

# Research integrity: a landscape study

**Annex B:** Quantitative data summary

June 2020



### Research integrity: a landscape study

Vitae in partnership with the UK Research Integrity Office (UKRIO) and the UK Reproducibility Network (UKRN)

Commissioned by UK Research and Innovation (UKRI)

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The interpretations and opinions in this report are those of the authors and may not reflect the policy positions of UKRI.

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This summary of the quantitative data provides further background data to support the conclusions drawn in the 'Research integrity: a landscape study' report.

The main findings and interpretations of the relevant survey are discussed within the main report. However, this annex provides a fuller description of the raw data and comparisons of the responses provided by different groups of researchers. This more detailed version may be useful for those wishing to build on the study or place a specific result from the report in context.

### 1 Background

A survey was a key methodological tool in the study commissioned by UKRI to undertake a landscape study exploring drivers and incentives in the research ecosystem and how these affect research behaviours in the context of research integrity. In particular, the survey explored: respondents' perceptions on incentives at different levels within the research ecosystem and how they believed these impacted on research integrity, positively or negatively. It also explored respondents' personal motivations with regard to research integrity, their knowledge of research integrity initiatives and their engagement with training and development in relation to research integrity.

### 2 Methodology

#### 2.1 Online survey

An online survey<sup>1</sup> was launched on 11 October 2019 and ran until 8 November 2019. It consisted of 48 questions, including 12 multiple choice questions relating to personal circumstances to route respondents through the survey plus nine demographic questions, collectively enabling exploration of the views of different constituency groups. The core of the survey explored respondents views on how a range of drivers and incentives in the research system impact on research integrity in either positive or negative ways; respondents' personal views, understanding and experiences of research integrity and whether respondents and other researchers feel tempted to compromise on research integrity; and who has responsibility for improving levels of research integrity.

#### 2.2 **Promotion of the survey**

The survey was disseminated across the higher education (HE) sector through the respective networks of the three project partners (Vitae, UKRIO and UKRN). Steven Hill of Research England provided a blog on the project and there was an active campaign on social media. The survey was shared across Twitter by the project team as well as by UKRI organisational accounts, with over 300,000 followers collectively, resulting in least 400 comments, retweets and likes. The survey was also distributed by email to over 25,000 individuals and over 200 research and other stakeholder organisations and networks, with information and resources to support cascading communications.

The primary audience for the survey was researchers in UK research institutions at all stages of their career, but responses from other interested stakeholders were also welcomed. The survey was targeted at individuals with current or recent experience of working in the UK research ecosystem:

• as a researcher or supporting research/researchers (for example, technician, research manager, researcher developer, research policy officer, academic)

<sup>&</sup>lt;sup>1</sup> Research integrity landscape survey <u>https://www.vitae.ac.uk/ri-study-survey-questions</u>

- either within an academic or publicly funded research performing organisation (for example, university, research institute)
- or within a research funding, policy, or advocacy organisation (for example, learned society, publisher, representative body).

Applicants to attend the workshops were also encouraged to register for the survey and workshop participants were encouraged to cascade information on the survey through their networks. Members of the External Advisory Group also assisted with the promotion of the survey.

#### 2.3 Survey responses

In total there were 1,539 responses to the survey, of which 1,084 were complete responses. These were provided by 993 researchers and 91 other respondents, both individuals and those responding on behalf of an organisation (predominantly universities). The sample size of other respondents was too small to analyse independently, but their responses were compared to the body of researcher responses. In addition, their free text responses were considered alongside those of researchers to explore any substantive differences (see Annex D.

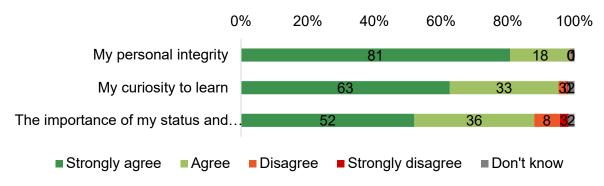
In terms of research-active respondents (researchers), there was a fairly balanced split between three different career stages: postgraduate researcher (PGR), research staff (postdoctoral researcher and research fellow) and 'academic staff' (research group leader, lecturer, professor and above). These three groupings were used to analyse survey responses by career stage. None of the other roles were large enough to be analysed separately.

Throughout the tables in this Annex, data have been highlighted in red where they are 3% below the average score and in green where they are 3% above the average score. Rounding means that totals do not always add up to 100%.

#### **3** Personal attitudes to research and research integrity

Research-active respondents were asked to what extent their personal qualities drive them to achieve high levels of research integrity.

### Figure 3.1 The extent to which personal qualities drive high levels of research integrity (research-active respondents)



#### 3.1 Personal integrity

Almost all respondents agreed that they were driven by their personal integrity to achieve high levels of research integrity, with 81% strongly agreeing (Table 3.1). Research

Excellence Framework (REF) Panel D (Arts and humanities) respondents were less likely to strongly agree, while female respondents were more likely to strongly agree than males. There was little difference by career stge.

Table 3.1 Extent to which respondents' personal integrity drives levels of research
integrity

N=936	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	81%	18%	0%	0%	1%
Male	79%	19%	0%	0%	1%
Female	84%	16%	0%	0%	1%
Panel A	81%	18%	-	-	1%
Panel B	81%	17%	-	-	1%
Panel C	82%	18%	-	-	1%
Panel D	74%	24%	-	-	2%

#### 3.2 Curiosity to learn

Curiosity to learn emerged as a powerful driver for high levels of research integrity with 63% of research-active respondents strongly agreeing that this was so. There was variation by discipline, with more Panel D respondents strongly agreeing compared with Panel A (Medicine, health and life sciences) respondents. Similarly, a difference was seen by career stage, with fewer research staff strongly agreeing compared with other groups. There were only small differences by gender.

## Table 3.2 Extent to which respondents' curiosity to learn drives levels of research integrity

N=934	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	62%	33%	1%	-	3%
Male	60%	34%	3%	-	3%
Female	64%	33%	2%	-	1%
Panel A	59%	36%	3%	-	3%
Panel B	63%	35%	1%	-	1%
Panel C	65%	30%	4%	-	2%
Panel D	72%	25%	1%	-	3%
PGR	65%	34%	1%	-	0%
Research staff	57%	37%	4%	0%	3%
Academic staff	66%	30%	3%	0%	1%

#### 3.3 Status and reputation as a researcher

There was more variation in whether a respondent's status and reputation as a researcher was a driver for research integrity. Overall, 52% strongly agreed the connection with their reputation. This disguised differences between disciplinary, however, with more Panel C respondents strongly agreeing especially compared with Panel B and Panel D respondents. Panel B respondents were most likely to disagree overall that their reputation was a driver for high levels of research integrity.

N=933	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	52%	36%	8%	3%	2%
Male	49%	37%	9%	3%	2%
Female	56%	43%	6%	2%	1%
Panel A	53%	36%	7%	2%	2%
Panel B	45%	38%	11%	5%	2%
Panel C	57%	34%	6%	2%	2%
Panel D	48%	44%	5%	2%	2%
PGR	54%	31%	11%	3%	1%
Research staff	47%	39%	9%	3%	2%
Academic staff	55%	36%	5%	2%	1%
Disability	47%	34%	13%	3%	4%
No disability	54%	36%	6%	3%	1%

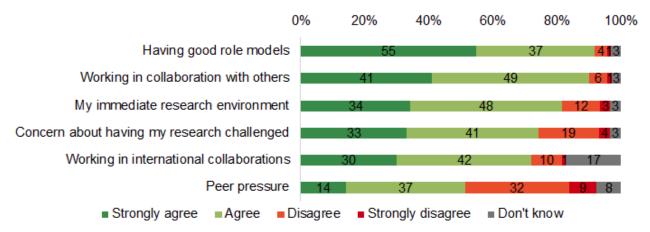
### Table 3.3 Extent to which respondents' status and reputation drives levels of research integrity, by various demographics

Female researchers were more likely to strongly agree than male respondents that their reputation was a driver. There were differences by career stage with fewer research staff strongly agreeing and fewer academic staff disagreeing overall. Researchers with disabilities were less likely to strongly agree and more likely to disagree.

# 4 Impact of other researchers and the research culture on research integrity

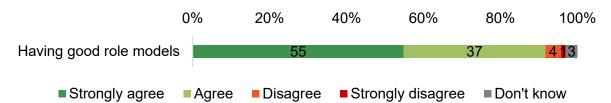
Respondents were asked about whether a range of interactions with other researchers drove them to achieve higher levels of research integrity.

### Figure 4.1 Extent to which respondents agree that various aspects of the research culture drive research integrity



#### 4.1 Good role models

Figure 4.2 Extent to which respondents agree that having good role models drives research integrity (N=928)



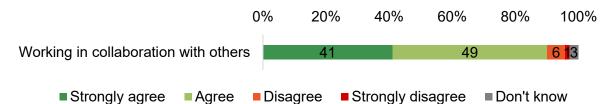
Respondents strongly agreed that having good role models was a personal driver for research integrity, with more than half strongly agreeing. Most likely to strongly agree were doctoral researchers, female respondents and Panel A respondents.

Table 4.1 Extent to which respondents agree that having good role models drives research integrity, by various demographics

N=928	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	54%	37%	4%	1%	3%
Male	49%	40%	5%	1%	5%
Female	60%	34%	3%	1%	2%
Panel A	58%	34%	4%	1%	3%
Panel B	52%	38%	5%	2%	3%
Panel C	53%	38%	4%	1%	4%
Panel D	55%	42%	1%	1%	2%
PGR	64%	30%	3%	1%	1%
Research staff	56%	35%	4%	1%	4%
Academic staff	51%	41%	4%	2%	3%

#### 4.2 Working in collaboration with others

Figure 4.3 Extent to which respondents agree that working in collaboration with others drives research integrity (N=927)



**Working in collaboration** with others was seen as a positive personal driver for research integrity with 90% agreeing overall.

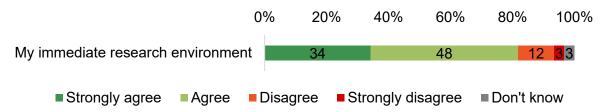
N=927	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	41%	49%	6%	1%	3%
Male	34%	54%	6%	1%	4%
Female	48%	44%	5%	1%	2%
Panel A	42%	49%	5%	1%	3%
Panel B	35%	51%	7%	3%	3%
Panel C	41%	48%	6%	1%	3%
Panel D	45%	49%	4%	2%	-
Caring responsibilities	45%	46%	6%	1%	2%
No caring responsibilities	41%	50%	5%	1%	3%
Disability	46%	41%	9%	1%	3%
No disability	40%	51%	4%	1%	3%

Table 4.2 Extent to which respondents agree that working in collaboration with others drives research integrity, by various demographics

Panel D respondents were most likely to strongly agree, with Panel B (Physical sciences, engineering and mathematics) respondents least likely to. Considerably more female respondents strongly agreed on the importance of working with others, compared with male respondents. Respondents with caring responsibilities and disabilities more strongly agreed that working in collaboration with others was a positive driver. There were no differences by career stage.

#### 4.3 Immediate research environment

### Figure 4.4 Extent to which respondents agree that the immediate research environment drives research integrity (N=932)



A third of respondents see their immediate research environment as a strong personal driver for research integrity, while overall 15% disagree that this is the case.

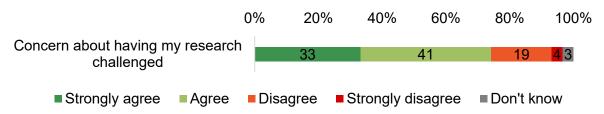
Table 4.3 Extent to which respondents agree the immediate research environment
drives research integrity, by various demographics

N=932	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	34%	48%	12%	3%	3%
Male	27%	53%	10%	4%	6%
Female	41%	44%	12%	2%	1%
Panel A	36%	47%	10%	3%	4%
Panel B	27%	52%	14%	4%	3%
Panel C	36%	47%	12%	2%	3%
Panel D	35%	45%	12%	5%	3%
PGR	42%	43%	9%	3%	3%
Research staff	36%	42%	13%	3%	5%
Academic staff	30%	52%	11%	3%	3%

Gender differences were pronounced, with a quarter of male respondents strongly agreeing compared with two fifths of female respondents. Panel B respondents were least likely to strongly agree at 27%. There was a clear trend based on career stage with 42% of doctoral respondents, 36% of research staff and 30% of academic staff respondents strongly agreeing.

#### 4.4 Concern about having their research challenged

### Figure 4.5 Extent to which respondents agree that concern about having their research challenged drives research integrity (N=930)



While three-quarters of respondents felt that concern about having their research challenged was a positive driver for high levels of research integrity, only a third strongly agreed and two-fifths disagreed or strongly disagreed.

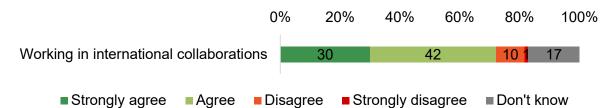
Table 4.4 Extent to which respondents agree that concern about having their research
challenged drives research integrity, by various demographics

N=930	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	33%	41%	19%	4%	3%
Male	30%	42%	22%	4%	3%
Female	37%	42%	15%	2%	3%
Panel A	35%	40%	21%	1%	3%
Panel B	32%	42%	17%	8%	1%
Panel C	32%	43%	18%	4%	4%
Panel D	28%	42%	19%	5%	7%
PGR	44%	35%	12%	4%	5%
Research staff	36%	43%	17%	2%	2%
Academic staff	29%	40%	23%	4%	3%
Disability	30%	45%	18%	3%	5%
No disability	34%	40%	20%	4%	2%
Fixed-term contracts	29%	42%	22%	4%	3%
Open contracts	35%	42%	16%	3%	4%

37% of female respondents strongly agreed that concern about having their research challenged drove them to high levels of research integrity compared with 30% of male respondents. Levels of agreement were lower for Panel D compared to other Panels. There was a clear trend based on career stage, with doctoral respondents more likely to strongly agree than research staff and academic staff respondents. Respondents on fixed-term contracts were less likely to strongly agree compared with those on open contracts.

#### 4.5 Working in international collaborations

Figure 4.6 Extent to which respondents agree that working in international collaborations drives research integrity (N=911)



Working in international collaborations was seen a as slightly less positive driver for personal research integrity, with 30% of respondents strongly agreeing while 11% disagreed overall. Panel B respondents were more likely to disagree overall. There were small differences by gender with more female respondents strongly agreeing compared with males. Little difference was seen by career stage.

N=911	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	30%	42%	10%	1%	17%
Male	26%	46%	13%	1%	14%
Female	33%	39%	7%	1%	20%
Panel A	31%	41%	9%	1%	18%
Panel B	28%	47%	14%	2%	10%
Panel C	31%	43%	8%	2%	17%
Panel D	28%	38%	4%	2%	28%

### Table 4.5 Extent to which respondents agree that working in international collaborations drives research integrity, by various demographics

#### 4.6 Interdisciplinary research

Figure 4.7 Extent to which respondents agree interdisciplinary research drives research integrity (N=967)

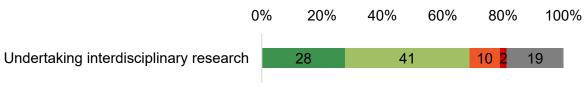
C	9% 2	20%	40%	60	)%		80%	100%
Interdisciplinary research	20		39		13	2	14	11
<ul> <li>Strong positive</li> <li>Negative</li> <li>Don't know</li> </ul>	-	ositive rong nega	ative		■ Botl ■ No			nd negative

Three fifths of respondents reported that interdisciplinary research had a positive impact on research integrity. Two thirds of female respondents saw it as positive while male respondents were more likely not to see an impact. Postgraduate respondents were more likely to strongly agree than other career stages.

