Human Resources Strategy for Researchers
HRS4R Online survey results

On 05/04/2023, an online survey was sent to UniUrb research staff, including PhD candidates and Research Fellows, both to assess the researchers' perception of the level of implementation of the 40 principles of *The European Charter for Researchers* and of *The Code of Conduct for the Recruitment of Researchers* within our institution, and to identify their needs.

The survey was drafted by the Researchers' Working Group and validated by the Steering Committee, appointed in December 2022. Each principle was investigated with at least one item in order to have the widest vision of the current *C&C* implementation status. Each item was formulated as a statement, and respondents were asked to express their level of agreement on a four-point Likert scale (1 = totally disagree; 2 = moderately disagree; 3 = moderately agree; 4 = totally agree). This choice was aimed at avoiding the "*central tendency bias*". In some cases, different items corresponded to a single principle to allow the analysis of specific aspects of the same principle.

The principles and the related items were grouped in thematic sections corresponding to the thematic headings indicated in the HRS4R templates:

- Ethical and Professional Aspects;
- Recruitment and Selection;
- Working Conditions and Social Security;
- Training and Development.

At the end of each section, researchers were asked to indicate a maximum of three principles felt as priorities. It was possible, therefore, to establish a link between the implementation status of each principle and the importance recognised to it by the academic community.

The survey was preceded by a section concerning personal data, and specifically:

- Gender;
- Age;
- Department of Affiliation;
- Scientific Area;
- Academic Position.

The survey stayed open for submission until April 26th. By that date 361 researchers had provided their answers, i.e., 58.60% of the potential respondents.
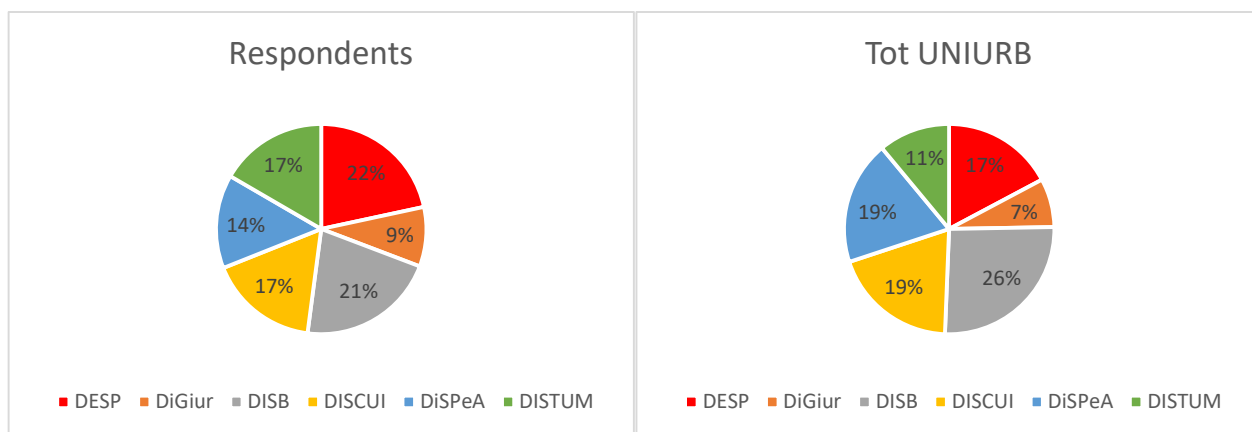
1. Respondents' profile

The collected data show that the respondents' distribution in terms of gender, Department of affiliation, academic position is consistent with the total of UniUrb's research staff.
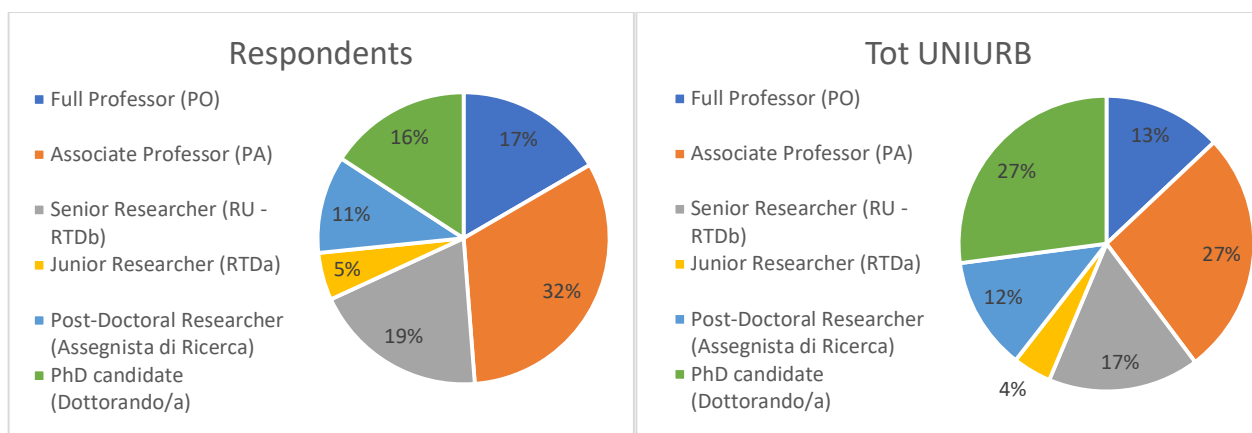
In particular, the percentage of men and women researchers correspond to the composition of the University's research staff:

