

FBK's Internal Survey on the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers

Technical report

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1. Introduction

This report illustrates the technical analyses and the main findings of FBK's Internal Survey on the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (hereafter, also FBK-HRS4R). The report is structured as follows. Section 2 illustrates the data collection tool developed to carry out the survey and describes the data collection process that was implemented. Section 3 compares the sample of survey respondents with the entire researcher population of FBK along a set of relevant demographic and professional characteristics. Section 4, 5, and 6 present and comment on the main results of the survey with respect to the different dimensions investigated, investigating the possible existence of internal heterogeneity among the respondents. Section 7 summarises the main findings.

2. Data collection

The questionnaire is organised in four sections: i) *ethical and professional aspects*; ii) *recruitment and selection*; iii) *working conditions and social security*; iv) *training and development*. Each section is composed of a list of items (in total 28) describing specific "best practices". For example: "FBK regularly uses transparent evaluation/appraisal systems for assessing researchers professional performance" or "FBK establishes efficient recruitment procedures". Each respondent was asked to express his/her level of agreement according to a Likert scale based on the following four modalities: "totally disagree"; "partially disagree", "partially agree", "totally agree". By answering "totally agree" respondents evaluate the practices implemented in/by FBK positively, while by giving any other answer they express criticism and are hence asked to specify the urgency of the problem.

In addition to the four modalities, respondents were also given the possibility to select a fifth option ("do not know").

Respondents who did not indicate total agreement with a given item, were subsequently asked which level of priority FBK should assign to the topic; i.e., whether the topic should be tackled within 3, 6, 12, 18, or 24 months. This question was meant to provide FBK with additional, useful indications to elaborate a strategy plan for the forthcoming years.

The survey also integrated a number of relevant demographic (e.g., age, sex, citizenship) and professional (e.g., education level, FBK position, participation in FBK selection processes) information that is relevant to investigate the existence of systematic differences among FBK's researchers with respect to how they evaluate FBK's practices in relation to the four above mentioned areas.

The questionnaire was administered by the means of a Computer-Assisted Web Interviewing (CAWI) procedure. FBK employees and collaborators filled in the questionnaire between June and July 2017.

3. Sample representativeness

Before presenting the substantive findings of the survey, it is important to document the extent to which the collected data can be generalised to the relevant population. A first indicator to assess the successful implementation of a survey is given by the "response rate" (i.e., the proportion of individuals participating in the survey out of the total set of individuals invited to do so). In the case of FBK-HRS4R, the response

rate amounts to 73 percent.¹ This indicates success, as more than 7 out of 10 FBK researchers accepted to participate in the survey.

To further investigate the representativeness analysis, Table 1 compares the average characteristics of the population of FBK employees with those of the survey respondents. The differences between these two populations appear to be negligible. Therefore, it can be reasonably assumed that the sample is representative of its reference population and, thus, that the results presented in the remainder of the document are a good approximation of the views of FBK employees as a whole.

Table 1. Characteristics of FBK population and respondents

•	Population	Survey respondents
Demographics characteristics	1	<u> </u>
Women (%)	21.8	22.4
Italians (%)	78.2	77.9
Age (years, average)	39.1	40.1
Role in FBK (%)		
Researchers	50.2	58.7
Technologists	16.9	15.5
Collaborators	14.6	12.6
PhD Students	18.3	13.2
Type of contract (%)		
Permanent contract	39.6	44.2
Fixed-term contract	27.5	30.0
Other contract	32.9	25.9
Institute (%)		
CMM	19.7	20.5
CREATE-NET	12.3	12.9
ECT	1.9	1.9
ECT* LISC	1.6	1.6
ICT	54.2	52.1
IRVAPP	3.7	4.7
ISIG	2.5	2.2
ISR	1.6	1.9
PROGETTI SPECIALI	2.5	2.2
Number of observations	432	317

4. Levels of agreement

In this section, the main results of the collected responses are presented. Table 2 displays the average and the standard deviation for each item. As respondents could choose between four levels of agreement when answering, each level has been assigned a number accordingly. Total disagreement has been assigned a value of 1, partial disagreement a value of 2, partial agreement a value of 3, and total agreement a value of 4. The column labelled *Implementation* presents the same information on average values but in the ordinal format requested by the European Commission. The score ranges from "-" over "-/+" and "+/-"

¹ Questionnaires that have not been finished have not been considered and are therefore counted as non-respondents.

to "+". The symbol "-" refers to a range from 1 to 1.75. The symbol "-/+" refers to a range from 1.75 to 2.5; "+/-" from 2.5 to 3.25, and "+" from 3.25 to 4.

Table 2. Average scores, standard deviations, and "implementation scores"

Item	Average	Sd	Implementation score ^a
(1)	(2)	(3)	(4)
Section 1			
1	3.27	0.72	+
2	3.27	0.73	+
3	3.16	0.82	+/-
4	3.69	0.54	+
5	3.24	0.83	+/-
6	3.27	0.77	+
7	3.76	0.63	+
8	3.20	0.89	+/-
Section 2			
9	3.72	0.60	+
10	3.38	0.79	+
11	3.55	0.76	+
12	3.64	0.68	+
13	3.54	0.74	+
14	3.60	0.69	+
15	3.56	0.73	+
16	3.59	0.74	+
Section 3			
17	3.49	0.75	+
18	3.56	0.71	+
19	3.76	0.54	+
20	3.50	0.78	+
21	3.50	0.80	+
22	2.67	1.06	+/-
23	3.72	0.58	+
24	3.09	0.99	+/-
25	3.33	0.85	+
26	3.45	0.81	+
Section 4			
27	3.62	0.683	+
28	3.50	0.758	+

Note: (a) Each item's degree of implementation is assessed on the basis of the average score (column 2): 1-1.75 "- "; 1.76-2.5 "-/+"; 2.6-3.25 "+/-"; 3.26-4 "+".

For almost all answers - except for question 22, which scores remarkably low - the average lies between 3 and 4. All items fall in the highest category (+), except for five of them, which fall in the second highest (+/-). Three of these answers are located in section i) *ethical and professional aspects*, and two of them are located in section iii) *working conditions and social security*.

In addition to the average values commented in Table 2, Table 3 shows the shares of people who "totally agree" or "at least partially agree". Especially when considering only the "totally agree" option, the answers vary rather considerably. The highest approval ratings have been recorded for sections i) recruitment and selection and ii) training and development, with no answer scoring under 50% of total agreement.

Table 3. Percentages of "At least partially agree" and "Totally agree"

Tuble 3: Telechtages	5 of 7tt least partially agree	
Item	At least partially agree	Totally agree
(1)	(2)	(3)
Section 1		
1	86.0	41.9
2	86.0	42.1
2 3	79.3	39.8
4	96.3	72.3
5	82.6	45.7
6	85.3	44.5
7	93.7	85.0
8	79.3	45.6
Section 2		
9	95.1	78.5
10	85.8	54.4
11	88.9	68.9
12	93.6	72.5
13	89.8	66.5
14	90.9	70.2
15	90.4	68.0
16	90.0	71.1
Section 3		
17	89.0	62.1
18	90.8	67.3
19	96.3	81.1
20	87.8	64.7
21	86.5	66.1
22	55.8	28.3
23	94.7	78.2
24	76.4	43.5
25	83.5	53.6
26	84.0	63.0
Section 4		
27	91.0	71.8
28	88.6	64.0
		<u> </u>

Finally, as already mentioned in section 2, respondents could select a fifth answer modality labelled "don't know". A precise interpretation of "don't know" answers is not straightforward, as they could be motivated by limited access to relevant information, lack of interest in the topic, or survey fatigue.

The case for survey fatigue could indirectly be supported if the percentage of "don't know" answers increases as the questionnaire proceeds. This hypothesis is rejected by the data. As Table 4 shows, there is no systematic pattern in the percent of "don't know" answers based on the order of the items. Instead, the number of respondents answering "don't know" rises and falls without clear pattern, clearly speaking against the survey fatigue hypothesis.

Table 4. Percentage of "don't know" answers by item

Item	% of don't know
Section 1	
1	12.0
2	12.3
3	22.4
4	5.4
5	12.9
6	7.9
7	5.0
8	17.7
Section 2	
9	10.4
10	17.7
11	14.8
12	35.6
13	32.2
14	23.7
15	30.9
16	24.6
Section 3	
17	8.5
18	3.5
19	6.6
20	9.8
21	20.8
22	16.4
23	17.4
24	31.9
25	25.2
26	18.9
Section 4	
27	19.6
28	6.3

An interesting picture emerges when comparing the average incidence of "do not know" answers across respondents' characteristics (Table 5). Nationality makes a big difference: foreign staff selected the "don't know" option more often that Italian staff. Similarly, employees with fixed-term contracts were more likely to answer questions with "don't know" than those permanently employed. The same holds true for employees up to 38 years *vis-à-vis* employees over 38 years: the younger employees selected this option more often.

The largest differences can be observed across institutes: while ISR and ISIG members hardly ever select the "don't know" modality (2.6% and 3.6%, respectively), ECT* members respond on average to every fifth question that they do not know (20.5%). No meaningful differences can be detected for the different categories of the variables gender and role in FBK.

Detailed figures for the 28 items are reported in Appendix II.

Table 5. Average incidence (percentage) of questions to which survey respondents do not know how to answer. (N=317)

	Average incidence of "don't
	know" answers
Gender	
Males	12.2
Females	12.7
Nationality	
Foreigner	17.5
Italian	10.9
Age	
Up to 38 years old	14.9
Older than 38 years old	9.7
Role in FBK	
Researcher	11.5
Technologist	12.6
Collaborator	13.2
PhD Student	13.6
Type of contract	
Permanent contract	9.7
Fixed-term contract	14.9
Other	13.4
Institute	
CMM	9.2
CREATE-NET	15.2
ECT*	20.5
ECT* LISC	14.3
ICT	13.3
IRVAPP	14.3
ISIG	3.6
ISR	2.6
PROGETTI SPECIALI	6.8

5. Perceived priorities

All things considered, the results presented above show a picture of overall high agreement rates. However, it is possible that the fraction of employees that express critical judgement could perceive the "low performance" of FBK as more or less pressing and hence attach to it a higher or lower urgency. Table 6 summarises how urgent respondents consider problems to be.

Respondents were asked to assess the urgency whenever they answered the previous question differently than "totally agree". Therefore, column N, which states the number of respondents that did not totally agree, can vary between items. Columns 2 to 6 list the percentage of respondents who want the problem to be solved within, respectively, 3, 6, 12, 18, or 24 months. The last column shows the average number of months. On average, the urgency with which respondents address the problematic topics is rather low: for almost every item, the average number of months is greater than nine, with the majority of respondents

selecting the option "within 12 months" or even opting for more delay. A notable exception to this picture is constituted by item 22 - asking whether FBK defined a specific career development strategy - where 67% of respondents ask to address the problem within 6 months or faster.

