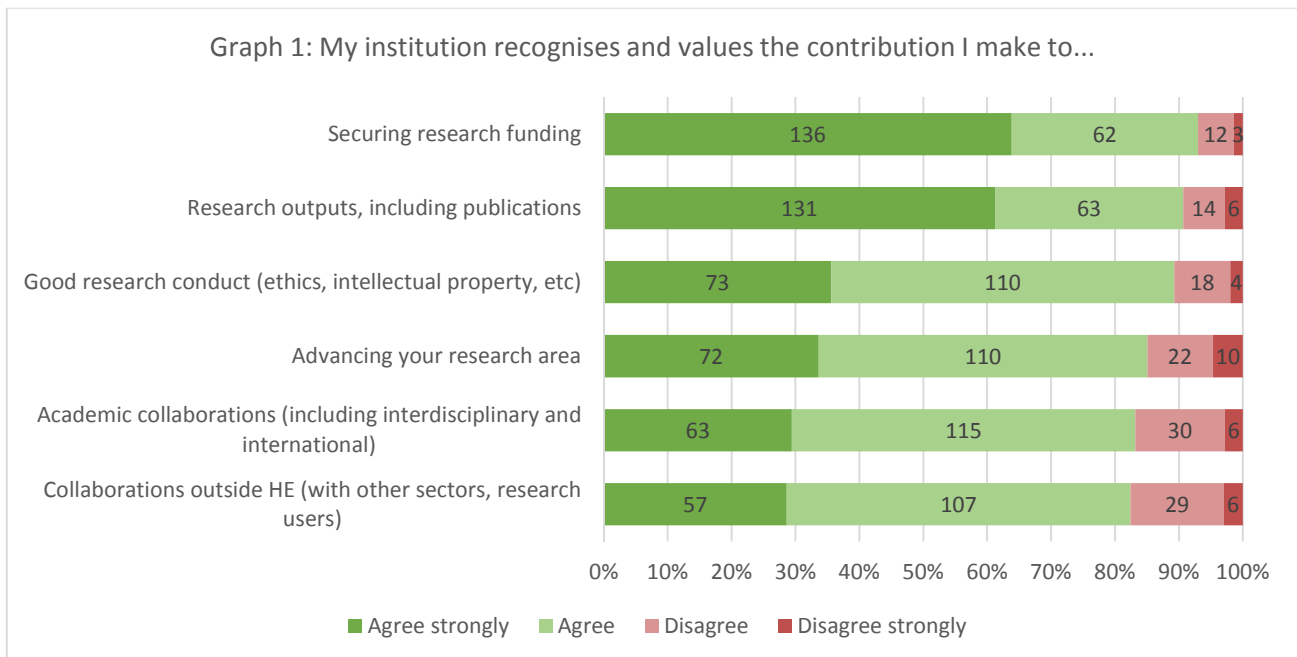# PIRLS Survey Analysis

Demographics:

- 215 PIs from UCL responded to the survey.
- **Gender**: 90 (42%) of respondents were female, 125 (58%) were male (there were also 7 respondents who did not identify their gender). Results are presented below where a gender difference has been identified in responses.
- **Disability**: 210 (97%) of respondents did not identify as disabled, while 3 (1%) did. 9 individuals did not respond to the question or selected 'prefer not to say'
- **BME**: only those who were from the UK were asked to identify their ethnicity. Of the 215 respondents, 152 (70%) were from the UK. Of this group, 138 (64% of total respondents) were white, 7 (3% of total respondents) BME, and a further 5 (2%) selecting 'other' or selecting 'prefer not to say'.
- **Nationality**: 152 (70%) respondents were from the UK, with 47 (21%) from the EU, and a further 23 (9%) from a country outside of the EU.
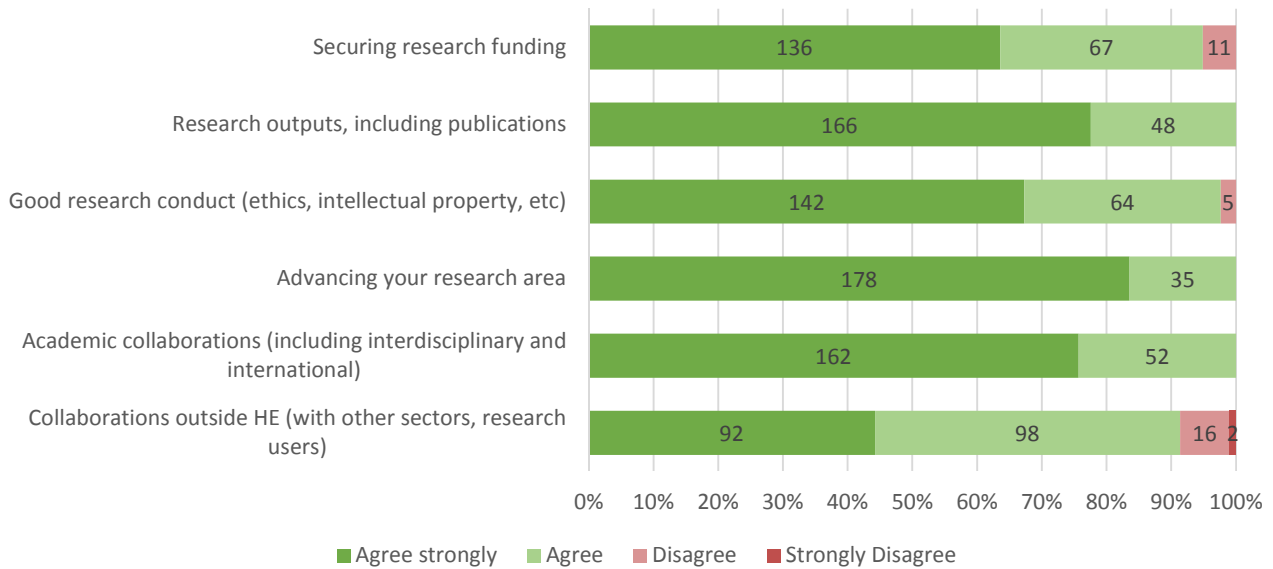
Recognition and Value

Throughout this section, respondents were given a list of activities and asked whether they were recognised by UCL for the contribution they made in these areas, and whether these activities were important parts of being a successful PI.

Research Activity: more than 80% of PIs responded positively, indicating that they felt recognised and valued for their contributions. More than 90% of respondents agreed or strongly agreed that all areas were important to being a successful PI.

Graph 1: My institution recognises and values the contribution I make to…

Graph 2: I think this activity is very important in being a successful PI/research leader

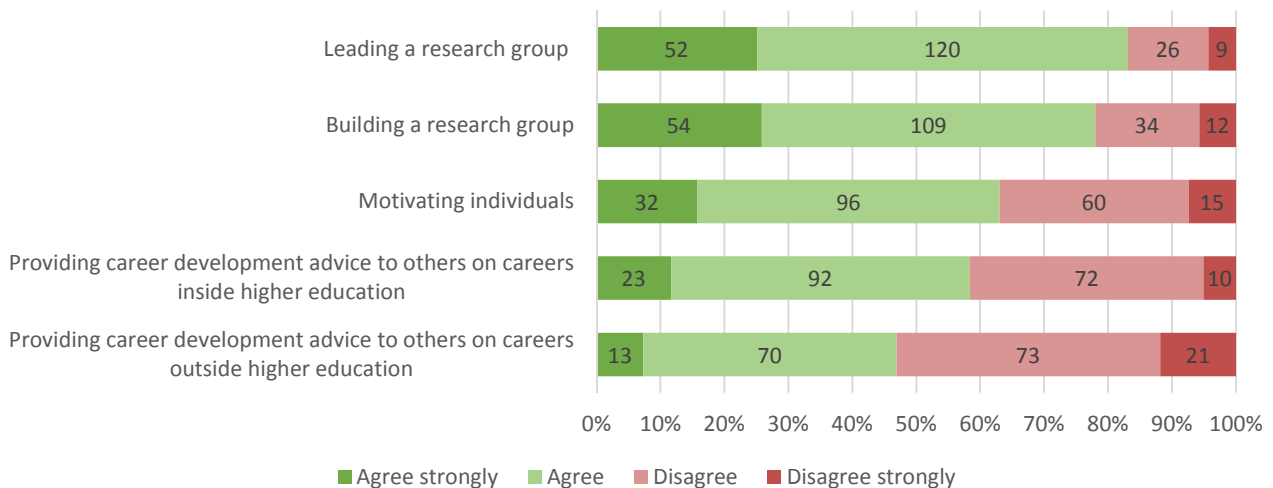| Activity	Agree strongly	Agree	Disagree	Strongly Disagree
Securing research funding	136	67	11	
Research outputs, including publications	166	48		
Good research conduct (ethics, intellectual property, etc)	142	64	5	
Advancing your research area	178	35		
Academic collaborations (including interdisciplinary and international)	162	52		
Collaborations outside HE (with other sectors, research users)	92	98	16	2