N=967	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	20%	39%	13%	2%	1%	14%	11%
Male	19%	35%	14%	2%	1%	18%	11%
Female	23%	42%	12%	1%	1%	11%	10%
Panel A	20%	41%	10%	1%	1%	16%	12%
Panel B	16%	44%	13%	3%	1%	14%	11%
Panel C	25%	32%	14%	2%	1%	13%	13%
Panel D	22%	40%	10%	1%	1%	19%	10%
PGR	28%	40%	10%	3%	0%	8%	12%
Research staff	17%	40%	14%	2%	1%	13%	13%
Academic staff	20%	38%	14%	1%	1%	16%	10%
Disability	28%	36%	16%	3%	-	9%	8%
No disability	20%	41%	12%	1%	1%	12%	11%

### Table 4.6 Extent to which respondents agree that interdisciplinary research drives research integrity, by various demographics

### Figure 4.8 Extent to which respondents agree that undertaking interdisciplinary research is a personal driver for research integrity (N=910)



Strongly agree Agree Disagree Strongly disagree Don't know

28% of respondents strongly agreed that undertaking interdisciplinary research was a personal driver for achieving high levels research integrity.

Table 4.7 Extent which respondents agree undertaking interdisciplinary research was
a personal driver for research integrity

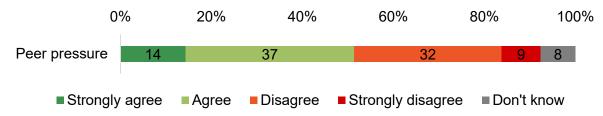
N=910	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	28%	41%	10%	2%	19%
Male	19%	44%	12%	4%	21%
Female	35%	37%	9%	1%	17%
Panel A	25%	43%	9%	2%	20%
Panel B	27%	40%	10%	3%	21%
Panel C	31%	37%	14%	2%	17%
Panel D	29%	45%	8%	2%	17%
PGR	39%	34%	7%	1%	19%
Research staff	24%	40%	12%	2%	22%
Academic staff	27%	45%	11%	3%	15%
Disability	38%	38%	11%	2%	12%
No disability	26%	43%	10%	2%	20%

There were strong gender differences with almost twice as many female respondents strongly agreeing compared with male respondents. Doctoral respondents were most likely

to strongly agree that it was a personal driver than respondents at other career stages. Similarly, researchers with a disability were more likely to strongly agree. There were small variations by REF Panel with Panel C (Social sciences) respondents most likely to disagree.

#### 4.7 Peer pressure

### Figure 4.9 Extent to which respondents agree that peer pressure drives research integrity (N=930)



Only 14% of respondents strongly agreed in the value of peer pressure as a personal driver, compared with 41% disagreeing or strongly disagreeing.

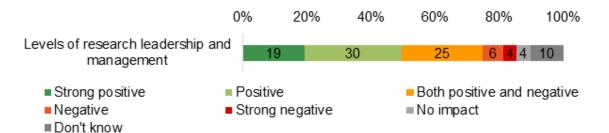
### Table 4.8 Extent to which respondents agree that peer pressure drives research integrity, by various demographics

N=930	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	14%	37%	32%	9%	8%
Male	11%	41%	34%	8%	5%
Female	17%	35%	30%	5%	9%
Panel A	15%	33%	36%	7%	9%
Panel B	9%	41%	33%	10%	6%
Panel C	15%	40%	29%	9%	7%
Panel D	20%	38%	25%	10%	8%
PGR	18%	34%	29%	8%	11%
Research staff	13%	35%	36%	9%	7%
Academic staff	14%	40%	32%	9%	6%
Disability	11%	35%	35%	10%	9%
No disability	15%	38%	32%	8%	7%
Caring responsibilities	16%	41%	30%	7%	7%
No caring responsibilities	14%	36%	33%	9%	8%

Female respondents were more likely to strongly agree compared with male respondents, which was also reflected in respondents by Panel with Panel D twice as likely to strongly agree compared with Panel B. Panels A and B were equally likely to disagree or strongly disagree, at 43% of respondents. Researchers with disabilities were less likely to strongly agree at 11%, while those with caring responsibilities were most likely to agree (57%). The only difference between career stages was that more postgraduate-level respondents (18%) strongly agreed compared with research staff and academic staff.

#### 4.8 Research leadership and management

Figure 4.10 Respondents' views on the impact that research leadership and management has on research integrity (N=980)



A fifth of respondents identified research leadership and management as having a strongly positive impact on research integrity, with a quarter of respondents saying that this can have both a negative and positive impact.

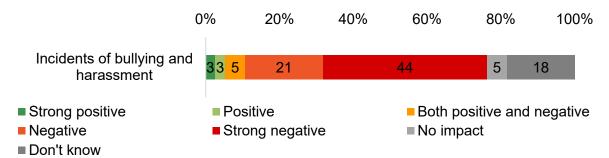
N=980	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	19%	30%	25%	6%	4%	5%	10%
Male	18%	32%	23%	8%	4%	6%	10%
Female	22%	29%	29%	6%	3%	4%	10%
Panel A	20%	29%	28%	7%	3%	4%	9%
Panel B	18%	28%	22%	8%	5%	5%	14%
Panel C	19%	31%	24%	7%	6%	4%	8%
Panel D	19%	38%	26%	5%	2%	4%	8%
PGR	23%	38%	17%	3%	4%	3%	12%
Research staff	17%	28%	25%	5%	4%	5%	16%
Academic staff	20%	31%	27%	8%	4%	5%	5%
Disability	22%	24%	31%	5%	4%	3%	10%
No disability	18%	32%	25%	6%	3%	5%	10%
Caring responsibilities	24%	29%	25%	7%	3%	5%	8%
No caring responsibilities	17%	30%	27%	6%	4%	4%	11%

### Table 4.9 Respondents' views on the impact that research leadership and management has on research integrity, by various demographics

Female respondents were most likely to see this as both a positive and negative driver. Postgraduate respondents were most likely to see research leadership and management as a strongly positive driver, while academic staff were more likely to see it as an overall positive personal driver than research staff, who were more likely not to know. Those with a disability were more likely to see peer pressure as both a positive and negative driver.

#### 4.9 Incidents of bullying and harassment

Figure 4.11 Respondents' views on the impact that incidents of bullying and harassment have on research integrity (N=977)



The majority of respondents saw incidents of bullying and harassment as a negative impact on research integrity, with small proportions seeing these as having a positive impact.

Table 4.10 Respondents' views on the impact that incidents of bullying and harassment have on research integrity, by various demographics

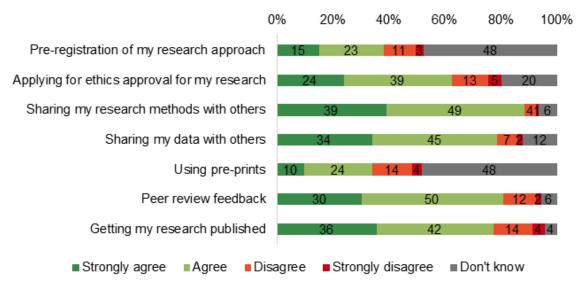
N=977	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	3%	3%	5%	21%	44%	5%	18%
Male	2%	3%	4%	23%	44%	5%	19%
Female	4%	3%	6%	21%	45%	5%	17%
Panel A	3%	3%	5%	23%	47%	4%	14%
Panel B	2%	2%	4%	24%	43%	4%	21%
Panel C	2%	4%	7%	18%	42%	7%	19%
Panel D	1%	3%	6%	15%	44%	6%	23%
PGR	4%	8%	9%	15%	38%	6%	21%
Research staff	2%	1%	5%	21%	48%	4%	20%
Academic staff	3%	2%	5%	23%	44%	7%	16%

There was no difference by gender or disability. Panels A and B were most likely to see incidents of bullying and harassment as negative impacts overall. Similarly, research staff were more likely to see these as negative than other career stages. There were no differences by disability.

#### **5** The research process

Respondents were asked to what extent various stages of the research process are drivers in achieving high levels of research integrity. The stages went from pre-registration of their research through to getting published.

## Figure 5.1 Extent to which respondents agree that aspects of the research process drive research integrity



#### 5.1 **Pre-registration of research**

Figure 5.2 Extent to which respondents agree that pre-registration of their research drives research integrity (N=884)

	0%	)	20%	40%	60%	80%	100%
Pre-registration of my research app	roach	15	23	11	3	48	
Strongly agree	Disagr	ee	Stron	gly disag	gree	■ Don't kn	ow

When asked about the impact of pre-registration of their research approach on research integrity levels, almost half (48%) did not have a view. The rest predominately agreed (38%) with the value of this, with only 14% disagreeing.

Table 5.1 Extent to which respondents agree that pre-registration of their research
approach drives research integrity, by various demographics

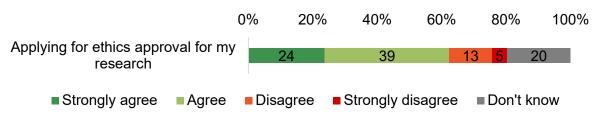
N=884	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	15%	23%	11%	3%	48%
Male	18%	20%	14%	3%	50%
Female	17%	27%	7%	2%	56%
Panel A	22%	31%	9%	2%	35%
Panel B	9%	15%	16%	3%	58%
Panel C	12%	22%	11%	3%	52%
Panel D	8%	16%	11%	5%	60%
PGR	22%	32%	5%	2%	40%
Research staff	17%	17%	10%	2%	54%
Academic staff	11%	25%	15%	3%	45%

Doctoral respondents were most likely to agree strongly (22%), compared with research staff (17%) and academic staff (11%) respondents. Unsurprisingly, Panel A respondents were most likely of the disciplines to strongly agree (22%) and to have higher level of awareness

of the value of pre-registration than the other Panels. Female respondents were more likely to agree (27%) than male respondents (20%), with similar proportions strongly agreeing.

#### 5.2 Applying for ethical approval

### Figure 5.3 Extent to which respondents agree that applying for ethical approval drives research integrity (N=901)



24% of respondents strongly agreed that applying for ethical approval is a driver for high levels of research integrity, with 39% agreeing.

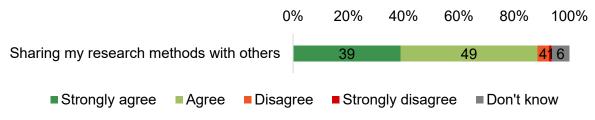
Table 5.2 Extent to which respondents agree that applying for ethical approval drives
research integrity, by various demographics

N=901	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	24%	39%	13%	5%	20%
Male	20%	35%	15%	6%	23%
Female	30%	42%	9%	2%	16%
Panel A	29%	42%	12%	3%	13%
Panel B	11%	26%	13%	8%	42%
Panel C	31%	44%	12%	4%	8%
Panel D	12%	44%	18%	5%	22%
PGR	40%	30%	9%	4%	16%
Research staff	20%	37%	11%	3%	29%
Academic staff	21%	42%	17%	6%	14%

Panels A and C were significantly more likely to strongly agree (29% and 31%, respectively), reflecting the higher proportion of research in these disciplines requiring ethical approval, compared with Panels B (11%) and D (12%). Female respondents were significantly more likely to strongly agree (30%) or agree (42%) than male respondents (20% and 35%, respectively). Similarly, doctoral respondents were more likely to strongly agree (40%) compared with research staff (20%) and academic staff (21%) respondents.

#### 5.3 Sharing research methods with others

### Figure 5.4 Extent to which respondents agree sharing research methods drives research integrity (N=924)



Sharing their research methods with others was seen as a positive way to drive levels of research integrity, with 39% strongly agreeing and 50% agreeing.

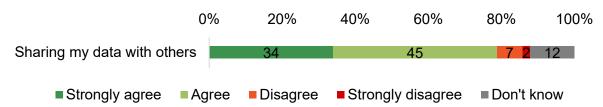
N=924	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	39%	50%	4%	1%	6%
Male	32%	54%	6%	1%	8%
Female	46%	46%	3%	1%	5%
Panel A	46%	46%	3%	-	4%
Panel B	35%	53%	5%	-	2%
Panel C	34%	53%	4%	-	2%
Panel D	30%	53%	5%	-	1%
PGR	45%	46%	2%	1%	5%
Research staff	39%	51%	4%	1%	5%
Academic staff	36%	52%	4%	1%	7%

### Table 5.3 Extent to which respondents agree sharing research methods drives research integrity, by various demographics

Again, Panel A respondents were most likely to strongly agree (46%). More female respondents strongly agreed (46%) in the value of sharing research methods compared with male respondents (32%). Similarly, doctoral respondents were more likely to strongly agree (45%) compared with research staff (39%) and academic staff (36%).

#### 5.4 Sharing data

### Figure 5.5 Extent to which respondents agree sharing research data drives research integrity (N=922)



Respondents generally also saw value for research integrity in sharing their data with others, with 34% strongly agreeing and 45% agreeing.

Table 5.4 Extent to which respondents agree that sharing research data drives
research integrity, by various demographics

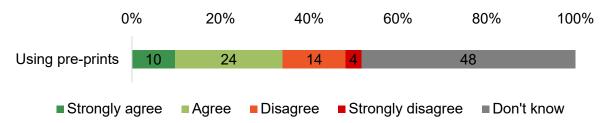
N=922	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	34%	45%	7%	2%	12%
Male	31%	46%	8%	3%	13%
Female	38%	43%	6%	1%	12%
Panel A	42%	44%	6%	1%	6%
Panel B	35%	44%	8%	3%	10%
Panel C	25%	48%	8%	3%	17%
Panel D	22%	43%	9%	2%	24%
PGR	40%	44%	3%	3%	9%
Research staff	38%	43%	7%	1%	11%
Academic staff	30%	45%	9%	2%	14%

Academic staff respondents were significantly less likely to strongly agree (30%) than doctoral researchers and research staff respondents (40% and 38%, respectively). Unsurprisingly, the proportion strongly agreeing declined from Panel A (42%) through Panel

B (35%) and Panel C (25%) to Panel D (22%). Gender differences were apparent with 38% of female respondents strongly agreeing compared with 31% of male respondents.

#### 5.5 Using pre-prints

### Figure 5.6 Extent to which respondents agree that using pre-prints drives research integrity (N=883)



When asked about the impact of using pre-prints on research integrity, almost half (48%) did not have a view, with 34% agreeing or strongly agreeing; 18% disagreed or strongly disagreed.

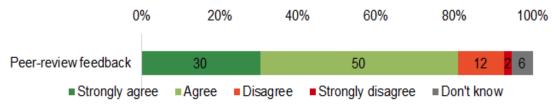
Table 5.5 Extent to which respondents agree that using pre-prints drives research
integrity, by various demographics

N=883	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	10%	24%	14%	4%	48%
Male	9%	27%	18%	5%	41%
Female	11%	22%	10%	2%	56%
Panel A	11%	26%	14%	3%	46%
Panel B	12%	29%	15%	5%	39%
Panel C	8%	21%	13%	4%	55%
Panel D	4%	14%	13%	4%	64%
PGR	9%	27%	5%	2%	58%
Research staff	13%	22%	12%	4%	49%
Academic staff	8%	25%	19%	4%	44%

There was little gender difference in those agreeing, although a significantly higher proportion of female respondents did not know (56%) compared with 41% of male respondents. Higher proportions in Panels C and D also did not know (56% and 64%, respectively). Similarly, 58% of doctoral respondents did not know whether using pre-prints would drive their research integrity.