Table 6. Questions concerning the perceived priority of intervention

Itam	·		Percentage				- N	Average
Item	in 3 months	in 6 months	in 12 months	in 18 months	in 24 months	Total	- IN	months
Section 1								_
1	12.3	40.1	38.9	6.2	2.5	100.0	162	9.1
2	7.5	23.0	53.4	11.8	4.3	100.0	161	11.2
3	8.1	31.8	40.5	14.9	4.7	100.0	148	10.8
4	4.8	25.3	49.4	14.5	6.0	100.0	83	11.6
5	12.7	37.3	40.0	8.7	1.3	100.0	150	9.3
6	10.5	32.7	37.7	15.4	3.7	100.0	162	10.5
7	28.9	20.0	40.0	2.2	8.9	100.0	45	9.4
8	23.2	30.3	39.4	4.2	2.8	100.0	142	8.7
Section 2								
9	11.5	29.5	42.6	8.2	8.2	100.0	61	10.7
10	18.5	34.5	35.3	9.2	2.5	100.0	119	9.1
11	23.8	26.2	38.1	9.5	2.4	100.0	84	9.1
12	7.1	26.8	50.0	14.3	1.8	100.0	56	10.8
13	13.9	22.2	45.8	11.1	6.9	100.0	72	10.9
14	8.3	30.6	41.7	12.5	6.9	100.0	72	11.0
15	15.7	22.9	35.7	17.1	8.6	100.0	70	11.3
16	13.0	34.8	40.6	5.8	5.8	100.0	69	9.8
Section 3								
17	22.7	34.5	31.8	9.1	1.8	100.0	110	8.6
18	21.0	41.0	24.0	10.0	4.0	100.0	100	8.7
19	19.6	21.4	39.3	17.9	1.8	100.0	56	10.2
20	22.8	30.7	35.6	8.9	2.0	100.0	101	8.9
21	15.3	18.8	38.8	21.2	5.9	100.0	85	11.5
22	28.4	38.4	27.9	3.7	1.6	100.0	190	7.5
23	5.3	31.6	38.6	21.1	3.5	100.0	57	11.3
24	13.1	28.7	36.1	19.7	2.5	100.0	122	10.6
25	6.4	22.7	50.0	17.3	3.6	100.0	110	11.5
26	11.6	27.4	46.3	13.7	1.1	100.0	95	10.3
Section 4								
27	8.3	30.6	36.1	22.2	2.8	100.0	72	11.1
28	14.0	29.0	40.2	12.1	4.7	100.0	107	10.3

6. Factor and Multivariate analysis

The four areas of the questionnaire contain sets of items aimed at capturing different, specific aspects of a common and general dimension: i) ethical and professional aspects; ii) recruitment and selection; iii) working conditions and social security; iv) training and development.

In the previous paragraphs, we have analysed the items separately, but data reduction techniques can be used to simplify the interpretation of the results. As extensively explained in Appendix IV, we tested the internal consistency and the unidimensionality of each of the groups of items listed above. This analysis

confirmed that the four groups measure indeed different dimensions. This allowed us to compute the means for each battery of items, and to use them for analytical purposes.

Table 7. Factors: averages and standard deviations

	Fact	tor1	Facto	or2	Facto	r3	Fac	tor4
	Ethical and		Recruit	ment	Working conditions		Training and	
	profession	al aspects	and selection and socia		and social s	security	develo	pment
	Mean	Sd	Mean	Sd	Mean	Sd	Mean	Sd
Gender								
Males	3.39	0.53	3.54	0.58	3.42	0.57	3.54	0.67
Females	3.33	0.58	3.55	0.66	3.37	0.62	3.54	0.70
Nationality								
Foreigner	3.54	0.47	3.73	0.47	3.63	0.52	3.70	0.61
Italian	3.33	0.55	3.50	0.62	3.35	0.58	3.50	0.69
Age								
Up to 38 years old	3.45	0.53	3.58	0.57	3.48	0.59	3.58	0.69
Older than 38 years old	3.32	0.54	3.51	0.62	3.35	0.56	3.51	0.66
Role in FBK								
Researcher	3.30	0.54	3.49	0.62	3.33	0.57	3.60	0.58
Technologist	3.41	0.53	3.55	0.65	3.48	0.48	3.48	0.64
Collaborator	3.59	0.55	3.68	0.60	3.59	0.69	3.47	0.89
PhD Student	3.50	0.48	3.68	0.40	3.52	0.55	3.37	0.84
Type of contract								
Fixed-term contract and								
other	3.45	0.53	3.59	0.57	3.47	0.60	3.55	0.74
Permanent contract	3.29	0.54	3.49	0.63	3.34	0.55	3.53	0.59
Institute								
CMM	3.29	0.54	3.43	0.69	3.31	0.55	3.52	0.63
CREATE-NET	3.50	0.48	3.68	0.46	3.56	0.53	3.67	0.65
ECT*	3.80	0.33	3.92	0.20	3.95	0.08	4.00	0.00
ECT* LISC	3.38	0.38	3.46	0.13	3.27	0.28	3.60	0.42
ICT	3.34	0.56	3.54	0.61	3.40	0.61	3.47	0.70
IRVAPP	3.60	0.47	3.69	0.49	3.48	0.49	3.97	0.13
ISIG	3.30	0.53	3.40	0.67	3.14	0.67	3.50	0.65
ISR	3.54	0.32	3.47	0.49	3.46	0.55	3.75	0.42
PROGETTI SPECIALI	3.39	0.62	3.50	0.69	3.43	0.57	3.14	1.21

Table 7 shows how the means of the four factors differ by respondents' personal traits (gender, age, nationality), professional profile (role in FBK and type of contract) and institute. Akin to previous results concerning individual questions, the averages range between 3 and 4. The variability of the scores for each factor is fairly low across characteristics: we can detect only slight differences, especially across institutes.

As these are purely descriptive results, it is very difficult to tell whether any differences between averages are statistically significant or driven by compositional factors. Therefore, we employed multivariate regression analyses to simultaneously take into account the correlation of the various factors depicted in table 7 with each of the four factors.

Table 8 shows four regression models, one for each dimension. Rows represent the explanatory variables; i.e., the characteristics of the respondents. For each characteristic the coefficient has been reported, along with its standard error (in brackets). Given that we included only categorical variables in the model, the coefficients always show the relative difference in the outcome, with respect to a reference category. For instance, the coefficient in the model for factor 1 associated with females indicates that females, net of all the other variables included in the model, show less agreement with respect to males, to an extent of 0.053. The coefficient, however, is small (the scale runs from 1 to 4) and not statistically significant: in this case we shall conclude that there are no meaningful gender differences in the rating of ethical and professional aspects within FBK.

The results of the regression models indicate that gender, age or type of contract do not affect average scores for any factor. There is some evidence for Italians scoring lower for each factor than foreigners. Concerning the role in FBK, we detect no differences with respect to the first three dimensions. Unsurprisingly, there is some evidence that collaborators and PhD students score lower on Factor 4 - Training and development. This may be due to the fact that collaborators and PhD students were excluded, until recently, from some specific training opportunities.

Finally, the differences between the institutes are not very pronounced, though some differences are worth noting: IRVAPP scores significantly higher than the reference category (CMM) for factors 1 and 4, while CREATE-NET and ECT* show significantly higher values for factor 3. All other institutes are indistinguishable from one another on the four factors.

Table 8: Linear regression model

	Factor1	Factor2	Factor3	Factor4	
	Ethical and	Recruitment and	Working conditions	Training and	
	professional aspects	selection	and social security	development	
Gender	D 6	D (D 6	ъ. с	
Males	Ref.	Ref.	Ref.	Ref.	
Females	-0.053	0.020	-0.047	0.007	
	(0.073)	(0.085)	(0.079)	(0.093)	
Nationality					
Foreigner	Ref.	Ref.	Ref.	Ref.	
Italian	-0.154*	-0.193**	-0.214**	-0.188*	
	(0.080)	(0.097)	(0.086)	(0.104)	
Age					
Up to 38 years old	Ref.	Ref.	Ref.	Ref.	
	-0.075	0.036	-0.091	-0.173	
Older than 38 years old	(0.096)	(0.112)	(0.103)	(0.127)	
Role in FBK					
Researcher	Ref.	Ref.	Ref.	Ref.	
Technologist	0.075	0.017	0.104	-0.177	
	(0.092)	(0.105)	(0.099)	(0.117)	
Collaborator	0.160	0.108	0.091	-0.326**	
Condocrator	(0.122)	(0.143)	(0.131)	(0.155)	
PhD Student	0.105	0.154	0.018	-0.407**	
The Student	(0.130)	(0.158)	(0.140)	(0.170)	
Type of contract	(0.130)	(0.136)	(0.140)	(0.170)	
Fixed-term contract and					
other	Ref.	Ref.	Ref.	Ref.	
		-0.046			
Permanent contract	-0.029		0.037	0.199	
To add and a	(0.097)	(0.113)	(0.104)	(0.126)	
Institute	D 6	D. C	D. C	D. C	
CMM	Ref.	Ref.	Ref.	Ref.	
CREATE-NET	0.150	0.219*	0.197*	0.130	
	(0.108)	(0.124)	(0.116)	(0.137)	
ECT*	0.356	0.312	0.460*	0.362	
	(0.237)	(0.269)	(0.254)	(0.320)	
ECT* LISC	0.096	0.068	-0.019	0.106	
	(0.247)	(0.309)	(0.265)	(0.309)	
ICT	0.027	0.107	0.072	-0.053	
	(0.079)	(0.090)	(0.085)	(0.099)	
IRVAPP	0.311**	0.259	0.209	0.538***	
	(0.157)	(0.177)	(0.168)	(0.197)	
ISIG	0.044	-0.020	-0.147	-0.030	
	(0.213)	(0.240)	(0.228)	(0.266)	
ISR	0.284	0.017	0.200	0.311	
	(0.232)	(0.262)	(0.249)	(0.291)	
PROGETTI SPECIALI	0.142	0.100	0.176	-0.303	
	(0.213)	(0.256)	(0.228)	(0.267)	
Constant	3.495***	3.591***	3.536***	3.666***	
	(0.095)	(0.110)	(0.103)	(0.121)	
Observations	316	301	315	304	
R-squared	0.065	0.044	0.068	0.067	
*** p<0.01, ** p<0.05, * p<0		0.011	0.000	0.007	

^{***} p<0.01, ** p<0.05, * p<0.1

7. Concluding remarks

Altogether, the results of the HRS4R survey reveal a high level of satisfaction with respect to the four areas investigated: i) *ethical and professional aspects*; ii) *recruitment and selection*; iii) *working conditions and social security*; iv) *training and development*. Opportunities of improvement are identified on a subset of specific factors: section i) *ethical and professional aspects* and section iii) *working conditions and social security* feature together, five questions that score below 3.25 or the 75th percentile of the grading scale. Namely, these are questions 3, 5, and 8 for section i) and questions 22 and 24 for section iii). Of these questions, question 22 (*FBK has defined a specific career development strategy for researchers at all stages of their career, including for researchers on fixed-term contracts.*) stands out. It fares by far worst according to all measures: The average score (2.67) is considerably lower than the next lowest question (3.09 for question 24). This is the largest difference to the next higher-ranking question of the entire set. Only 55.8 percent of respondents agree at least partially to question 22, which is again well below the second lowest approval rating (76.4 percent for question 24). As expected from these results, most people did not "totally agree" to question 22; i.e. 190 respondents. Of these 190 respondents 54 (28.4 percent) assigned to it the highest priority; i.e., to be solved within 3 months.

Appendix I The questionnaire

Section 1 - ETHICAL AND PROFESSIONAL ASPECTS

1.FBK provides adequate means for researchers to be familiar with the institutional strategic goals and funding mechanisms.

