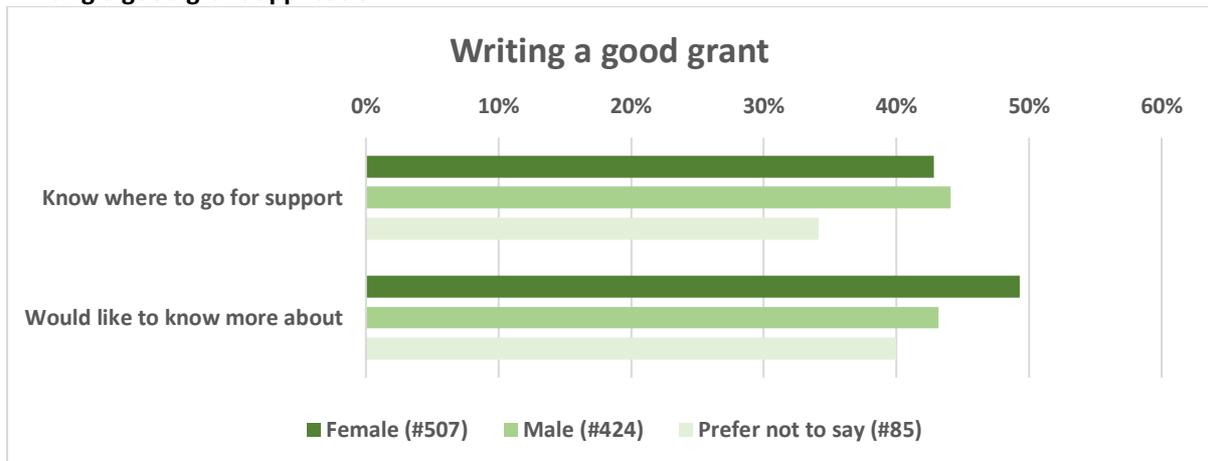*Figure 25 Responses by Gender on Research IT*

Writing a good publication / output

Writing a good publication

Know where to go for support

Would like to know more about

Female (#507) Male (#424) Prefer not to say (#85)

Note: Gender non-binary and self-declare genders are not presented here as n <10
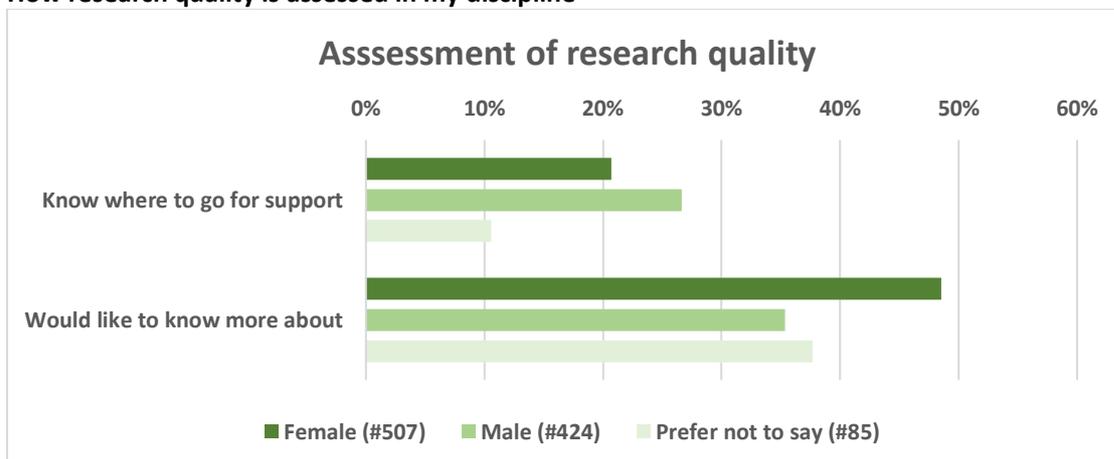*Figure 26 Responses by Gender on Writing a Good Publication/Output*

Writing a good grant application

Writing a good grant

Know where to go for support

Would like to know more about

Female (#507) Male (#424) Prefer not to say (#85)

Note: Gender non-binary and self-declare genders are not presented here as n <10
Figure 27 Responses by Gender on Writing a Good Grant Application

How research quality is assessed in my discipline

Asssessment of research quality

Know where to go for support

Would like to know more about

Female (#507) Male (#424) Prefer not to say (#85)

Note: Gender non-binary and self-declare genders are not presented here as n <10
Figure 28 Responses by Gender on How Research Quality is Assessed in my Discipline

Research Identifiers

Research identifiers (e.g. ORCID)

Know where to go for support
Would like to know more about

■ Female (#507) ■ Male (#424) ■ Prefer not to say (#85)