#### **5.6 Peer-review feedback**

### Figure 5.7 Extent to which respondents agree peer-review feedback drives research integrity (N=925)



30% of respondents strongly agreed that peer-review feedback was a personal driver for research integrity, with 80% agreeing overall.

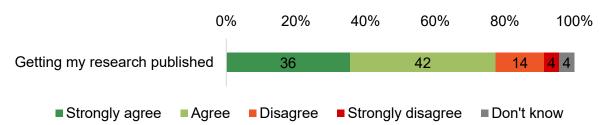
N=925	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	30%	51%	12%	2%	6%
Male	24%	54%	14%	3%	5%
Female	36%	59%	9%	1%	6%
Panel A	32%	47%	13%	2%	6%
Panel B	25%	57%	10%	4%	3%
Panel C	30%	55%	9%	2%	5%
Panel D	38%	44%	12%	-	6%
PGR	41%	42%	5%	1%	10%
Research staff	27%	56%	12%	1%	4%
Academic staff	30%	52%	12%	2%	4%

### Table 5.6 Extent to which respondents agree that peer-review feedback drives personal research integrity, by various demographics

Gender differences were strong, with 36% of female respondents and 24% of male respondents strongly agreeing. Panel B respondents were least likely to strongly agree (25%), while Panel D respondents were most likely to strongly agree (38%). Doctoral respondents were most likely to strongly agree (41%) than respondents at other career stages.

#### 5.7 Getting research published

Figure 5.8 Extent to which respondents agree that getting research published drives research integrity (N=929)



36% of respondents strongly agreed that getting their research published drove their levels of research integrity, with 42% agreeing; 18% disagreed.

Table 5.7 Extent to which respondents agree getting research published drives
research integrity, by various demographics

N=929	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	36%	42%	14%	4%	4%
Male	30%	41%	19%	6%	5%
Female	40%	42%	11%	3%	3%
Panel A	34%	41%	16%	6%	4%
Panel B	33%	43%	16%	5%	4%
Panel C	39%	43%	12%	4%	3%
Panel D	47%	39%	5%	1%	8%
PGR	49%	34%	5%	4%	8%
Research staff	28%	49%	14%	6%	3%
Academic staff	37%	40%	17%	3%	3%

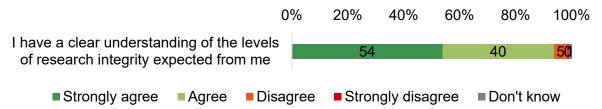
40% of female respondents strongly agreed compared with 30% of male respondents. Panel D respondents were more likely to strongly agree (47%) compared with other Panels: Panels A and B were most likely to disagree or strongly disagree. Postgraduate respondents were most likely to strongly agree (49%), while research staff respondents were least likely at 28%; 20% of academic staff respondents disagreed.

#### 6 Perceptions of research integrity levels

Survey respondents were asked a range of questions on their understanding of expected levels of research integrity and whether they or other researchers feel tempted to compromise on their research integrity levels.

#### 6.1 Understanding of expected levels of research integrity

### Figure 6.1 Extent to which respondents agree that they understand of the levels of research integrity expected from them (N=930)



Respondents were overwhelmingly confident in their understanding of the levels of research integrity expected from them, with 94% agreeing overall.

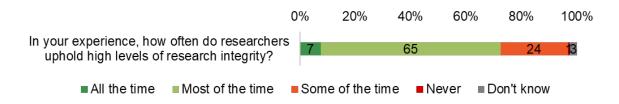
Table 6.1 Extent to which respondents agree that they understand of the levels of
research integrity expected from them, by various demographics

N=930	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	54%	40%	5%	0%	1%
Male	57%	36%	5%	1%	1%
Female	55%	40%	5%	-	1%
Panel A	57%	36%	6%	1%	1%
Panel B	51%	41%	7%	1%	1%
Panel C	51%	45%	3%	2%	-
Panel D	58%	37%	4%	1%	-
PGR	49%	43%	6%	1%	1%
Research staff	45%	47%	7%	0%	1%
Academic staff	61%	35%	3%	0%	1%

Panels A and D were more likely to strongly agree that they understand the levels of research integrity expected from them than Panel B and C. Academic staff were significantly more likely to strongly agree than other career stages.

#### 6.2 Upholding levels of research integrity

Figure 6.2 Extent to which respondents believe researchers uphold high levels of research integrity



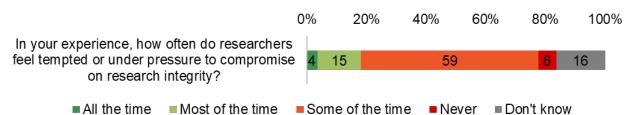
When asked how often researchers uphold high levels of research integrity, 72% of respondents replied all or most of the time.

Table 6.2 Extent to which respondents believe researchers uphold high levels of
research integrity, by various demographics

N=937	All the time	Most of the time	Some of the time	Never	Don't know
Total	7%	65%	24%	1%	3%
Male	6%	67%	24%	1%	2%
Female	9%	66%	22%	-	3%
Panel A	7%	63%	27%	1%	3%
Panel B	7%	65%	27%	1%	1%
Panel C	7%	67%	22%	-	4%
Panel D	11%	71%	14%	-	4%
PGR	11%	52%	29%	1%	7%
Research staff	7%	65%	28%	-	1%
Academic staff	6%	71%	20%	1%	2%

Panel D respondents were more likely to report that researchers uphold high levels of research integrity all or most of the time. Academic staff were also more positive about levels of research integrity than research staff, and postgraduate respondents, with 77% reporting researchers uphold high levels of research integrity all or most of the time, compared with 72% of research staff and 63% of postgraduate researchers.

### Figure 6.3 Extent to which respondents believe researchers feel tempted or under pressure to compromise on research integrity (N=937)



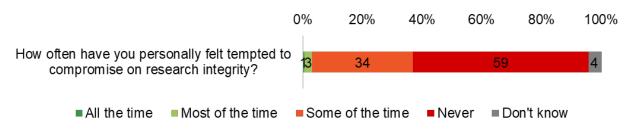
A significant percentage of researchers (59%) reported that researchers feel tempted or under pressure to compromise on research integrity some of the time, with an additional 19% believing this happens most or all of the time.

### Table 6.3 Extent to which respondents believe researchers feel tempted or under pressure to compromise on research integrity, by various demographics

N=937	All the time	Most of the time	Some of the time	Never	Don't know
Total	4%	15%	59%	6%	16%
Male	4%	17%	63%	5%	12%
Female	3%	11%	57%	8%	22%
Panel A	5%	17%	58%	7%	13%
Panel B	4%	16%	64%	7%	10%
Panel C	2%	12%	60%	3%	23%
Panel D	2%	11%	55%	6%	27%
PGR	5%	15%	50%	5%	25%
Research staff	4%	18%	60%	6%	12%
Academic staff	3%	13%	63%	6%	16%

Male respondents were more likely to believe researchers feel tempted or under pressure to compromise on research integrity most of the time, compared with female respondents. Similarly, Panel A and B respondents reported that researchers feel tempted or under pressure most of the time, while Panels C and D were more likely not to know. Research staff were also more likely to report researchers feeling pressured than academic staff.

### Figure 6.4 Extent to which respondents have personally felt tempted to compromise on research integrity (N=934)



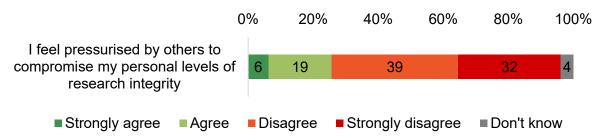
Conversely, 59% of respondents reported that they had never personally felt tempted to compromise on research integrity, although 34% acknowledging this has happened some of the time.

Table 6.4 Extent to which respondents have personally felt tempted to compromise on
research integrity, by various demographics

N=934	All the time	Most of the time	Some of the time	Never	Don't know
Total	1%	3%	34%	59%	4%
Male	0%	2%	39%	57%	2%
Female	0%	3%	29%	61%	6%
Panel A	0%	3%	37%	56%	4%
Panel B	1%	4%	37%	55%	4%
Panel C	-	2%	34%	59%	4%
Panel D	-	1%	23%	69%	7%
PGR	0%	6%	28%	60%	7%
Research staff	1%	3%	39%	53%	4%
Academic staff	0%	2%	35%	60%	3%

Male respondents (39%) were more likely to report that they had personally felt tempted to compromise on research integrity some of the time than female respondents (29%). Panel D respondents (69%) were most likely to report that they had never felt tempted to compromise on research integrity, while research staff (53%) were least likely to report that they had never felt tempted to compromise.

### Figure 6.5 Extent to which respondents have felt pressurised to compromise on research integrity (N=932)



71% of respondents disagreed or strongly disagreed that they had felt pressurised by others to compromise their personal levels of research intensity, with 25% agreeing or strongly agreeing.

Table 6.5 Extent to which respondents have felt pressurised to compromise on
research integrity, by various demographics

N=932	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	6%	19%	39%	32%	4%
Male	6%	19%	38%	34%	3%
Female	6%	17%	41%	32%	4%
Panel A	8%	19%	36%	32%	5%
Panel B	9%	21%	36%	31%	4%
Panel C	5%	18%	44%	31%	2%
Panel D	3%	12%	52%	31%	3%
PGR	9%	19%	31%	38%	4%
Research staff	9%	18%	42%	26%	5%
Academic staff	4%	19%	41%	33%	3%

Panel D respondents were more likely to disagree overall (83%) that they have felt pressurised to compromise on research integrity, while research staff were least likely to disagree overall (68%).

### 7 Institutional level

Respondents were asked about the impact on research integrity of a range of incentives at institutional level. These covered:

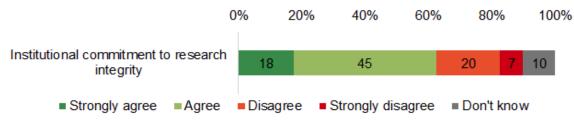
- institutional research integrity policies and processes
- raising concerns about levels of research integrity
- institutional strategy and governance
- employment circumstances
- professional development and training.

#### 7.1 Institutional research integrity policies and processes

Respondents were asked about the impact of a range of institutional policies and processes on research integrity.

#### 7.1.1 Institutional commitment to research integrity

### Figure 7.1 Extent to which respondents agree that their institution's commitment to research integrity drives research integrity (N=920)



Over three fifths of respondents agreed overall that their institution's commitment to research integrity drives their levels of research integrity, with over a quarter disagreeing overall.

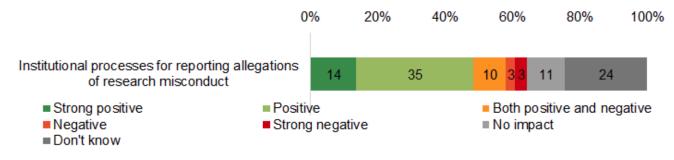
Table 7.1 Extent to which respondents agree that their institution's commitment to
research integrity drives research integrity, by various demographics

N=920	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	18%	45%	20%	7%	10%
Male	16%	44%	22%	8%	10%
Female	20%	49%	17%	4%	10%
Panel A	19%	43%	22%	6%	10%
Panel B	12%	42%	21%	11%	13%
Panel C	21%	50%	18%	5%	5%
Panel D	16%	47%	19%	4%	14%
PGR	33%	40%	11%	5%	12%
Research staff	12%	42%	23%	9%	15%
Academic staff	15%	50%	21%	7%	7%

Female respondents at 69% were more likely to agree overall than male respondents (60%). Panel B respondents were less likely to agree overall, with a third disagreeing overall, compared with Panel C respondents who were most likely to agree overall. Research staff respondents were least likely to agree that their institution's commitment to research integrity drives research integrity.

#### 7.1.2 Institutional processes for reporting allegations of research misconduct

Figure 7.2 Respondents' views on the impact that institutional processes for reporting allegations of research misconduct have on research integrity (N=973)



Half of respondents reported that institutional processes for reporting allegations of research misconduct had a positive impact on research integrity.

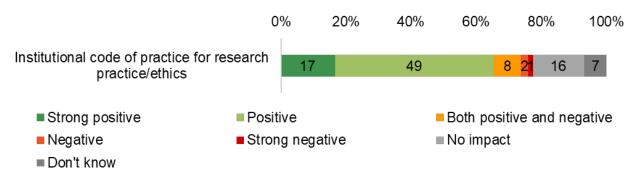
N=973	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	14%	35%	10%	3%	3%	11%	24%
Male	15%	34%	8%	1%	3%	13%	25%
Female	14%	37%	11%	2%	2%	8%	24%
Panel A	14%	36%	10%	2%	3%	11%	23%
Panel B	12%	33%	7%	3%	4%	14%	27%
Panel C	16%	32%	9%	3%	4%	12%	25%
Panel D	12%	38%	12%	3%	1%	9%	26%
PGR	20%	34%	10%	1%	3%	5%	28%
Research staff	11%	29%	10%	4%	4%	13%	30%
Academic staff	13%	38%	9%	3%	4%	14%	20%
Disability	11%	29%	14%	2%	5%	12%	26%
No disability	15%	37%	9%	3%	3%	10%	24%

Table 7.2 Respondents' views on the impact that institution's processes for reporting
allegations of research misconduct have on research integrity, by various
demographics

There were few demographic differences in respondents' views on the impact of institutional processes for reporting allegations of research misconduct on research integrity. Research staff respondents were least likely to see these as having a positive impact on research integrity compared with other career stages and more likely not to know compared with academic staff respondents. Respondents declaring a disability were less likely than those who did not to see institutional processes for reporting allegations of research misconduct as having a positive impact and more likely to see both positive and negative impacts.

#### 7.1.3 Institutional code of practice on research integrity

### Figure 7.3 Respondents' views on the impact that their institutional code of practice has on research integrity (N=972)



Two thirds of respondents agreed or strongly agreed that an institutional code of practice was a positive or strongly positive incentive for high levels of research integrity.

N=972	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	17%	49%	8%	2%	1%	16%	7%
Male	15%	44%	7%	3%	1%	22%	8%
Female	19%	55%	9%	2%	1%	9%	5%
Panel A	18%	52%	8%	2%	1%	13%	5%
Panel B	10%	49%	6%	3%	1%	23%	9%
Panel C	21%	45%	9%	2%	2%	16%	5%
Panel D	14%	51%	9%	3%	1%	12%	11%
PGR	23%	50%	8%	1%	1%	8%	7%
Research staff	14%	49%	10%	2%	1%	16%	8%
Academic staff	14%	51%	7%	3%	1%	18%	6%

### Table 7.3 Respondents' views on the impact that their institutional code of practice has on research integrity, by various demographics

Male respondents were less likely to see their institutional code of practice as having an overall positive impact on research integrity, compared with three quarters of female respondents. Panel B respondents were least likely to record a positive impact and most likely to state it had no impact on research integrity. Postgraduate respondents were more positive about the impact of their institutional code of practice on research integrity, while research staff and academic staff held similar views to each other.

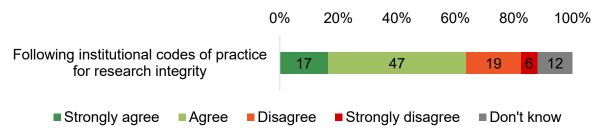
However, just over a half of respondents had some understanding of their institutional code of practice on research integrity, with a third knowing that it exists but not knowing the detail. 12% of respondents had not heard of it.