Please choose the appropriate response for each item:

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '1 [q1Art4]' (1. FBK provides adequate means for researchers to be familiar with the institutional strategic goals and funding mechanisms. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

2. FBK provides adequate means for researchers to be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '3 [q2Art5]' (2. FBK provides adequate means for researchers to be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

3. FBK provides adequate means for researchers to be aware of the principles of sound, transparent and efficient financial management. *

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '5 [q3Art6]' (3. FBK provides adequate means for researchers to be aware of the principles of sound, transparent and efficient financial management. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

4. FBK provides adequate means for researchers to be aware of national and European regulations about safety at

the workplace, data and confidentiality protection requirements. *

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '7 [q4Art7]' (4. FBK provides adequate means for researchers to be aware of national and European regulations about safety at the workplace, data and confidentiality protection requirements. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

5. FBK ensures that the activity of the researchers are disseminated and exploited (eg. transferred into other research settings or, if appropriate, commercialized). *

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '9 [q5Art8]' (5. FBK ensures that the activity of the researchers are disseminated and exploited (eg. transferred into other research settings or, if appropriate, commercialized). (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

6. FBK ensures that the research activities of its researchers are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '11 [q6Art9]' (6. FBK ensures that the research activities of its researchers are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

7. FBK does not discriminate in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition. Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '13 [q7Art10]' (7. FBK does not discriminate in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

8. FBK regularly uses transparent evaluation/appraisal systems for assessing researchers professional performance.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '15 [q8Art11]' (8. FBK regularly uses transparent evaluation/appraisal systems for assessing researchers professional performance. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

Section 2 - RECRUITMENT AND SELECTION

9. FBK establishes open recruitment procedures

Please choose the appropriate response for each item:

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '17 [q9Art13]' (9. FBK establishes open recruitment procedures (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

10. FBK establishes efficient recruitment procedures.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '19 [q10Art13]' (10. FBK establishes efficient recruitment procedures. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

11. FBK establishes transparent recruitment procedures.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '21 [q11Art13]' (11. FBK establishes transparent recruitment procedures. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

VERY HIGH (in 3HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

12. FBK establishes supportive recruitment procedures.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '23 [q12Art13]' (12. FBK establishes supportive recruitment procedures. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

13. FBK establishes internationally comparable recruitment procedures.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '25 [q13Art13]' (13. FBK establishes internationally comparable recruitment procedures. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

14. FBK establishes recruitment procedures tailored to the type of positions advertised.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '27 [q14Art13]' (14. FBK establishes recruitment procedures tailored to the type of positions advertised. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

15. FBK ensures that selection committees bring together diverse expertise and competences and have an adequate gender balance, where appropriate and feasible, including members from different sectors and disciplines, also from other countries and with relevant experience to assess the candidates.

Please choose the appropriate response for each item:

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '29 [q15Art14]' (15. FBK ensures that selection committees bring together diverse expertise and competences and have an adequate gender balance, where appropriate and feasible, including members from different sectors and disciplines, also from other countries and with relevant experience to assess the candidates. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

16. FBK informs candidates, prior to selection, about the recruitment process and selection criteria, the number of available positions and career development prospects.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '31 [q16Art15]' (16. FBK informs candidates, prior to selection, about the recruitment process and selection criteria, the number of available positions and career development prospects. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

Section 3 - WORKING CONDITIONS AND SOCIAL SECURITY

17. FBK recognizes all researchers as professionals engaged in a research career.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '33 [q17Art22]' (17. FBK recognizes all researchers as professionals engaged in a research career. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in months)MEDIUM (in 12 months)LOW (in 18 months)Not a priority (in months)

18. FBK promotes the creation of a <u>stimulating research environment</u> that offers appropriate equipment, facilities, opportunities and observes the national or sectoral regulations concerning health and safety in research.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '35 [q18Art23]' (18. FBK promotes the creation of a stimulating research environment that offers appropriate equipment, facilities, opportunities and observes the national or sectoral regulations concerning health and safety in research. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in months)MEDIUM (in 12 LOW (in 18 months)24 months)

19. FBK ensures, where appropriate, the <u>flexibility</u> deemed essential for successful research performance in accordance with existing national legislation, providing welfare opportunities which allow researchers to combine family and work, children and career.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '37 [q19Art24]' (19. FBK ensures, where appropriate, the flexibility deemed essential for successful research performance in accordance with existing national legislation, providing welfare opportunities which allow researchers to combine family and work, children and career. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in months)

20. FBK ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation or sectoral collective bargaining agreements

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '39 [q20Art26]' (20. FBK ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation or sectoral collective bargaining agreements (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

21. FBK aims for a representative gender balance at all levels of staff, including at supervisory and managerial level, through an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '41 [q21Art27]' (21. FBK aims for a representative gender balance at all levels of staff, including at supervisory and managerial level, through an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

22. FBK has defined a specific career development strategy for researchers at all stages of their career, including for researchers on fixed-term contracts.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '43 [q22Art28]' (22. FBK has defined a specific career development strategy for researchers at all stages of their career, including for researchers on fixed-term contracts. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

23. FBK recognizes the value of geographical, intersectoral, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '45 [q23Art29]' (23. FBK recognizes the value of geographical, intersectoral, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

24. FBK offers career development advice and job placement assistance, either in the institutions concerned, or through collaboration with other organisations.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '47 [q24Art30]' (24. FBK offers career development advice and job placement assistance, either in the institutions concerned, or through collaboration with other organisations. (To what extent do you agree or disagree with this statement?)) Please choose the appropriate response for each item:

25. FBK provides adequate means for researchers to be aware of policies and practices specifying what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations.

Please choose the appropriate response for each item:

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '49 [q25Art31]' (25. FBK provides adequate means for researchers to be aware of policies and practices specifying what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

26. FBK recognizes it as wholly legitimate that researchers be represented in the relevant consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' or 'Partially disagree' or 'Partially agree' at question '51 [q26Art35]' (26. FBK recognizes it as wholly legitimate that researchers be represented in the relevant consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

Section 4 - TRAINING AND DEVELOPMENT

27. FBK provides and supports training opportunities to supervisors, leaders, project coordinators, managers or science communicators for them to perform these tasks to the highest professional standards. Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '53 [q27Art37]' (27. FBK provides and supports training opportunities to supervisors, leaders, project coordinators, managers or science communicators for them to perform these tasks to the highest professional standards. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

VERY HIGH (in 3 HIGH (in 6 months)MEDIUM (in 12 LOW (in 18 months)Not a priority (in 24 months)months)months)months)

28. FBK ensures that all researchers at any stage of their career, including researchers on fixed-term contracts, have access to training, workshops, conferences and e-learning in order to improve, be up to date, expand their skills, competencies and sustain professional development.

Please choose the appropriate response for each item:

Totally disagree Partially disagree Partially agree Totally agree Don't know

To what extent do you agree or disagree with this statement?

Please indicate the level of priority that FBK should assign to this topic (i.e. the time within which you would expect FBK deals with this matter):

Only answer this question if the following conditions are met:

Answer was 'Totally disagree' *or* 'Partially disagree' *or* 'Partially agree' at question '55 [q28Art38]' (28. FBK ensures that all researchers at any stage of their career, including researchers on fixed-term contracts, have access to training, workshops, conferences and e-learning in order to improve, be up to date, expand their skills, competencies and sustain professional development. (To what extent do you agree or disagree with this statement?))

Please choose the appropriate response for each item:

General Questions

29. Have you ever heard of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (C&C)?

Choose one of the following answers

Please choose only one of the following:

Yes

No

30. Have you ever participated in any FBK Selection Process?

Choose one of the following answers

Please choose **only one** of the following:

Yes

No

You've joined the selection process as:

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '58 [q30]' (30. Have you ever participated in any FBK Selection Process?) Check all that apply

Please choose all that apply:

Candidate

Selection Committee Member

31. Please indicate your highest education title:

Choose one of the following answers

Please choose **only one** of the following:

High School Diploma

Bachelor Degree

Master Degree

PhD

Thank you for your contribution!

The HR Development team in collaboration with the Research Institute for the Evaluation of Public Policies (<u>IRVAPP</u>) will analyze the responses and publish the results of the gap analysis on the <u>FBK HRStrategy Website</u>.

For queries related to the HRStrategy process, please reach out to hrstrategy@fbk.eu.

Thank you again for your cooperation,

FBK HR Development Team

Appendix II Detailed responses

Figure A1a. Agreement or disagreement with the statement "FBK provides adequate means for researchers to be familiar with the institutional strategic goals and funding mechanisms." (N=317)

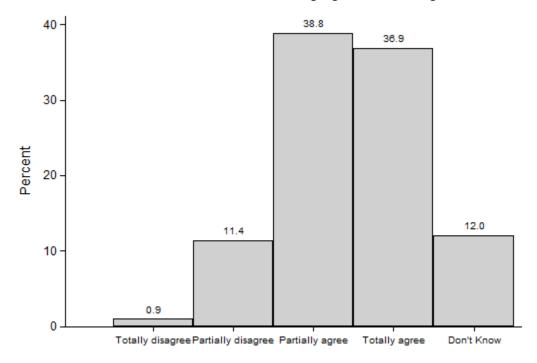


Figure A1b. The level of priority that FBK should assign to this topic. (N=162)

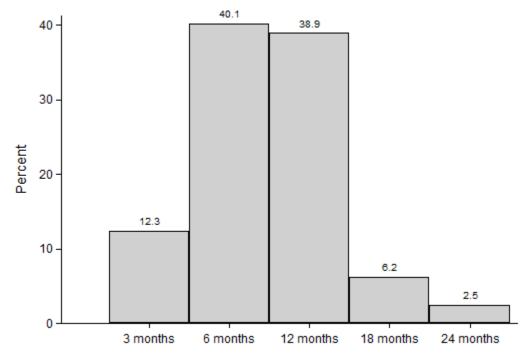


Figure A2a. Agreement or disagreement with the statement "FBK provides adequate means for researchers to be familiar with the national, sectoral or institutional regulations governing training and/or working conditions. This includes Intellectual Property Rights regulations, and the requirements and conditions of any sponsor or funders." (N=317)

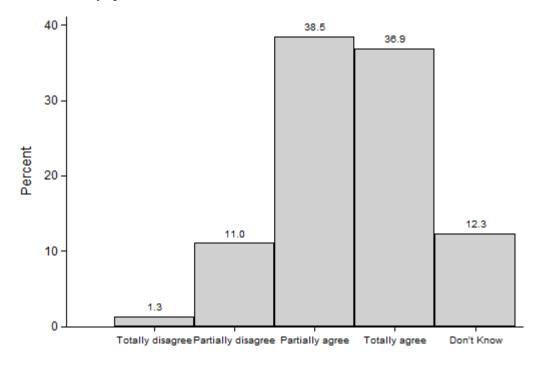


Figure A2b. The level of priority that FBK should assign to this topic. (N=161)

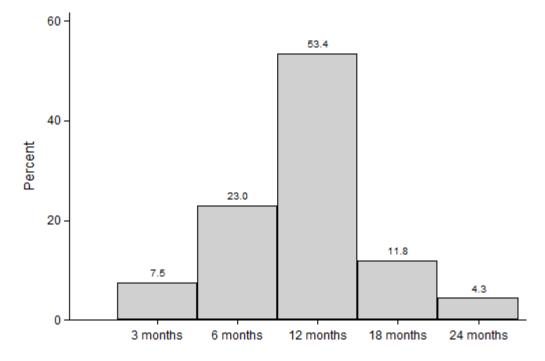


Figure A3a. Agreement or disagreement with the statement "FBK provides adequate means for researchers to be aware of the principles of sound, transparent and efficient financial management." (N=317)