Inspiring/leading other researchers: responses were generally positive in relation to leading and building a research group, with more than 85% agreeing that these activities were recognised and valued by UCL. However, between 37-42% of respondents did not feel they were recognised for motivating individuals or providing career advice on careers in HE, and 53% did not feel recognised for providing career advice on careers outside of HE. Encouragingly, the vast majority of PIs saw all activities as important parts of being a successful PI.
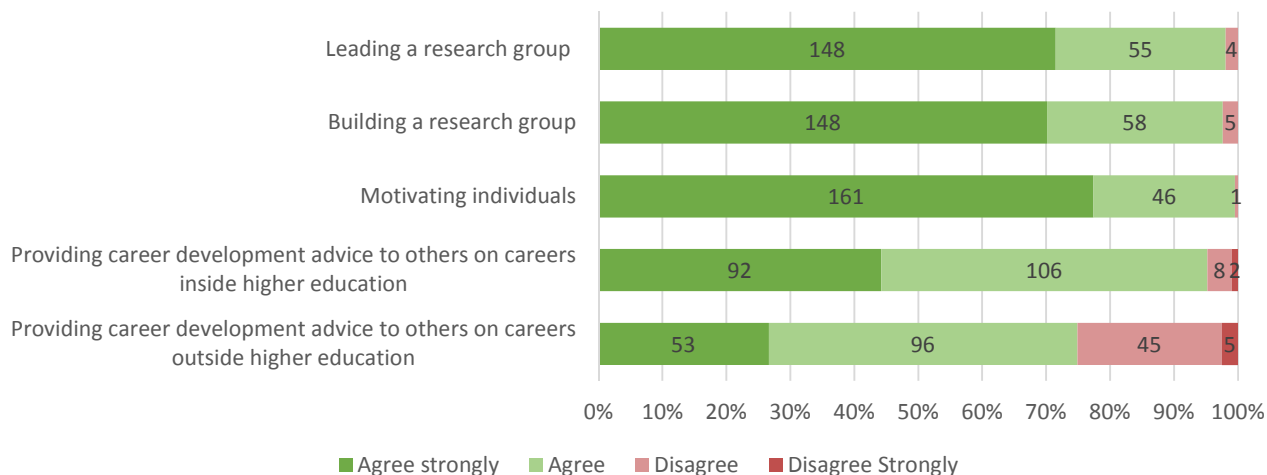
In the analysis of the CROS survey, it was suggested that PIs should be made aware of their role as sponsors and in supporting the career development of early career researchers; ensuring this support is offered to all researchers equitably. However, for this to be successful, it is important that PIs feel they are recognised and valued for providing this support.

Action: consider how to better recognise and value the contributions PIs make in providing career advice and support to early career researchers. For example, strongly link this to 'enabling' as part of promotion.

Graph 3: My institution recognises and values the contribution I make to...

Activity	Agree strongly	Agree	Disagree	Disagree strongly
Leading a research group	52	120	26	9
Building a research group	54	109	34	12
Motivating individuals	32	96	60	15
Providing career development advice to others on careers inside higher education	23	92	72	10
Providing career development advice to others on careers outside higher education	13	70	73	21

Graph 4: I think this activity is very important in being a successful PI/research leader

Activity	Agree strongly	Agree	Disagree	Disagree Strongly
Leading a research group	148	55	4	
Building a research group	148	58	5	
Motivating individuals	161	46	1	
Providing career development advice to others on careers inside higher education	92	106	8	2
Providing career development advice to others on careers outside higher education	53	96	45	5

Legend: Agree strongly, Agree, Disagree, Disagree Strongly

Management activity: more than 80% of respondents agreed that they were recognised for supervising research staff. Between 30-40% of respondents did not feel they were recognised for their contribution towards appraisal of staff, managing staff performance, developing others, managing/supervising or financial management. However, at least 90% of respondents felt that all of these activities were important for being a successful PI.

Action: similarly to the action above, it is important that PIs feel they are recognised for developing, managing and supervising staff. Ensure these activities are recognised and valued. For example – explore why PIs feel they are recognised for their supervising research students but not developing or managing research staff – this may help in identifying actions in this area.

Graph 5: My institution recognises and values the contribution I make to...

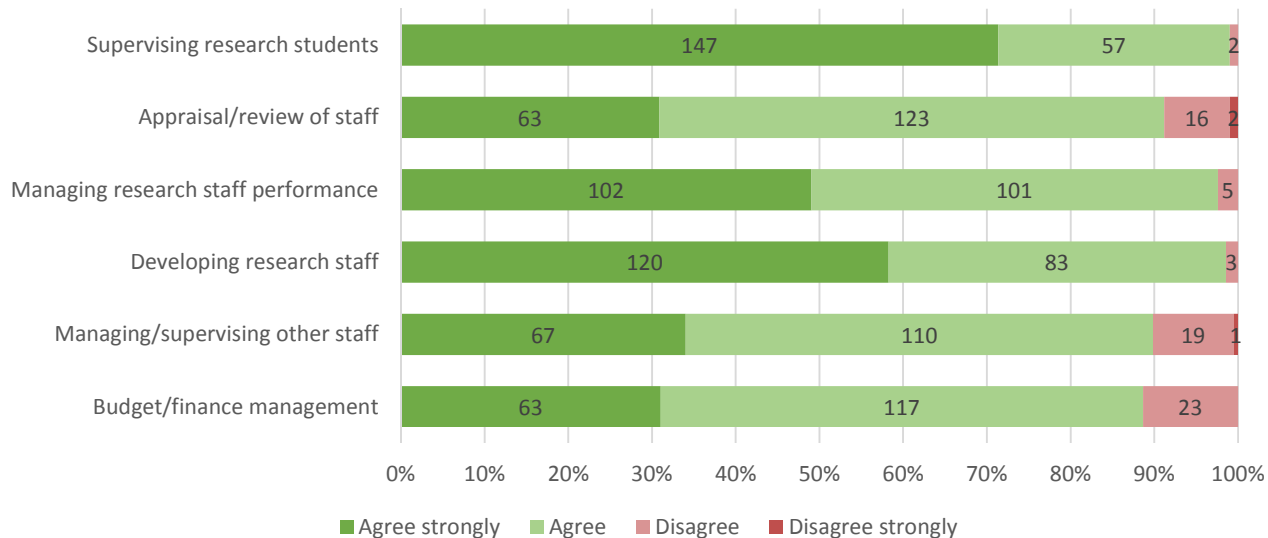| Activity	Agree strongly	Agree	Disagree	Disagree strongly
Supervising research students	57	110	27	8
Appraisal/review of staff	22	108	47	10
Managing research staff performance	23	107	57	9
Developing research staff	23	107	53	13
Managing/supervising other staff	18	91	58	10
Budget/finance management	19	94	56	19

Legend: Agree strongly, Agree, Disagree, Disagree strongly
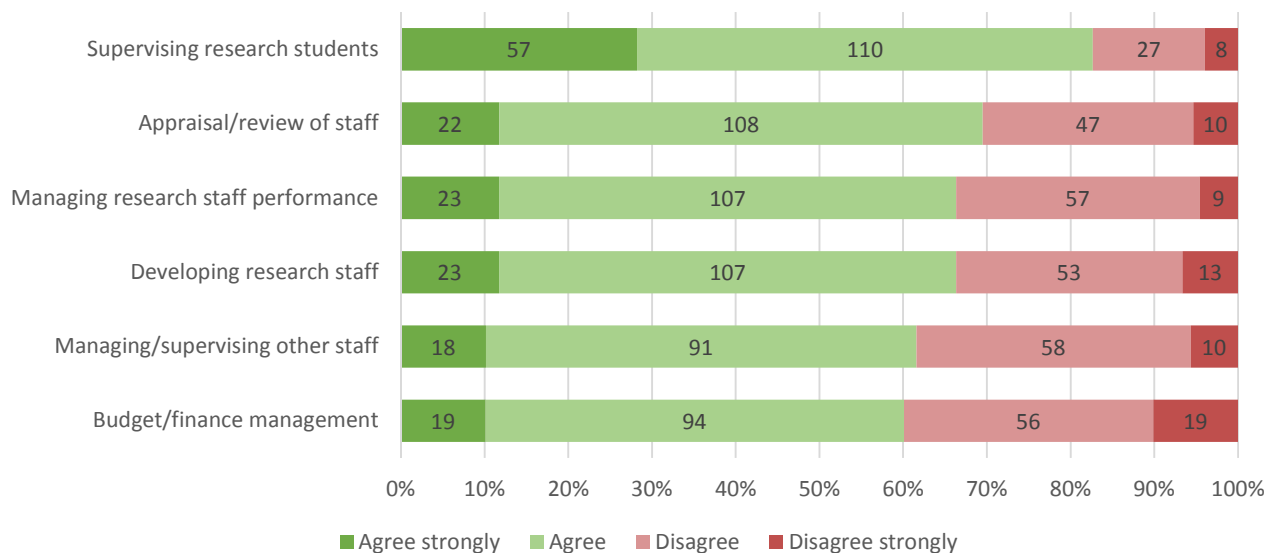
Graph 6: I think this activity is very important in being a successful PI/research leader

Activity	Agree strongly	Agree	Disagree	Disagree strongly
Supervising research students	147	57	2	
Appraisal/review of staff	63	123	16	2
Managing research staff performance	102	101	5	
Developing research staff	120	83	3	
Managing/supervising other staff	67	110	19	1
Budget/finance management	63	117	23	

Legend: ■ Agree strongly ■ Agree ■ Disagree ■ Disagree strongly

Engagement and impact: between 70-83% of respondents agreed that they were recognised for their contribution to the activities outlined in graph 7, and similar proportions felt these activities were important parts of being a successful PI.

