REMOTE WORK IN THE CONTEXT OF THE COVID-19 PANDEMIC
RESULTS OF THE BASELINE QUESTIONNAIRE

UNIVERSITY OF
ABERDEEN

Bonnesen, Kamilla (u09kb16@abdn.ac.uk)

Cret, Darius (u01dgc17@abdn.ac.uk)

Irwin, Amy (a.irwin@abdn.ac.uk)

UNIVERSITY OF ABERDEEN

RESULTS SUMMARY

Overall the majority of University staff reported a positive response regarding the questions about University support, colleague support, working flexibly and using that flexibility to manage caring responsibilities. However, although predominantly positive the level of effectiveness reported did vary across the four key questions:

- The question regarding overall effectiveness of University level support was associated with 80% positive responses (4 & 5), 14% of neutral responses (3) and 6% negative responses (1 & 2).

- The question about the effectiveness of colleague support was associated with a similarly positive response; 80% reported effective support (4 & 5), 12% of participants reported a neutral response (3) and 6% gave a negative response (1 & 2).

- The third question regarding the extent to which the University has supported flexible working from home received a positive response from 77% of participants (4 & 5), 12% of participants recorded a neutral response (3) and 8 % reported a negative response (1 & 2).

- The final question, related to the effectiveness of work flexibility in allowing staff to meet their caring responsibilities (this question was completed by the 50% of staff who reported caring responsibilities) was associated with a positive response (4 & 5) from 63% of participants, a neutral response (3) from 18% of participants and a negative response from 11% of participants.

The next stage of analysis was to split participants into groups according to key demographic and working information (gender, age, contract type, caring responsibilities etc.). Key results for each group can be viewed below *(Please note all scores discussed below represent mean scores – generated by summing all participant scores for a question and then dividing by the number of participants to provide an average score. In some cases the mean difference between groups was descriptively small, whilst still reaching significance – see full results section for further details)*:

- **Gender:** The descriptive data indicated that women reported marginally lower levels of effectiveness for colleague, flexible working and caring support. Women reported a significant marginally higher mean response for the effectiveness of overall University support during Covid-19.

- **Age:** The data indicated an association between age and reported effectiveness across three questions (University support, colleague support, flexible working) with the youngest employees (age bracket 18-24) reporting a significantly lower mean score. There was no significant difference in response in terms of the effectiveness of flexible working for caring responsibilities.

- **Ethnicity:** Due to participant numbers the analysis of responses according to ethnicity represents a comparison across two groups – white and minority (comprised of all other ethnic minority groups). The descriptive data indicated that staff in minority groups reported lower levels of effectiveness across all four questions. Two of the differences were significant – minority groups reported a lower mean response for both the colleague support and flexible working questions.

- **Religion:** The majority of participants reported no religion or identified as Christian, with the remainder reporting another religion (Buddhist, Jewish, Hindu, Muslim, Spiritual). Religion was collapsed into three categories – Christian, no religion and other. The data indicated responses were similar across those groups apart from flexible working, where individuals in the 'other' category reported significantly lower levels of effectiveness.

- **Sexual orientation:** The pattern of descriptive data indicated that individuals identifying as gay or bisexual reported marginally lower levels of effectiveness for University, colleague and caring support, but these differences were not significant.

- **Disability:** The pattern of data indicated that individuals identifying as disabled reported consistently lower levels of effectiveness across all four questions (though the difference was marginal). One of those differences was significant – overall effectiveness of University support.

- **Living and relationship status:** The mean data indicated that staff who live alone consistently report lower levels of effectiveness for support. The results were significant for two questions: staff members who reported living alone reported significantly lower levels of effectiveness of colleague support and support of flexible working.

- **Home-schooling:** Members of staff who home-schooled scored significantly lower on both support for flexible work and the extent to which flexible working allowed them to meet their caring responsibilities. No other significant differences based on home-schooling were recorded.

- **Department:** There were observed differences in responses across departments: staff within the Schools of Business and Social Science were associated with lower mean scores across all four questions compared to other schools. Staff in the Development Trust, Psychology, Finance, Research and Innovation, and Directorate of People generally recorded a higher mean response across all four questions regarding effectiveness of support.

- **Job role:** There was a general trend in responses according to job role with academic staff associated with lower mean scores across all four questions than staff in support and professional services. Further analysis indicated that women in academic roles reported significantly lower levels of effectiveness for questions related to colleague, flexible working and caring support. There were no differences according to contract type (fixed versus open-ended) or working pattern (full versus part time).

CONTENTS

INTRODUCTION

The current project was designed to explore the impact of remote work in the context of the Covid-19 pandemic on University staff members, in order to inform the planning and development of subsequent guidelines that the University can use both throughout and beyond this period.

This report details the preliminary quantitative results from a survey constructed and shared by the University of Aberdeen HR department. The survey involved the collection of both qualitative and quantitative data, the latter of which is being reported in the present work. The quantitative section of the questionnaire consisted of 4 Likert-scale questions (responses from 1 – not at all, to 5 - very) examining the effectiveness of University support during the early stages of transition to remote work, as well as a set of questions designed to collect participants' demographic information.

This baseline report details data collected in June 2020, several months after remote work measures had been implemented following the UK lockdown.

The results outlined in the present work incorporate both descriptive and statistical analyses of the data.

The results presented in this section represent an analysis of the frequency of response type across all quantitative questions of the HR Staff Survey. The results detail three main aspects of the survey:

- **Demographic information:** This section details the demographic make-up of the staff who completed the survey. This includes gender, age, ethnicity, religion, sexual orientation, disability, living arrangements and caring responsibilities.
- **Employment information:** This section provides an overview of the types of job role, contract type and the department included in the staff sample for the survey.
- **Effectiveness of support:** The final section provides an overall measure of effectiveness for the entire participant sample across four key questions – university support, colleague support, flexible work arrangements and caring responsibilities.

A total of 1445 survey responses were received by the University of Aberdeen HR Department.

Demographic information

Gender

Figure 1.1 provides the percentages of gender identities. Women accounted for 57% of respondents and men for 35%. An additional 0.42% of respondents identified as non-binary, while 7.81% of the participants chose not to state their gender identity. Six individuals reported that their current gender identity did not match their assigned sex at birth.
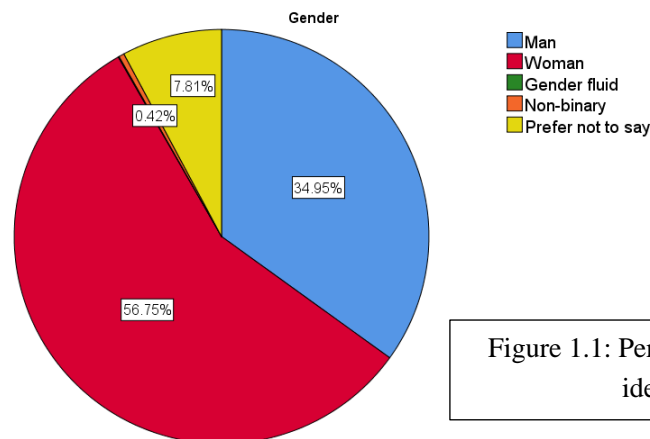

Figure 1.1: Percentages of gender identities.