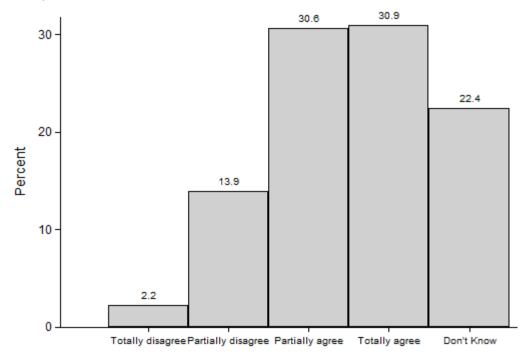


Figure A3b. The level of priority that FBK should assign to this topic. (N=148)

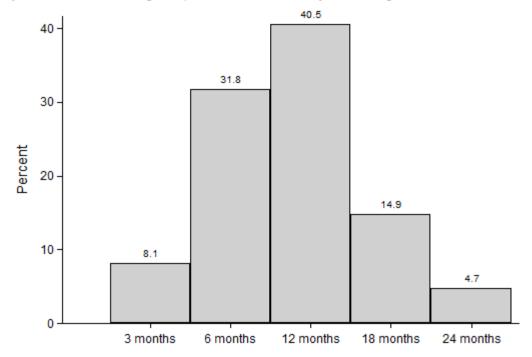


Figure A4a. Agreement or disagreement with the statement "FBK provides adequate means for researchers to be aware of national and European regulations about safety at the workplace, data and confidentiality protection requirements." (N=317)

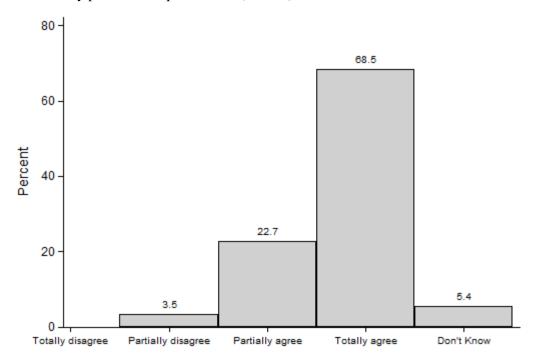


Figure A4b. The level of priority that FBK should assign to this topic. (N=83)

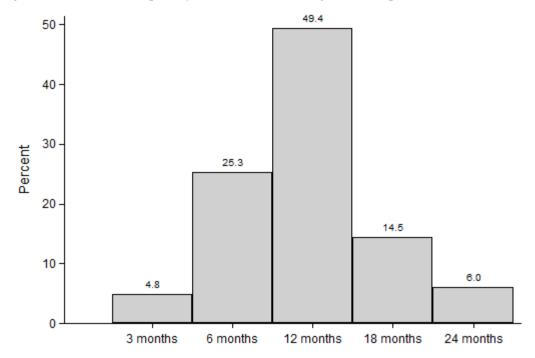


Figure A5a. Agreement or disagreement with the statement "FBK ensures that the activity of the researchers are disseminated and exploited (eg. transferred into other research settings or, if appropriate, commercialized)." (N=317)

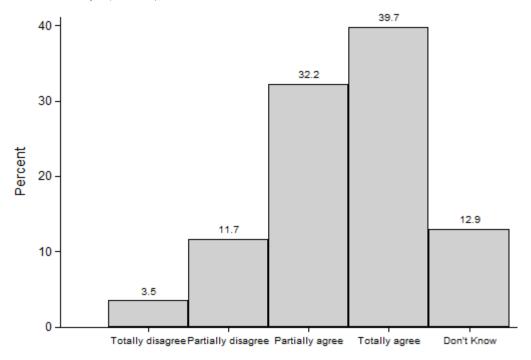


Figure A5b. The level of priority that FBK should assign to this topic. (N=150)

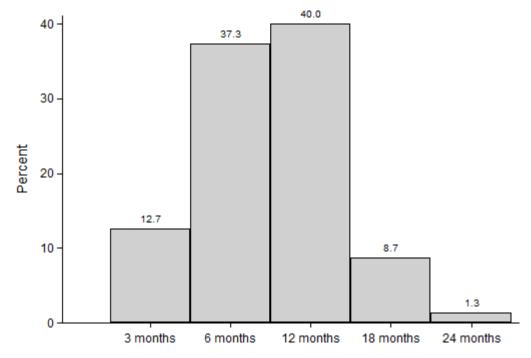


Figure A6a. Agreement or disagreement with the statement "FBK ensures that the research activities of its researchers are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science." (N=317)

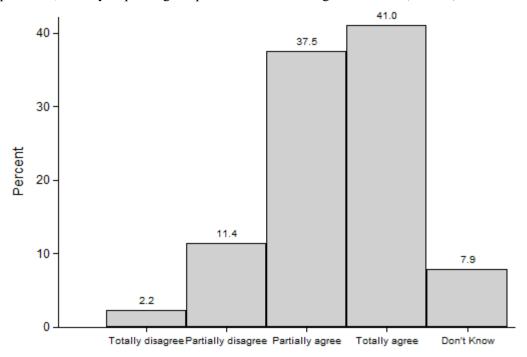


Figure A6b. The level of priority that FBK should assign to this topic. (N=162)

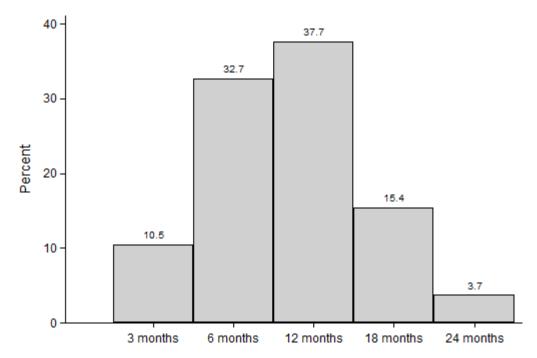


Figure A7a. Agreement or disagreement with the statement "FBK does not discriminate in any way on the basis of gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition." (N=317)

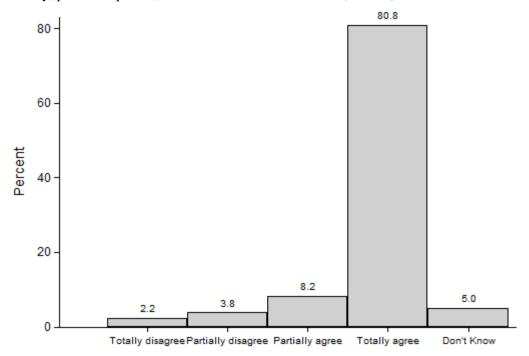


Figure A7b. The level of priority that FBK should assign to this topic. (N=45)

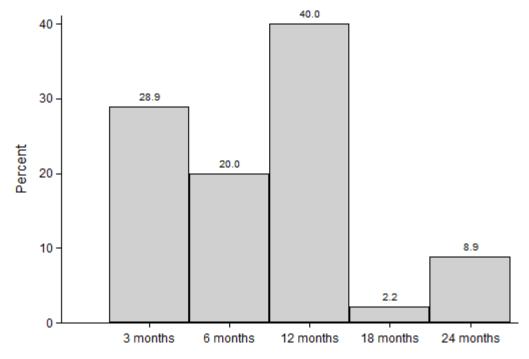


Figure A8a. Agreement or disagreement with the statement "FBK regularly uses transparent evaluation/appraisal systems for assessing researchers professional performance." (N=317)

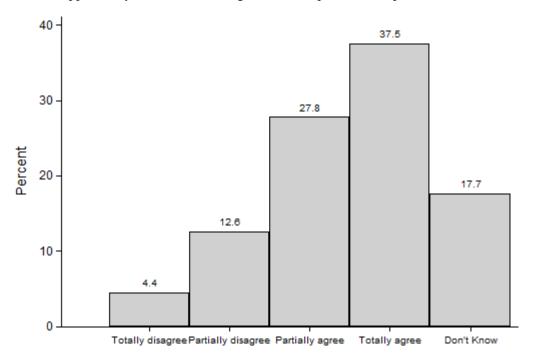


Figure A8b. The level of priority that FBK should assign to this topic. (N=142)

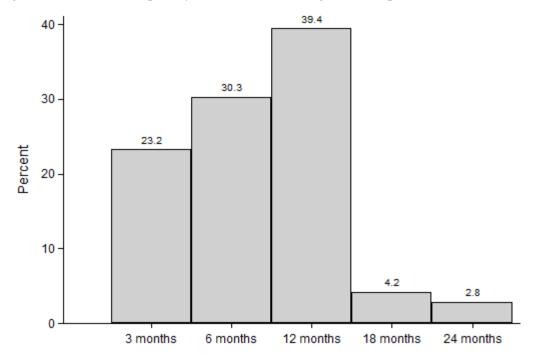


Figure A9a. Agreement or disagreement with the statement "FBK establishes open recruitment procedures" (N=317)

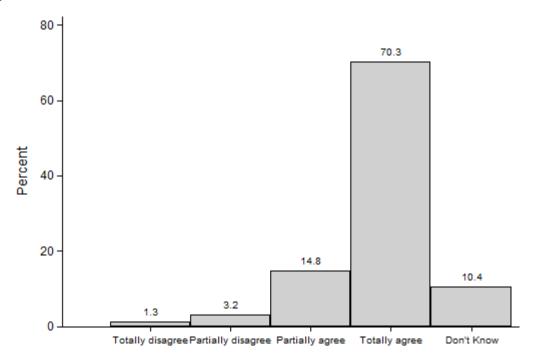


Figure A9b. The level of priority that FBK should assign to this topic. (N=61)

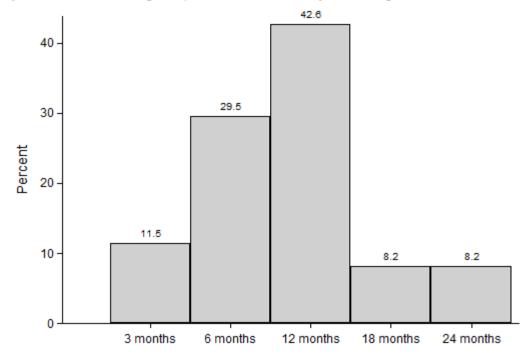


Figure A10a. Agreement or disagreement with the statement "FBK establishes efficient recruitment procedures." (N=317)

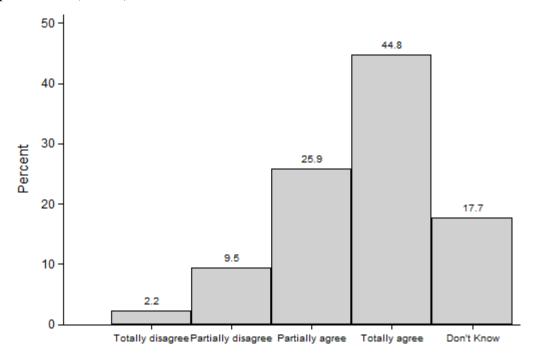


Figure A10b. The level of priority that FBK should assign to this topic. (N=119)