Graph 7: My institution recognises and values the contribution I make to...

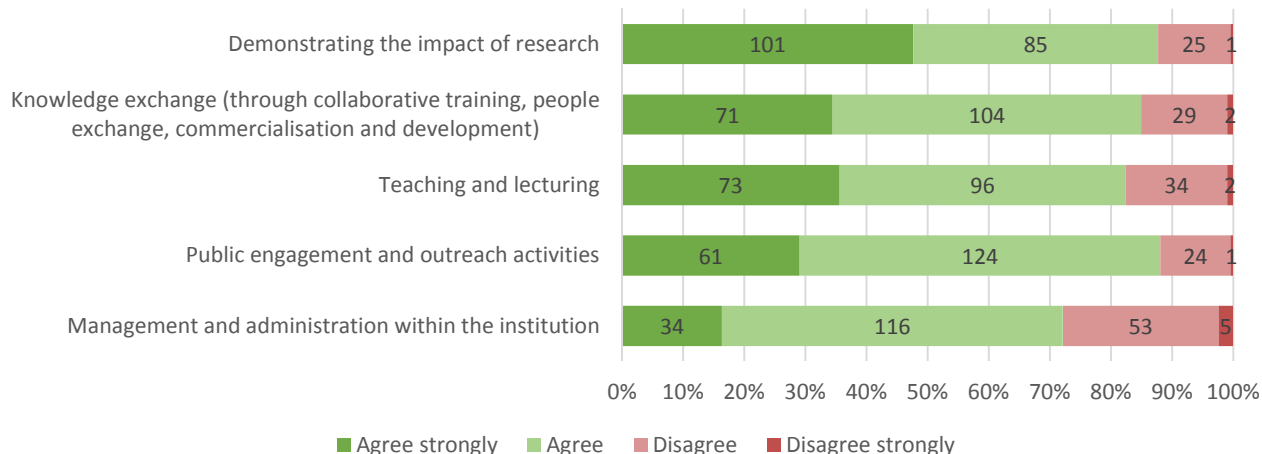| Activity	Agree strongly	Agree	Disagree	Disagree strongly
Demonstrating the impact of research	80	93	29	6
Knowledge exchange (through collaborative training, people exchange, commercialisation and development)	51	106	27	8
Teaching and lecturing	43	112	32	16
Public engagement and outreach activities	38	113	44	12
Management and administration within the institution	29	110	42	15

Legend: ■ Agree strongly ■ Agree ■ Disagree ■ Disagree strongly

Graph 8: I think this activity is very important in being a successful PI/research leader

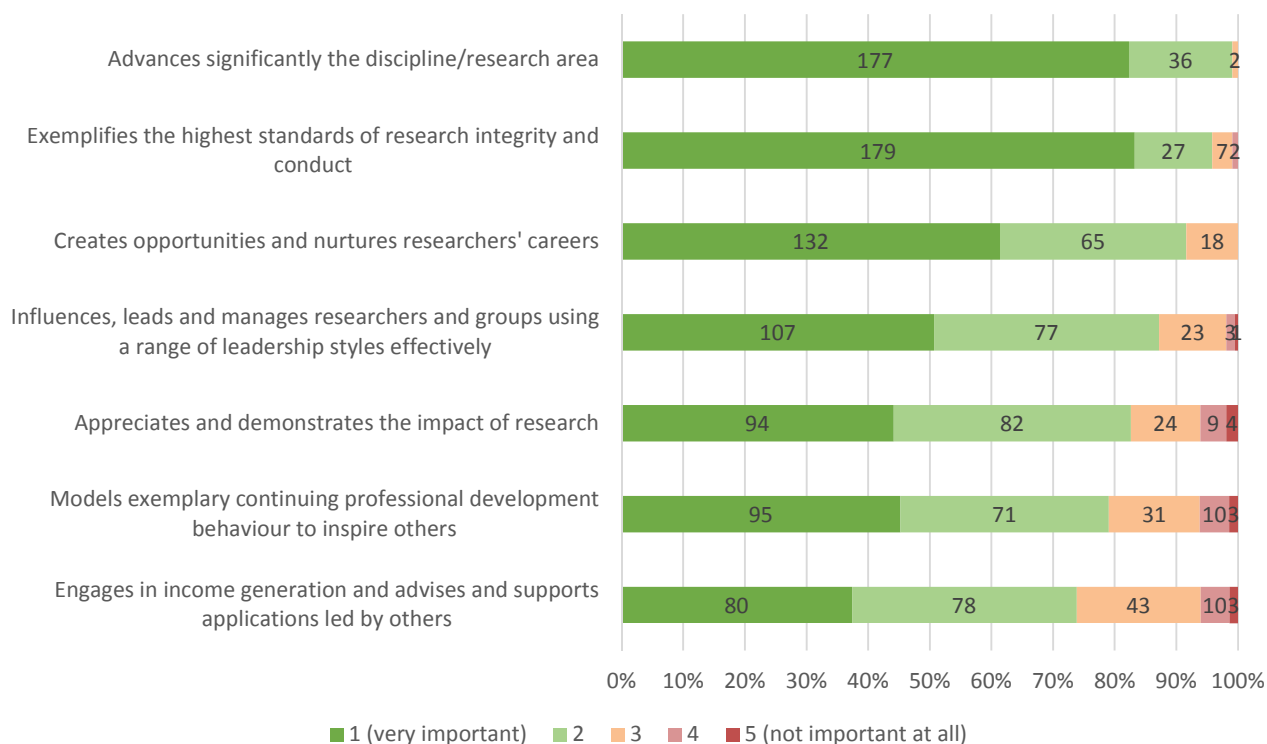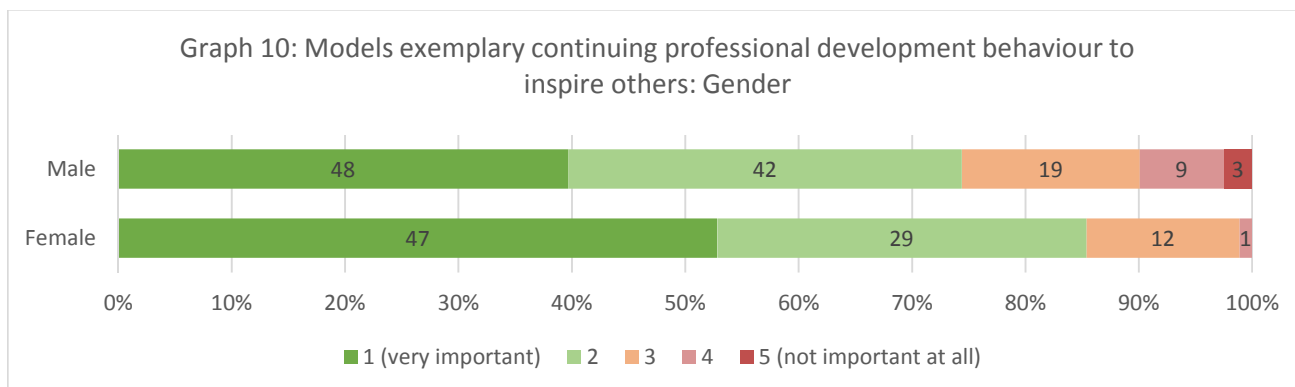| Activity	Agree strongly	Agree	Disagree	Disagree strongly
Demonstrating the impact of research	101	85	25	1
Knowledge exchange (through collaborative training, people exchange, commercialisation and development)	71	104	29	2
Teaching and lecturing	73	96	34	2
Public engagement and outreach activities	61	124	24	1
Management and administration within the institution	34	116	53	5

What makes a good PI?

Over 80% of respondents felt that advancing their discipline/research area and exemplifying high standards of research conduct were very important aspects of being a good PI, and over 70% of staff felt that all aspects in graph 9 were important.

The only area where there was a gender difference in responses was in relation to modelling exemplary continuing professional development behaviour to inspire others. Women were more likely to see this as an important part of being a good PI than male respondents.