Age

Figure 1.2 presents the proportion of respondents in each age band. The majority of respondents were in the 45-54 year age range (26.63%), closely followed by responses in the 35-44 year age range (25.14%).
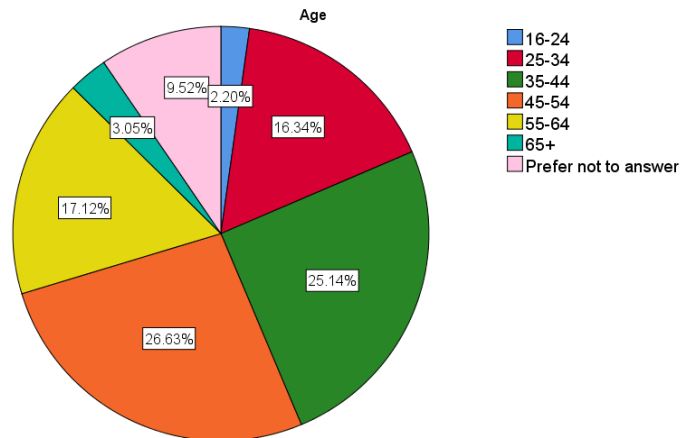

Figure 1.2: Percentages of age groups of survey respondents.

Ethnicity

Figure 1.3 represents the distribution of ethnic diversity. The three most prevalent ethnicities were: white-Scottish (40.31%); white-British ethnics (24.10%); and other white background (14.52%). Black-African ethnics made up 1.34% of responses; 1.06% reported being of other mixed/dual heritage, while 0.92% were white-Irish ethnics. The remaining 17.75% is made up of 10 different ethnicities.
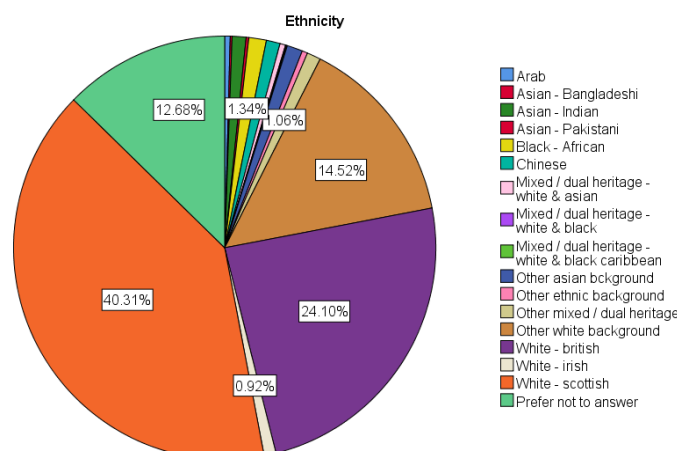

Figure 1.3: Percentages of ethnic diversity in the sample.

Religion

Participants were asked to indicate their religion. Figure 1.4 illustrates that almost half of the participants indicated that they had no religion (47.21%). The majority of participants reporting a religion indicated a Christian denomination (Church Scotland (13.48%), Catholic (5.43%) or Other (9.24%)). Almost ¼ of participants (20.11%) preferred not to answer this question.
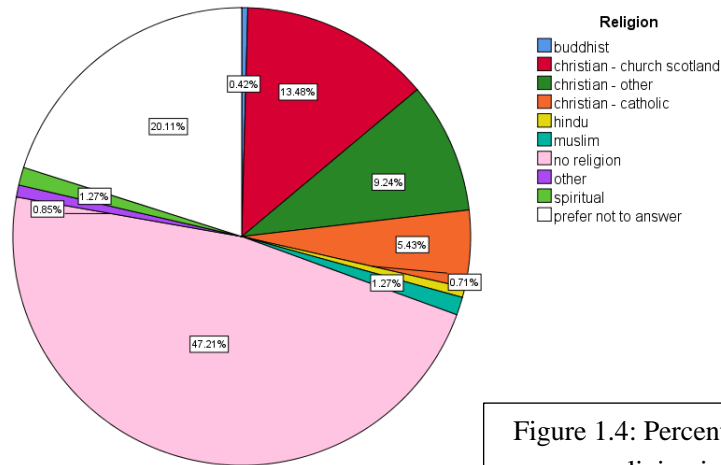

Figure 1.4: Percentages of reported religion in sample.

Disability

Participants responded to a question regarding whether or not they had a disability. Figure 1.5 shows that the majority of respondents do not have a disability (86.38%), while a minority (5.82%) stated that they do.
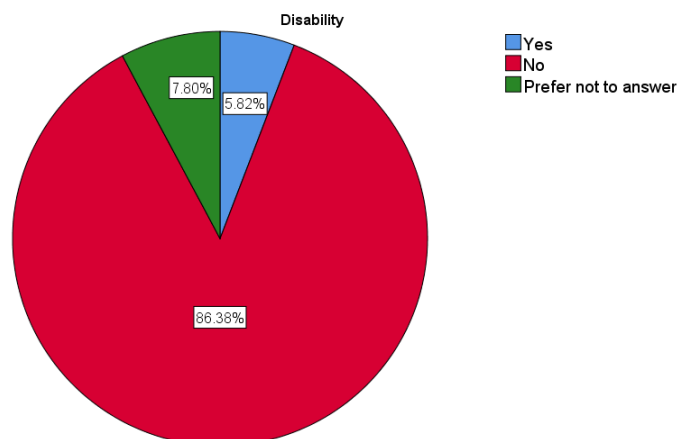

Figure 1.5: Percentages of disability prevalence in sample.

Living Status

Figure 1.6 illustrates the variation in living status within the sample. The majority of participants live with others (79.84%), whilst 14.52% reported living alone.

Figure 1.6: Percentages of respondents' living situations.
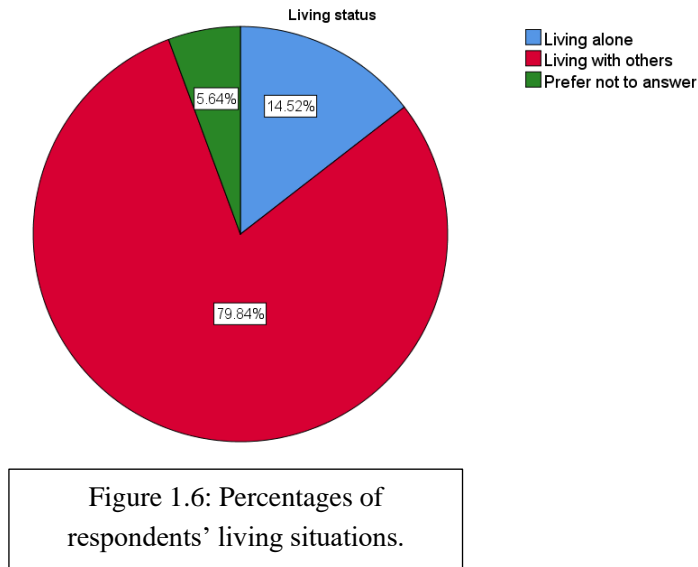
Sexual orientation

Figure 1.7 illustrates the reported sexual orientation of the survey participants (please note this represents the reported sexual orientation of 1170 participants, the remainder preferred not to answer this question), with the majority being heterosexual (94.19%), followed by gay man or woman (3.16%) and then bisexual (2.65%).