Respondents

M: 51% · F: 48% · prefer not to anwer / preferisce non rispondere: 1%

Tot UNIURB

M: 52% · F: 48%
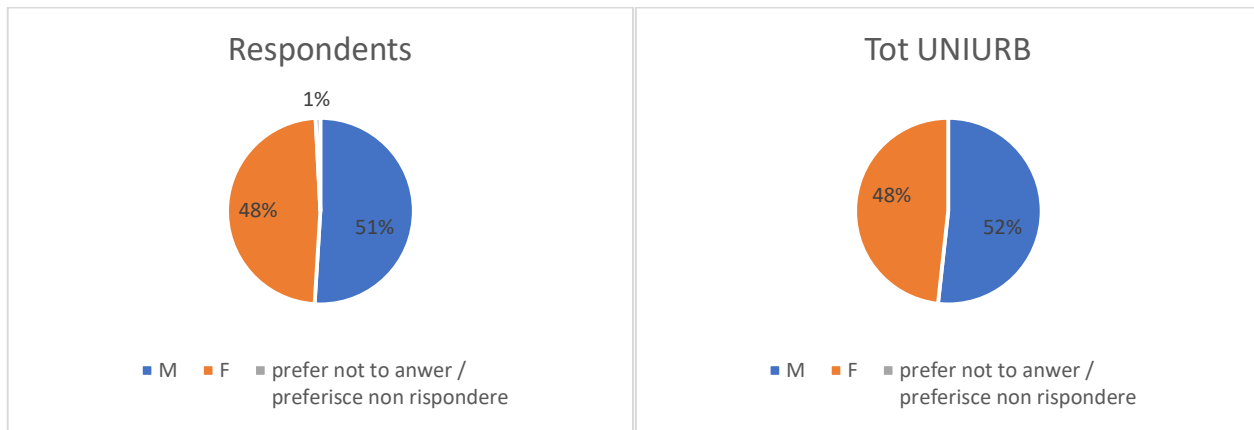
For what concerns the Department of affiliation, the distribution if the respondents' does not differ substantially with the distribution of researchers among the University's Departments, even if some small variations (smaller than 6%) are reported.

Respondents

DESP: 22% · DiGiur: 9% · DISB: 21% · DISCUI: 17% · DiSPeA: 14% · DISTUM: 17%

Tot UNIURB

DESP: 17% · DiGiur: 7% · DISB: 26% · DISCUI: 19% · DiSPeA: 19% · DISTUM: 11%

Finally, a good correspondence between respondents and staff composition is observable with reference to the Academic position, even if a low participation of PhD candidates has to be remarked.

Respondents

- Full Professor (PO): 17%
- Associate Professor (PA): 32%
- Senior Researcher (RU - RTDb): 19%
- Junior Researcher (RTDa): 5%
- Post-Doctoral Researcher (Assegnista di Ricerca): 11%
- PhD candidate (Dottorando/a): 16%

Tot UNIURB

- Full Professor (PO): 13%
- Associate Professor (PA): 27%
- Senior Researcher (RU - RTDb): 17%
- Junior Researcher (RTDa): 4%
- Post-Doctoral Researcher (Assegnista di Ricerca): 12%
- PhD candidate (Dottorando/a): 27%

These results confirm that the pool of respondents is representative of the entire UniUrb population.

2. Analysis of the survey results

Aggregated data on responses to individual items and their histograms are shown below (X-axis reports the level of agreement from 1 to 4; Y-axis reports the number of respondents), grouped on the basis of the correspondent section. To highlight the mean of the agreement level, descriptive tables are provided at the end of each section, followed by bar charts reporting the mean of the agreement level corresponding to each principle, to make the relevant data easily readable. The tables were obtained thanks to the open statistical software Jamovi (https://www.jamovi.org). A sufficient level of agreement is considered as reached when the mean of responses is equal or higher than 3; the level of agreement is considered low when the mean of responses is lower than 3.
The items returning a low level of agreement are considered worthy of further attention, as well as those reaching a mean of barely sufficient responses (i.e., included between 3 and 3.10).

In those cases where it was possible to design different actions addressed to the different categories of respondents, descriptive tables reporting the mean, median and standard deviation of the results sorted by academic position, gender or area of affiliation[1] of the respondents are shown below.

To proceed to the data analysis and to enter them in the descriptive tables, individual items have been renamed using a unique code designed to report:

Section number_principle number within the related section_Item number within the related principle_sub-item number (if applicable) – e.g. C1_4_2 indicates the second item related to the fourth principle of the first section.

If more than one item refers to the same principle, we computed the mean agreement by averaging the mean values of the items. Accordingly, in the descriptive table, the unique code reports:

Section number_principle number_M – e.g., C1_4_M indicates the average level of the agreement reached by the items related to the fourth principle of the first section.