N=874	I have some understanding of this	l know this exists, but I don't know the detail	I have never heard of this	Not applicable
Total	54%	33%	12%	2%
Male	53%	32%	13%	1%
Female	54%	34%	10%	2%
Panel A	53%	35%	12%	1%
Panel B	42%	35%	20%	3%
Panel C	58%	31%	9%	2%
Panel D	63%	29%	7%	1%
PGR	60%	31%	8%	2%
Research staff	45%	38%	17%	0%
Academic staff	58%	30%	11%	2%

### Table 7.4 Respondents' knowledge of their institutional code of practice on research integrity, by various demographics

There were no differences by gender in the levels of respondents' knowledge and understanding of their institutional code of practice on research integrity. Panel B respondents were least likely to have an understanding of this and around twice as likely not to have heard of it. Research staff respondents were also least likely to have an understanding of their institutional code of practice and less likely to have heard of it compared with other career stages.

### Figure 7.4 Extent to which respondents agree that following their institutional code of practice for research integrity is a personal driver for research integrity (N=914)



Two third of respondents agreed that following their institutional code of practice for research integrity was a personal driver to achieve high levels of research integrity.

Table 7.5 Extent to which respondents agree that following their institutional code of
practice for research integrity is a personal driver for research integrity, by various
demographics

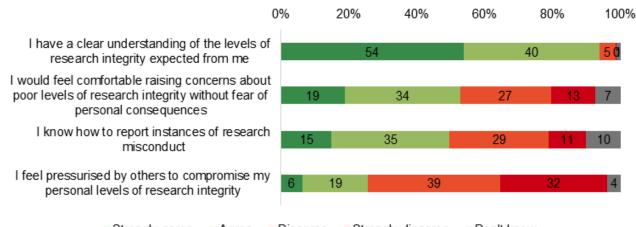
N=914	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	17%	47%	19%	6%	12%
Male	15%	41%	24%	7%	14%
Female	19%	55%	13%	4%	9%
Panel A	17%	49%	19%	4%	11%
Panel B	13%	42%	21%	10%	14%
Panel C	19%	51%	18%	5%	7%
Panel D	13%	47%	14%	3%	23%
PGR	31%	42%	11%	4%	13%
Research staff	13%	50%	20%	5%	12%
Academic staff	15%	48%	21%	7%	10%

Three quarters of female respondents agreed overall that their institutional code of practice for research integrity was a personal driver compared with just over half of male respondents. Panel C respondents were more likely to agree overall that it was a personal driver compared to other Panels: Panel B reported the lowest level of agreement. Postgraduate respondents were most likely to strongly agree that their institutional code of practice for research integrity was a personal driver, while research staff and academic staff reported similar levels of agreement to each other.

#### 7.2 Raising concerns about levels of research integrity

Respondents were asked a range of questions about how confident they were in raising concerns about levels of research integrity and their knowledge of the processes for doing so.

### Figure 7.5 Extent to which respondents agree they are confident about raising research integrity concerns



Strongly agree Agree Disagree Strongly disagree Don't know

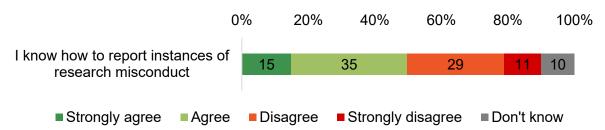
53% confirmed that they would feel comfortable raising concerns about poor levels of research integrity without fear of personal consequences. However, 27% disagreed and 13% strongly disagreed.

N=930	Strongly agree	Agree	Disagree	Strongly disagree	Don't know			
Total	19%	34%	27%	13%	7%			
Male	23%	35%	26%	12%	5%			
Female	16%	34%	28%	12%	10%			
Panel A	19%	30%	29%	14%	7%			
Panel B	16%	35%	28%	13%	8%			
Panel C	22%	35%	25%	13%	6%			
Panel D	13%	45%	23%	7%	12%			
PGR	22%	32%	20%	13%	13%			
Research staff	13%	34%	34%	14%	5%			
Academic staff	21%	36%	26%	11%	7%			
Disability	18%	30%	29%	17%	7%			
No disability	19%	35%	27%	10%	8%			

## Table 7.6 Extent to which respondents agree that they are comfortable about raising concerns about poor levels of research integrity, by various demographics

Male respondents were more likely than female respondents to agree overall that they are comfortable about raising concerns about poor levels of research integrity without fear of personal consequences. Female respondents were more likely to record that they did not know. Panel D respondents were less likely to strongly agree or disagree, and more likely not to know, than other Panels. Research staff respondents were considerably less likely to strongly agree that they were comfortable about raising research integrity concerns without fear of personal consequences than other career stages, with almost half disagreeing overall. Respondents with a disability were less likely to agree overall than those who had not declared a disability. There were no differences by caring responsibility.

### Figure 7.6 Extent to which respondents agree that they know how to report instances of research misconduct



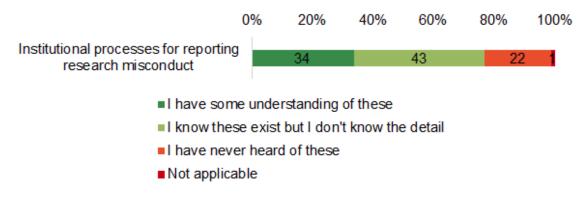
50% agreed that they knew how to report instances of research misconduct, with 29% strongly disagreeing and 11% disagreeing.

Table 7.7 Extent to which respondents agree that they knew how to report instances of research misconduct, by various demographics

N=928	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	15%	35%	29%	11%	10%
Male	18%	36%	27%	10%	10%
Female	13%	33%	33%	11%	11%
Panel A	19%	30%	30%	12%	10%
Panel B	10%	33%	35%	10%	12%
Panel C	17%	39%	25%	8%	8%
Panel D	8%	42%	30%	10%	10%
PGR	17%	35%	24%	10%	14%
Research staff	6%	30%	39%	15%	10%
Academic staff	19%	39%	24%	9%	10%

Female respondents were less likely than male respondents to know how to report instances of research misconduct, with 44% disagreeing overall. Panel C respondents were most likely to agree overall that they knew how to report research misconduct, with Panel B respondents less likely to know how to do this. Similarly, research staff respondents were considerably less likely to know how to report misconduct than other career stages, with over half disagreeing overall. There was little difference by disability or caring responsibility.

### Figure 7.7 Respondents' knowledge of their institutional processes for reporting research misconduct (N=928)



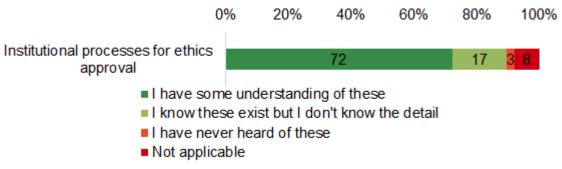
43% of respondents knew that an institutional process for reporting research misconduct exists but were not aware of the details; 22% of respondents had never heard of this process.

N=928	I have some understanding of these	l know these exist, but I don't know the detail	I have never heard of these	Not applicable
Total	34%	43%	21%	1%
Male	36%	42%	21%	1%
Female	33%	45%	21%	1%
Panel A	39%	29%	30%	2%
Panel B	29%	41%	30%	1%
Panel C	30%	50%	18%	2%
Panel D	32%	47%	19%	2%
PGR	32%	47%	20%	1%
Research staff	24%	46%	30%	-
Academic staff	41%	41%	17%	1%

### Table 7.8 Respondents' knowledge of their institutional processes for reporting research misconduct, by various demographics

There were no differences between the genders in knowing about institutional processes for reporting research misconduct. Panel A was most likely to have an understanding of institutional processes for reporting research misconduct compared to other Panels. Conversely, almost a third of Panel A and Panel B respondents, and of research staff respondents, had never heard of their institutional processes for reporting misconduct. Research staff respondents were least likely to know these processes compared with other career stages.

### Figure 7.8 Respondents' knowledge of their institutional processes for ethical approval (N=874)



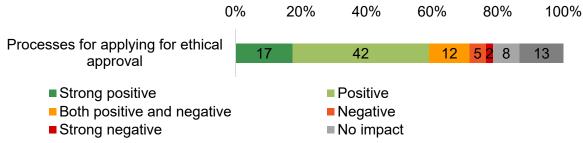
Respondents were much more likely to know about their institution's processes for ethical approval with 72% reporting they had some understanding of this and 17% knowing it exists but not knowing the details.

N=874	I have some understanding of these	l know these exist, but I don't know the detail	I have never heard of these	Not applicable
Total	72%	17%	3%	8%
Male	68%	18%	4%	9%
Female	77%	16%	12%	6%
Panel A	79%	14%	2%	5%
Panel B	44%	29%	7%	21%
Panel C	87%	9%	1%	3%
Panel D	79%	17%	1%	3%
PGR	72%	21%	3%	4%
Research staff	56%	23%	5%	16%
Academic staff	85%	11%	1%	3%

### Table 7.9 Respondents' knowledge of their institutional processes for ethical approval, by various demographics

More female respondents than male had some understanding of institutional processes for ethical approval but, conversely, more female respondents had not heard of these. Panel B respondents were considerably less likely to have any understanding of institutional processes for ethical approval with a fifth reporting that they were not applicable. A similar profile was seen for research staff respondents with just over a half having some understanding of these processes and 16% saying they were not applicable.

### Figure 7.9 Respondents' views on the impact that their institutional processes for applying for ethical approval have on research integrity (N= 975)



59% of respondents saw institutional processes for applying for ethical approval as a positive or strongly positive incentive. Additionally, 12% saw this as both a negative and a positive incentive, while 7% saw it as a negative incentive.

N=975	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	17%	42%	12%	5%	2%	8%	13%
Male	15%	42%	9%	6%	3%	10%	15%
Female	21%	44%	13%	4%	1%	5%	11%
Panel A	18%	47%	14%	5%	2%	7%	8%
Panel B	11%	38%	8%	4%	1%	8%	30%
Panel C	23%	41%	9%	7%	2%	9%	6%
Panel D	15%	37%	11%	6%	2%	11%	15%
PGR	23%	40%	12%	4%	1%	6%	13%
Research staff	11%	42%	13%	3%	2%	6%	22%
Academic staff	18%	44%	12%	7%	3%	10%	8%

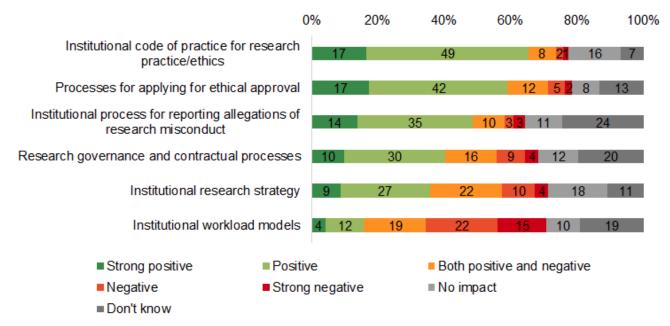
### Table 7.10 Respondents' views on the impact that their institutional processes for applying for ethical approval have on research integrity, by various demographics

Two thirds of female respondents reported that institutional processes for applying for ethical approval had a positive impact overall on research integrity compared with just over half of male respondents. Panel C respondents were most likely to see these processes as strongly positive, with a 30% of Panel B respondents not knowing. Research staff were least likely to see institutional processes for applying for ethical approval as strongly positive, with a fifth not knowing.

#### 7.3 Institutional strategy and governance

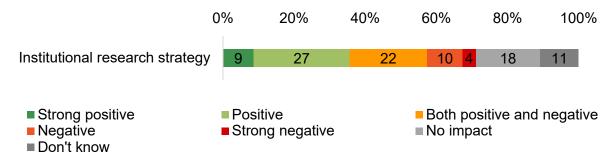
Respondents were asked about the impact of a range of institutional governance processes on research integrity.

### Figure 7.10 Respondents' views on the impact of various institutional processes on research integrity



#### 7.3.1 Institutional research strategies

### Figure 7.11 Respondents' views on the impact that their institutional research strategy has on research integrity (N=981)



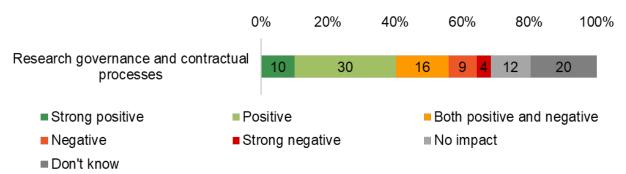
Just over a third of respondents stated that institutional research strategies had an overall positive impact on research integrity, with a fifth seeing these as both positive and negative. Just under a fifth thought they had no impact.

Table 7.11 Respondents' views on the impact that their institutional research strategy
has on research integrity, by various demographics

N=981	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	9%	27%	22%	10%	4%	18%	11%
Male	8%	30%	15%	11%	4%	23%	10%
Female	9%	28%	26%	9%	2%	14%	12%
Panel A	8%	28%	23%	9%	4%	17%	11%
Panel B	8%	23%	18%	4%	4%	24%	13%
Panel C	9%	27%	20%	5%	5%	21%	10%
Panel D	9%	30%	23%	4%	4%	11%	10%
PGR	12%	38%	15%	4%	1%	11%	19%
Research staff	4%	24%	25%	8%	4%	21%	14%
Academic staff	10%	26%	21%	13%	5%	19%	7%

A quarter of female respondents reported that their institutional research strategy had both a positive and a negative impact on research integrity, compared to 15% of male respondents, who were more likely than female respondents to report that it had no impact on research integrity. A quarter of Panel B respondents reported that their institutional research strategy had no impact on research integrity, with almost a fifth reporting both a positive and a negative impact. Postgraduate respondents were most likely to see institutional research strategy as having an overall positive impact, with research staff least likely to believe this.

### Figure 7.12 Respondents' views on the impact of research governance and contractual processes on research integrity (N=976)



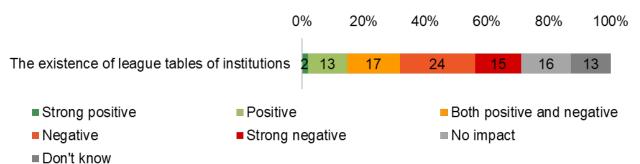
Two fifths of respondents stated that research governance and contractual processes had a positive impact on research integrity, while another fifth did not know, predominantly postgraduate and research staff respondents.

Table 7.12 Respondents' views on the impact of research governance and contractual processes on research integrity, by various demographics

N=976	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	10%	30%	16%	9%	4%	12%	20%
Male	7%	32%	13%	10%	4%	15%	19%
Female	12%	33%	18%	7%	3%	7%	19%
Panel A	12%	33%	14%	7%	4%	11%	18%
Panel B	5%	29%	9%	10%	3%	17%	25%
Panel C	10%	31%	18%	11%	5%	11%	15%
Panel D	9%	27%	21%	9%	4%	5%	25%
PGR	13%	33%	16%	4%	2%	6%	27%
Research staff	5%	24%	16%	9%	5%	13%	28%
Academic staff	11%	34%	16%	9%	4%	14%	12%

Female respondents were slightly more likely than male respondents to report that research governance and contractual processes had positive impacts, or both positive and negative impacts, on research integrity. Panel B respondents were least likely to see positive, or both positive and negative impacts, on research integrity, with a quarter of Panel B and Panel D respondents not knowing. Research staff respondents were least likely to see positive impacts of research governance and contractual processes on research integrity, with over a quarter not knowing.