Figure 1.7: Percentages of respondent reported sexual orientation.
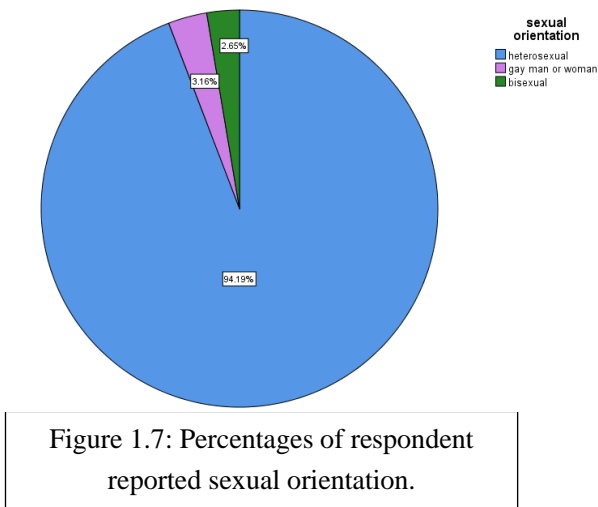
Relationship

Figure 1.8 illustrates the relationship status of survey participants. Most respondents reported being married (52.64%) and 14.52% reported being in a domestic relationship (co-habiting with their partners). Additionally, 12.83% of participants reported being single, and 13.18% chose not to disclose their relationship status. Widowed participants accounted for 1.41% of the responses, and 4.44% of respondents reported being divorced.
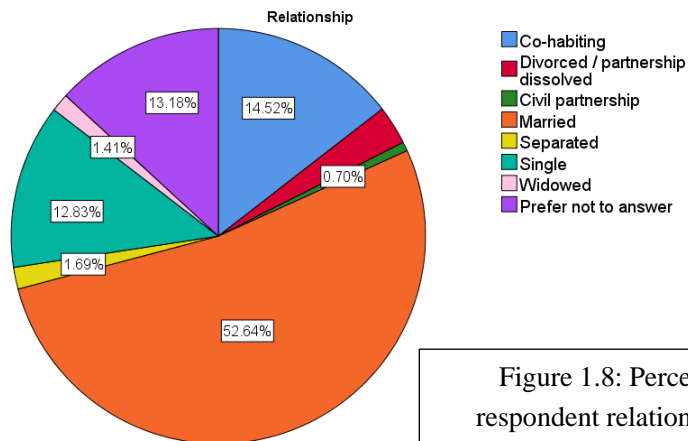
Figure 1.8: Percentages of respondent relationship status.

Caring Responsibilities

Figure 1.9 presents the distribution of participants' responses to a question on whether their at-home duties included caregiver responsibilities: we observed an even distribution with 46.8% yes-responses, and 48.7% no-responses. We observed the same pattern between genders with 47.7% of male respondents and 46.8% female respondents reporting having care responsibilities.
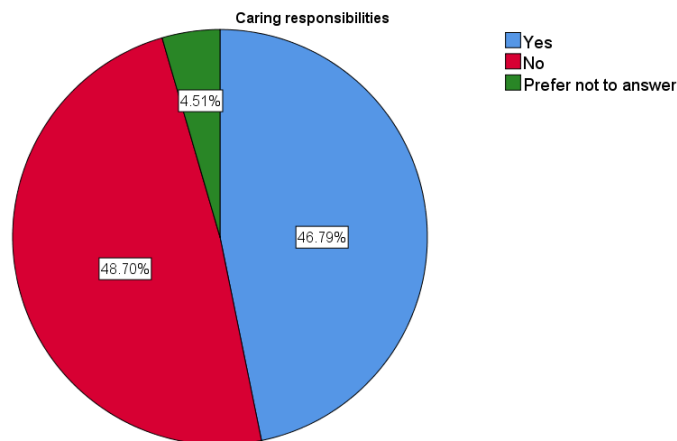
Figure 1.9: Percentages of respondent caregiver

Home Schooling

Figure 1.10 outlines the percentages of respondents with caring responsibilities engaging in home schooling with their children. The results show an even split, with 47.02% of participants reporting home schooling and 47.05% stating they were not home schooling. We observed the same pattern between genders with 49.4% of male respondents and 48.8% female respondents reporting having home-schooling responsibilities.
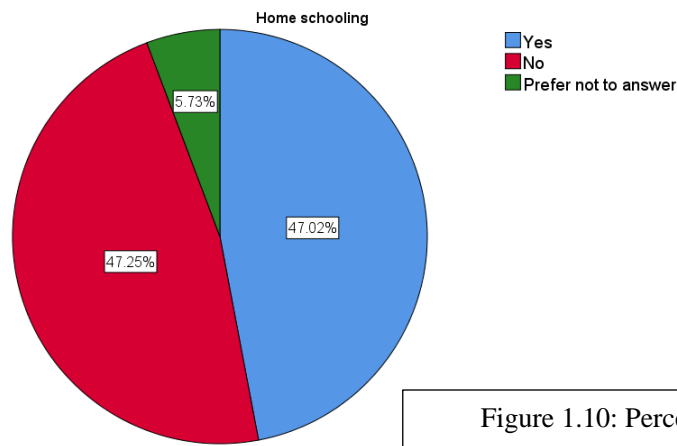
Figure 1.10: Percentage of respondents with home schooling

Employment Information

Department

Figure 1.11 illustrates the distribution of responses across the 23 University departments that participated in the survey. Participants in the School of Medicine, Medical Sciences & Nutrition accounted for approximately ¼ of responses (24.74%), followed by participants who chose not to reveal the department to which they belonged (8.32%) and those in Digital & Information Services (7.26%). The remaining responses are spread across the other 20 departments within the University.

Responses by Department

3.17%, 0.85%, 7.26%, 4.58%, 2.54%, 4.02%, 2.26%, 2.82%, 3.24%, 4.16%, 2.96%, 24.74%, 4.23%, 3.45%, 4.72%, 3.45%, 3.24%, 2.26%, 8.32%