Graph 9: What makes a good PI

Quality	1 (very important)	2	3	4	5 (not important at all)
Advances significantly the discipline/research area	177	36	2		
Exemplifies the highest standards of research integrity and conduct	179	27	7	2	
Creates opportunities and nurtures researchers' careers	132	65	18		
Influences, leads and manages researchers and groups using a range of leadership styles effectively	107	77	23	3	1
Appreciates and demonstrates the impact of research	94	82	24	9	4
Models exemplary continuing professional development behaviour to inspire others	95	71	31	10	3
Engages in income generation and advises and supports applications led by others	80	78	43	10	3

Graph 10: Models exemplary continuing professional development behaviour to inspire others: Gender

	1 (very important)	2	3	4	5 (not important at all)
Male	48	42	19	9	3
Female	47	29	12	1	

PIs were asked to indicate how confident they were in undertaking a range of activities, and whether they would be interested in undertaking training in these areas. More than 70% of respondents said they were confident or fully confident in all areas.
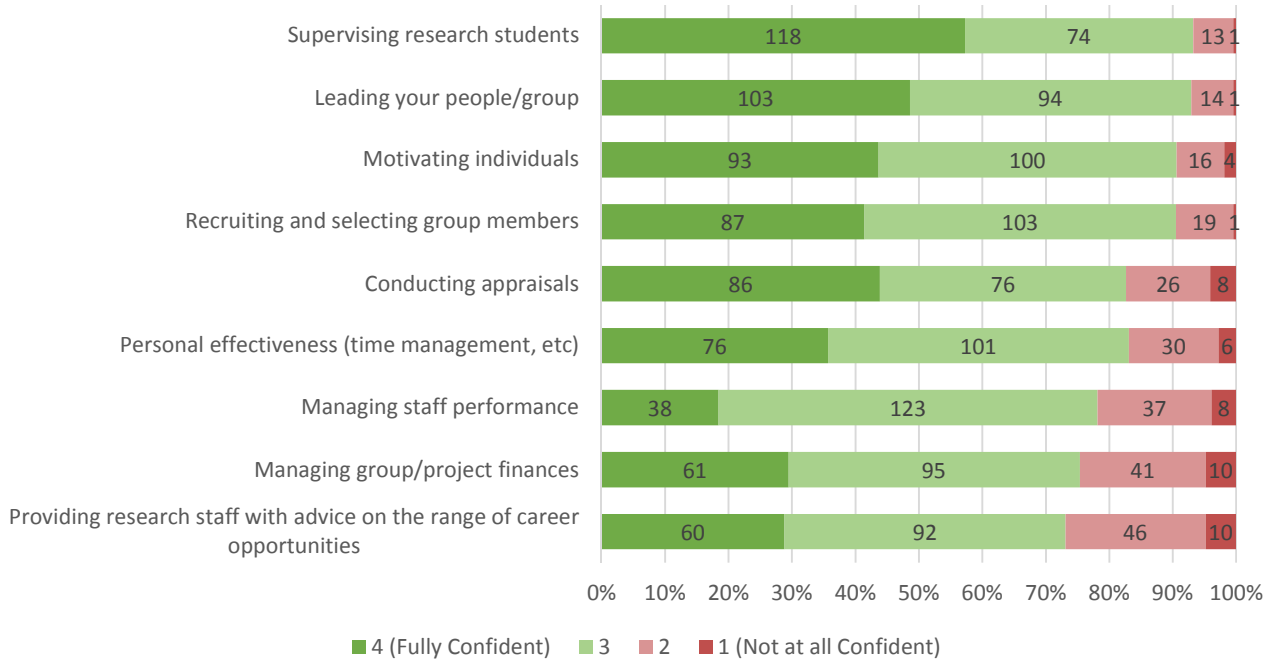
However less than 30% of PI said they felt fully confident in managing staff performance, managing finances or providing research staff with advice on career opportunities. This links with actions outlined above and in the CROS survey analysis. It is important that PIs are aware of their responsibilities as a sponsor, and are supported in providing advice, guidance and in managing staff performance. PIs also need to feel they are recognised and valued for performing these roles. Over 55% of respondents indicated that they would like training, support and development in relation to managing staff performance. In addition, over 45% said they would like additional development in leading a group and managing finance.

In almost all areas, women were more likely than men to say they would like to have support training and development.
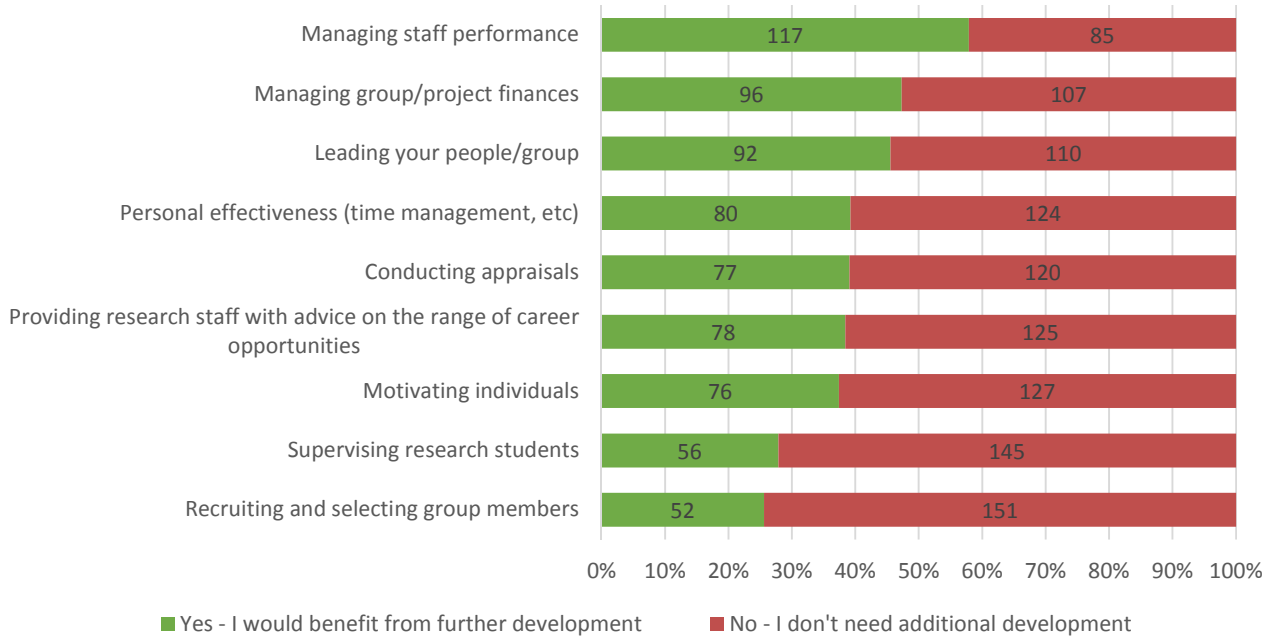
Action: evaluate the current training available to PIs. It may be appropriate to run training programmes specifically for PIs – covering academic sponsorship and staff management along with management of budgets and research projects. Training could also include management of flexible working/work-life balance and parental leave as these were highlighted as an issue within the CROS survey.

Action: review the data on the gender of PIs who are completing training courses at UCL. Ensure women are engaging in these events at an equitable rate. If women are not accessing training at the same rate as men, consider running female only courses, and/or running focus groups with female PIs to discuss why they are not accessing training.
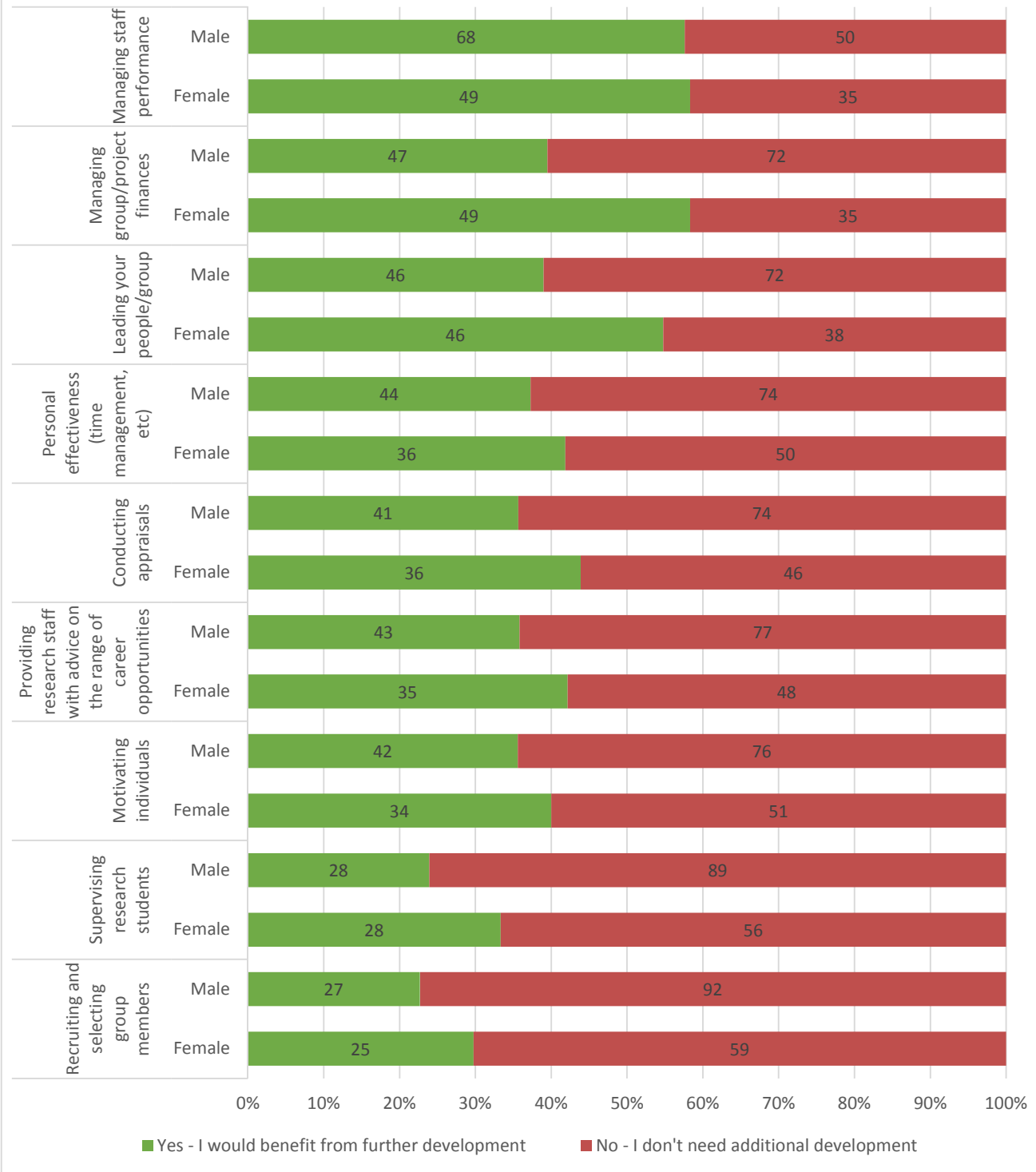
Graph 11: Confidence