## Figure 7.13 Respondents' views on the impact that league tables of institutions have on research integrity (N=969)



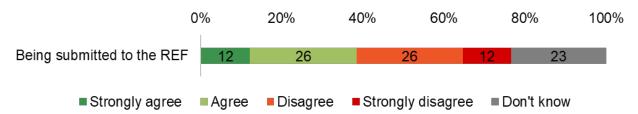
Two fifths of respondents identified the existence of league tables of institutions as having a negative impact on research integrity; 17% said it could be positive or negative.

			• •				
N=969	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	2%	13%	17%	24%	15%	16%	13%
Male	2%	11%	14%	28%	18%	18%	9%
Female	2%	13%	22%	22%	10%	15%	16%
Panel A	2%	12%	18%	24%	14%	15%	16%
Panel B	1%	13%	13%	26%	16%	18%	14%
Panel C	2%	16%	16%	22%	15%	18%	9%
Panel D	2%	8%	21%	28%	16%	14%	11%
PGR	3%	28%	21%	14%	8%	8%	20%
Research staff	1%	10%	15%	23%	12%	19%	20%
Academic staff	1%	10%	15%	30%	20%	18%	6%

# Table 7.13 Respondents' views on the impact that league tables of institutions have on research integrity, by various demographics

Male respondents were more likely to report league tables as a negative impact overall on research integrity. Female respondents were more likely to see them as both positive and negative impacts or not to know. Panel D respondents were most likely to see league tables as negative overall, compared to other Panels. Postgraduate respondents were considerably more likely to see league tables as positive or not to know, compared with academic staff, with half of these seeing them as having a negative impact overall on research integrity.

## Figure 7.14 Extent to which respondents agree that being submitted to the REF is a personal driver for research integrity (N=896)



Being submitted to the REF was seen as a mixed driver for individual respondents to achieve high levels of research integrity, with equal proportions agreeing and disagreeing overall.

Table 7.14 Extent to which respondents agree that being submitted to the REF is a
personal driver for research integrity, by various demographics

N=896	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	12%	26%	26%	12%	23%
Male	9%	27%	32%	13%	19%
Female	16%	27%	20%	10%	26%
Panel A	13%	25%	25%	11%	26%
Panel B	10%	32%	32%	16%	21%
Panel C	12%	24%	24%	13%	21%
Panel D	16%	23%	23%	11%	21%
PGR	20%	15%	15%	5%	45%
Research staff	9%	25%	27%	12%	29%
Academic staff	12%	33%	30%	15%	11%
Disability	15%	25%	19%	18%	25%
No disability	13%	28%	27%	10%	22%
Caring responsibilities	13%	28%	30%	12%	18%
No caring responsibilities	12%	28%	23%	12%	25%

Female respondents were more likely to agree overall, or not know, that being submitted to the REF was a personal driver for research integrity, while male respondents were more likely to disagree. Almost half of Panel B respondents reported that it had a negative impact overall. Postgraduate respondents are more likely to strongly agree that being submitted to the REF is a positive personal incentive or not to know. Academic staff respondents were almost equally divided between reporting being submitted to the REF as a positive personal driver or a negative driver, while 29% of research staff respondents did not know.

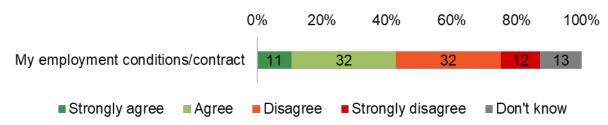
Respondents declaring a disability were more likely to strongly disagree that being submitted to the REF is a personal incentive for research integrity. Those respondents with caring responsibilities were also more likely to disagree than those without.

### 7.4 Employment circumstances

Respondents were asked whether a range of incentives relating to employment conditions and workloads impacted on levels of research integrity.

### 7.4.1 Employment conditions and workloads

## Figure 7.15 Extent to which respondents agree that their employment conditions are personal drivers for research integrity (N=906)



Similar proportions of respondents agreed and disagreed overall that employment conditions and contracts were a personal driver for research integrity.

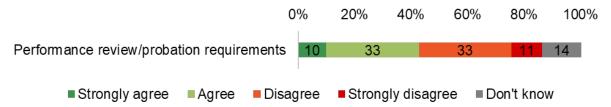
Table 7.15 Extent to which respondents agree that their employment conditions and
contracts are a personal driver for research integrity, by various demographics

N=906	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	11%	32%	32%	12%	13%
Male	9%	31%	32%	12%	15%
Female	11%	35%	32%	11%	11%
Panel A	11%	31%	34%	11%	14%
Panel B	11%	27%	32%	14%	16%
Panel C	9%	36%	34%	14%	8%
Panel D	10%	38%	28%	11%	14%
PGR	22%	26%	23%	6%	24%
Research staff	9%	30%	34%	14%	14%
Academic staff	8%	37%	35%	8%	8%
Disability	12%	26%	33%	15%	14%
No disability	10%	35%	32%	11%	12%

There were differences by gender in whether employment conditions and contracts were personal drivers for research integrity. Panel C and D respondents were more likely to agree overall that these were personal drivers, with almost half of Panel D agreeing; Panel B respondents were least likely to agree. Postgraduate respondents were most likely to agree overall, with a quarter not knowing. Almost half of research staff respondents disagreed overall that their employment conditions and contracts were a personal driver for high levels of research integrity, with 14% not knowing. Respondents declaring a disability were less likely to agree or strongly agree than those not declaring a disability.

### 7.4.2 Performance review and probation requirements

## Figure 7.16 Extent to which respondents agree that performance review and probation requirements are personal drivers for research integrity (N=913)



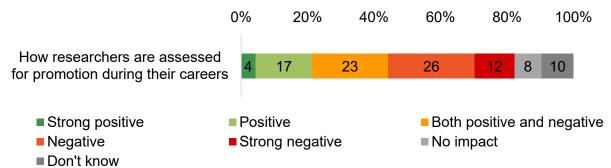
When asked whether performance review and probation requirements were personal drivers for research integrity, similar proportions agreed and disagreed. When analysed by career stage, postgraduate researchers were more likely to agree and academic staff to disagree.

## Table 7.16 Extent to which respondents agree that performance review and probation requirements are personal drivers for research integrity, by various demographics

N=913	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	10%	33%	33%	11%	14%
Male	8%	31%	34%	14%	14%
Female	13%	36%	31%	7%	13%
Panel A	11%	33%	34%	11%	13%
Panel B	6%	29%	32%	15%	18%
Panel C	13%	34%	35%	9%	10%
Panel D	6%	37%	30%	8%	19%
PGR	25%	35%	16%	4%	20%
Research staff	8%	33%	33%	9%	17%
Academic staff	6%	33%	39%	14%	9%
Disability	12%	29%	30%	13%	17%
No disability	10%	35%	33%	10%	13%

### 7.4.3 How researchers are assessed for promotion and probation

Figure 7.17 Respondents' views on the impact of how researchers are assessed for promotion and probation on research integrity (N=989)



More than a third of respondents reported that **how researchers are assessed for promotion during their careers** had a negative impact, with a quarter identifying this as both a positive and a negative impact on research integrity. A fifth of respondents saw it as having a positive impact. Research staff are less likely to see it as a positive incentive than academic staff.

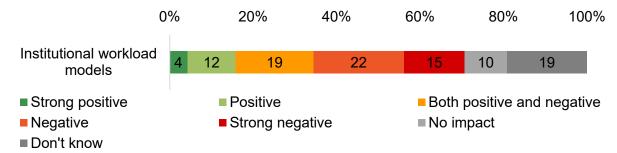
N=989	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	4%	17%	23%	26%	12%	8%	10%
Male	3%	18%	19%	27%	12%	10%	9%
Female	5%	16%	27%	25%	10%	8%	10%
Panel A	4%	14%	22%	29%	13%	8%	9%
Panel B	2%	14%	22%	29%	13%	10%	11%
Panel C	8%	23%	22%	22%	10%	9%	6%
Panel D	2%	22%	28%	17%	11%	5%	15%
PGR	8%	20%	16%	18%	10%	6%	23%
Research staff	3%	13%	21%	30%	12%	8%	12%
Academic staff	4%	19%	26%	27%	12%	10%	3%

# Table 7.17 Respondents' views on the impact of how researchers are assessed for promotion during their careers has on research integrity, by various demographics

Female respondents were considerably more likely than male respondents to see how researchers are assessed for promotion as having both a positive and a negative impact. Panel C and D respondents were more likely to see this as a more positive impact than Panels A and B, and less negative overall. Panel D respondents were also more likely to see this as both a positive and a negative impact or not to know than respondents from other Panels. There was no difference by disability.

### 7.4.4 Institutional workload models

Figure 7.18 Respondents' views on the impact that institutional workload models have on research integrity (N=972)



Almost two fifths of respondents reported workload models as having a negative impact overall on research integrity. A fifth of respondents see it as both positive and negative with a similar proportion not knowing.

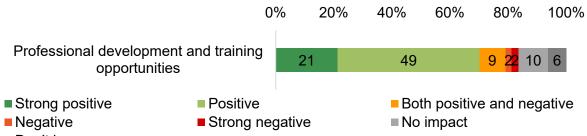
N=972	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	4%	12%	19%	22%	15%	10%	19%
Male	4%	14%	14%	25%	14%	14%	17%
Female	4%	10%	22%	19%	14%	7%	23%
Panel A	4%	11%	21%	20%	13%	9%	22%
Panel B	5%	14%	16%	21%	13%	11%	22%
Panel C	4%	11%	15%	19%	19%	13%	14%
Panel D	5%	9%	23%	16%	16%	10%	14%
PGR	7%	18%	14%	13%	11%	5%	32%
Research staff	2%	11%	19%	23%	11%	7%	27%
Academic staff	5%	11%	20%	24%	19%	14%	9%
Disability	1%	9%	20%	25%	17%	9%	20%
No disability	4%	13%	19%	22%	13%	10%	19%
Caring responsibilities	4%	12%	18%	24%	15%	14%	12%
No caring responsibilities	3%	12%	18%	20%	14%	8%	24%

## Table 7.18 Respondents' views on the impact that workload models have on research integrity, by various demographics

Female respondents were more likely than male respondents to report workload models as having both a positive and a negative impact on research integrity or not to know. Panel D respondents were more likely than other Panel respondents to see workload models as having both a positive and a negative impact on research integrity. Similar proportions of research staff and academic staff respondents see workload models as positive, or both positive and negative, impacts on research integrity. Academic staff are more likely, however, to see them as having a negative impact, with over a quarter of research staff not knowing.

### 7.5 Professional development and training

## Figure 7.19 Respondents' views on the impact that professional development and training opportunities have on research integrity (N=985)



■ Don't know

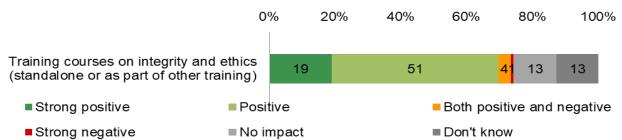
70% of respondents reported that professional development and training opportunities have a positive impact on research integrity.

N=985	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	21%	49%	10%	2%	1%	8%	9%
Male	18%	49%	8%	2%	1%	14%	8%
Female	27%	50%	9%	1%	1%	7%	4%
Panel A	26%	48%	9%	1%	2%	9%	5%
Panel B	19%	45%	7%	1%	2%	18%	7%
Panel C	19%	54%	7%	3%	3%	7%	11%
Panel D	20%	50%	10%	5%	9%	10%	7%
PGR	30%	49%	9%	3%	3%	3%	4%
Research staff	19%	53%	6%	1%	2%	12%	7%
Academic staff	20%	46%	10%	3%	2%	13%	6%

### Table 7.19 Respondents' views on the impact professional development and training opportunities have on research integrity, by various demographics

Female respondents were more likely than male respondents to report professional development and training opportunities as having a positive impact on research integrity, with twice as many male respondents reporting no impact. Panel A respondents were more likely to report these as strongly positive impacts than other Panels, while Panel B respondents were least likely to see training and development as a positive impact overall. Four fifths of postgraduate respondents reported training and development as having a positive impact overall on research integrity levels.

## Figure 7.20 Respondents' views on the impact that training on integrity and ethics has on research integrity (N=976)



70% of respondents reported that stand alone training on integrity and ethics, or as part of other training provision, has a positive impact overall on research integrity, with 26% not knowing or reporting no impact.

N=976	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	19%	51%	4%	1%	1%	13%	13%
Male	17%	51%	3%	1%	1%	16%	12%
Female	23%	54%	4%	0%	1%	7%	11%
Panel A	24%	54%	2%	0%	1%	12%	7%
Panel B	14%	45%	4%	1%	1%	21%	14%
Panel C	16%	54%	4%	1%	-	10%	16%
Panel D	16%	46%	8%	2%	-	7%	21%
PGR	25%	50%	3%	1%	-	9%	12%
Research staff	18%	52%	5%	0%	1%	12%	12%
Academic staff	16%	51%	4%	1%	1%	15%	14%

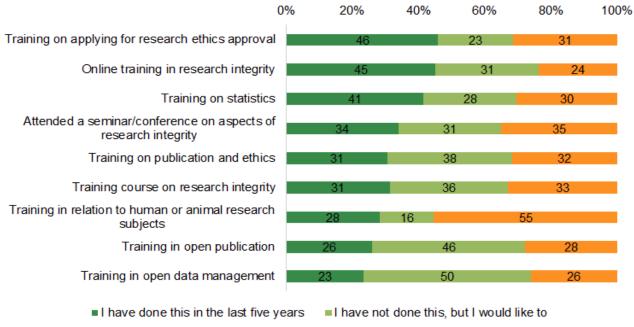
## Table 7.20 Respondents' views on the impact that training on integrity and ethics has on research integrity, by various demographics

More than three quarters of female respondents reported training on integrity and ethics as having a strongly positive or positive impact on levels of research integrity compared with around two thirds of male respondents. Panel A respondents were most likely to report this training as strongly positive, with Panel B respondents least likely to see training as positive overall and to not have an impact. Panel D respondents were least likely to know the impact of this training. Postgraduate respondents were more strongly positive on the impact of training on research integrity with three quarters seeing this as positive overall. Research staff and academic staff respondents reported similar views to each other on the value of training in integrity and ethics.

### 7.5.1 Engagement in training and development

Respondents were asked whether they had undertaken training and development activities related to research integrity, undertaking training in open data management and open publication.

# Figure 7.21 Respondents' participation and interest in a range of training and development activities



Currently I have no interest in doing this

Roughly a third had participated across the range of activities in the last five years; a third would like to do so, while about a third has no interest in doing these. Respondents were most likely to have done online training in research integrity or in applying for ethical approval. Respondents had most interest in receiving training in open publication and open data management.

Table 7.21 Respondents' participation and interest in a range of training and
development activities, by gender

N=827	I have done this in the last five years		I have not done this, but I would like to		
Training topic	Male	Female	Male	Female	
Online training on research integrity	44%	46%	27%	37%	
Research integrity	32%	33%	29%	42%	
Open publication	29%	25%	38%	54%	
Open data management	26%	22%	43%	57%	
Applying for research ethical approval	43%	49%	20%	25%	
Publication and ethics	33%	31%	29%	44%	
Statistics	44%	40%	25%	32%	
In use of human/animal research subjects	26%	31%	12%	20%	

Although there were only small differences by gender in participation in training on research integrity topics, female respondents consistently expressed more interest in undertaking training in all these topics than male respondents. More than half of female respondents wanted training in open publication and open data management.