Legend:
Academic Services & Online Education, Business School, Development Trust, Digital & Information Services, Directorate of People, Directorate of Planning, Divinity, History & Philosophy, Estates and Facilities, External Relations, Finance, Geosciences, Language, Literature, Music & Visual culture, Law, Marketing & Student Recruitment, Medicine, Medical Sciences & Nutrition, Natural & Computing Sciences, Research & Innovation, Biological Sciences, Education, Engineering, Psychology, Management & Support Teams, Social Science, Prefer not to answer
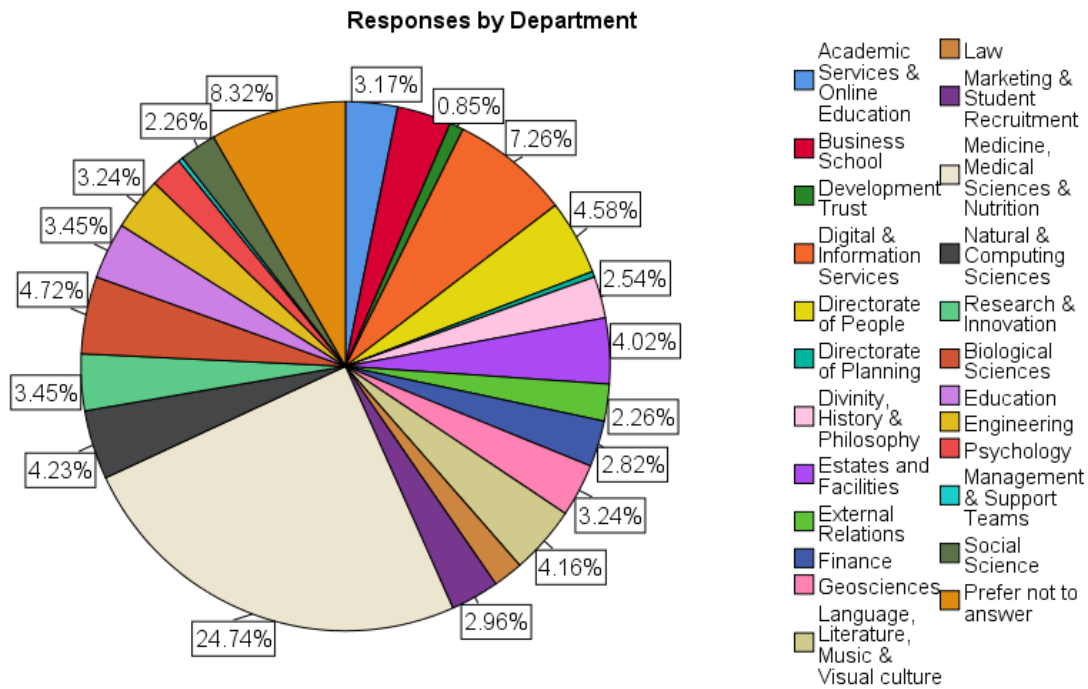
Figure 1.11: Distribution of survey responses across the University Departments

Job role

Figure 1.12 on the following page presents respondent job roles. Professional services (grade 5-9) represented the majority of responses (28.79%), followed by respondents in academic teaching and research roles (22.68%). The remaining percentage was made up of support staff (14.96%), respondents in research-based academic roles (13.83%), teaching and scholarship roles (10.18%), and technical staff (4.14%).

Job Role

10.18%, 22.68%, 13.83%, 28.79%, 14.96%, 4.14%, 5.41%

Legend:
Academic - teaching & scholarship, Academic - teaching & research, Academic - research, Professional services (grade 5-9), Support staff (grade 1-4), Technical staff, Prefer not to answer
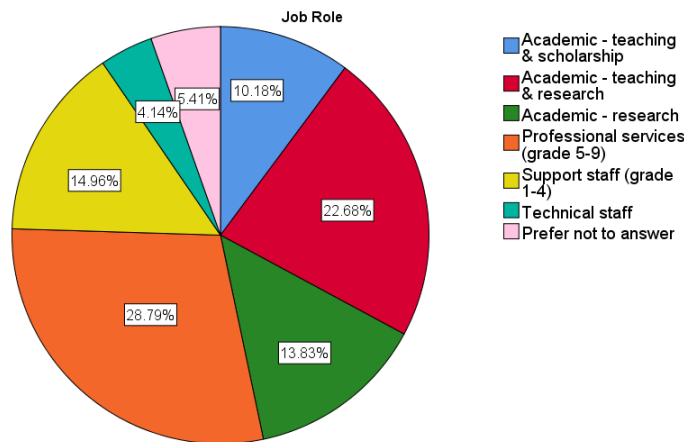
Figure 1.12: Distribution of job roles across the sample

Contract type

Figure 1.13 illustrates the percentages of employment contract types. Open-ended contracts make up the majority of responses (69.42%), followed by fixed term contracts (15.58%). Open-ended contracts limited by the nature of the project or funding available (4.84%), alongside guaranteed minimum hours contracts (1.28%) represented a minority of the responses.
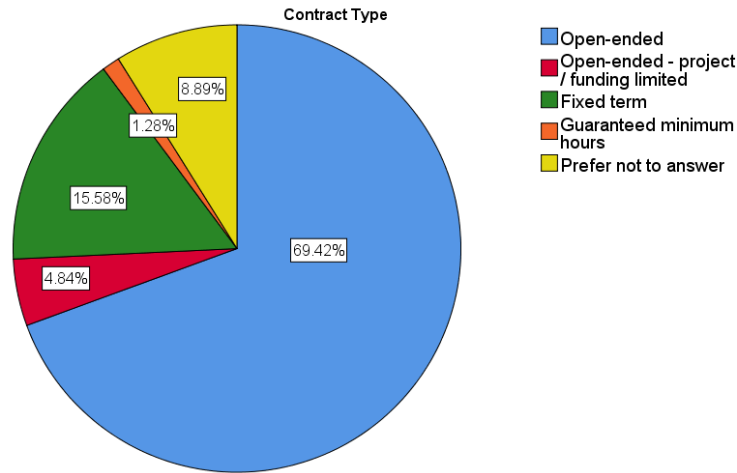
Figure 1.13: Percentages of respondents' employment contract types.

Work pattern

Figure 1.14 represents respondents' working pattern as included in their contract. Full-time hours represented ¾ of the respondents (77.71%), followed by employees on part-time hours contracts (19.13%). Responses from staff on guaranteed minimum hours contracts only represented 2.6%.
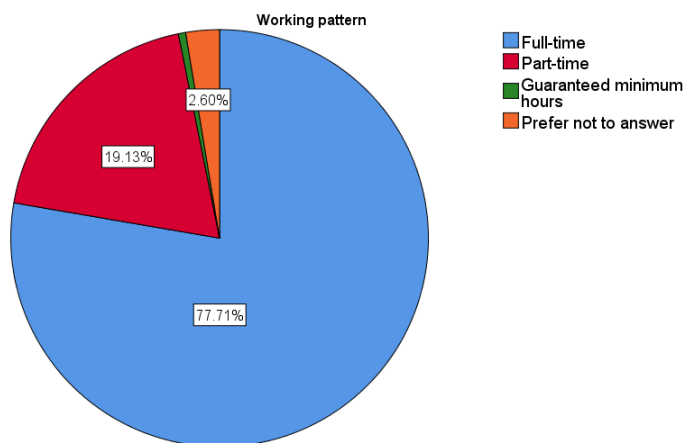

Figure 1.14: Distribution of working patterns across the sample.

Effectiveness of Support

Figure 1.15 on the following page includes the distribution of responses across the four Likert Scale Effectiveness of Support questions. Respondents answered on a scale from 1 (Not at all) to 5 (Very) on all questions. The majority of participants felt the actions being taken were effective across all dimensions: predominantly positive ratings of 4-5 ("Quite" to "Very") throughout all questionnaire items.

The first question assessed how effectively the University provided support for members of staff. Ratings of 5 ("Very") constitute the largest portion of responses (43.13%), and ratings of 4 ("Quite" – 36.04%). The remaining responses were at the scale midpoint of 3 (14.31%), negative responses of 1 (1.61%) and 2 (4.28%) or prefer not to answer (0.63%).

The second question examined the effectiveness of colleague support; "Very" and "Quite" accounted for 50.93% and 29.52%, respectively; over 80% of respondents felt that their colleagues provided good support. The remaining responses were 12.51% at the scale midpoint (3 – "Somewhat"), 5.20% 2 ("Slightly"), 0.91% 1 (not at all), and 0.91% preferred not to answer.