Category	4 (Fully Confident)	3	2	1 (Not at all Confident)
Supervising research students	118	74	13	1
Leading your people/group	103	94	14	1
Motivating individuals	93	100	16	4
Recruiting and selecting group members	87	103	19	1
Conducting appraisals	86	76	26	8
Personal effectiveness (time management, etc)	76	101	30	6
Managing staff performance	38	123	37	8
Managing group/project finances	61	95	41	10
Providing research staff with advice on the range of career opportunities	60	92	46	10

Graph 12: Support, Training and Development

Category	Yes - I would benefit from further development	No - I don't need additional development
Managing staff performance	117	85
Managing group/project finances	96	107
Leading your people/group	92	110
Personal effectiveness (time management, etc)	80	124
Conducting appraisals	77	120
Providing research staff with advice on the range of career opportunities	78	125
Motivating individuals	76	127
Supervising research students	56	145
Recruiting and selecting group members	52	151

Graph 13: Support, Training and Development: Gender

Category	Gender	Yes - I would benefit from further development	No - I don't need additional development
Managing staff performance	Male	68	50
	Female	49	35
Managing group/project finances	Male	47	72
	Female	49	35
Leading your people/group	Male	46	72
	Female	46	38
Personal effectiveness (time management, etc)	Male	44	74
	Female	36	50
Conducting appraisals	Male	41	74
	Female	36	46
Providing research staff with advice on the range of career opportunities	Male	43	77
	Female	35	48
Motivating individuals	Male	42	76
	Female	34	51
Supervising research students	Male	28	89
	Female	28	56
Recruiting and selecting group members	Male	27	92
	Female	25	59

Legend: ■ Yes - I would benefit from further development   ■ No - I don't need additional development

UCL Support for PIs

88% of respondents indicated that they had had an appraisal in the last 2 years. Of those who had not received an appraisal, the majority reported that they had only recently been appointed.

60% of respondents found UCL's appraisal process useful overall. Less than 30% believed appraisal led to changes in work practices. Worryingly, less than 35% felt it succeeded in leading to training or continual professional development opportunities. Just over 50% agreed that their appraisal focused on their career aspirations. These should be central roles of the appraisal process. Similar feedback is consistently received by Athena SWAN departments in departmental staff surveys.

Graph 14: Usefulness of UCL appraisal scheme

	Very useful	Useful	Not very useful	Not at all useful
In reviewing your personal progress	30	100	42	15
For highlighting issues	20	99	56	13
Overall	18	96	59	15
In identifying your strengths and achievements	20	92	63	13
In helping you focus on your career aspirations and how these are met by your current role	23	74	59	31
In leading to training or other continuing professional development opportunities	14	46	93	32
In leading to changes in work practices	7	46	86	48
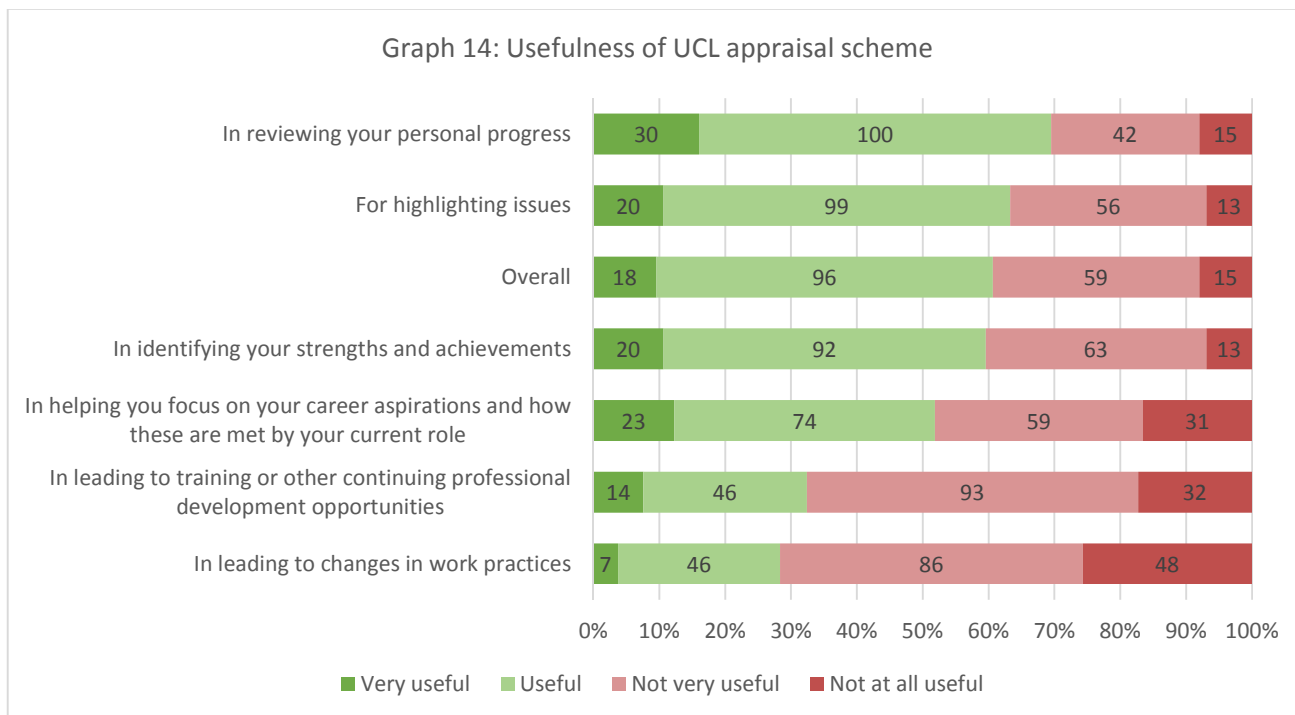
The majority of respondents had taken part in 1-2 days training in the past 12 months.

Graph 15: During the past 12 months (or since taking up your current position if that is more recent) approximately how many days have you spent on training and other continuing professional development activities?

None	less than one - 2 days	3-4 days	5+ days
26	84	36	54

Over 85% of PIs reported they had a good level of job satisfaction at UCL. Less than 60% felt they are appropriately rewarded for their contributions to UCL, and only 55% felt they were satisfied with their work/life balance. Less than 55% felt UCL is led well by senior management. Please see the discussion and actions above in relation to recognising and rewarding PIs for their contributions to UCL.
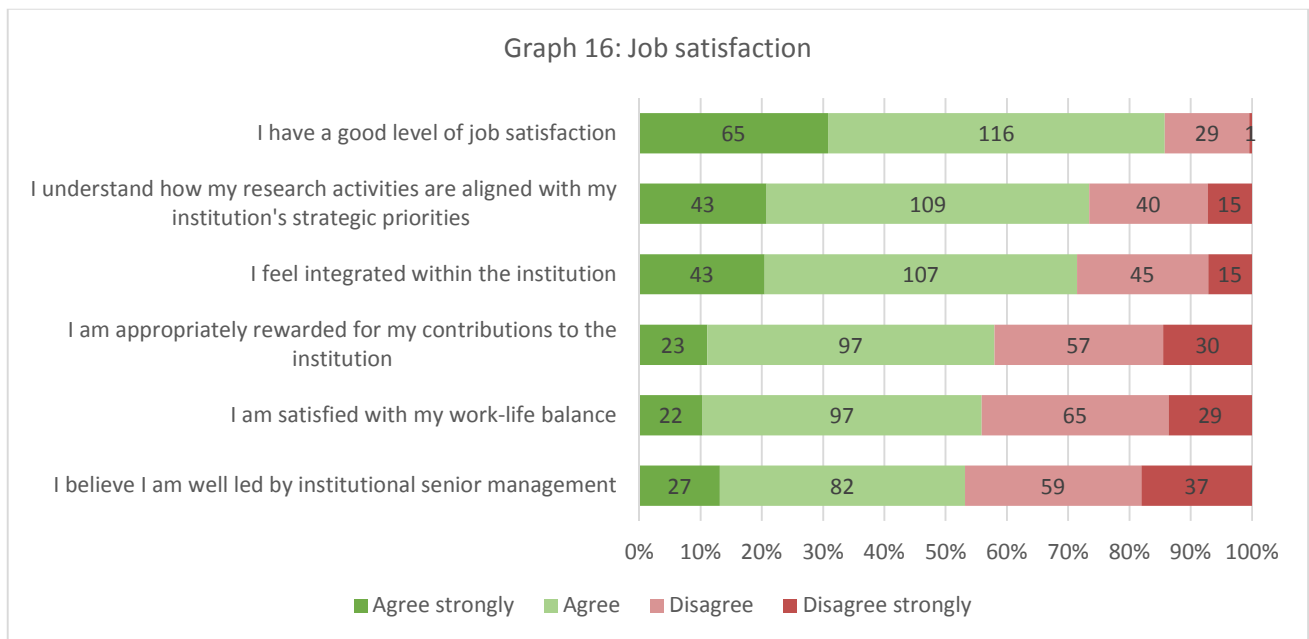
In almost all areas, women were less positive in their responses (graph 17). This is a crucial career transition point for female academics – in many science departments, the point at which the proportion of women starts to drop is between post doc and lecturer / senior researcher (often PIs). The fact that women at this stage are generally less positive about their job satisfaction is