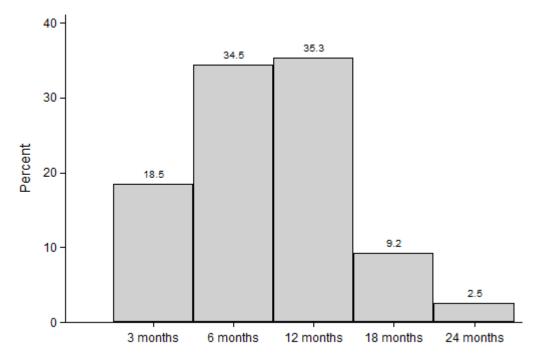


Figure A11a. Agreement or disagreement with the statement "FBK establishes transparent recruitment procedures." (N=317)

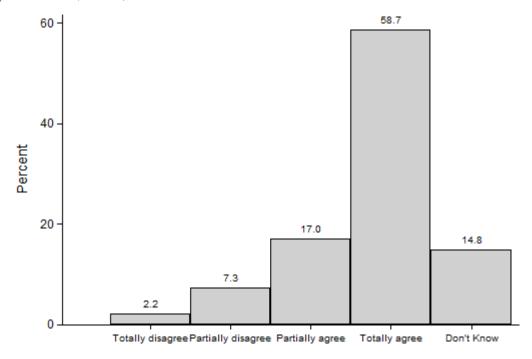


Figure A11b. The level of priority that FBK should assign to this topic. (N=84)

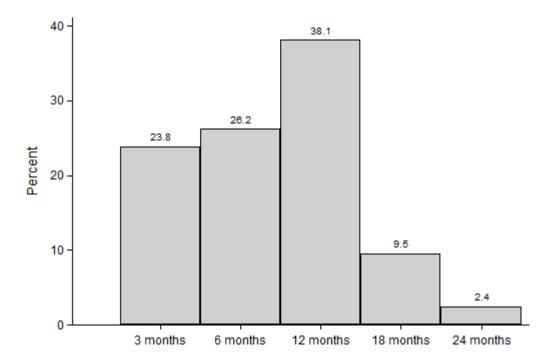


Figure A12a. Agreement or disagreement with the statement "FBK establishes supportive recruitment procedures." (N=317)

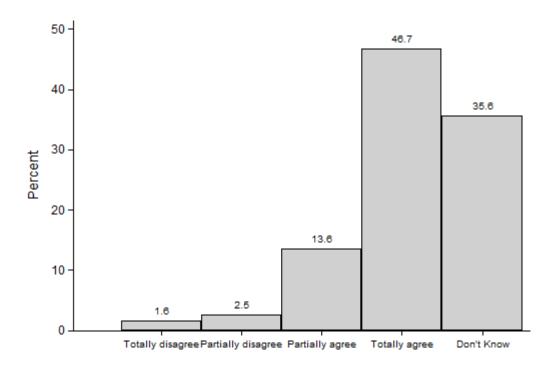


Figure A12b. The level of priority that FBK should assign to this topic. (N=56)

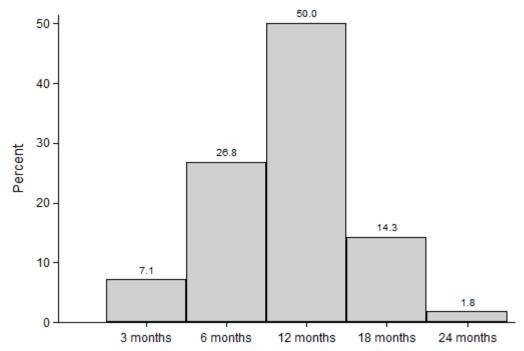


Figure A13a. Agreement or disagreement with the statement "FBK establishes internationally comparable recruitment procedures." (N=317)

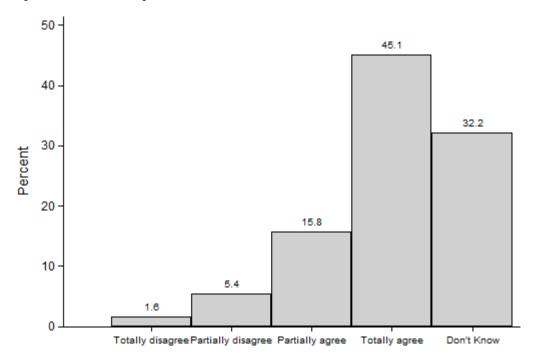


Figure A13b. The level of priority that FBK should assign to this topic. (N=72)

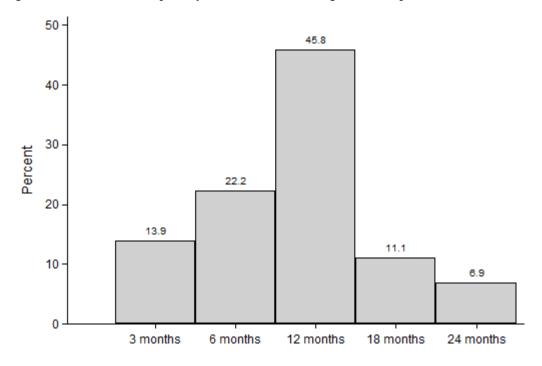


Figure A14a. Agreement or disagreement with the statement "FBK establishes recruitment procedures tailored to the type of positions advertised."

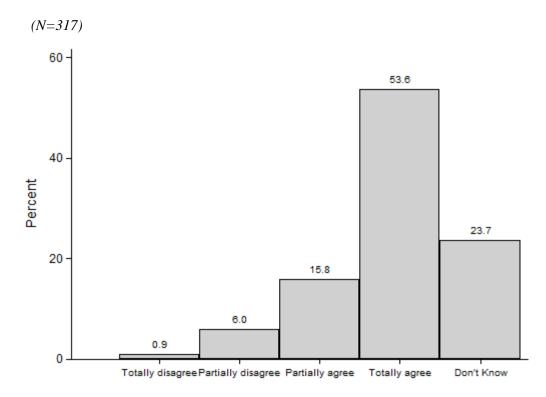


Figure A14b. The level of priority that FBK should assign to this topic. (N=72)

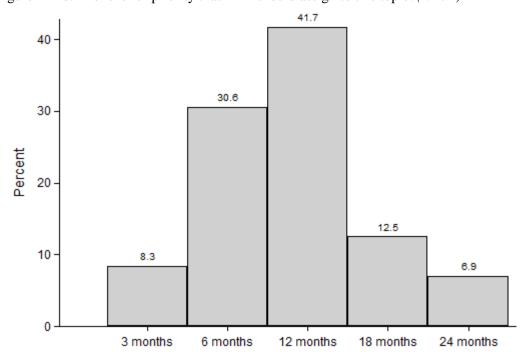


Figure A15a. Agreement or disagreement with the statement "FBK ensures that selection committees bring together diverse expertise and competences and have an adequate gender balance, where appropriate and feasible, including members from different sectors and disciplines, also from other countries and with relevant experience to assess the candidates." (N=317)

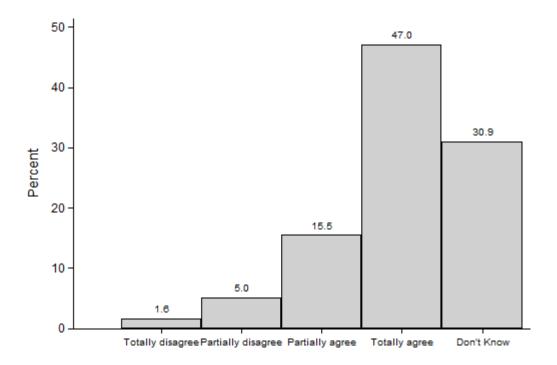


Figure A15b. The level of priority that FBK should assign to this topic. (N=70)

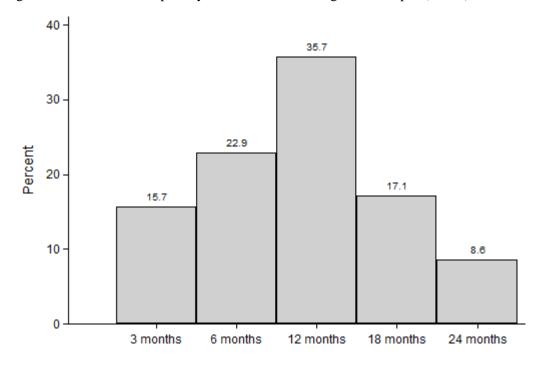


Figure A16a. Agreement or disagreement with the statement "FBK informs candidates, prior to selection, about the recruitment process and selection criteria, the number of available positions and career development prospects." (N=317)

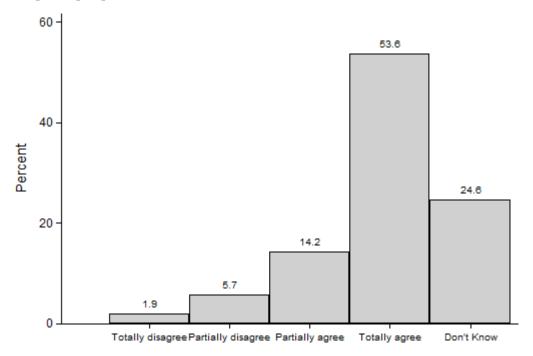


Figure A16b. The level of priority that FBK should assign to this topic. (N=69)

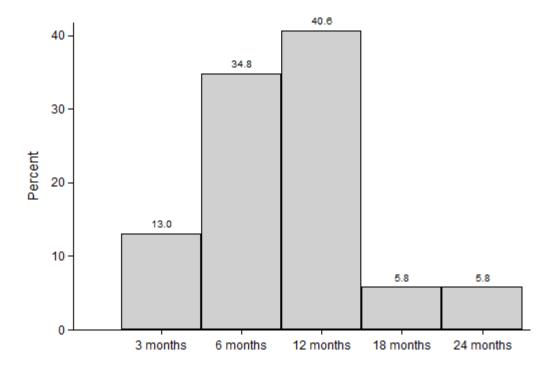


Figure A17a. Agreement or disagreement with the statement "FBK recognizes all researchers as professionals engaged in a research career." (N=317)

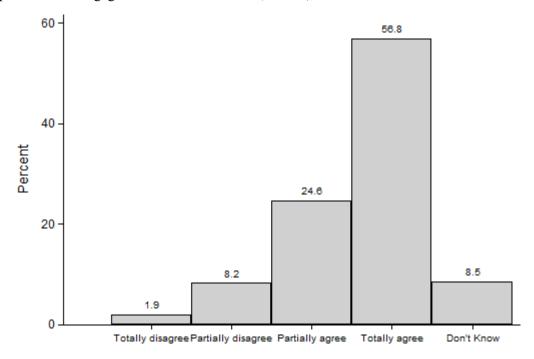


Figure A17b. The level of priority that FBK should assign to this topic. (N=110)

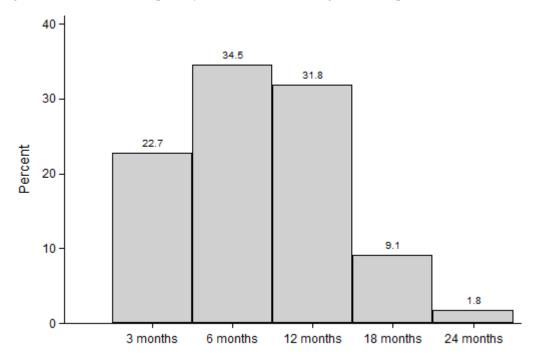


Figure A18a. Agreement or disagreement with the statement "FBK promotes the creation of a stimulating research environment that offers appropriate equipment, facilities, opportunities and observes the national or sectoral regulations concerning health and safety in research." (N=317)