---

[1] According to the University's General Regulation, art. 25, § 1, scientific areas are intended as follows: Scientific Area (Area Scientifica); Humanities (Area Umanistica); Social Sciences (Area Giuridico-Economico-Politico-Sociale - G.E.P.S.)

## 2.1. Section 1: Ethical and Professional Aspects

1- RESEARCH FREEDOM

C1_1: The University allows me to freely choose the topics and methods of my research activity, within the limits of available resources and while respecting the practices and ethical principles of my work.
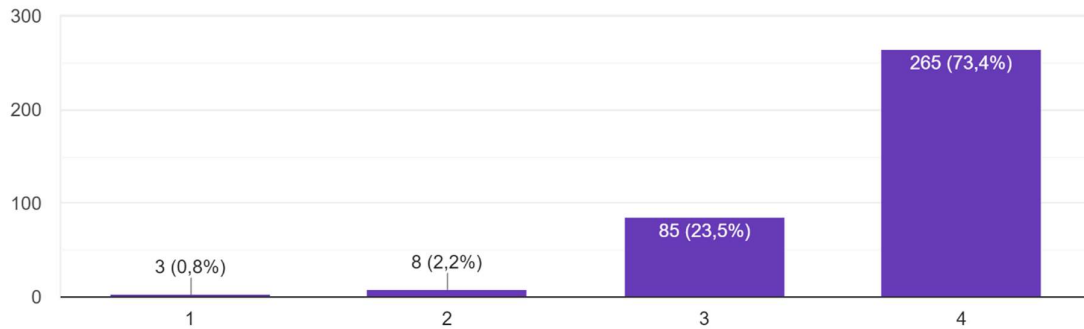

2- ETHICAL PRINCIPLES

C1_2: I am properly informed about the recognised ethical practices and fundamental ethical principles suited to the discipline(s) of my research activity.
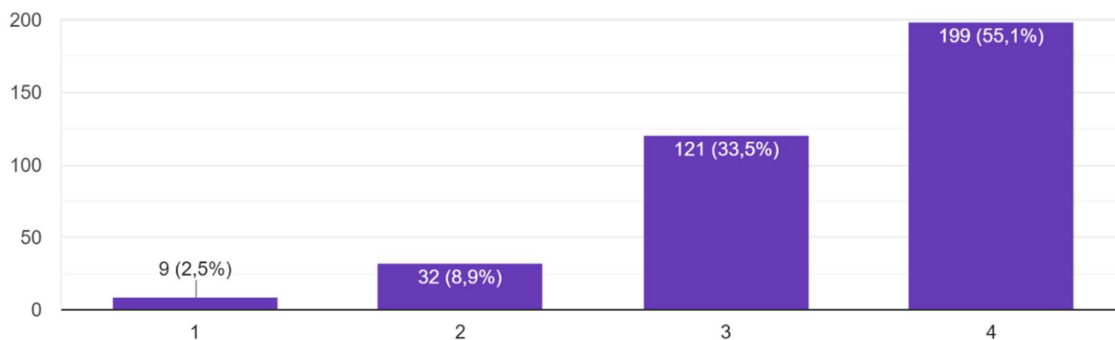

3- PROFESSIONAL RESPONSIBILITY

C1_3: I know my responsability constraints towards the research community and the society as a whole, avoiding plagiarism and abiding by the principle of intellectual property.
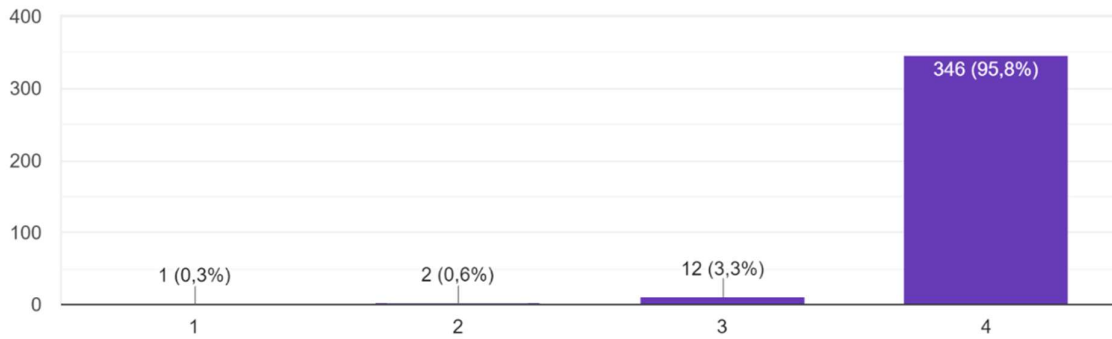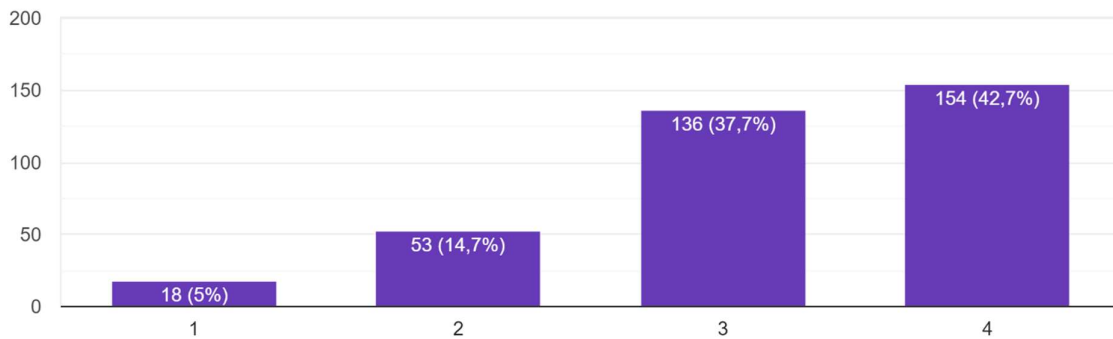
4- PROFESSIONAL ATTITUDE