Table 7.22 Respondents' participation and interest in a range of training and
development activities by career stage

N=827	l have	done this in five years	the last	I have not done this, but I would like to			
Training topic	PGR	Research staff	Academic staff	PGR	Research staff	Academic staff	
Online training on research integrity	48%	45%	44%	37%	31%	30%	
Research integrity	51%	25%	29%	32%	39%	35%	
Open publication	28%	26%	26%	59%	47%	41%	
Open data management	23%	25%	22%	55%	56%	45%	
Applying for research ethical approval	56%	34%	52%	30%	29%	16%	
Publication and ethics	43%	26%	31%	49%	41%	29%	
Statistics	50%	49%	34%	25%	31%	27%	
In use of human/animal research subjects	34%	29%	26%	19%	16%	15%	

Postgraduate respondents were most likely to have attended a training course on research integrity in the last five years, while research staff were least likely to have undertaken training in applying for ethical approval.

Almost 60% of postgraduate researchers would like to do training in open publication, while almost as many would like to do training in open data management. Similar proportions of research staff would like to undertake training on this topic. Between 15% and 45% of academic staff respondents identified training that they were interested in undertaking.

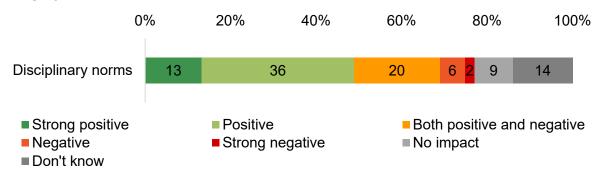
N=827	I have done this in the last five years			I have not done this, but I would like to				
REF Panel	Α	В	С	D	Α	В	С	D
Training topic								
Online training on research integrity	53%	32%	50%	34%	30%	34%	30%	32%
Research integrity	33%	21%	39%	28%	35%	37%	38%	31%
Open publication	23%	24%	30%	27%	51%	41%	47%	44%
Open data management	23%	24%	21%	21%	57%	46%	52%	33%
Applying for research ethical approval	52%	24%	59%	46%	25%	22%	20%	36%
Publication and ethics	30%	23%	38%	31%	41%	35%	36%	31%
Statistics	57%	32%	38%	13%	26%	31%	29%	25%
In use of human/animal research subjects	43%	13%	26%	12%	21%	13%	13%	10%

 Table 7.23 Respondents' participation and interest in a range of training and development activities, by REF Panel

Panel A and Panel C respondents were more likely to have undertaken a range of training and development activities relating to research integrity compared to Panel B and D respondents. Panel A respondents were most likely to be interested in participating in training and development activities and Panel D respondents were less likely to be interested than other Panels.

### 8 Disciplinary norms

Figure 8.1 Respondents' views on the impact of disciplinary norms on research integrity (N=969)



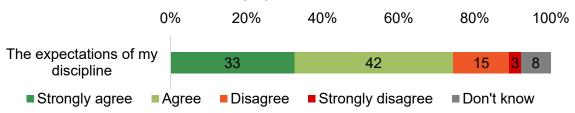
Half of respondents saw disciplinary norms as having a positive impact on research integrity, while a fifth reported these as both a positive and a negative impact.

N=969	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	14%	36%	20%	6%	2%	9%	14%
Male	14%	37%	16%	6%	3%	11%	12%
Female	15%	34%	23%	5%	2%	6%	15%
Panel A	13%	33%	23%	5%	2%	9%	15%
Panel B	11%	40%	14%	6%	1%	9%	18%
Panel C	17%	37%	18%	5%	3%	10%	11%
Panel D	14%	36%	26%	5%	2%	5%	12%
PGR	15%	18%	15%	7%	3%	6%	17%
Research staff	9%	30%	23%	7%	2%	9%	19%
Academic staff	16%	41%	19%	5%	2%	9%	8%

## Table 8.1 Respondents' views on the impact of disciplinary norms on research integrity, by various demographics

Female respondents were more likely to state that disciplinary norms have both a positive and a negative impact on research integrity than male respondents. Panel B respondents and academic staff respondents were more likely to state disciplinary norms were a positive impact, compared with research staff respondents where only two fifths see these as positive overall and are most likely not to know.

## Figure 8.2 Extent to which respondents agree that the expectations of their discipline are a personal driver for research integrity (N=917)



Three quarters of respondents agreed overall that the expectations of their discipline was a personal driver for research integrity, with a third of respondents strongly agreeing.

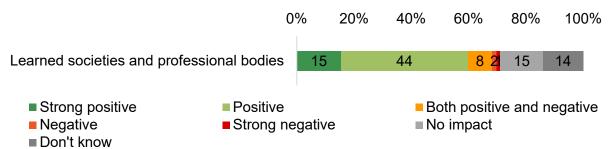
# Table 8.2 Extent to which respondents agree that the expectations of their discipline are a personal driver for research integrity, by various demographics

N=917	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	33%	42%	15%	3%	8%
Male	26%	46%	15%	5%	8%
Female	40%	38%	13%	2%	7%
Panel A	28%	46%	16%	3%	8%
Panel B	34%	37%	15%	4%	9%
Panel C	34%	40%	16%	2%	8%
Panel D	42%	39%	11%	3%	5%
PGR	41%	37%	13%	3%	6%
Research staff	28%	43%	15%	3%	12%
Academic staff	35%	42%	16%	3%	5%

Two fifths of female respondents strongly agreed that the expectations of their discipline were personal drivers for research integrity, compared with a quarter of male respondents.

Panel D respondents were most likely to strongly agree and least likely to disagree overall. Research staff respondents were least likely to strongly agree compared with other career stages.

## Figure 8.3 Respondents' views on the impact of learned societies and professional bodies on research integrity (N=969)



Over half of respondents reported learned societies and professional bodies as having an overall positive impact on research integrity. 29% reported that these organisations had no impact or that they did not know.

Table 8.3 Respondents' views on the impact of learned societies and professional
bodies on research integrity, by various demographics

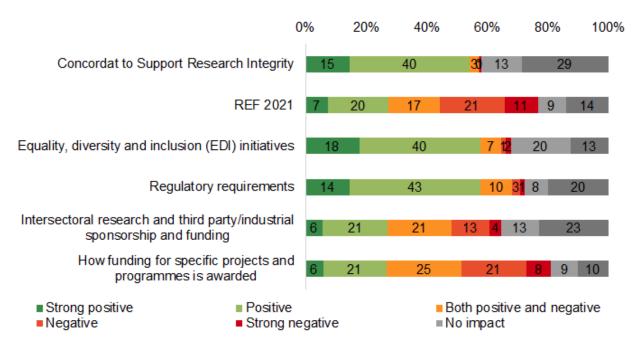
N=969	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	16%	44%	9%	2%	1%	15%	14%
Male	13%	46%	7%	2%	1%	21%	10%
Female	18%	44%	9%	1%	1%	10%	15%
Panel A	13%	44%	9%	1%	1%	18%	9%
Panel B	11%	46%	9%	1%	1%	13%	18%
Panel C	19%	43%	7%	2%	1%	8%	23%
Panel D	24%	47%	9%	2%	-	9%	9%
PGR	19%	38%	9%	3%	1%	8%	22%
Research staff	9%	45%	9%	1%	2%	17%	18%
Academic staff	19%	46%	9%	1%	1%	17%	8%

Although similar proportions of male and female respondents see learned societies and professional bodies as having an overall positive impact on research integrity, male respondents were twice as likely to report that they did not have an impact. Panel D respondents were more likely to see learned societies and professional bodies as having an overall positive impact on research integrity, particularly compared with Panels A and B. Panels B and C were most likely not to know the impact of these organisations. Postgraduate and research staff respondents were more than twice as likely not to know whether learned societies and professional bodies had a positive impact on research integrity compared with academic staff respondents.

### 9 UK initiatives

Respondents were asked about their knowledge of and the impact of a range of incentives at a UK level and their perception of the impact on research integrity.

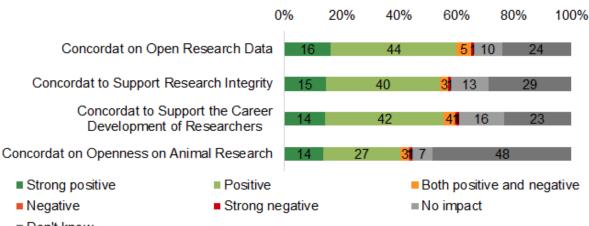
## Figure 9.1 Respondents' views on the impact of a range of UK initiatives relating to research integrity



### 9.1 UK concordats

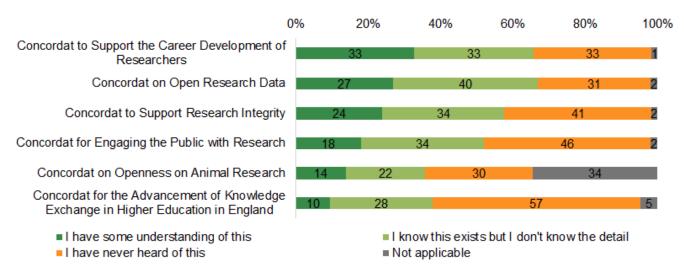
The suite of concordats relating to research integrity were seen as having a positive impact by almost half of respondents, with the majority of the rest not knowing or reporting no impact. The exception was the Concordat on Openness on Animal Research where twice as many respondents did not know.

#### Figure 9.2 Respondents' views on the impact of the concordats on research integrity



Don't know

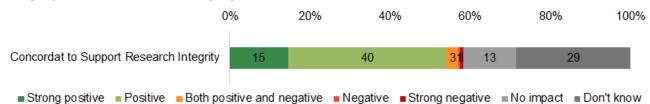
#### Figure 9.3 Respondents' knowledge of the concordats



In terms of knowledge about the various concordats, respondents were most likely to have some understanding of the Concordat to Support the Career Development of Researchers, the earliest concordat. Respondents were more likely to have heard of the Concordat on Open Data than the other concordats. Two fifths of respondents had not heard of the Concordat to Support Research Integrity.

#### 9.1.1 Concordat to Support Research Integrity

### Figure 9.4 Respondents' views on the impact that the Concordat to Support Research Integrity has on research integrity (N=965)



When looking specifically at the Concordat to Support Research Integrity, over half of respondents reported that it had an overall positive impact on research integrity, with two fifths saying that it had no impact or they did not know.

N=965	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	15%	40%	3%	0%	0%	13%	29%
Male	14%	40%	3%	0%	0%	18%	26%
Female	18%	41%	3%	0%	1%	8%	29%
Panel A	20%	42%	2%	0%	1%	13%	22%
Panel B	10%	38%	1%	0%	-	18%	32%
Panel C	12%	42%	4%	0%	1%	10%	31%
Panel D	13%	32%	7%	-	-	8%	40%
PGR	16%	42%	1%	0%	0%	6%	35%
Research staff	15%	32%	3%	0%	0%	14%	32%
Academic staff	13%	44%	3%	0%	0%	15%	25%

### Table 9.1 Respondents' views on the impact that the Concordat to Support Research Integrity has on research integrity, by various demographics

There were few differences between genders in terms of views on the impact of the Concordat to Support Research Integrity, although male respondents were more than twice as likely as female respondents to state it did not have an impact. Panel A respondents were twice as likely as other Panels to state that it had a strong positive impact. Research staff respondents were least likely to state that the Concordat had an overall positive impact on research integrity.

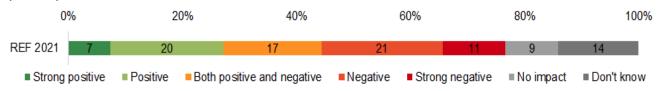
Table 9.2 Respondents' knowledge of the Concordat to Support Research Integrity, by
various demographics

N=875	I have some understanding of this	l know this exists, but I don't know the detail	I have never heard of this	Not applicable
Total	24%	34%	41%	2%
Male	25%	34%	40%	2%
Female	25%	32%	41%	2%
Panel A	26%	36%	36%	2%
Panel B	15%	35%	50%	-
Panel C	26%	31%	42%	2%
Panel D	25%	30%	42%	3%
PGR	14%	36%	47%	4%
Research staff	19%	34%	47%	1%
Academic staff	30%	32%	37%	1%

There were no differences by gender in terms of knowledge and understanding of the Concordat to Support Research Integrity. Panel B respondents were most likely not to know about the Concordat and least likely to have some understanding of it. Awareness of the Concordat to Support Research Integrity differed by career stage with fewer postgraduate and research staff respondents being aware of it and knowing the detail than academic staff. Almost half of postgraduate and research staff respondents had not heard of the Concordat.

### 9.2 Research Excellence Framework 2021

## Figure 9.5 Respondents' views on the impact that REF 2021 has on research integrity (N=981)



REF 2021 was seen as a having a negative impact on research integrity by a third of respondents, with almost a fifth viewing it as both positive and negative. More than a quarter of respondents reported the REF as having a positive impact.

Table 9.3 Respondents' views on the impact that REF 2021 has on research integrity,
by various demographics

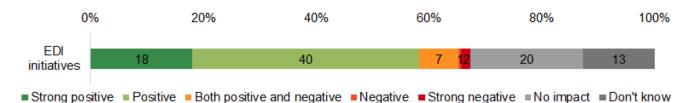
N=981	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	7%	20%	17%	21%	11%	9%	14%
Male	7%	17%	20%	24%	11%	9%	13%
Female	8%	22%	18%	19%	9%	9%	15%
Panel A	7%	21%	18%	19%	11%	7%	17%
Panel B	4%	17%	15%	28%	11%	9%	15%
Panel C	10%	23%	14%	22%	11%	13%	14%
Panel D	9%	17%	24%	16%	14%	10%	24%
PGR	15%	30%	10%	6%	5%	5%	30%
Research staff	4%	19%	14%	25%	10%	9%	18%
Academic staff	6%	37%	22%	24%	14%	13%	4%

Female respondents were more positive about the impact of the REF than males. Panel B respondents were most likely to report it as a negative impact on research integrity, while Panel D respondents were most likely to see the REF as both a positive and a negative impact or not to know.

Postgraduate respondents were considerably more likely to see the REF as strongly positive, while also most likely not to know if it had any impact. Research staff respondents were least likely to see the REF as positive overall. Similar proportions of research staff and academic staff respondents reported that REF 2021 had a negative impact on research integrity. Academic staff respondents were most likely to see the REF as having both positive and negative impact.

### 9.3 EDI initiatives

Figure 9.6 Respondents' views on the impact that EDI initiatives have on research integrity (N=976)



EDI initiatives were seen as having a positive impact on research integrity by almost 60% of respondents. However, a fifth reported no impact, while 12% did not know.

## Table 9.4 Respondents' views on the impact that EDI initiatives have on research integrity, by various demographics

N=976	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	18%	42%	6%	1%	2%	20%	12%
Male	14%	41%	6%	1%	2%	26%	11%
Female	22%	53%	7%	1%	1%	15%	11%
Panel A	20%	41%	5%	1%	1%	23%	9%
Panel B	14%	38%	6%	2%	2%	23%	15%
Panel C	16%	40%	9%	1%	-	17%	16%
Panel D	22%	42%	9%	2%	2%	12%	12%
PGR	27%	37%	6%	2%	2%	13%	5%
Research staff	16%	41%	8%	1%	2%	20%	12%
Academic staff	16%	40%	7%	1%	1%	21%	12%
Disability	25%	36%	7%	1%	1%	21%	9%
No disability	17%	43%	7%	1%	1%	20%	11%
Caring responsibilities	17%	44%	4%	2%	2%	20%	11%
No caring responsibilities	19%	41%	7%	1%	1%	20%	12%

Three quarters of female respondents reported EDI initiatives as having positive impacts on research integrity compared with just over half of male respondents, who were also more likely to report no impact. Panel D respondents were most likely to see EDI initiatives as having a positive impact on research integrity. Higher proportions of postgraduate respondents reported EDI initiatives as positive impacts on research integrity, compared with both research staff and academic staff respondents.