The third question measured the University's effectiveness in providing flexibility in work activities. The majority of responses were either "Very" (47.92%) or "Quite" (29.08%): the University largely provided flexibility in remote work activities. Midpoint ("Somewhat"), 2 ("Slightly"), 1 ("Not at all"), and "Prefer not to answer" represented 12.42%; 5.95%; 2.10%; and 2.75%, respectively.

The fourth question measured the extent to which work flexibility accommodated caring responsibilities. The majority of responses were "Very" (34.46%) and "Quite" (28.95%) but this item saw an increase in both midpoint (18.22%), and negative ratings: 2 (8.47%) and 1 (3.1%), suggesting that further improvements are necessary for participants with caring responsibilities. A proportion of participants (6.8%) chose the "Prefer not to answer" option.
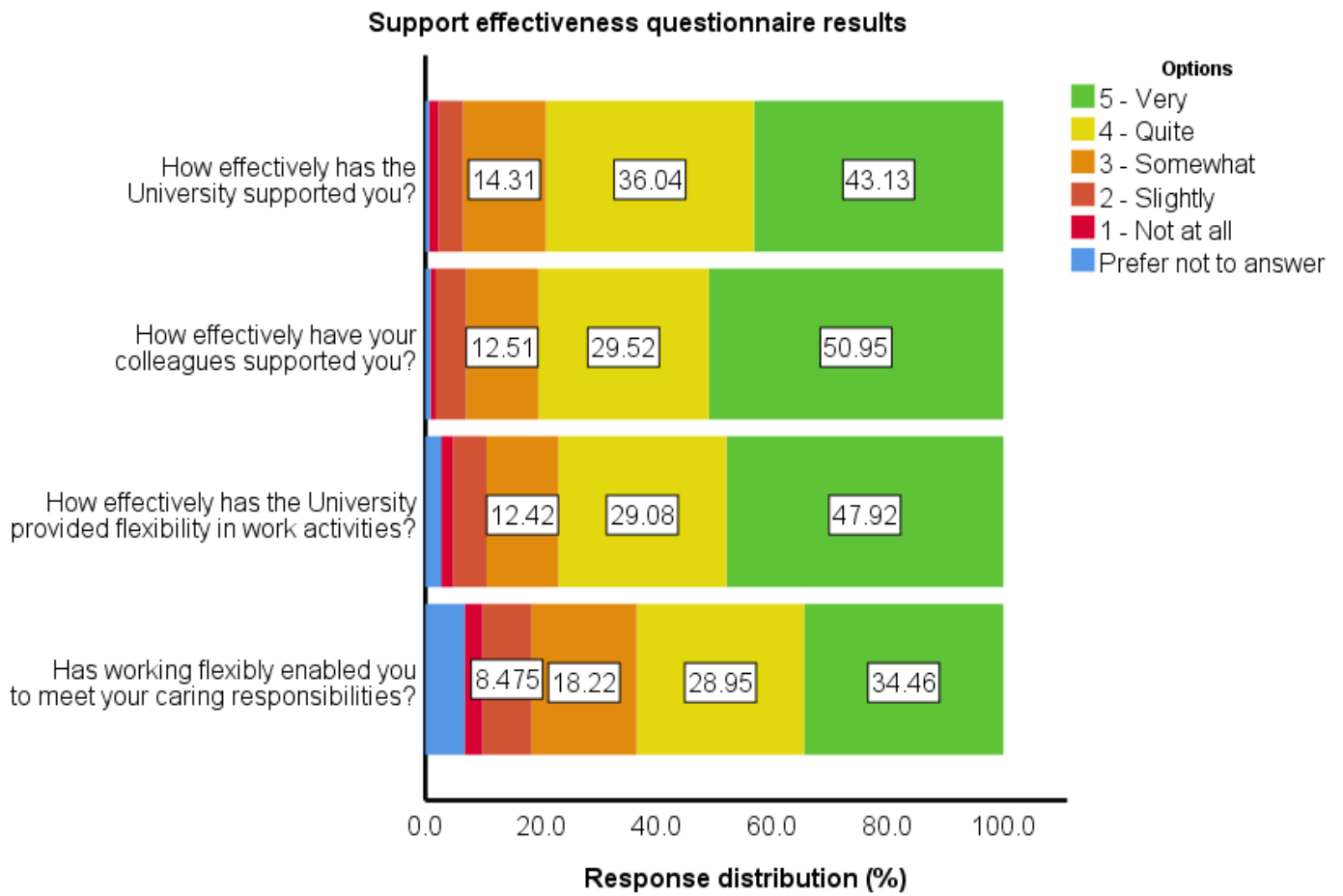
Figure 1.15: stacked percentage distribution of responses to Effectiveness of Support questions.

STATISTICAL RESULTS

This section of the report deals with statistical analysis of group differences in effectiveness of support scores based on mean scores (all participant scores for a question are summed, then divided by number of participants to generate average response). Based on the likert scale used (1 not at all effective – 5 very effective) a mean score of 0 – 2.5 would be considered generally negative, a score of 2.6 – 3.5 would be considered neutral, and a mean score of 3.6 and above would be considered generally positive.

We employed t-tests and ANOVA's to identify reliable differences between groups: both express whether differences in mean scores across groups are statistically probable or not as a p-value. The smaller the p-value (below 0.05 is considered significant) associated with the test the stronger the results are, and the less likely it is that the result is being generated by chance. A high p-value (above 0.05) indicates that the groups being assessed are similar, and any difference might be down to chance.

Finally, it is important to note that where statistically significant differences are recorded, these differences are proportionally small in some cases (e.g. a difference of just 0.5 between groups may be significant). As such in some cases where one group reports a significantly lower mean score in comparison to a second group, both groups might still be reporting a generally positive response (e.g. Group 1 may have a mean score of 4.2, Group 2 may have a mean score of 4.7).

Effectiveness of support was measured with four Likert Scale questions:
1) How effectively has the University supported you during the Covid-19 crisis?
2) How effectively have your colleagues supported you during the Covid-19 crisis?
3) How effectively has the University supported you in providing flexibility in your work activities?
4) To what extent has work flexibility enable you to accommodate your caring responsibilities during the Covid-19 crisis?

Collectively, these responses will be referred to as Effectiveness of Support scores. Individually, the questions will be referred to as: University Support, Colleague Support, Flexible Work, and Caring Support, respectively.

Effectiveness of support scores

Four one-sample t-tests revealed that all effectiveness of support scores were significantly above mid-point (3) $p < .001$ (see Table 2.1) and so overall responses can be considered generally positive for all four questions. Paired samples t-tests revealed moderately-strong to strong, positive correlations between all questions: meaning higher scores in one question predicted higher scores in all other questions.

Table 2.1: Effectiveness of support scores

	N:	*M:*	*SD*	*t:*
University Support	1417	4.16	0.94	45.55
Colleague Support	1410	4.26	0.93	50.57
Flexible Work	1378	4.18	1.01	43.58
Caring Support	660	3.89	1.10	20.77

Gender and Age

Independent samples t-tests revealed one small but reliable gender difference in University Support scores: women felt that the University level support provided was more effective than men (mean difference: 0.10). There were no other significant gender differences in the other three Effectiveness of Support questions, though it should be noted that descriptively women consistently reported marginally lower scores for all three questions (Table 2.2). Members of staff identifying as gender fluid, non-binary, or other were excluded from analysis due to the small sample size.