C1_4_1: I am familiar with the funding mechanisms and the strategic orientations of national and international programmes that guide research activity in my scientific area.
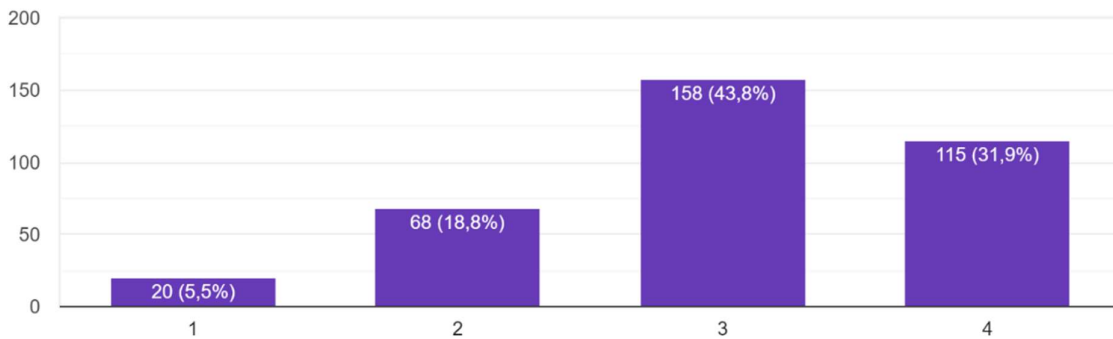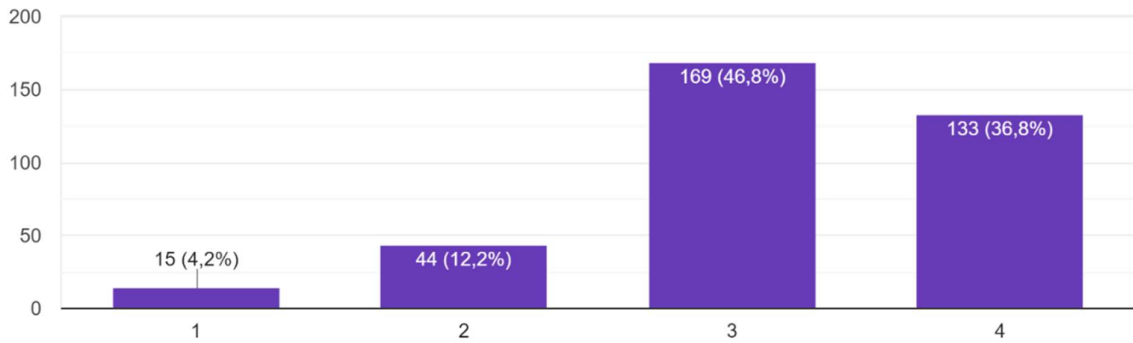

C1_4_2: I am aware of the main strategic goals identified by the University and my Department which guide research activity in my scientific area.
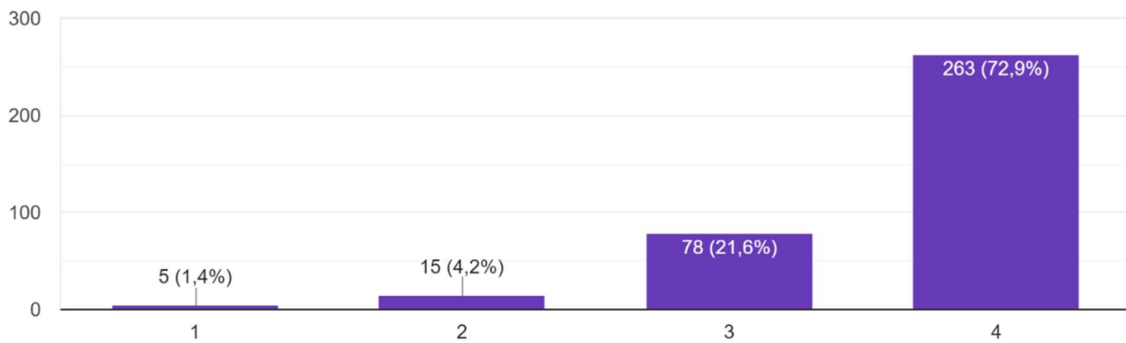

5- CONTRACTUAL AND LEGAL OBLIGATIONS

C1_5: I am familiar with the regulations of the legal framework concerning the intellectual property and the funders' conditions.