Note: Gender non-binary and self-declare genders are not presented here as n <10
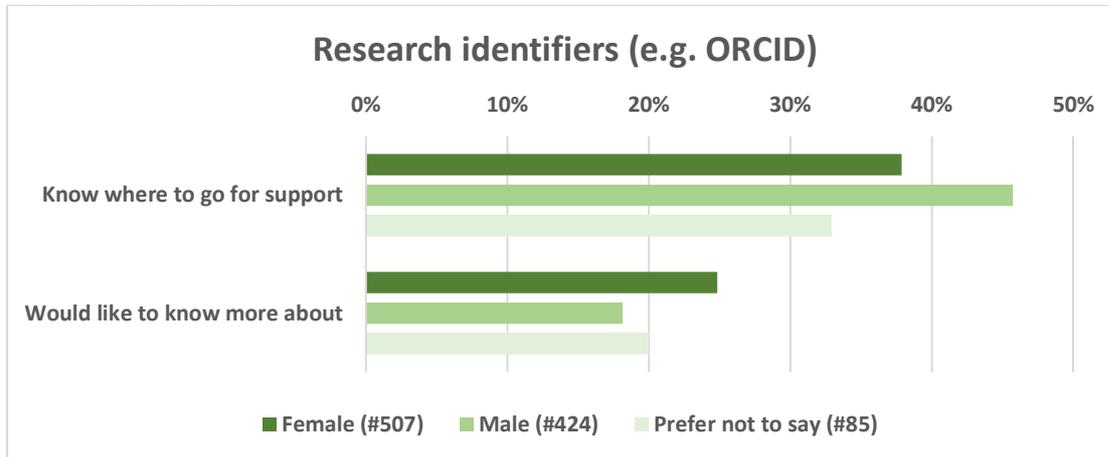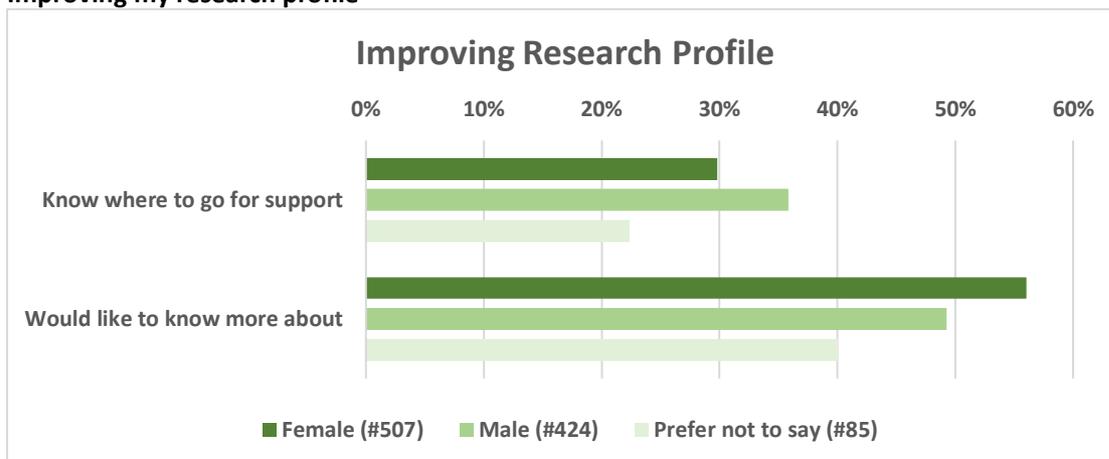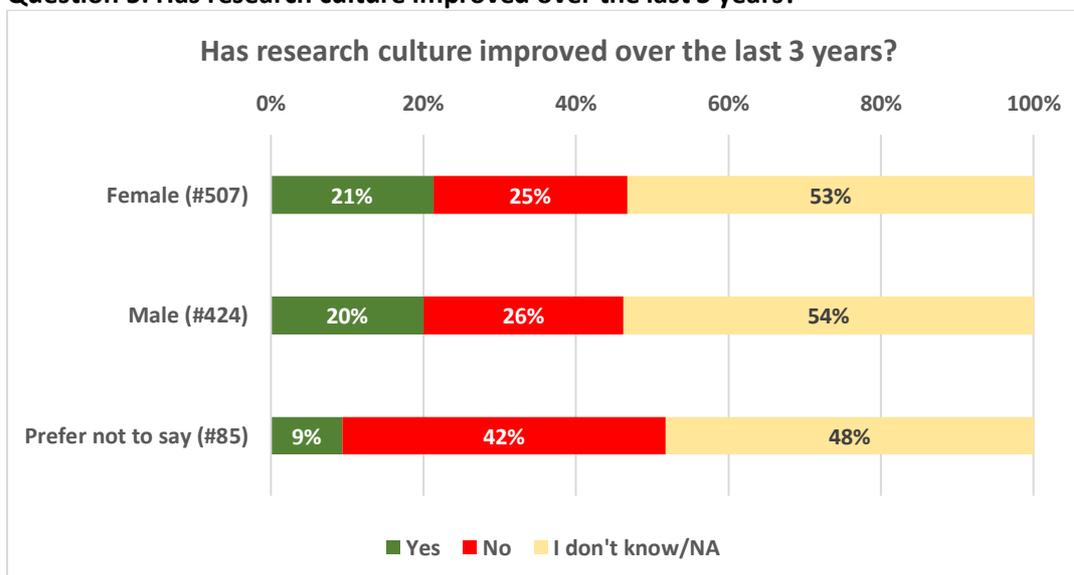*Figure 29 Responses by Gender on Research Identifiers*

Improving my research profile

Improving Research Profile

Know where to go for support
Would like to know more about

■ Female (#507) ■ Male (#424) ■ Prefer not to say (#85)

Note: Gender non-binary and self-declare genders are not presented here as n <10
Figure 30 Responses by Gender on Improving my Research Profile

Question 5: Has research culture improved over the last 3 years?

Has research culture improved over the last 3 years?

	Yes	No	I don't know/NA
Female (#507)	21%	25%	53%
Male (#424)	20%	26%	54%
Prefer not to say (#85)	9%	42%	48%

■ Yes ■ No ■ I don't know/NA

Note: Gender non-binary and self-declare genders are not presented here as n <10
Figure 31 Responses by Gender to the question: Has Research Culture Improved over the last 3 years ?