Table 2.2: Gender differences in Effectiveness of Support

	M:		p	t:
	Men	Women		
University Support	4.14	4.24	.044*	2.02
Colleague Support	4.33	4.25	.132	1.51
Flexible Work	4.24	4.21	.697	0.39
Caring Support	3.99	3.88	.215	1.24

indicates significance.

Descriptively, age effects showed a positive trend across all Effectiveness of Support questions: older members of staff reported higher levels of effectiveness of support compared with younger members of staff. The only exception was the 65+ age group in the Caring Support question who scored lower than all other age groups even though the differences did not reach statistical significance. Lack of significance could be explained by a relatively small sample size ($n = 10$).

A one-way ANOVA revealed significant age-differences in three of the effectiveness of support questions: University Support, Colleague Support and Flexible Work ($p < .05$). There was no significant age-difference in Caring Support scores. A post-hoc Tukey revealed that the youngest group scored significantly lower on University Support compared with most other groups. The oldest group scored significantly higher on colleague support compared with the two youngest age groups (Table 2.3) and the 25-34 and the 25-34 group scored lower on flexible work than the 55-65 age group.

Table 2.3: Mean scores and significant age-differences in effectiveness of support.

	M :					
	18-24	*25-34*	*35-44*	*45-54*	*55-65*	*65+*
University Support	3.73[a]	4.03[ab]	4.21[b]	4.26[b]	4.31[b]	4.22[b]
Colleague Support	4.07[a]	4.10[a]	4.30[ab]	4.33[ab]	4.29[ab]	4.56[b]
Flexible Work	4.00	4.08[a]	4.24	4.23	4.38[b]	4.23
Caring Support	X	3.89	3.85	3.96	4.18	3.40

X=Mean score is excluded due to small sample size (N<10)
Superscripts denote statistical differences within Effectiveness of Support questions: superscript "a" is statistically different from superscript b. If a score has a & b superscripts, it is not statistically different from any of the scores. Only one difference was found in the Flexible Work question – denoted by a single superscript-pair.

Ethnicity

Descriptively, Black African members of staff scored lower than all other ethnic groups. To retain more participants, we collapsed ethnicity groups into two categories: white and minority (members of ethnic minorities in the UK). Independent samples t-tests revealed that members of staff belonging to minority groups scored significantly lower on Colleague Support and Flexible Work and approached significance in University Support. This indicates that members of staff from ethnic minority groups felt that the support provided by the university, their colleagues and in tackling flexible work was less effective compared with their white counterparts (Table 2.4).

Table 2.4: Mean Effectiveness of Support scores for white and non-white members of staff

	M:		p	t:
	White	Minority		
University Support	4.24	4.07	.051[†]	1.96
Colleague Support	4.32	4.13	.040[*]	2.05
Flexible Work	4.27	4.03	.016[*]	2.41
Caring Support	3.98	3.82	.284	1.07

*indicates significance (p < .05) and [†] indicates approaching significance (p < .07)

Religion

Due to the low numbers of participants reporting different religions it was necessary to collapse across religion types to conduct a comparison (it should be noted that collapsing across religious categories allows statistical comparison whilst maintaining anonymity, but may mean that variation related to a specific religion may be missed). As such religion was collapsed into three categories: No religion ($n = 669$), Christian religion, comprised of Church of Scotland, Roman Catholic and Other Christian ($n = 399$) and Other religion, comprised of Buddhism, Jewish, Muslim, Spiritual and Other. ($n = 64$).

The descriptive data (Table 2.5) indicated that staff reporting no religion were associated with a higher effectiveness score for overall University support. In comparison, staff reporting a minority religion ('Other' category) reported lower effectiveness scores for both flexible work and caring support. Only one difference was significant when analysed using one-way ANOVA – staff reporting a minority religion reported significantly lower effectiveness scores for flexible working than individuals reporting no religion or Christian religion.

Table 2.5: Mean effectiveness of support scores across reported religion

	Religion M:		
	Christian	None	Other
University Support	4.25	4.41	4.21
Colleague Support	4.30	4.31	4.33
Flexible Work	4.41	4.41	4.24
Caring Support	4.22	4.11	4.03

Disability

Descriptively University staff members reporting a disability reported consistently lower levels of effectiveness of support that staff members with no reported disability, though the level of difference between scores was quite small (Table 2.6). Independent samples t-tests revealed a significant difference in University Support scores: members of staff with a disability reported significantly

lower levels of effectiveness than those without. There were no significant differences between the groups in the other three Effectiveness of Support questions (Table 2.5).

Table 2.6: Disability mean scores and significant differences

	M:		p	t:
	Disability	No Disability		
University Support	3.96	4.22	.015*	2.44
Colleague Support	4.13	4.29	.129	1.52
Flexible Work	4.15	4.23	.521	0.64
Caring Support	4.12	3.92	.318	1.00

indicates significance (p < .05)

Living and Relationship Status

The descriptive data displayed in Table 2.7 illustrates a trend within the data whereby individuals who live alone report that the support offered is less effective than individuals who share their home with others. Independent samples t-tests revealed that members of staff living with others reported that Colleague Support and Flexible Work was significantly more effective, and approached significance in University Support scores. There were no differences in Caring Responsibility.

Table 2.7: Differences in Effectiveness of Support for different living situations

	M:		p	t:
	Alone	*With others*		
University Support	4.07	4.21	.055†	1.92
Colleague Support	4.07	4.32	.002*	3.12
Flexible Work	4.08	4.25	.029*	2.19
Caring Support	3.82	3.93	.631	0.48

indicates significance (p < .05) and † indicates approaching significance (p < .07)

Descriptively, separated members of staff reported lower levels of effectiveness of support across all four questions. Three one-way ANOVAs revealed significant differences in Effectiveness of Support

scores dependent on relationship situation. Post-hoc Tukey's revealed that separated members of staff scored significantly lower than widowed members of staff on how effectively the university and colleagues provided support and in providing flexibility in work activities. Separated members of staff also scored significantly lower on colleague support compared with people living in a civil partnership. A fourth one-way ANOVA revealed significant differences in how flexible work enabled caring responsibilities. Again, separated members of staff scored significantly lower than most other groups (Table 2.8).

Table 2.8: Mean scores and significant Relationship Situation differences in Effectiveness of Support

	M :						
	Separated	*Single*	*Married*	*Co-habiting*	*Divorced*	*Civil Partnership*	*Widowed*
University Support	3.79^a	4.01^{ab}	4.25^{ab}	4.28^{ab}	4.33^{ab}	$4.^{40ab}$	4.58^b
Colleague Support	3.88^a	4.06^{ab}	4.36^{abc}	4.34^{abc}	4.21^{abc}	4.6^{bc}	4.79^c
Flexible Work	3.83^a	4.05^{ab}	4.30^{ab}	4.24^{ab}	4.45^{ab}	4.40^{ab}	4.71^b
Caring Support	3.06^a	3.83^{ab}	3.97^b	4.00^b	4.00^b	X	X

X=Mean score excluded due to small sample size (N<10).
Superscripts denote statistical differences within Effectiveness of Support questions: superscript "a" is statistically different from superscript b and superscript c. If a score has a, b & c superscripts, it is not statistically different from any of the scores.