6- ACCOUNTABILITY

C1_6: I am aware that I am accountable for the financial management of my research, and I adhere to the principles of transparency and efficient use of the research funds.


7- GOOD PRACTICE IN RESEARCH

C1_7_1: As required by the national legislation, I know and usually adopt safe working practices for the physical and psychological health and safety of myself, my team and everyone involved in various ways in my research activity.
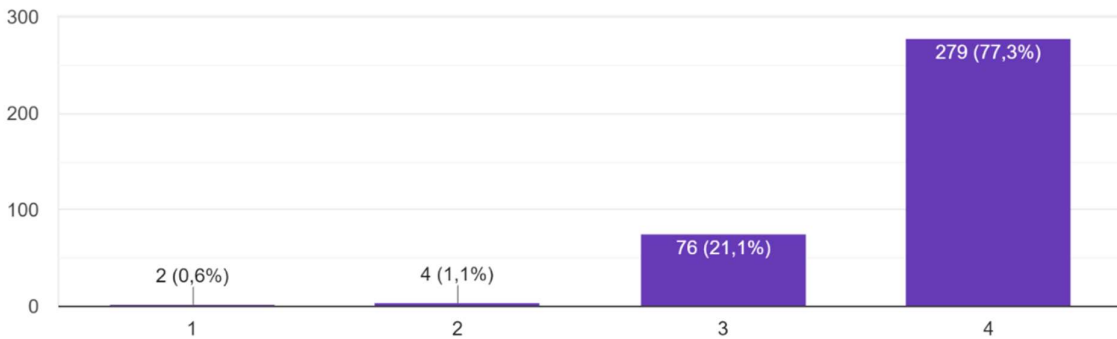

C1_7_2: I usually adopt proper back up strategies to prevent information technology disasters, as well as appropriate practices for sensitive information processing.
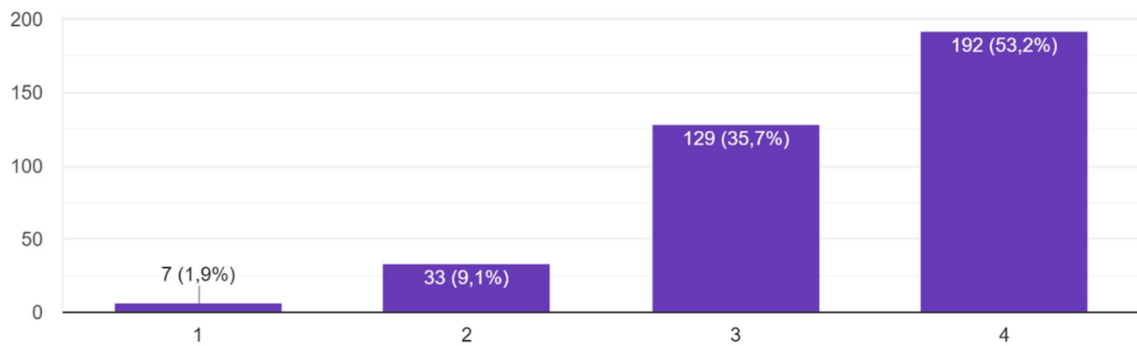
8- Dissemination and Exploitation of Results

C1_8: The results of my research are accessible and adequately disseminated for the benefit of society as a whole, whenever the opportunity arises and within the limits of copyright and legal framework of the research commissioner.
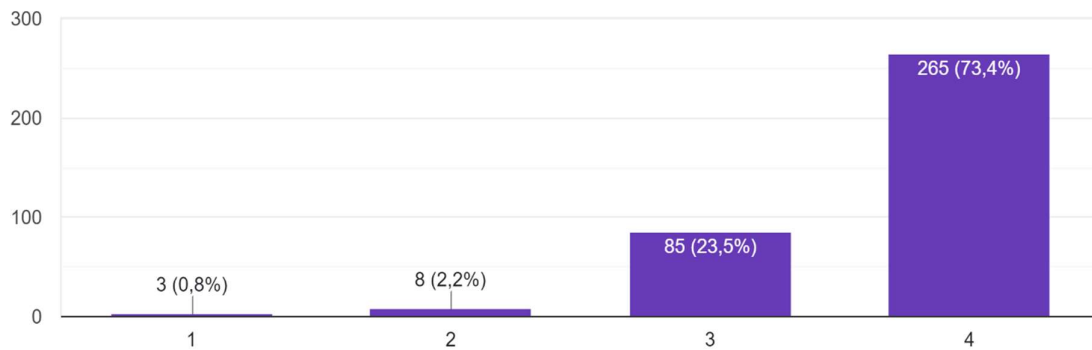