Those declaring a disability were similarly more likely to record a positive impact (61%) compared with respondents not declaring any disabilities. No difference was evident between those with caring responsibilities and those without them.

### 9.4 Regulatory requirements

Figure 9.7 Respondents' views on the impact of regulatory requirements on research integrity (N=962)

0	%	20%	40%	60	0%		80	9%	100%
Regulatory requirements	14		43		10	3 <mark>1</mark>	8	20	

Strong positive = Positive = Both positive and negative = Negative = Strong negative = No impact = Don't know

Over half of respondents reported regulatory requirements as having an overall positive impact on research integrity, with 11% seeing these as positive and negative.

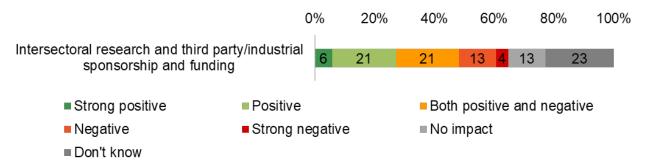
Table 9.5 Respondents' views on the impact of regulatory requirements on research
integrity, by various demographics

N=962	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	14%	43%	10%	3%	1%	8%	20%
Male	13%	41%	12%	3%	1%	10%	20%
Female	17%	48%	9%	1%	1%	4%	19%
Panel A	19%	46%	8%	3%	2%	8%	15%
Panel B	10%	42%	10%	3%	1%	10%	22%
Panel C	13%	41%	13%	2%	1%	13%	23%
Panel D	11%	40%	12%	2%	-	12%	12%
PGR	20%	42%	10%	1%	1%	5%	20%
Research staff	13%	44%	11%	3%	1%	7%	21%
Academic staff	13%	44%	11%	3%	1%	9%	19%

Two thirds of female respondents reported regulatory requirements as having an overall positive impact on research integrity, compared with fewer than half of male respondents, with similar proportions not knowing. Panel A and postgraduate respondents were most likely to see them as strong positive impacts.

### 9.5 Intersectoral research

## Figure 9.8 Respondents' views on the impact of intersectoral research and industrial funding on research integrity (N=968)



Respondents had mixed views on the impacts of intersectoral research and industrial funding on research integrity, with just over a quarter seeing these as positive impacts, a fifth reporting both a positive and a negative impact, and over a third not reporting an impact or not knowing.

N=968	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	6%	21%	21%	13%	4%	13%	23%
Male	3%	24%	22%	15%	3%	14%	19%
Female	7%	23%	22%	9%	2%	10%	26%
Panel A	6%	24%	20%	10%	4%	11%	25%
Panel B	8%	23%	22%	12%	3%	15%	18%
Panel C	4%	22%	18%	15%	4%	15%	22%
Panel D	1%	11%	28%	18%	5%	10%	27%
PGR	9%	24%	21%	10%	4%	6%	26%
Research staff	5%	19%	21%	10%	4%	14%	29%
Academic staff	4%	23%	21%	16%	4%	15%	18%

### Table 9.6 Respondents' views on the impact that intersectoral research and industrial funding have on research integrity, by various demographics

Male respondents were more likely to record intersectoral research and industrial funding as negative impacts on research integrity. Panel D respondents were more likely to see the impacts as both positive and negative impacts or not to know, compared with other Panels.

### 9.6 Grant funding

## Figure 9.10 Extent to which respondents agree that funders' research grant requirements are personal drivers for research integrity (N=902)

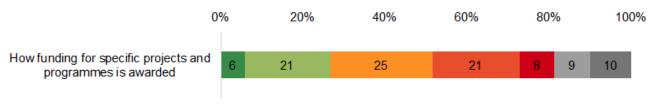


60% of respondents agreed overall that funders' research grant requirements were an overall positive personal driver for research integrity, with a quarter disagreeing.

Table 9.7 Extent to which respondents agree that funders' research grant
requirements are personal drivers for research integrity, by various demographics

N=902	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Total	19%	41%	19%	7%	14%
Male	13%	43%	24%	7%	13%
Female	26%	39%	15%	6%	14%
Panel A	19%	42%	19%	7%	14%
Panel B	16%	39%	23%	11%	12%
Panel C	20%	42%	17%	6%	15%
Panel D	20%	45%	14%	4%	18%
PGR	27%	28%	14%	4%	26%
Research staff	18%	44%	19%	8%	12%
Academic staff	17%	45%	22%	7%	9%

# Figure 9.11 Respondents' views on how the way funding is awarded impacts on research integrity (N=979)



Strong positive Positive Both positive and negative Negative Strong negative No impact Don't know

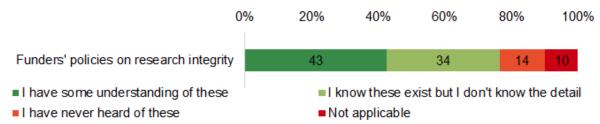
Respondents were equally divided on how the way funding is awarded impacts on research integrity. Around a quarter saw this as positive overall, with a quarter reporting it as having both a positive and a negative impact. 29% considered it as negative overall.

Table 9.8 Respondents' views on how the way funding is awarded impacts on
research integrity, by various demographics

N=979	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	6%	21%	25%	21%	8%	9%	10%
Male	4%	20%	23%	24%	9%	10%	11%
Female	7%	23%	27%	19%	7%	7%	9%
Panel A	6%	21%	25%	23%	10%	10%	7%
Panel B	4%	18%	24%	25%	9%	10%	11%
Panel C	9%	22%	23%	18%	8%	9%	12%
Panel D	5%	22%	31%	17%	6%	5%	15%
PGR	5%	24%	21%	17%	7%	7%	16%
Research staff	5%	18%	26%	20%	9%	10%	12%
Academic staff	5%	21%	24%	25%	8%	10%	7%

There were no differences between genders.in terms of how respondents saw the impact of the way funding was awarded on research integrity. Panel D was most likely to see this as both a positive and a negative impact on research integrity, or not to know. Academic staff respondents were most likely to see how funding was awarded as negative, compared with other career stages.

## Figure 9.12 Respondents' knowledge of funders' policies on research integrity (N=874)



43% of respondents had some awareness of funders' policies on research integrity, with a third knowing they exist but not the detail.

N=874	I have some understanding of these	l know these exist, but I don't know the detail	I have never heard of these	Not applicable
Total	43%	34%	14%	10%
Male	44%	36%	13%	8%
Female	42%	34%	12%	13%
Panel A	39%	40%	12%	9%
Panel B	42%	33%	21%	4%
Panel C	46%	29%	9%	17%
Panel D	47%	28%	13%	13%
PGR	27%	32%	15%	26%
Research staff	38%	39%	20%	3%
Academic staff	52%	32%	8%	8%

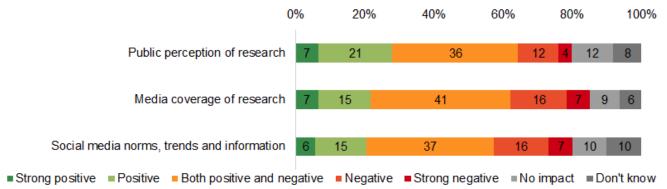
## Table 9.9 Respondents' knowledge of funders' policies on research integrity, by various demographics

There were no differences by gender in respondents' knowledge of funders' policies on research integrity. Panel A respondents were least likely to have an understanding of these policies, with Panel B respondents most likely not to have heard of them. Academic staff were most likely to have some understanding of funders' policies on research integrity, with three fifths of research staff respondents not having heard of them or not knowing the detail.

### **10** Media coverage and public perception of research

Respondents were asked about their views on how media coverage and public perception of research impacts on research integrity.

# Figure 10.1 Respondents' views on how the media and public perception of research impacts on research integrity



### **10.1 Public perception of research**

Figure 10.2 Respondents' views on the impact of the public perception of research on research integrity (N=976)

09	6	20%	40%	60%		809	6	100	0%
Public perception of research	7	21	36		12	4	12	8	
Strong positive Positive		oth positive and neg	gative Negative	Strong negat	ive	■No in	npact	■Don't kn	iow

Over a third of respondents reported that the public perception of research could have both positive and negative impacts, with a fifth of respondents stating that it has no impact or that they did not know.

N=976	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	7%	21%	36%	12%	4%	12%	8%
Male	7%	25%	32%	13%	4%	14%	6%
Female	7%	21%	43%	10%	3%	9%	8%
Panel A	6%	24%	35%	11%	4%	14%	7%
Panel B	6%	23%	33%	13%	5%	13%	7%
Panel C	7%	20%	39%	11%	2%	10%	11%
Panel D	6%	11%	42%	12%	5%	10%	10%
PGR	11%	19%	37%	11%	4%	9%	8%
Research staff	6%	23%	34%	9%	4%	14%	10%
Academic staff	5%	22%	37%	13%	3%	13%	8%

## Table 10.1 Respondents' views on the impact of the public perception of research on research integrity, by various demographics

Male respondents were more likely to see the public perception of research as having positive impacts while female respondents and Panel D respondents were more likely to record both positive and negative impacts. Postgraduate respondents were more likely to see the public perception of research as strongly positive than other career stages.

#### 10.2 Media

### Figure 10.3 Respondents' views on the impact of the media on research integrity (N=979)

0	%	20%	40%	60%	809	%	100%
Media coverage of research	7	15	41		16	7 9	6
<ul> <li>Strong positive</li> <li>Negative</li> </ul>		<ul> <li>Positive</li> <li>Strong negative</li> </ul>			■ Both positive and n ■ No impact		gative

When asked about the impact of the media on research integrity, around two fifths of respondents stated that it could have both positive and negative impacts, with a fairly equal balance between other respondents reporting either positive or negative effects.

Table 10.2 Respondents' views on the impact of the media on research integrity, by
various demographics

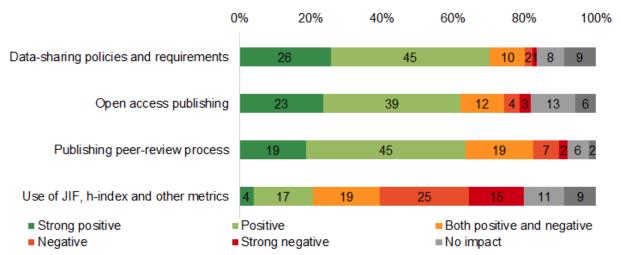
N=979	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	7%	15%	41%	16%	7%	9%	6%
Male	7%	15%	34%	23%	7%	10%	5%
Female	8%	15%	48%	11%	5%	7%	7%
Panel A	5%	15%	40%	17%	8%	10%	5%
Panel B	8%	15%	37%	21%	8%	8%	5%
Panel C	8%	13%	43%	15%	5%	11%	6%
Panel D	5%	18%	47%	10%	4%	6%	11%
PGR	11%	16%	38%	16%	6%	6%	6%
Research staff	6%	17%	37%	15%	7%	11%	7%
Academic staff	6%	14%	44%	17%	5%	9%	5%

Male respondents were more likely to record that the media has a negative impact on research integrity while half of female respondents saw both positive and negative impacts, as did almost half of academic staff. Panel B respondents were most likely to see the media as having a negative impact on research integrity.

### **11 Global level initiatives**

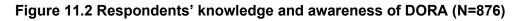
Respondents were asked about the impact on research integrity of a range of initiatives that go beyond the UK.

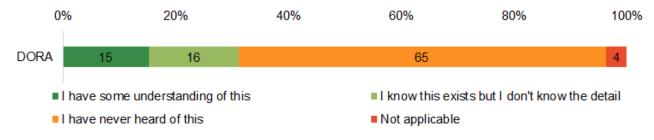
## Figure 11.1 Respondents' views on the impact of various global initiatives on research integrity



### **11.1 Global research and innovation initiatives**

Awareness of the San Francisco Declaration on Research Assessment (DORA) was low with 65% of respondents recording that they had never heard of this. This was fairly consistent across all demographics although academic staff were more aware of DORA than other career stages.





N=876	I have some understanding of this	l know this exists, but I don't know the detail	I have never heard of this	Not applicable
Total	15%	16%	65%	4%
Male	17%	18%	62%	3%
Female	14%	14%	68%	4%
Panel A	18%	15%	64%	3%
Panel B	16%	16%	66%	2%
Panel C	12%	13%	70%	5%
Panel D	8%	16%	68%	7%
PGR	4%	15%	74%	7%
Research staff	14%	14%	71%	2%
Academic staff	20%	18%	58%	4%

#### Table 11.1 Respondents' knowledge of DORA, by various demographics

# 11.2 Responsible research and innovation (RRI), open science and open access

Figure 11.3 Respondents' views on the impact of data-sharing policies on research integrity (N=985)

	0%	20%	40%	60%	8	0%		10	0%
Data-sharing policies and requirements	26		45		10	21	8	9	
Strong positive	<ul> <li>Positive</li> <li>Strong negative</li> </ul>		■Both positive a ■No impact		and negative				
Negative									
■ Don't know									

71% of respondents reported data-sharing policies as having an overall positive impact on research integrity, with another 10% saying they have both a positive and a negative impact.

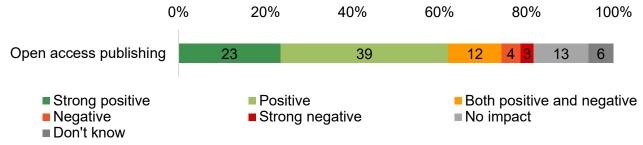
Table 11.2 Respondents' views on the impact of data-sharing policies on research
integrity, by various demographics

N=985	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	26%	45%	10%	2%	1%	8%	9%
Male	25%	47%	7%	3%	1%	9%	8%
Female	25%	45%	11%	2%	1%	6%	10%
Panel A	34%	45%	8%	2%	1%	6%	4%
Panel B	28%	49%	6%	1%	1%	9%	5%
Panel C	17%	42%	14%	5%	2%	9%	12%
Panel D	12%	38%	15%	1%	1%	9%	25%
PGR	32%	34%	11%	2%	2%	6%	14%
Research staff	28%	47%	6%	2%	1%	8%	7%
Academic staff	22%	48%	11%	2%	1%	8%	9%

Panel A respondents were considerably more likely to report data-sharing policies as having an overall positive impact on research integrity compared with Panels C and D. Postgraduate respondents were more strongly positive than academic staff.

### 11.2.1 Open access publishing

# Figure 11.4 Respondents' views on the impact of open access publishing on research integrity (N=989)



Almost two thirds of respondents reported open access publishing as having a positive impact on research integrity, with a quarter saying it has no impact or both a positive and negative impact.