Caring responsibilities, home-schooling, and gender interactions

The mean scores for individuals reporting caring responsibilities were consistently, marginally, lower than the mean levels of effectiveness reported by individuals with no caring responsibilities. However, independent samples t-tests revealed no significant difference in Effectiveness of Support scores between members of staff with and without caring responsibilities (Table 2.9). Both groups scored significantly above mid-point (3) on all questions (p < .001). Factorial ANOVAs (gender x caring responsibilities) revealed no gender differences or interaction between gender and caring responsibilities on Effectiveness of Support scores: men with caring responsibilities scored similarly to women with caring responsibilities.

Table 2.9: Caring responsibility mean scores

	Caring Responsibility (M):		p
	Yes	No	
University Support	4.18	4.19	.737
Colleague Support	4.27	4.28	.799
Flexible Work	4.20	4.24	.430
Caring Support	3.89	4.06	.388

Further analysis evaluated the potential impact of home-schooling responsibilities (as opposed to general caring responsibilities – Table 2.10). Descriptively those who home schooled reported consistently lower levels of effectiveness of support across all four questions. Independent samples t-tests revealed these differences were significant though it should be noted that the differences were descriptively small. Factorial ANOVAS revealed no gender differences or interaction between gender and home-schooling responsibilities on Effectiveness of Support scores: men with home schooling responsibilities scored similarly to women with home-schooling responsibilities.

This pattern of findings highlights that caring responsibilities generally may impact the level of perceived effectiveness, with home schooling responsibilities specifically having a greater impact on mean effectiveness scores.

Table 2.10: Home-schooling responsibility mean scores

	Home Schooling (M):		p	t:
	Yes	No		
University Support	4.16	4.25	.159	1.41
Colleague Support	4.28	4.31	.701	.384
Flexible Work	4.14	4.30	.022*	2.30
Caring Support	3.80	4.04	.010*	2.57

indicates significance (p < .05)

Sexual orientation

One-way ANOVAs indicated no significant difference in reported effectiveness across reported sexual orientation. The descriptive data (Table 2.11) indicates a trend in the data whereby gay men and women, along with bisexual respondents, are associated with lower effectiveness scores for university and colleague support, but this trend does not reach significance (possibly due to the small reported numbers of gay and bisexual respondents). In comparison the descriptive data indicates that gay men and women reported higher levels of effectiveness for flexible work and caring support than heterosexual and bisexual members of staff, though again this difference was not significant.

*Table 2.11: Sexual orientation mean scores*

|	Sexual orientation (M):			p
	Heterosexual	Gay man / woman	Bisexual	
University Support	4.23	4.05	3.97	.148
Colleague Support	4.32	4.16	4.00	.088
Flexible Work	4.29	4.43	4.00	.184
Caring Support	4.10	4.50	4.33	.451

Department

One-way ANOVAS revealed significant differences in Effectiveness of Support scores across departments. Social Science and the School of Business scored significantly lower than several other departments and descriptively lower than all other departments in in all four questions. Faculty in the Development trust scored significantly higher than several other departments and descriptively: Psychology, Finance, Research and Innovation, and Directorate of people generally scored highly across all Effectiveness of Support questions. We removed two departments from the overall analysis due to small sample sizes (N<10): Directorate of Planning and Senior Management. We further excluded Development Trust and Law from the analysis of the Caring Support question for the same

reason. See Figure 2.1 for a visual representation and Appendix A for a full table with means and statistical findings.

Figure 2.1: Mean scores of Effectiveness of Support Questions by Department
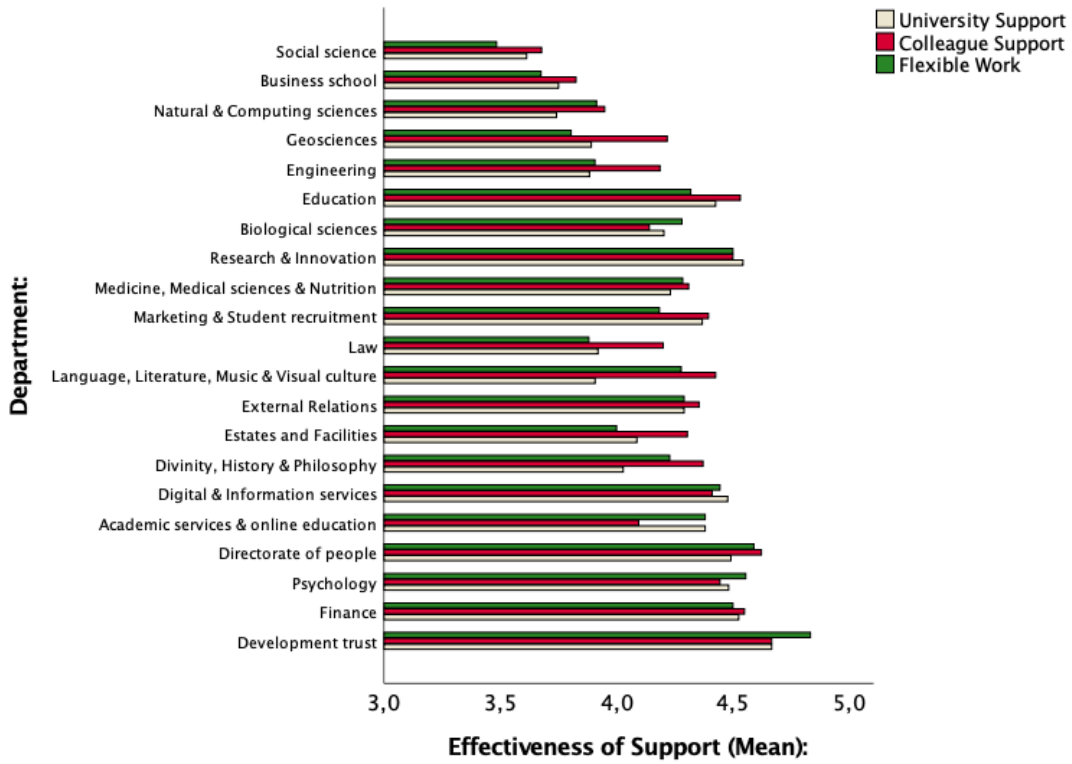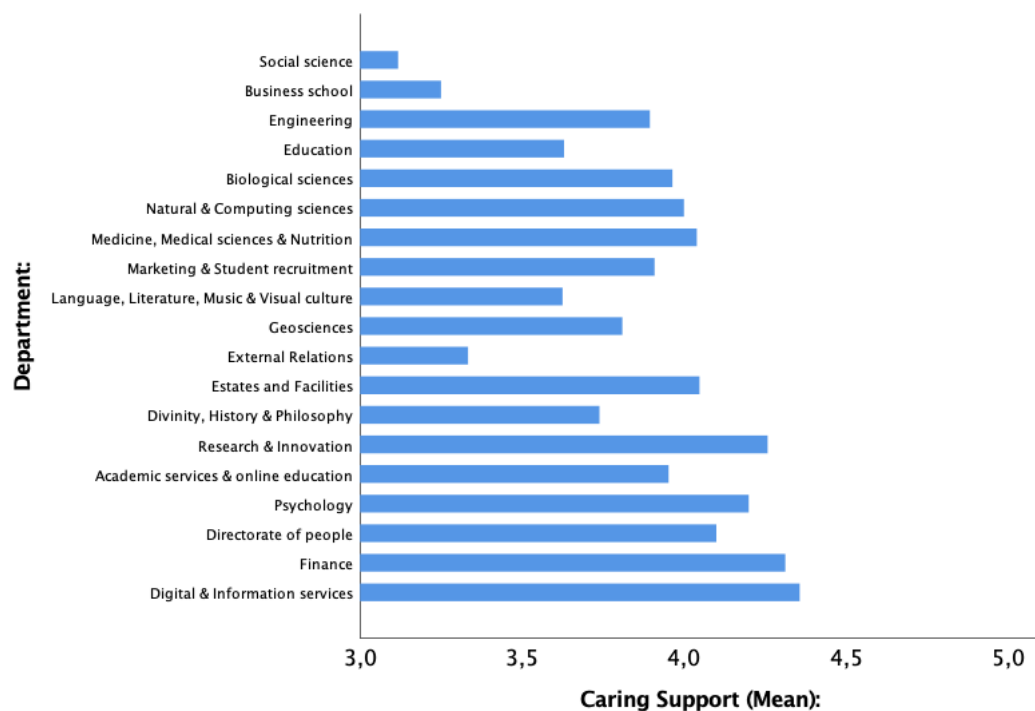
In a follow-up analysis which split the data according to gender, we found that only female members of staff in the School of Business score significantly lower than other departments; male members score similarly to other departments. Social Science was associated with low scores for both male and female members of staff.