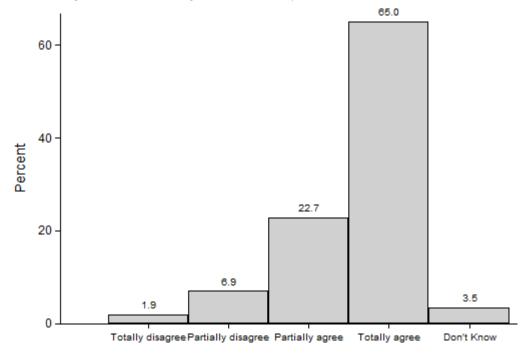


Figure A18b. The level of priority that FBK should assign to this topic. (N=100)

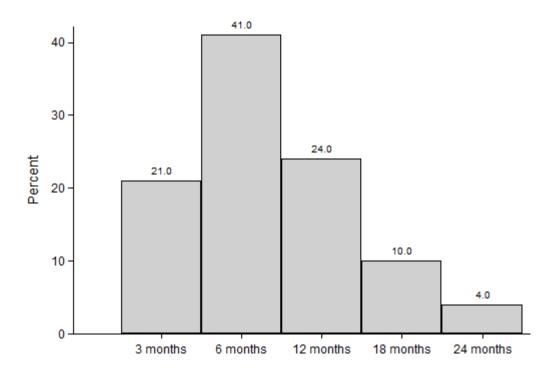


Figure A19a. Agreement or disagreement with the statement "FBK ensures, where appropriate, the flexibility deemed essential for successful research performance in accordance with existing national legislation, providing welfare opportunities which allow researchers to combine family and work, children and career." (N=317)

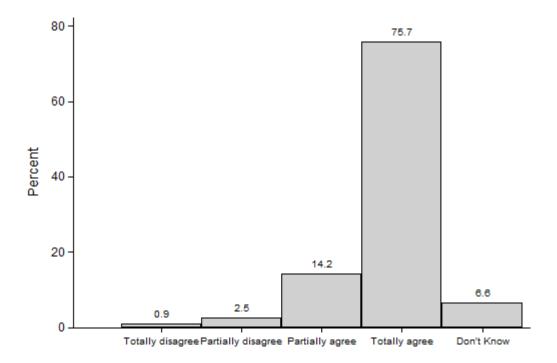


Figure A19b. The level of priority that FBK should assign to this topic. (N=56)

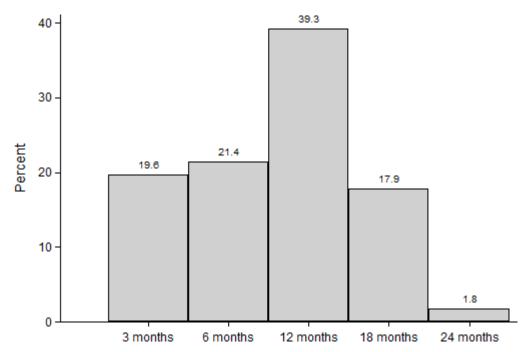


Figure A20a. Agreement or disagreement with the statement "FBK ensure that researchers enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions (including sickness and parental benefits, pension rights and unemployment benefits) in accordance with existing national legislation or sectoral collective bargaining agreements" (N=317)

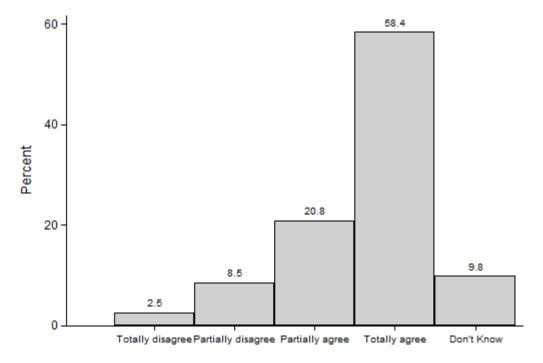


Figure A20b. The level of priority that FBK should assign to this topic. (N=101)

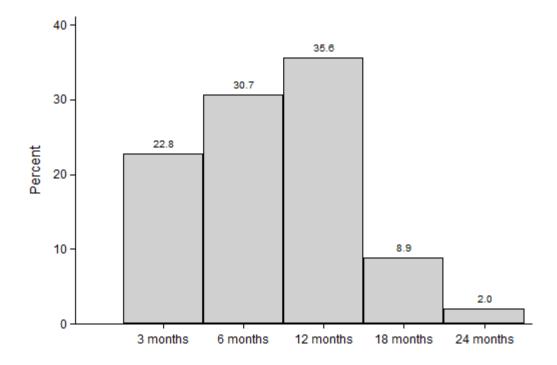


Figure A21a. Agreement or disagreement with the statement "FBK aims for a representative gender balance at all levels of staff, including at supervisory and managerial level, through an equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria." (N=317)

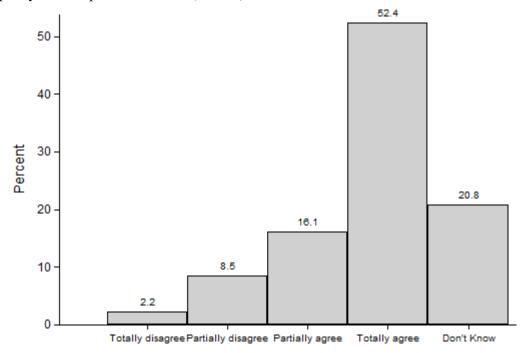


Figure A21b. The level of priority that FBK should assign to this topic. (N=85)

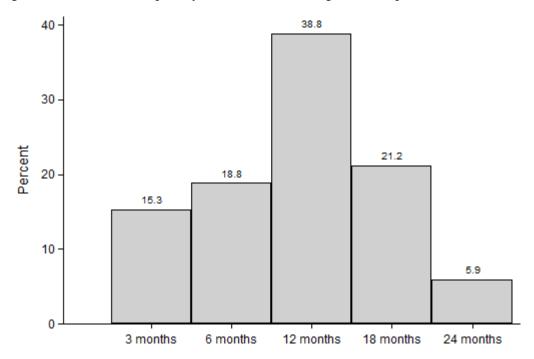


Figure A22a. Agreement or disagreement with the statement "FBK has defined a specific career development strategy for researchers at all stages of their career, including for researchers on fixed-term contracts." (N=317)

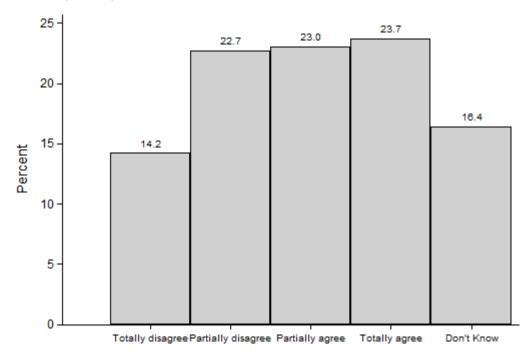


Figure A22b. The level of priority that FBK should assign to this topic. (N=190)

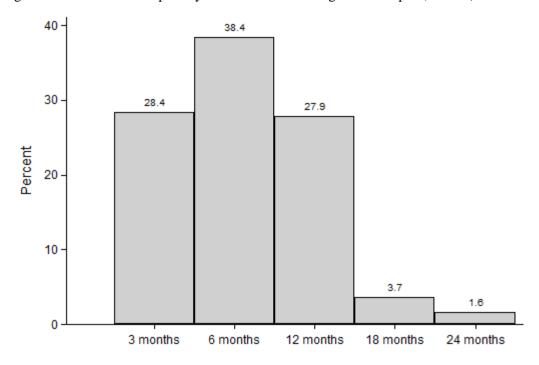


Figure A23a. Agreement or disagreement with the statement "FBK recognizes the value of geographical, intersectoral, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector as an important means of enhancing scientific knowledge and professional development at any stage of a researcher's career." (N=317)

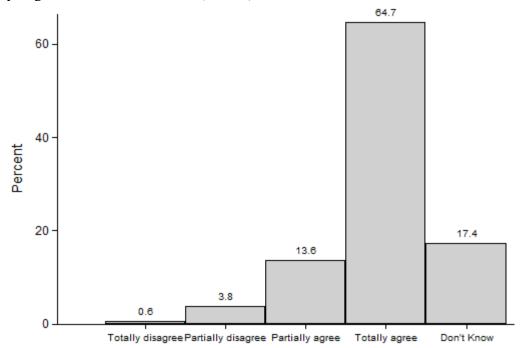


Figure A23b. The level of priority that FBK should assign to this topic. (N=57)

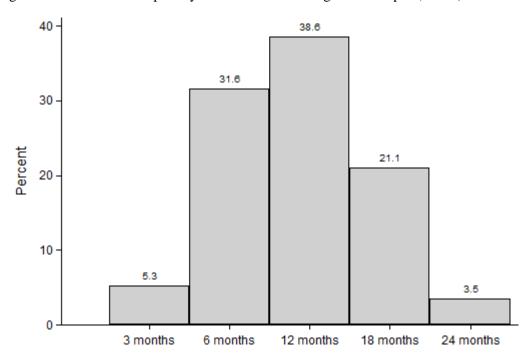


Figure A24a. Agreement or disagreement with the statement "FBK offers career development advice and job placement assistance, either in the institutions concerned, or through collaboration with other organisations." (N=317)

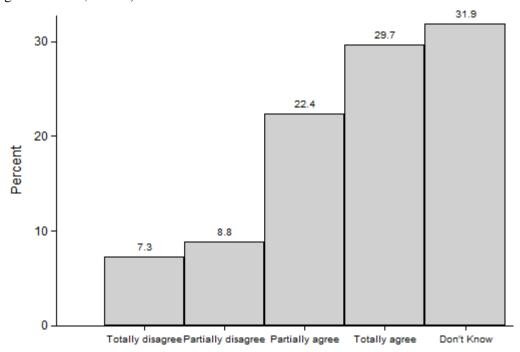


Figure A24b. The level of priority that FBK should assign to this topic. (N=122)

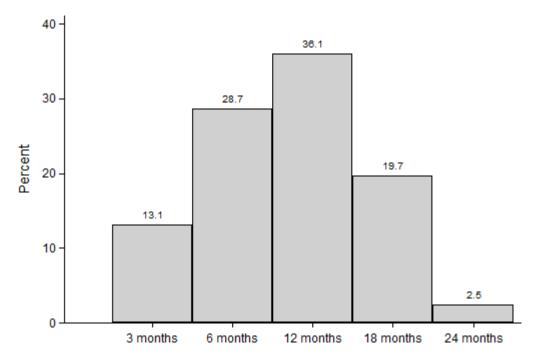


Figure A25a. Agreement or disagreement with the statement "FBK provides adequate means for researchers to be aware of policies and practices specifying what rights belong to researchers and/or, where applicable, to their employers or other parties, including external commercial or industrial organisations." (N=317)