9- Public Engagement

C1_9: I do my best in order to make the results of my work known to society at large in such a way that they can be understood by non-specialists, also to improve public interest in my research field.
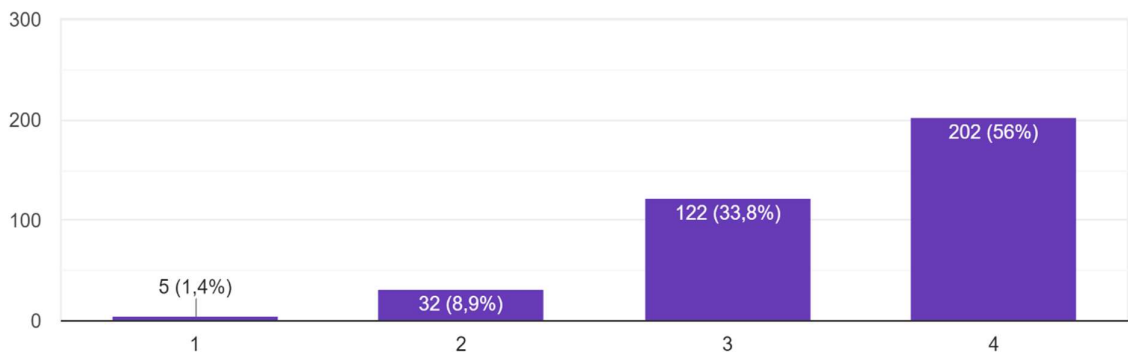

10- Non Discrimination

C1_10_1: The University is committed to avoiding discriminations on the basis of: (Please choose the appropriate option for each item).

C1_10_1_1: Gender

C1_10_1_2: Age

C1_10_1_3: Ethnic origin

C1_10_1_4: Religion

C1_10_1_5: Sexual orientation

C1_10_1_6: Political opinions

C1_10_1_7: Social-economic condition

C1_10_1_8: Academic position

C1_10_1_9: Disability
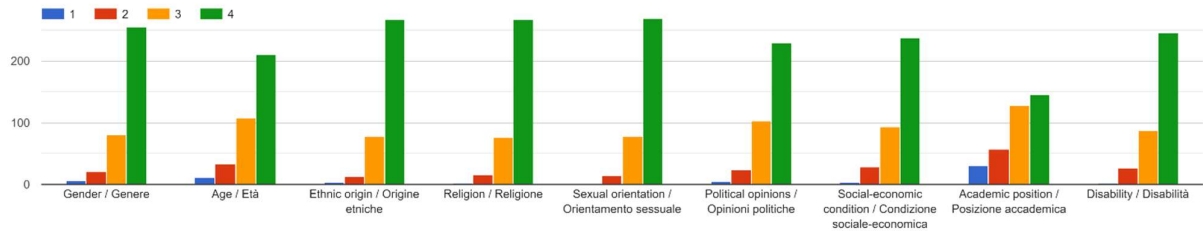
11- EVALUATION / APPRAISAL SYSTEMS

C1_11: When evaluating my professional performance, the University's appraisal systems take into account both the overall quality of my research and my contribution to the achievement of the main institutional goals.
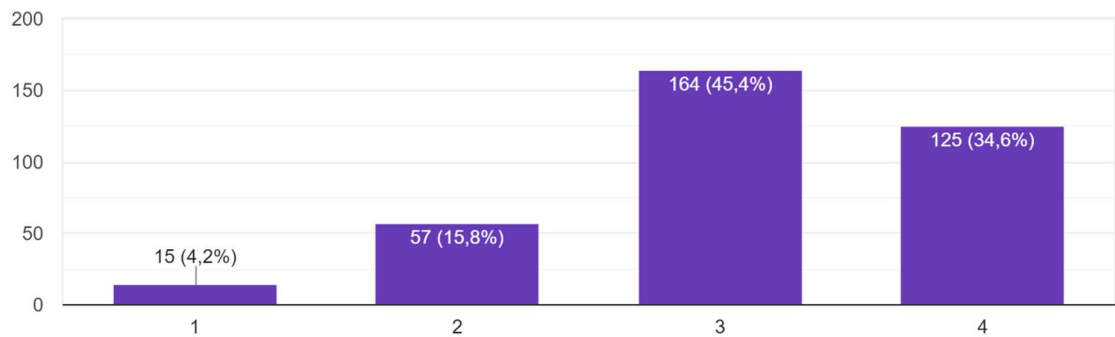
Tab.1: DESCRIPTIVE TABLE Section 1: Ethical and Professional Aspects

	Mean	Median	SD
C1_1	3.69	4.00	0.635
C1_2	3.41	4.00	0.756
C1_3	3.95	4.00	0.279
C1_4_1	**3.02**	**3.00**	**0.855**
C1_4_2	3.18	3.00	0.862
C1_4_M	3.10	3.00	0.777
C1_5	3.16	3.00	0.795
C1_6	3.66	4.00	0.626
C1_7_1	3.75	4.00	0.493
C1_7_2	3.40	4.00	0.736

C1_7_M	3.58	3.50	0.503
C1_8	3.70	4.00	0.554
C1_9	3.44	4.00	0.713
C1_10_1_1	3.62	4.00	0.669
C1_10_1_2	3.43	4.00	0.783
C1_10_1_3	3.69	4.00	0.581
C1_10_1_4	3.68	4.00	0.582
C1_10_1_5	3.71	4.00	0.535
C1_10_1_6	3.54	4.00	0.682
C1_10_1_7	3.56	4.00	0.673
C1_10_1_8	**3.08**	**3.00**	**0.943**
C1_10_1_9	3.59	4.00	0.652
C1_10_1M	3.54	3.78	0.533
C1_11	3.11	3.00	0.813