Job Role, Employment Status and Work Pattern

The mean effectiveness scores across all four questions indicate a trend in the data whereby individuals in an academic role (teaching, scholarship, research) reported lower levels of effectiveness that staff in professional, technical or support roles. One-way ANOVAS revealed that these differences were all significant. The differences ranged from 0.4 – 0.9 points with the biggest difference found between academic teaching and scholarship, and technical staff scores in the Caring Support question (Table 2.12).

Table 2.12: Job role mean scores and significant differences

	Academic (Mean):					
	Teaching & Research	*Teaching & Scholarship*	*Research*	*Prof. Services*	*Technical*	*Support Staff*
University Support	3.85[a]	4.03[a]	4.03[a]	4.38[b]	4.42[b]	4.44[b]
Colleague Support	4.19[ab]	4.13[a]	4.10[a]	4.43[b]	4.42[b]	4.37[ab]
Flexible Work	4.00[a]	4.04[ab]	4.10[ab]	4.31[bc]	4.64[c]	4.47[c]
Caring Support	3.64[a]	3.64[a]	3.93[ab]	4.01[ab]	4.71[c]	4.28[bc]

Superscripts denote statistical differences within Effectiveness of Support questions: superscript "a" is statistically different from superscript b and superscript c. If a score has a, b & c superscripts, it is not statistically different from any of the scores.

Further analysis to examine underlying trends related to job role was conducted; the data was collapsed to produce two groups according to job role – academic (combining teaching & research, teaching & scholarship and research) and support / professional (combining professional services, technical and support staff). The file was then split in order to analyse potential gender differences across academic and support / professional staff separately.

The descriptive data (Table 2.13) indicated that women in academic job roles report consistently lower levels of effectiveness of support across colleague, flexible work and caring support (there was no reported difference for overall University level support). This difference in reported effectiveness was significant ($p < .05$) for two of the questions – colleague and caring support.

The descriptive data indicated a similar pattern across staff in support and professional roles, with women reporting consistently lower levels of effectiveness across three of the questions (colleague, flexible and caring support). However, the differences reported were smaller, and not significant when assessed using independent t-tests.

Table 2.13: Mean effectiveness scores for men and women, split according to job role

	Academic job role - Gender (M):		*Professional / support role – Gender (M)*	
	Man	Woman	Man	Woman
University Support	4.00	3.99	4.38	4.45
Colleague Support	4.26	4.09	4.51	4.41
Flexible Work	4.20	4.03	4.47	4.44
Caring Support	4.05	3.71	4.36	4.20

One-way ANOVAs revealed no significant differences ($p > 0.06$) in Effectiveness of Support Scores dependent on employment status (type of contract – fixed term / open-ended): members of staff found support similarly effective regardless of contract type. Similarly, one-way ANOVAs revealed no significant differences ($p > 0.06$) in Effectiveness of Support Scores dependent on work pattern (full / part time): members of staff found support similarly effective regardless of work pattern.

	University Support	Colleague Support	Flexible Work	Caring Support
Social Science	3.59^a	3.68 ^{a}	3.48 ^{a}	3.12^a
Natural & Computing Science	3.72^{ab}	3.97 ^{abc}	3.91 ^{abcd}	4.00 ^{ab}
Business School	3.77^{abc}	3.88 ^{ab}	3.74 ^{ab}	3.25 ^{ab}
Engineering	3.84^{abcd}	4.14 ^{abc}	3.91 ^{abcd}	3.89 ^{ab}
Geosciences	3.89^{abcd}	4.22 ^{abc}	3.80 ^{abc}	3.81 ^{ab}
Language, Lit…	3.91^{abcd}	4.41 ^{bc}	4.27 ^{bcde}	3.63 ^{ab}
Law	4.96^{abcd}	4.20 ^{abc}	3.88 ^{abcd}	X
Divinity, Hist…	4.00 ^{abcde}	4.33 ^{abc}	4.23 ^{abcde}	3.74 ^{ab}
Estates and Facilities	4.12 ^{abcde}	4.34 ^{abc}	3.96 ^{abcd}	4.05 ^{ab}
Biological sciences	4.15^{abcde}	4.11 ^{abc}	4.28 ^{bcde}	3.96 ^{ab}
Medicine, Med…	4.24^{abcde}	4.32 ^{abc}	4.29 ^{bcde}	4.04 ^{ab}
External Relations	4.25 ^{abcde}	4.34 ^{abc}	4.29 ^{bcde}	3.33 ^{ab}
Marketing and student recruitment	4.33 ^{bcde}	4.43 ^{bc}	4.18 ^{abcde}	3.91 ^{ab}
Academic services & online education	4.38 ^{bcde}	4.10 ^{abc}	4.38 ^{bcde}	3.95 ^{ab}

Research & Innovation	4.43 ^{cde}	4.42 ^{bc}	4.49 ^{bcde}	4.26^{b}
Education	4.44 ^{cde}	4.54 ^{bc}	4.32 ^{bcde}	3.63 ^{ab}
Digital & information services	4.50 ^{de}	4.41 ^{bc}	4.45 ^{bcde}	4.36^{b}
Directorate of people	4.50 ^{de}	4.63 ^{c}	4.60^{de}	4.10 ^{ab}
Psychology	4.50 ^{de}	4.46 ^{bc}	4.56^{cde}	4.20^{ab}
Finance	4.53 ^{de}	4.55 ^{bc}	4.50^{bcde}	4.31^{b}
Development Trust	4.67 ^{e}	4.67 ^{c}	4.83^{e}	X

X=Mean score excluded due to small sample size (N<10).
Superscripts denote statistical differences within Effectiveness of Support questions: superscript "a" denotes a statistical difference from superscript b, c, d, and e.