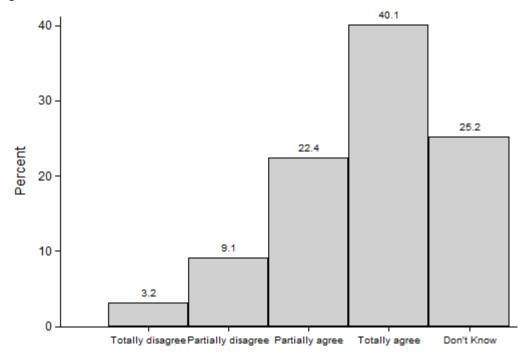


Figure A25b. The level of priority that FBK should assign to this topic. (N=110)

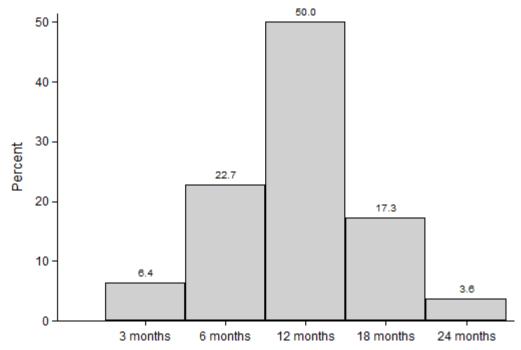


Figure A26a. Agreement or disagreement with the statement "FBK recognizes it as wholly legitimate that researchers be represented in the relevant consultation and decision-making bodies of the institutions for which they work, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution." (N=317)

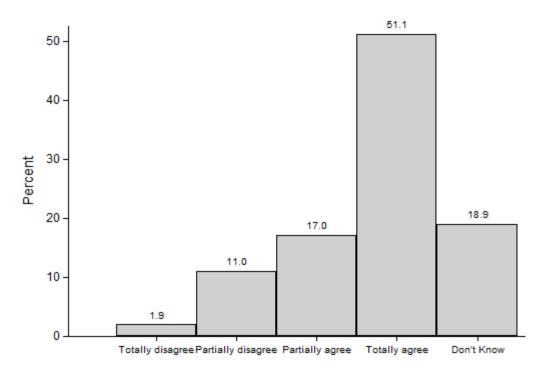


Figure A26b. The level of priority that FBK should assign to this topic. (N=95)

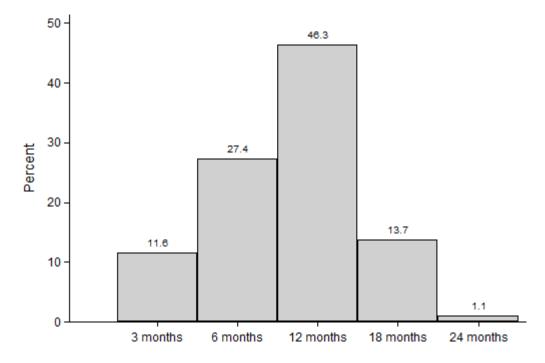


Figure A27a. Agreement or disagreement with the statement "FBK provides and supports training opportunities to supervisors, leaders, project coordinators, managers or science communicators for them to perform these tasks to the highest professional standards." (N=317)

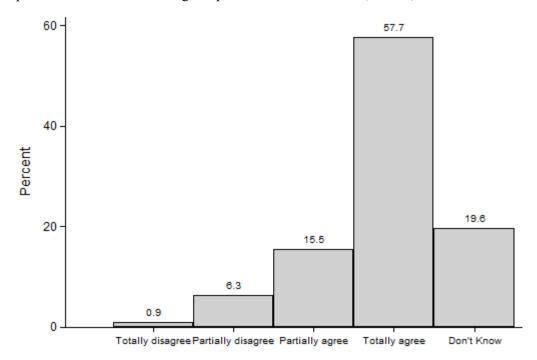


Figure A27b. The level of priority that FBK should assign to this topic. (N=72)

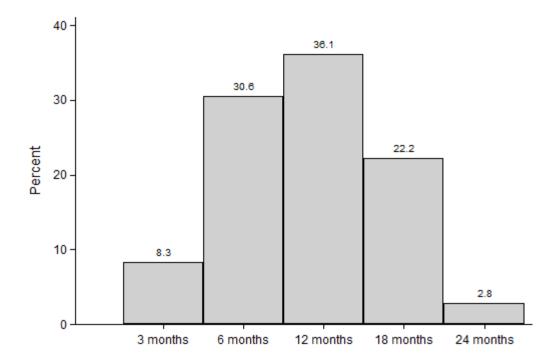


Figure A28a. Agreement or disagreement with the statement "FBK ensures that all researchers at any stage of their career, including researchers on fixed-term contracts, have access to training, workshops, conferences and e-learning in order to improve, be up to date, expand their skills, competencies and sustain professional development." (N=317)

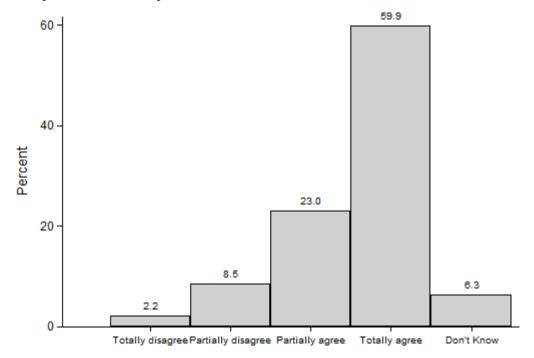
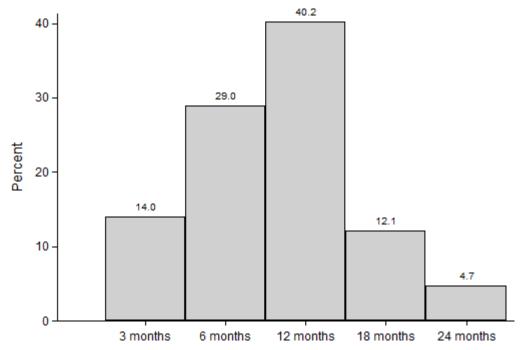


Figure A28b. The level of priority that FBK should assign to this topic. (N=107)



Appendix III Detailed bivariate analyses

Table B1. Average scores and standard deviations concerning section 1 "Ethical and professional aspects"

								Item								
	1		2		3		4		5		6		7		8	,
	Mean	Sd														
Gender																
Males	3.29	0.74	3.30	0.69	3.16	0.83	3.69	0.53	3.24	0.82	3.26	0.79	3.82	0.57	3.23	0.86
Females	3.20	0.67	3.15	0.87	3.15	0.78	3.66	0.56	3.27	0.88	3.31	0.68	3.57	0.80	3.09	0.97
Nationality																
Foreigner	3.39	0.71	3.43	0.66	3.38	0.79	3.67	0.50	3.46	0.66	3.58	0.59	3.92	0.32	3.36	0.90
Italian	3.23	0.72	3.23	0.75	3.11	0.82	3.69	0.55	3.19	0.86	3.19	0.79	3.72	0.69	3.16	0.88
Age																
Up to 38 years old	3.35	0.73	3.33	0.73	3.22	0.86	3.70	0.55	3.29	0.84	3.30	0.80	3.81	0.57	3.37	0.79
Older than 38 years old	3.21	0.72	3.22	0.73	3.13	0.79	3.67	0.53	3.21	0.83	3.25	0.75	3.73	0.68	3.07	0.94
Role in FBK																
Researcher	3.14	0.74	3.15	0.75	3.03	0.82	3.68	0.56	3.22	0.86	3.23	0.77	3.74	0.64	3.12	0.88
Technologist	3.42	0.64	3.48	0.60	3.40	0.77	3.64	0.53	3.25	0.74	3.12	0.77	3.77	0.67	3.05	1.00
Collaborator	3.69	0.54	3.53	0.61	3.53	0.63	3.76	0.49	3.31	0.89	3.50	0.74	3.77	0.71	3.68	0.54
PhD Student	3.42	0.69	3.33	0.78	3.25	0.85	3.72	0.51	3.31	0.79	3.43	0.77	3.88	0.46	3.31	0.93
Type of contract																
Permanent contract	3.15	0.73	3.21	0.75	3.09	0.81	3.67	0.54	3.19	0.84	3.20	0.79	3.72	0.67	3.00	0.94
Fixed-term contract	3.26	0.73	3.22	0.71	3.10	0.87	3.66	0.57	3.27	0.83	3.22	0.74	3.78	0.62	3.29	0.81
Other	3.54	0.64	3.43	0.70	3.41	0.74	3.74	0.50	3.31	0.83	3.47	0.75	3.82	0.59	3.51	0.76
Institute																
CMM	3.05	0.76	3.13	0.72	3.18	0.73	3.66	0.54	3.05	0.95	3.27	0.82	3.74	0.65	3.10	0.88
CREATE-NET	3.45	0.56	3.51	0.56	3.65	0.55	3.68	0.53	3.39	0.61	3.30	0.73	3.87	0.53	3.39	0.83
ECT*	3.75	0.50	3.75	0.50	3.50	0.58	3.60	0.55	4.00	0.00	3.80	0.45	4.00	0.00	3.75	0.50
ECT* LISC	3.40	0.89	3.20	0.45	3.25	0.50	3.80	0.45	3.25	0.50	2.75	1.50	4.00	0.00	3.00	0.82
ICT	3.29	0.72	3.18	0.75	3.03	0.86	3.67	0.56	3.24	0.85	3.24	0.73	3.72	0.70	3.11	0.92
IRVAPP	3.36	0.84	3.62	0.65	3.00	1.04	3.87	0.35	3.73	0.47	3.77	0.44	3.92	0.28	3.85	0.38
ISIG	3.29	0.76	3.29	1.11	3.14	0.69	4.00	0.00	3.50	0.84	2.57	0.98	3.71	0.76	3.00	0.82
ISR	3.50	0.55	3.67	0.52	3.40	0.55	3.67	0.82	3.00	0.63	3.33	0.52	3.83	0.41	3.83	0.41
PROGETTI SPECIALI	3.14	0.69	3.57	0.79	3.00	1.15	3.71	0.49	3.29	0.95	3.57	0.79	3.71	0.49	3.00	1.10

Table B2: Average scores and standard deviations concerning section 2 "Recruitment and selection"