SECTION 1: MEAN OF THE AGREEMENT LEVEL

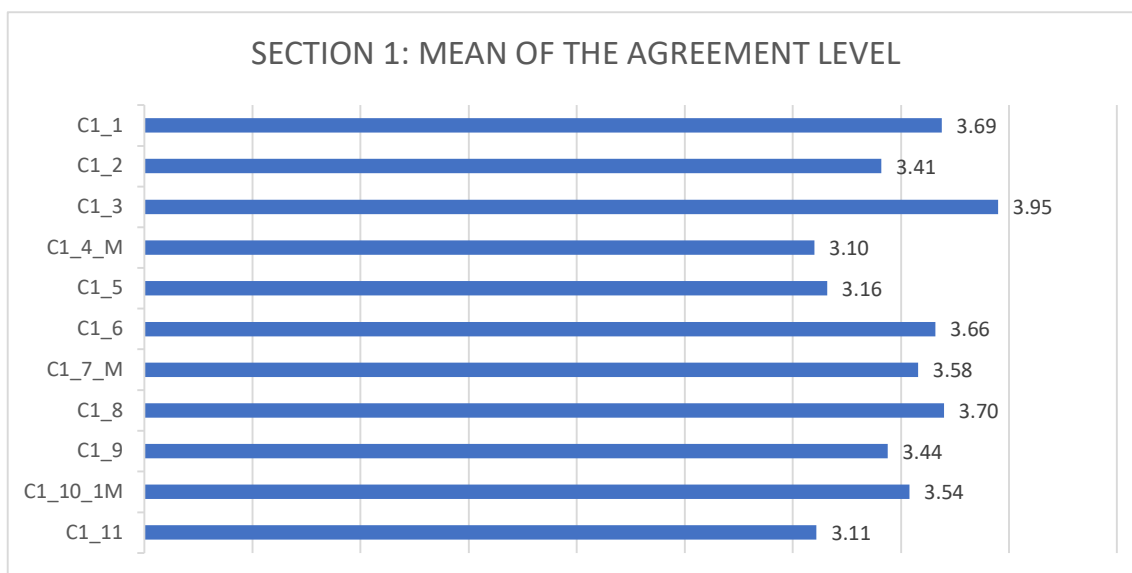|	
C1_1	3.69
C1_2	3.41
C1_3	3.95
C1_4_M	3.10
C1_5	3.16
C1_6	3.66
C1_7_M	3.58
C1_8	3.70
C1_9	3.44
C1_10_1M	3.54
C1_11	3.11

Fig: 1: Mean of the agreement level for section 1

C1_4_1: I am familiar with the funding mechanisms and the strategic orientations of national and international programmes that guide research activity in my scientific area.

MEAN OF THE AGREEMENT LEVEL: 3.02

The mean of the agreement level is barely sufficient; survey results have been further analysed taking into consideration the respondents' academic position and its possible correlation with the collected results.
As shown by table 1.1, the knowledge of the funding programmes increases with academic seniority.

	Academic position	C1_4_1
Mean	PO	3.37
	PA	3.23
	RU-RTDb	3.10
	RTDa	2.84
	Post-Doc	2.69
	PhDcandidate	2.40
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3.00
	Post-Doc	3.00
	PhDcandidate	2.00
Standard Deviation	PO	0.712
	PA	0.738
	RU-RTDb	0.640
	RTDa	0.834
	Post-Doc	0.863
	PhDcandidate	1.05

Tab. 1.1

C1_10_1: The University is committed to avoiding discriminations on the basis of:

> […]
> C1_10_1_8: Academic position
> […]

MEAN OF THE AGREEMENT LEVEL: 3.08

The level of agreement is barely sufficient, the item has been further analysed on the basis of the respondents' academic position (see *Tab. 1.2*).
The level of agreement is insufficient among Associate Professors and PhD candidates; barely sufficient among Junior fixed-term researcher (RTD-a); fully sufficient among Post-Docs (Research Fellows), Senior Researchers (RU), Senior Fixed-Term Researchers (RTD-b) and Full Professors.

Tab. 1.2

	Academic position	C1_10_1_8
Mean	PO	3.43
	PA	2.82

Tab. 1.2

	Academic position	C1_10_1_8
	RU-RTDb	3.26
	RTDa	3.00
	Post-Doc	3.15
	PhDcandidate	2.98
Median	PO	4.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3.00
	Post-Doc	3.00
	PhDcandidate	3.00
Standard Deviation	PO	0.698
	PA	1.03
	RU-RTDb	0.863
	RTDa	0.816
	Post-Doc	0.875
	PhDcandidate	1.03

2.2 Section 2: Recruitment and Selection

12- RECRUITMENT (CHARTER)