concerning, and suggests that there are issues that are detracting early career women form continuing, and affecting those who stay on into more senior roles.
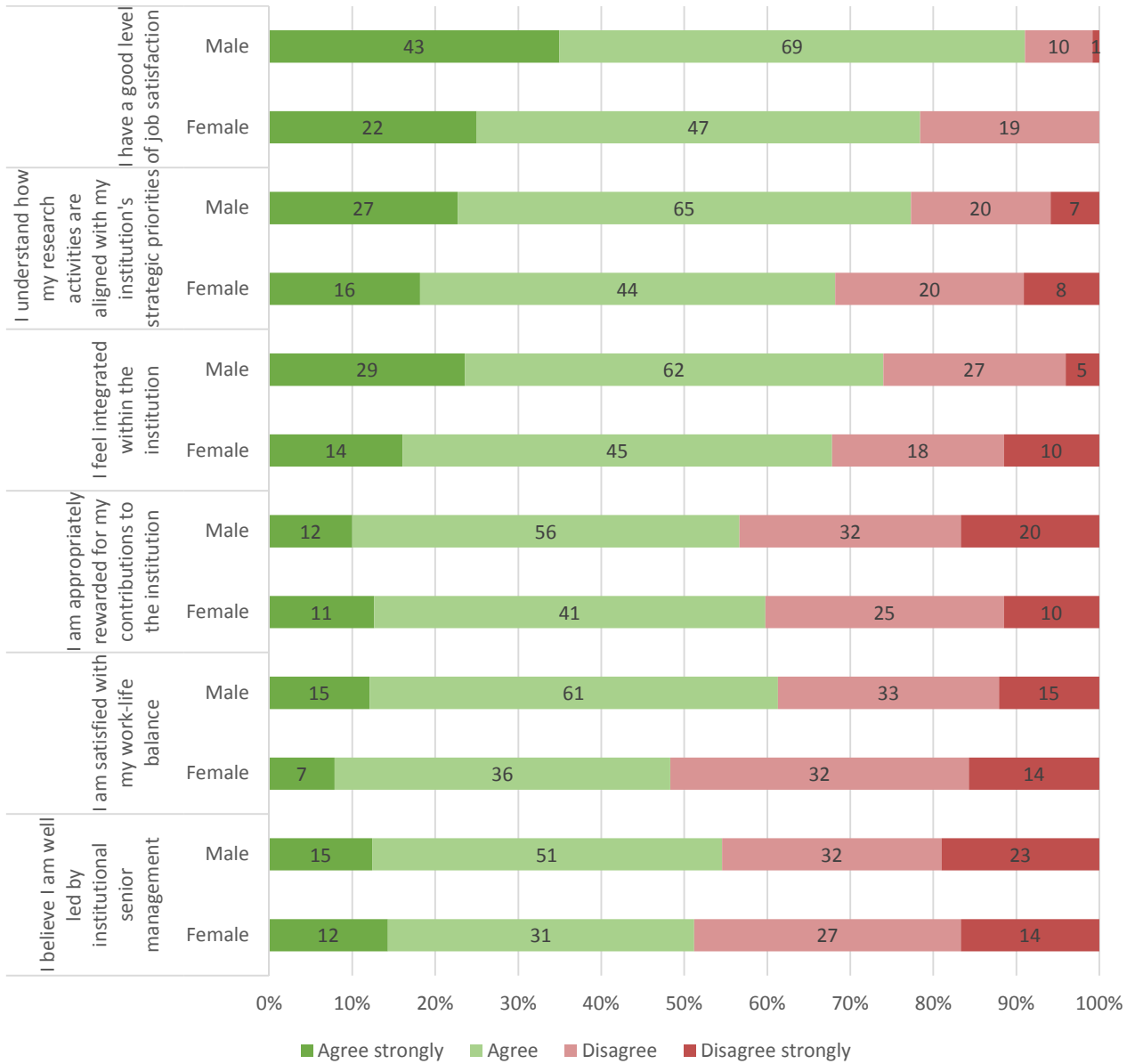
Action: tackle long-hours working culture in order to improve PI's work/life balance (this is a tricky area – it comes up a lot, but it's hard to tackle. For discussion at the researcher forum? Or a focus groups with PIs?)

Action: create a support network / forum for female PIs – this may provide a support group, networking opportunities and career development opportunities (offer training/events through the forum). This may help to address some of the lower levels of satisfaction from female PIs.

Action: run focus groups with female PIs to establish why they may have responded less positively than male PIs. Discuss their own career trajectories and their opinions on why positivity appears to decrease between research roles (CROS survey) and PI roles (PIRLS survey).
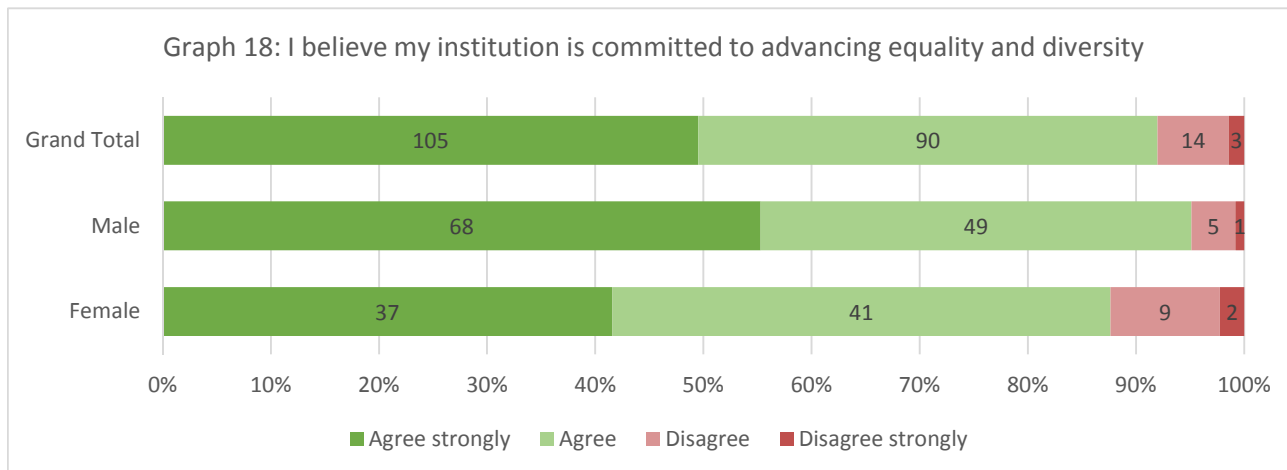

Graph 16: Job satisfaction

Graph 17: Job satisfaction: Gender

Statement	Gender	Agree strongly	Agree	Disagree	Disagree strongly
I have a good level of job satisfaction	Male	43	69	10	1
	Female	22	47	19	
I understand how my research activities are aligned with my institution's strategic priorities	Male	27	65	20	7
	Female	16	44	20	8
I feel integrated within the institution	Male	29	62	27	5
	Female	14	45	18	10
I am appropriately rewarded for my contributions to the institution	Male	12	56	32	20
	Female	11	41	25	10
I am satisfied with my work-life balance	Male	15	61	33	15
	Female	7	36	32	14
I believe I am well led by institutional senior management	Male	15	51	32	23
	Female	12	31	27	14

Legend: Agree strongly · Agree · Disagree · Disagree strongly

Equality and Diversity

Over 90% of PIs strongly agreed or agreed that UCL is committed to advancing equality and diversity. However women were slightly less likely than men to respond positively. See actions above – female PI focus group and female PI forum.