								Item								
	9		10		11	[12		13		14		15		16	
	Mean	Sd														
Gender																
Males	3.70	0.63	3.37	0.75	3.55	0.76	3.62	0.67	3.51	0.78	3.57	0.72	3.61	0.64	3.57	0.74
Females	3.79	0.45	3.39	0.95	3.54	0.75	3.68	0.69	3.65	0.57	3.72	0.57	3.39	0.96	3.63	0.73
Nationality																
Foreigner	3.87	0.47	3.63	0.69	3.72	0.62	3.77	0.56	3.75	0.64	3.84	0.43	3.81	0.40	3.75	0.55
Italian	3.69	0.62	3.31	0.80	3.52	0.78	3.60	0.71	3.48	0.76	3.55	0.72	3.50	0.78	3.54	0.78
Age																
Up to 38 years old	3.74	0.55	3.47	0.77	3.59	0.74	3.70	0.61	3.58	0.78	3.61	0.70	3.64	0.67	3.55	0.79
Older than 38 years old	3.70	0.64	3.30	0.80	3.52	0.77	3.59	0.73	3.51	0.71	3.59	0.68	3.50	0.77	3.62	0.69
Role in FBK																
Researcher	3.70	0.60	3.27	0.84	3.49	0.78	3.56	0.74	3.46	0.78	3.57	0.73	3.51	0.77	3.57	0.77
Technologist	3.69	0.73	3.49	0.73	3.64	0.82	3.69	0.71	3.59	0.64	3.49	0.70	3.55	0.77	3.64	0.63
Collaborator	3.74	0.62	3.59	0.70	3.68	0.64	3.79	0.50	3.74	0.71	3.74	0.58	3.79	0.50	3.64	0.73
PhD Student	3.88	0.33	3.52	0.64	3.64	0.62	3.74	0.45	3.70	0.61	3.74	0.53	3.65	0.59	3.55	0.78
Type of contract																
Permanent contract	3.69	0.63	3.26	0.80	3.50	0.81	3.57	0.73	3.40	0.79	3.55	0.74	3.49	0.80	3.61	0.71
Fixed-term contract	3.69	0.62	3.41	0.84	3.54	0.78	3.63	0.74	3.60	0.69	3.57	0.70	3.56	0.73	3.55	0.78
Other	3.81	0.50	3.56	0.67	3.66	0.63	3.76	0.47	3.72	0.66	3.74	0.55	3.73	0.54	3.60	0.75
Institute																
CMM	3.67	0.63	3.18	0.89	3.53	0.77	3.52	0.78	3.48	0.75	3.59	0.69	3.36	0.85	3.37	0.93
CREATE-NET	3.84	0.44	3.44	0.61	3.85	0.44	3.81	0.40	3.64	0.57	3.69	0.54	3.76	0.52	3.67	0.66
ECT*	4.00	0.00	3.83	0.41	3.80	0.45	3.75	0.50	4.00	0.00	4.00	0.00	3.83	0.41	4.00	0.00
ECT* LISC	4.00	0.00	3.00	1.00	3.50	0.58	4.00	0.00	3.00	1.00	3.25	0.96	3.33	0.58	3.67	0.58
ICT	3.70	0.64	3.40	0.81	3.51	0.80	3.60	0.73	3.51	0.80	3.55	0.75	3.69	0.59	3.63	0.70
IRVAPP	3.85	0.55	3.50	0.67	3.62	0.65	4.00	0.00	3.90	0.32	3.83	0.39	3.46	0.97	3.73	0.65
ISIG	3.71	0.49	3.57	0.79	3.57	0.79	3.67	0.52	3.14	1.07	3.50	0.84	2.86	1.07	3.57	0.53
ISR	3.67	0.52	3.17	0.75	3.33	0.82	3.60	0.55	3.50	0.55	3.67	0.52	3.17	0.75	3.67	0.52
PROGETTI SPECIALI	3.50	0.84	3.80	0.45	3.00	1.26	3.67	0.58	3.83	0.41	3.60	0.55	3.20	1.30	3.50	0.84

Table B3: Average scores and standard deviations concerning section 3 "Working conditions and social security"

-										Iter	n									
	17		18	_	19		20		21	1	2		23		24	-	2:	5	20	
	Mean	Sd																		
Gender																				
Males	3.48	0.76	3.57	0.68	3.76	0.55	3.47	0.78	3.63	0.66	2.68	1.06	3.71	0.60	3.11	0.98	3.35	0.84	3.42	0.82
Females	3.51	0.70	3.53	0.81	3.77	0.52	3.60	0.76	3.08	1.02	2.64	1.08	3.76	0.54	3.02	1.04	3.26	0.88	3.54	0.79
Nationality																				
Foreigner	3.73	0.60	3.67	0.60	3.90	0.31	3.59	0.74	3.78	0.47	3.22	0.90	3.82	0.43	3.31	0.95	3.42	0.78	3.67	0.67
Italian	3.42	0.77	3.53	0.74	3.73	0.58	3.47	0.79	3.43	0.84	2.55	1.06	3.69	0.62	3.04	1.00	3.30	0.87	3.40	0.84
Age																				
Up to 38 years	3.70	0.57	3.63	0.62	3.75	0.63	3.57	0.75	3.61	0.72	2.81	1.11	3.70	0.62	3.07	1.05	3.30	0.92	3.57	0.75
old	3.70	0.57	3.03	0.02	3.73	0.03	3.31	0.73	3.01	0.72	2.01	1.11	3.70	0.02	3.07	1.03	3.30	0.72	3.31	0.75
Older than 38 years old	3.32	0.83	3.51	0.78	3.78	0.46	3.43	0.80	3.40	0.84	2.57	1.02	3.74	0.55	3.11	0.95	3.36	0.79	3.37	0.85
Ž																				
Role in FBK	2.20	0.00	2.52	0.50	2.55	0.50	2.42	0.02	2.26	0.00	2.55	1.05	2.60	0.62	2.01	1.05	2.24	0.06	2.26	0.06
Researcher	3.39	0.80	3.52	0.73	3.75	0.52	3.43	0.82	3.36	0.88	2.55	1.07	3.69	0.63	3.01	1.05	3.26	0.86	3.36	0.86
Technologist	3.60	0.66	3.54	0.77	3.79	0.62	3.60	0.65	3.69	0.62	2.74	0.96	3.84	0.37	3.18	0.77	3.45	0.71	3.57	0.69
Collaborator	3.69	0.62	3.68	0.71	3.74	0.69	3.65	0.81	3.76	0.44	3.12	1.05	3.81	0.47	3.41	0.96	3.57	0.90	3.65	0.71
PhD Student	3.63	0.63	3.65	0.53	3.85	0.36	3.53	0.68	3.69	0.64	2.90	1.08	3.65	0.61	3.12	0.99	3.31	0.89	3.57	0.74
Type of contract																				
Permanent	3.31	0.84	3.51	0.76	3.82	0.40	3.39	0.83	3.38	0.86	2.53	1.04	3.71	0.58	3.13	0.91	3.32	0.74	3.36	0.85
contract	3.31	0.64	3.31	0.76	3.62	0.40	3.39	0.63	3.30	0.80	2.33	1.04	3.71	0.56	3.13	0.91	3.32	0.74	3.30	0.83
Fixed-term	3.62	0.62	3.56	0.71	3.65	0.70	3.58	0.70	3.51	0.83	2.68	1.06	3.73	0.62	2.90	1.12	3.25	0.95	3.47	0.81
contract																				
Other	3.66	0.62	3.66	0.62	3.79	0.56	3.59	0.75	3.72	0.55	3.00	1.06	3.73	0.54	3.24	0.98	3.44	0.90	3.61	0.72
Institute																				
CMM	3.32	0.88	3.35	0.86	3.81	0.43	3.43	0.73	3.39	0.80	2.53	0.97	3.66	0.64	3.06	0.84	3.35	0.76	3.27	0.85
CREATE-NET	3.69	0.72	3.72	0.65	3.76	0.55	3.52	0.68	3.72	0.63	2.94	1.11	3.86	0.43	3.60	0.76	3.47	0.72	3.70	0.65
ECT*	4.00	0.00	3.80	0.45	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	4.00	0.00	3.75	0.50
ECT* LISC	3.00	0.82	3.20	0.84	4.00	0.00	3.50	1.00	4.00	0.00	1.75	0.96	3.75	0.50	2.75	0.50	3.67	0.58	3.00	0.82
ICT	3.50	0.69	3.59	0.67	3.79	0.55	3.41	0.88	3.54	0.80	2.68	1.09	3.71	0.56	3.03	1.04	3.23	0.91	3.47	0.80
IRVAPP	3.67	0.49	3.80	0.56	3.20	0.86	3.93	0.26	3.07	0.92	3.00	1.18	3.77	0.83	2.88	1.25	3.58	0.90	3.77	0.60
ISIG	3.43	0.79	3.43	0.79	3.86	0.38	3.71	0.49	2.71	1.11	1.83	0.75	3.40	0.89	2.50	1.38	3.25	1.50	3.14	1.21
ISR	3.50	0.84	3.67	0.82	3.50	0.55	3.83	0.41	3.40	0.55	2.83	0.75	3.67	0.82	3.25	0.96	3.50	0.55	3.33	0.82
PROGETTI SPECIALI	3.29	0.95	3.57	0.53	3.86	0.38	3.86	0.38	4.00	0.00	2.50	0.84	3.71	0.49	3.14	1.21	3.17	0.98	3.14	1.21
51 LCIALI																				

Table B4: Average scores and standard deviations concerning section 4 "Training and development"

	Item					
	27		28			
	Mean	Sd	Mean	Sd		
Gender						
Males	3.61	0.66	3.50	0.76		
Females	3.63	0.75	3.51	0.75		
Nationality						
Foreigner	3.71	0.65	3.71	0.61		
Italian	3.59	0.69	3.44	0.79		
Age						
Up to 38 years old	3.66	0.66	3.54	0.75		
Older than 38 years old	3.59	0.70	3.47	0.77		
Role in FBK						
Researcher	3.68	0.61	3.56	0.69		
Technologist	3.55	0.64	3.46	0.71		
Collaborator	3.61	0.74	3.41	1.01		
PhD Student	3.36	0.99	3.36	0.83		
Type of contract						
Permanent contract	3.60	0.66	3.49	0.69		
Fixed-term contract	3.75	0.52	3.62	0.70		
Other	3.48	0.87	3.38	0.92		
Institute						
CMM	3.58	0.65	3.46	0.76		
CREATE-NET	3.74	0.56	3.69	0.66		
ECT*	4.00	0.00	4.00	0.00		
ECT* LISC	3.50	0.58	3.60	0.55		
ICT	3.59	0.71	3.40	0.79		
IRVAPP	3.92	0.29	4.00	0.00		
ISIG	3.14	1.07	3.83	0.41		
ISR	3.83	0.41	3.67	0.52		
PROGETTI SPECIALI	3.40	1.34	3.00	1.29		

Appendix IV Factor analysis

For each battery of items, we estimate first the Cronbach's alpha, a measure used to assess the internal consistency of groups of items. Alpha coefficients range in value from 0 to 1, with higher values indicating consistent, unidimensional scale. Alpha values are considered acceptable when they are higher than 0.7; they are considered good above 0.8. Cronbach's alpha is equal to or higher than 0.85 for the first three sections (ethical and professional aspects; recruitment and selection; working conditions and social security), indicating the existence of only one latent factor. The last section shows a poorer fit, with Cronbach's alpha equating to 0.67. The value is however very close to the acceptable threshold.

In addition to estimating Cronbach's alpha, we performed an explorative analysis called factor analysis; i.e., a method for investigating whether a number of variables of interest are linearly related to a smaller number of latent factors. The analysis confirmed that there is only one unobservable variable for each area of the questionnaire, which summarizes the respective area. Table C1 shows the values of the factor loadings, which express the correlation between original items and latent factor (the highest is the value the strongest is the relationship).

Table C1. Factor loadings

Item		oadings		
Itelli	Factor 1	Factor 2	Factor 3	Factor 4
1	0.69			
2				
3				
4	0.53			
5	0.69			
6	0.60			
7	0.43			
8	0.69			
9		0.66		
10		0.73		
11		0.75		
12		0.68		
13		0.74		
14		0.73		
15		0.57		
16		0.51		
17			0.70	
18			0.66	
19			0.42	
20			0.49	
21			0.53	
22			0.68	
23			0.64	
24			0.78	
25			0.75	
26			0.59	
27				0.61
28				0.61

Note Cronbach's alpha: section 1= 0.85, section 2= 0.87, section 3= 0.85, section 4=0.66