Table 11.3 Respondents' views on the impact of open access publishing on research
integrity, by various demographics

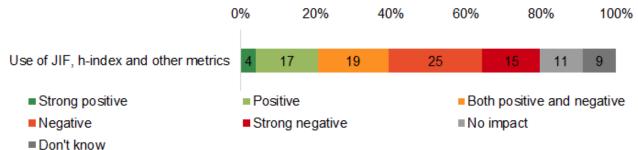
N=989	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	23%	39%	12%	4%	3%	13%	6%
Male	20%	37%	12%	6%	4%	18%	5%
Female	25%	40%	14%	4%	2%	9%	6%
Panel A	28%	41%	10%	3%	3%	12%	3%
Panel B	25%	40%	10%	5%	3%	14%	4%
Panel C	16%	33%	15%	8%	3%	16%	9%
Panel D	19%	37%	20%	3%	4%	8%	10%
PGR	35%	18%	14%	2%	2%	4%	6%
Research staff	27%	38%	9%	3%	2%	13%	3%
Academic staff	17%	44%	15%	7%	3%	16%	7%

Female respondents were more likely to report open access as having an overall positive impact on research integrity, with male respondents twice as likely to report it as having no impact. Panel A respondents were most likely to see open access publishing as strongly positive, with Panel C respondents seeing this as least positive. Postgraduate researchers were more likely to see open access as a strongly positive impact with academic staff respondents less likely to do so.

### **11.3 Journal Impact Factor and publisher policies**

#### 11.3.1 Use of JIF and other metrics

## Figure 11.5 Respondents' views on the impact of the use of JIF and other metrics on research integrity (N=983)



Two fifths of respondents reported JIF and other metrics as having a negative impact on research integrity. Only a fifth of respondents reported these as having only a positive impact on research integrity, with another fifth seeing them as having both positive and negative impacts.

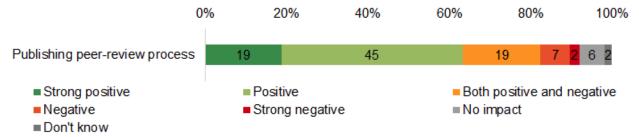
N=983	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	4%	17%	19%	25%	15%	11%	9%
Male	4%	15%	19%	28%	17%	11%	7%
Female	4%	18%	21%	23%	11%	12%	11%
Panel A	3%	19%	19%	28%	16%	8%	6%
Panel B	4%	14%	20%	27%	18%	12%	5%
Panel C	7%	18%	17%	22%	12%	12%	11%
Panel D	2%	11%	17%	18%	17%	17%	21%
PGR	6%	30%	17%	17%	7%	4%	18%
Research staff	3%	13%	19%	29%	17%	11%	8%
Academic staff	3%	14%	17%	26%	17%	15%	7%

## Table 11.4 Respondents' views on the impact of the use of JIF and other metrics on research integrity, by various demographics

Male respondents were more likely to view JIF and other metrics as having a strongly negative impact on research integrity. Postgraduate researchers were more likely to see these as having positive impacts on research integrity, or not to know. Research staff were the career stage that were most negative about the impact of JIF and other metrics.

### 11.3.2 Publishing peer-review process

## Figure 11.6 Respondents' views on the impact of the publishing peer-review process on research integrity (N=988)



Publishers' peer-review processes were predominantly seen as having a positive impact on research integrity with two thirds of respondents agreeing. Another fifth of respondents reported both positive and negative impacts.

## Table 11.5 Respondents' views on the impact of the publishing peer-review process on research integrity, by various demographics

N=988	Strong positive	Positive	Positive and negative	Negative	Strong negative	No impact	Don't know
Total	19%	45%	19%	7%	3%	6%	2%
Male	19%	46%	15%	9%	3%	8%	1%
Female	20%	46%	23%	5%	3%	4%	2%
Panel A	20%	43%	20%	7%	3%	6%	1%
Panel B	20%	50%	14%	6%	2%	7%	2%
Panel C	17%	47%	17%	10%	2%	5%	1%
Panel D	19%	40%	25%	4%	2%	5%	5%
PGR	27%	38%	20%	4%	4%	3%	4%
Research staff	19%	47%	20%	6%	3%	5%	1%
Academic staff	18%	46%	17%	8%	2%	7%	1%

Female respondents and Panel D respondents were more likely to see publishers' peerreview processes as having both positive and negative impacts on research integrity. Postgraduate respondents were more likely to see them as strongly positive compared with other career stages.

## Figure 11.7 Respondents' knowledge and awareness of publishers' policies on research integrity, publication and authorship (N=871)



The majority of respondents reported knowledge of publishers' policies on research integrity, publication and authorship, with half reporting to have some understanding of these.

N=871	I have some understanding of these	I know these exist, but I don't know the detail	I have never heard of these	Not applicable
Total	49%	34%	10%	6%
Male	55%	30%	10%	5%
Female	46%	38%	10%	7%
Panel A	48%	39%	8%	4%
Panel B	55%	30%	12%	3%
Panel C	47%	33%	11%	9%
Panel D	53%	23%	14%	10%
PGR	27%	32%	15%	26%
Research staff	38%	39%	20%	3%
Academic staff	52%	32%	8%	8%

## Table 11.6 Respondents knowledge of publishers' policies on research integrity, publication and authorship, by various demographics

Male respondents and Panel B and D respondents were more likely to have an understanding of publishers' policies on research integrity, publication and authorship, with postgraduate researchers and research staff reporting less understanding than academic staff.

### 12 Who is responsible for research integrity?

Respondents were asked to prioritise who holds most responsibility for increasing levels of research integrity.

# Table 12.1 Which groups hold most responsibility for increasing levels of research integrity? (N-793)

Responsible stakeholder	Proportion ranking 1 <sup>st</sup>
Individual researchers	49%
Supervisors/principal investigators responsible for training researchers	18%
Institutions	11%
Heads of department / research group leaders	7%
Ethics committees	7%
Research funders	5%
Government / policymakers	5%
Publishers	4%
Professional bodies / learned societies	2%
Disciplinary networks	1%

### **13 Demographics**

90% of respondents were from universities and research institutes; the balance came from research funders and charities, researchers in hospitals or healthcare settings, private sector research and professional bodies.

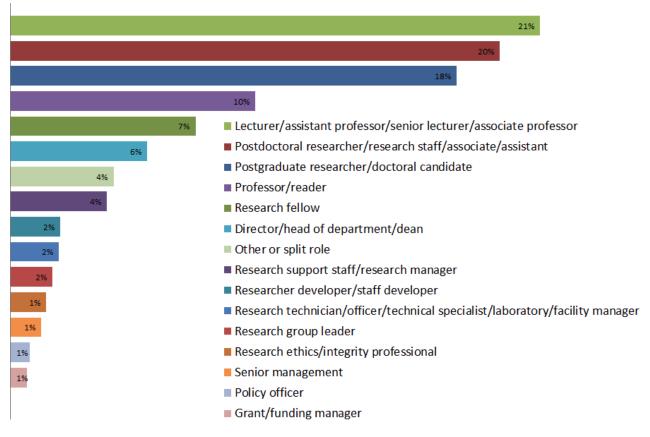
### 13.1 Roles

Although most survey responses were from active researchers, respondents reflected a wide variety of roles across the research system. Overall, there was a fairly balanced split between three broad researcher career stages: postgraduate researcher, research staff (postdoctoral researcher and research fellow) and 'academic staff' (research group leaders, lecturers, professors and above).

The gender balance in these three groups was as follows (respondents were given the option not to say):

- postgraduate researchers: 55% women; 33% men
  research staff: 59% female; 39% men
- academic staff: 44% female; 49% men.

#### Figure 13.1 Profile of respondents' roles (N=1539)



### **13.2 Disciplines**

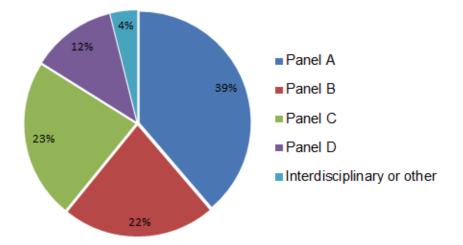
Respondents covered all four REF Panels. Two fifths of respondents reported their main discipline specialism as within REF Panel A (Medicine, health and life sciences), with just over a fifth in Panel B (Physical sciences, engineering and mathematics) and Panel C (Social sciences). 12% of respondents were from Panel D disciplines (Arts and humanities). Responses were spread across all REF Units of Assessment, with biological sciences being

the largest at 13%, and psychology, psychiatry and neuroscience being the next largest at 10% each. Responses were analysed by REF Panel as the sample was too small to consider individual disciplines.

The gender balance across REF panels was as follows (respondents were given the option not to say):

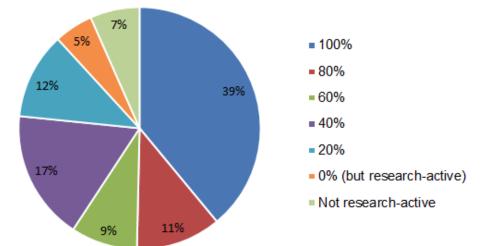
- Panel A: 58% women; 35% men
- Panel B: 29% women; 62% men
- Panel C: 53% women; 40% men
- Panel D: 61% women; 26% men

#### Figure 13.2 Respondents by REF Panel (N=1359)



#### 13.3 Research activity

40% of respondents were 100% research-active, with the majority of other respondents having a proportion of their current working time allocated to research. 7% of respondents were not research-active and 5% declared that they were research-active but did not have any working time allocated to research. 55% of Panel D and 48% of Panel C respondents had 40% or less of their working time allocated to research, compared with around 30% of Panel A and B respondents.



#### Figure 13.3 Proportion of workload allocated to research (N=1539)

#### **13.4 Research experience**

Almost a third of respondents had more than 15 years' experience as a researcher (including their doctoral studies), with a roughly equal balance across other experience levels. Only 6% of respondents had less than a year's experience as a researcher. There was a good correlation between length of experience and career stage.

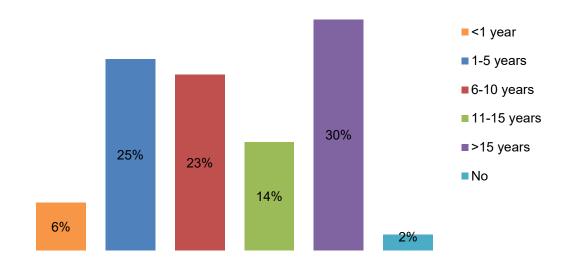
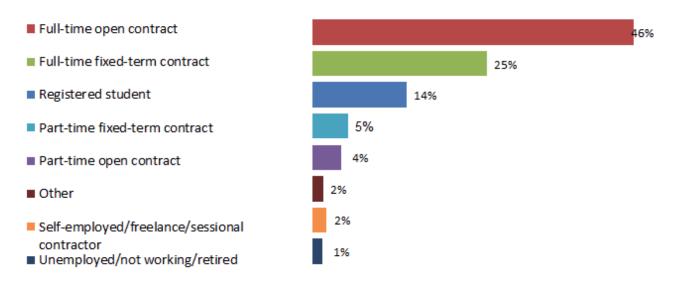


Figure 13.4 Respondents' research experience (including doctoral studies) (N=1396)

#### **13.5 Contractual status**

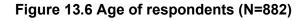
The majority of respondents were employed on full-time open contracts (46%) or full-time fixed-term contracts (25%). 9% of respondents were on open or fixed-term part-time contracts. 2% of respondents stated that they were self-employed or on sessional contracts, with 14% registered as doctoral students.

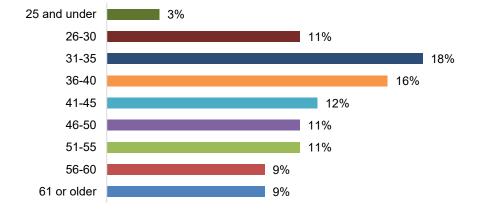
#### Figure 13.5 Type of contract and mode of employment (N=1534)



### 13.6 Age

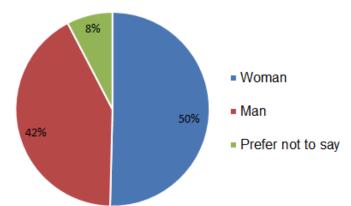
There was a fairly equal distribution across the sample by age.





### 13.7 Gender, sexuality and caring responsibilities

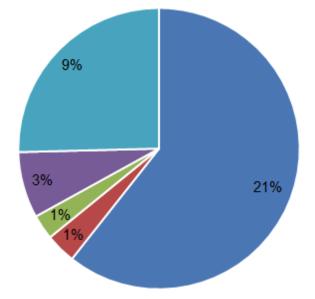
Slightly more women responded to the survey than men. Only 11% of respondents stated a sexual orientation other than heterosexual, with 17% preferring not to say, creating too small a sample to undertake any comparative analysis. Overall 35% of respondents had caring responsibilities, roughly divided equally between women (51%) and men (44%).



#### Figure 13.7 Gender of respondents (N=883)

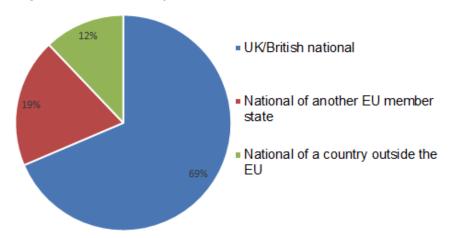
#### Figure 13.8 Type of caring responsibilities (36% of sample; N=315)

- Primary carer of a child or children (under 18 years)
- Primary carer of a disabled child or children
- Primary carer or assistant for a disabled adult (18 years and over)
- Primary carer or assistant for an older person or people (65 years and over)
- Secondary carer (another person carries out main caring role)



### **13.8 Nationality and ethnicity**

The majority of respondents were UK nationals, with 20% from the rest of the EU and 12% from the rest of the world. Only UK nationals were asked about their ethnicity; 87% declared as white, with another 8% preferring not to say. Fewer than 30 respondents declared an ethnicity other than white, so no comparative analysis by ethnicity was possible.

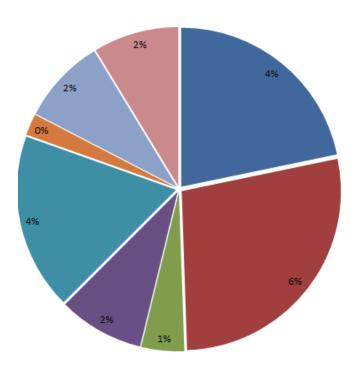


#### Figure 13.9 Nationality of respondents (N=901)

### **13.9 Disability**

20% of respondents declared an impairment, health condition or learning difficulty that had a substantial or long-term impact on their ability to carry out day-to-day activities; another 8% preferred not to say. A mental health difficulty was the most commonly identified condition.

Postgraduate researchers were more likely to declare a disability at 27%, compared with 20% of research staff and 17% of academic staff. There was little difference between genders in whether respondents declared a disability, with 17% of male respondents and 19% of female respondents doing so.



#### Figure 13.10 Types of declared disability (20% of sample; N=158)

- Long standing illness or health condition such as cancer, HIV, diabetes, chronic heart disease, or epilepsy
- Mental health difficulty, such as depression, schizophrenia or anxiety disorder
- Physical impairment or mobility issues, such as difficulty using your arms or using a wheelchair or crutches
- Social/communication impairment such as a speech and language impairment or Asperger's syndrome/other autistic spect
- Specific learning difficulty such as dyslexia, dyspraxia or attention deficit hyperactivity disorder (ADHD)
- Blind or have a visual impairment uncorrected by glasses
- Deaf or have a hearing impairment
- Impairment, health condition or learning difference that is not listed above

#### www.ukrio.org

The UK Research Integrity Office (UKRIO) is an independent charity, offering support to the public, researchers and organisations to further good practice in academic, scientific and medical research. We promote integrity and high ethical standards in research, as well as robust and fair methods to address poor practice and misconduct. We pursue these aims through our publications on research practice, in-depth support and services for research employers, our education and training activities, and by providing expert guidance in response to requests for assistance from individuals and organisations.

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