Graph 18: I believe my institution is committed to advancing equality and diversity

Category	Agree strongly	Agree	Disagree	Disagree strongly
Grand Total	105	90	14	3
Male	68	49	5	1
Female	37	41	9	2

Over 90% of respondents felt that staff are treated fairly regardless of their personal characteristics in relation to access to training, recruitment and treatment at work. Less than 80% agreed that individuals are treated fairly in relation to reward and participation in decision making.
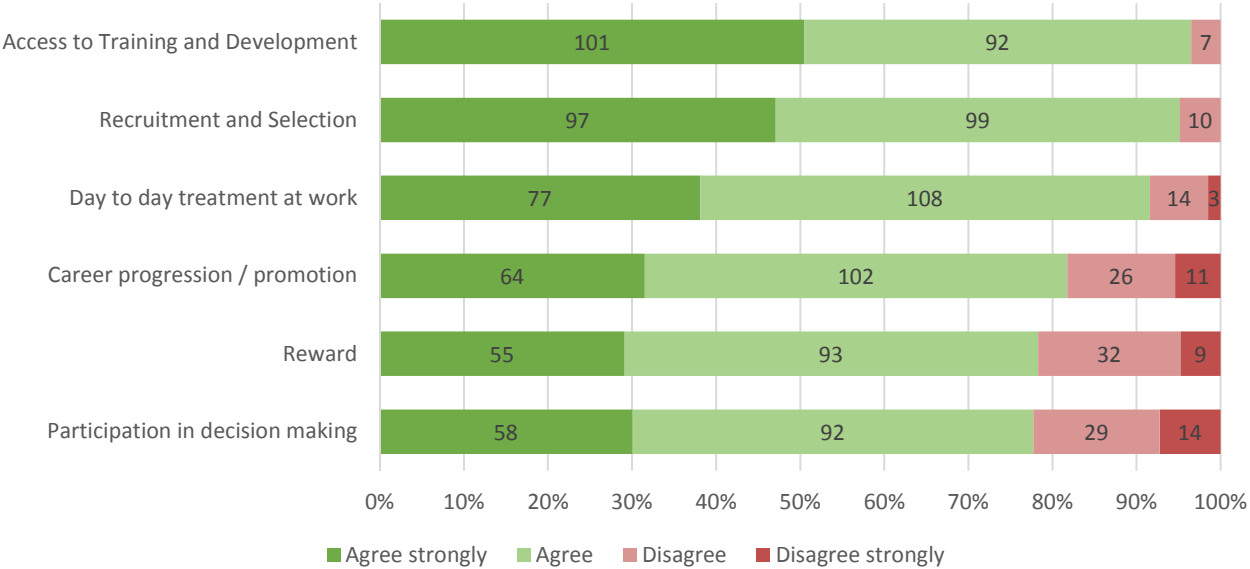
Graph 20 illustrates that female respondents were less positive in response to each question. The largest gender imbalance in responses was in relation to reward, followed by career progression and promotion. Both actions below from the CROS survey report would be relevant here:

Action: This could link to an action in the Athena SWAN Silver action plan. The Faculty of Medical Sciences have put in place a review committee that meets twice a year. The committee reviews all applications for accelerated increments and other pay-related rewards. The applications are reviewed to ensure consistency, but also in relation to equality and diversity. Divisions are questioned if, for example, a disproportionate number of applications are from men. It is proposed that this process will be reviewed in 2016 – after two years of data has been compiled. If it is clear that this has had a positive impact in relation to fairness and transparency, a proposal will be presented to HRPC with a recommendation that this be rolled out to other faculties.
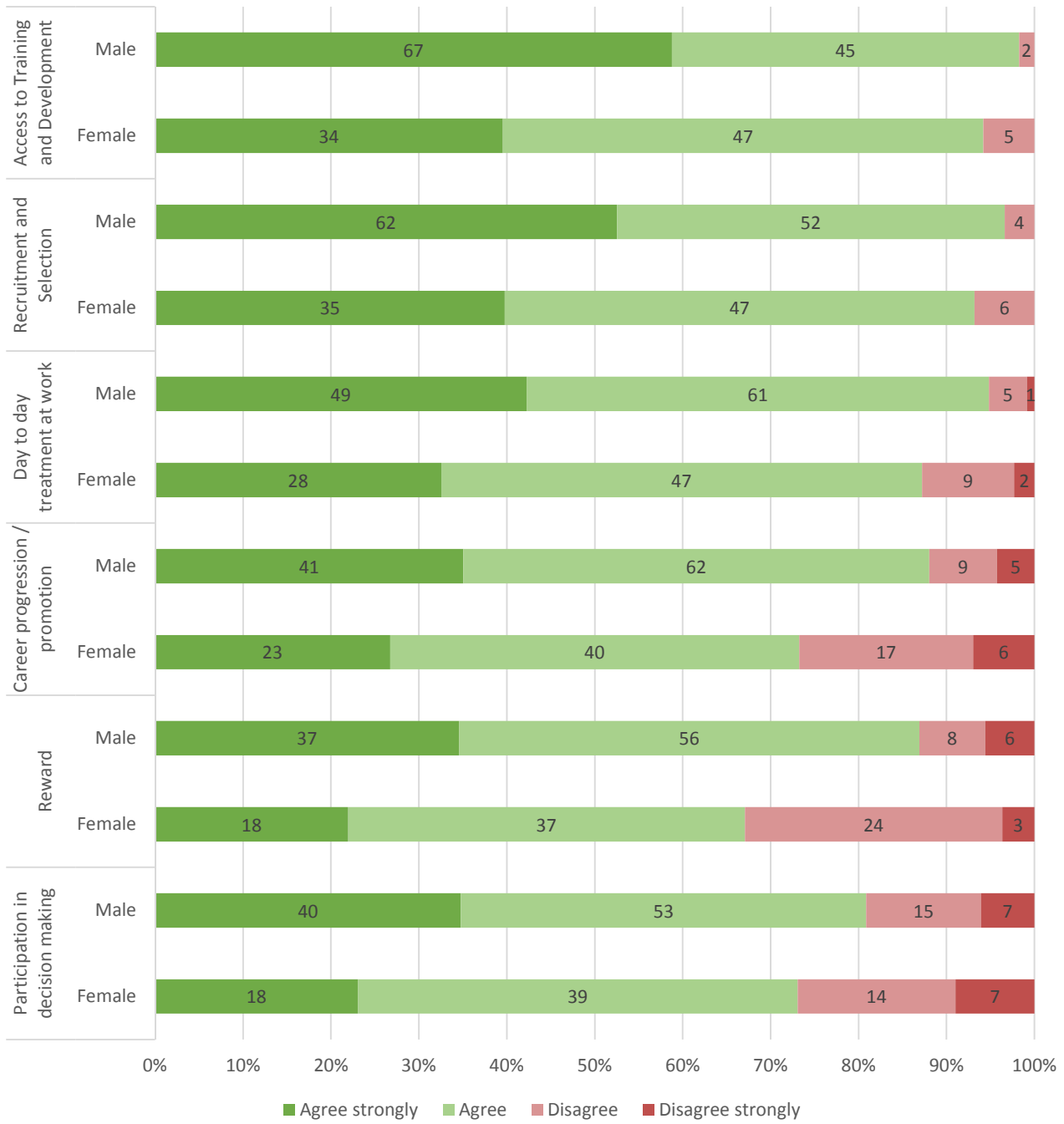
Action: Ask each department to review the gender balance of their key committees, and ensure that both male and female research staff are represented where appropriate. This is already taking place in many Athena SWAN departments. Ensure committee vacancies are advertised within departments – not filled through a 'tap on the shoulder'.

Action: work with the proposed new rewards team following the HR restructure (if the current proposal is approved) to ensure reward processes at UCL are fair, transparent and equitable. Ensure equality monitoring is undertaken annually for all reward processes, with any discrepancies investigated and addressed.

Graph 19: Staff at UCL are treated fairly, regardless of personal characteristics such as age, ethnicity, disability, gender or gender identify, in relation to...

Category	Agree strongly	Agree	Disagree	Disagree strongly
Access to Training and Development	101	92	7	
Recruitment and Selection	97	99	10	
Day to day treatment at work	77	108	14	3
Career progression / promotion	64	102	26	11
Reward	55	93	32	9
Participation in decision making	58	92	29	14

Legend: ■ Agree strongly ■ Agree ■ Disagree ■ Disagree strongly

Graph 20: Staff at UCL are treated fairly, regardless of personal characteristics such as age, ethnicity, disability, gender or gender identify, in relation to: Gender

Category	Gender	Agree strongly	Agree	Disagree	Disagree strongly
Access to Training and Development	Male	67	45	2	
	Female	34	47	5	
Recruitment and Selection	Male	62	52	4	
	Female	35	47	6	
Day to day treatment at work	Male	49	61	5	1
	Female	28	47	9	2
Career progression / promotion	Male	41	62	9	5
	Female	23	40	17	6
Reward	Male	37	56	8	6
	Female	18	37	24	3
Participation in decision making	Male	40	53	15	7
	Female	18	39	14	7

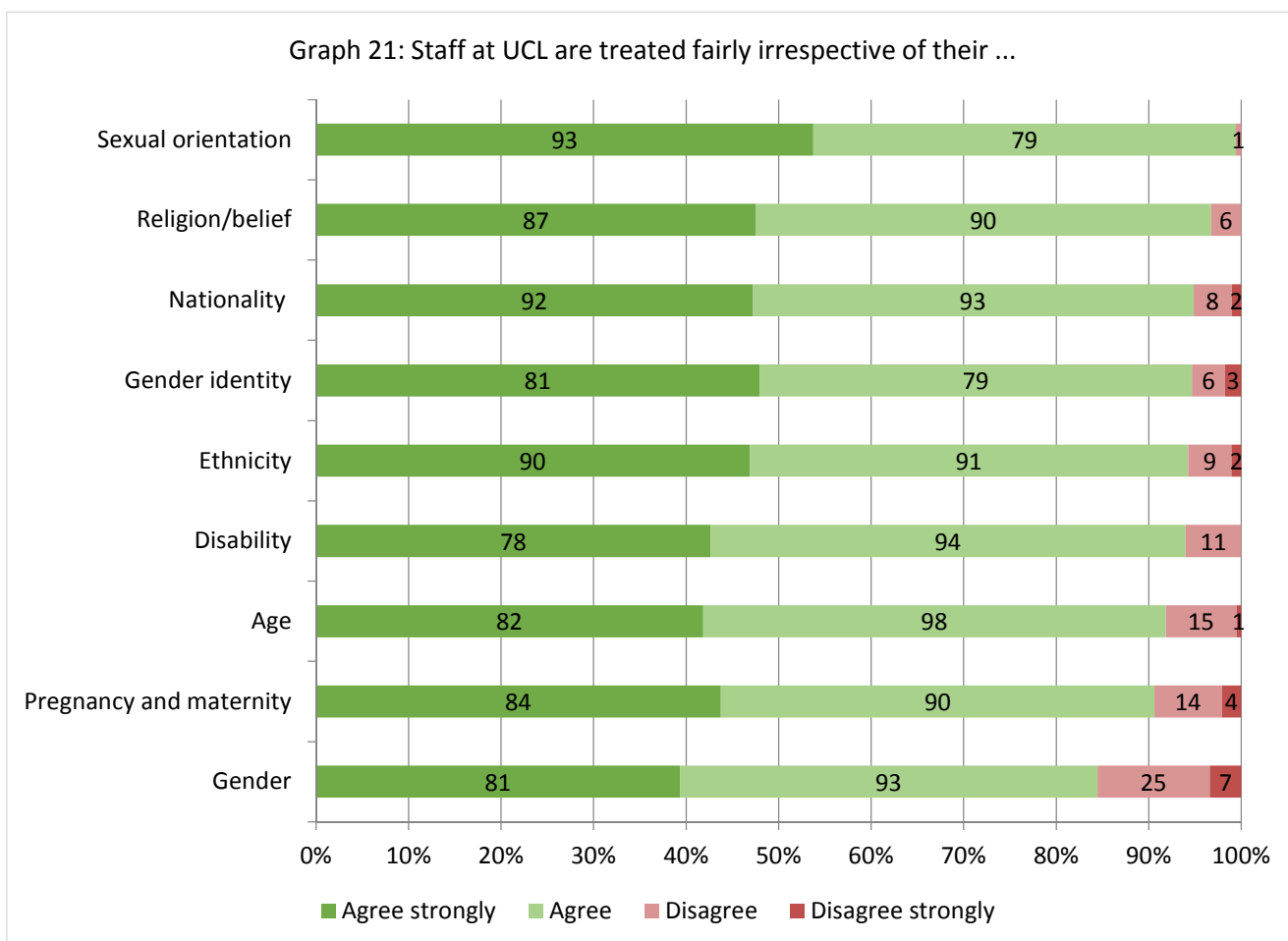Legend: ■ Agree strongly ■ Agree ■ Disagree ■ Disagree strongly

More than 90% of respondents agreed that staff are treated fairly at UCL irrespective of their personal characteristics, with the exception of gender, where 15% of respondents disagreed.
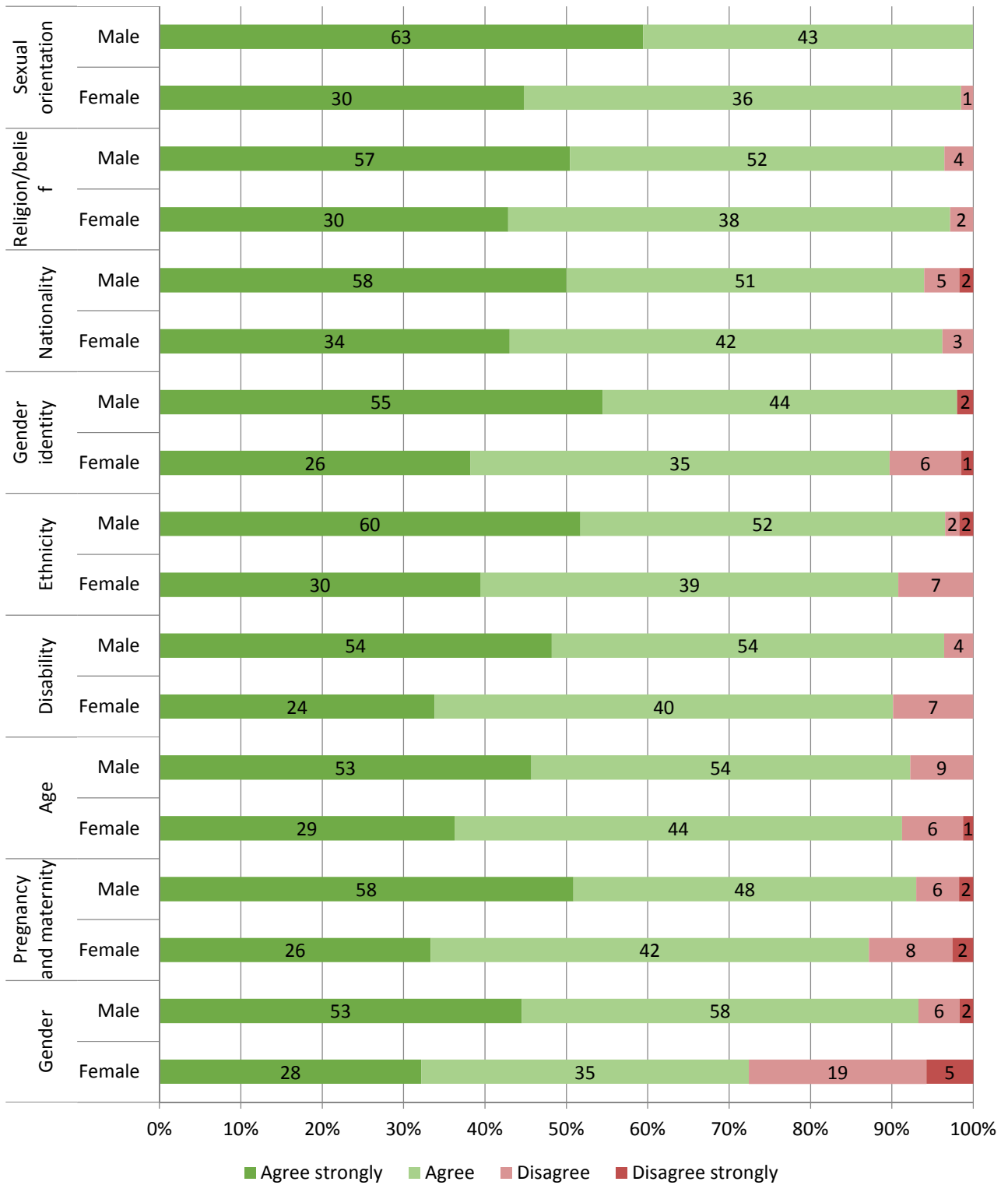
While the responses were generally positive, there were some small gender differences (graph 22). The most striking difference was in relation to gender – 93% of men agreed or strongly agreed that staff at UCL are treated fairly irrespective of their gender, in comparison to 72% of women. In comparison to the CROS survey results to this question, female PIs are less positive than female researchers (72% compared with 81%)– while male PIs have the same positive response as male researchers (93%). This could suggest that as female academics become more senior, and/or spend longer in higher education, they feel they are treated less favourably.

Action: as suggested above, run a focus group with female PIs to seek to further understand these results.

Graph 21: Staff at UCL are treated fairly irrespective of their …

Graph 22: Staff at UCL are treated fairly irrespective of their... :Gender

Category	Gender	Agree strongly	Agree	Disagree	Disagree strongly
Sexual orientation	Male	63	43		
	Female	30	36	1	
Religion/belief	Male	57	52	4	
	Female	30	38	2	
Nationality	Male	58	51	5	2
	Female	34	42	3	
Gender identity	Male	55	44		2
	Female	26	35	6	1
Ethnicity	Male	60	52	2	2
	Female	30	39	7	
Disability	Male	54	54	4	
	Female	24	40	7	
Age	Male	53	54	9	
	Female	29	44	6	1
Pregnancy and maternity	Male	58	48	6	2
	Female	26	42	8	2
Gender	Male	53	58	6	2
	Female	28	35	19	5

Legend: ■ Agree strongly ■ Agree ■ Disagree ■ Disagree strongly

When PIs were asked whether they felt they had been discriminated against in their post, just over 10% said that they had. When responses are disaggregated by gender it is clear the majority are female – with 20 of the 25 individuals saying they had been discriminated against being female.

Action: A number of actions have been included within the Athena SWAN and Race Charter Marks relating to reporting discrimination, bullying and harassment. For example, at the start of 2016, Fiona McCelment will be reviewing the 'report and support' system in place at Manchester University and assess whether this is something we could implement at UCL. In addition, we are promoting the new dignity at work statement and dignity at work advisers (more have recently been recruited)

Graph 23: Have you ever felt that you have been discriminated against in your post?

	No	Yes
Grand Total	185	25
Male	118	5
Female	67	20