C2_1_1: The University ensures that the entry and admission standards for researchers are advertised as widely as possible, particularly for early-stage researchers.
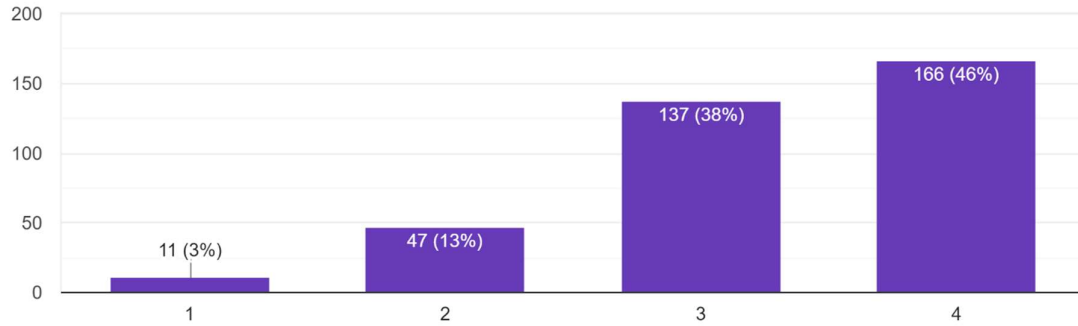
C2_1_2: The University supports disadvantaged groups (researchers coming from other countries, disabled researchers, etc) or researchers resuming their research career after a break.
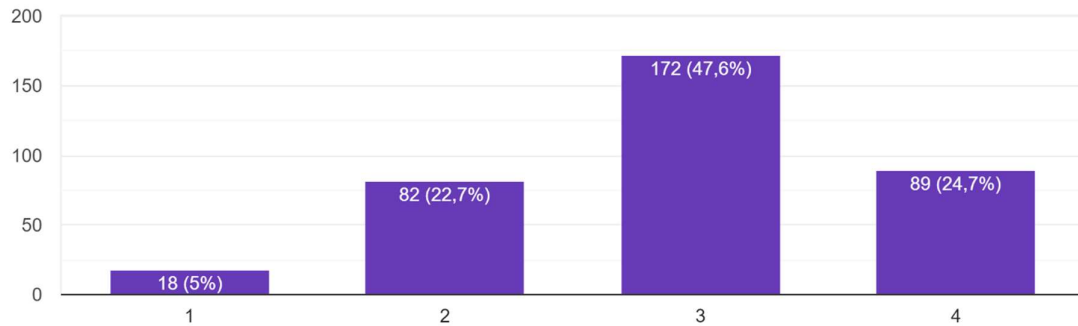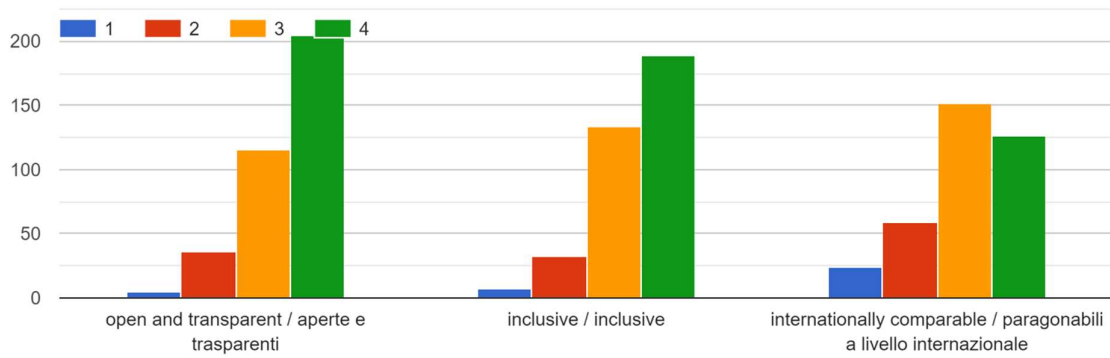

13- RECRUITMENT (CODE)

C2_2_1: Recruitment procedures are: (Please choose the appropriate option for each item)
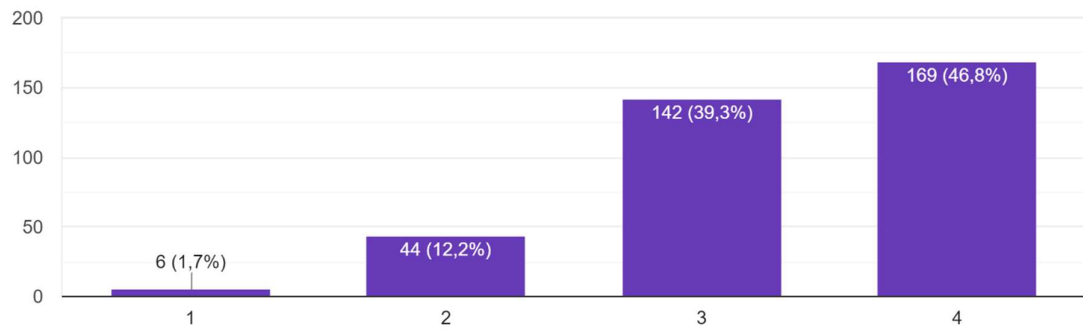
C2_2_1_1: open and transparent
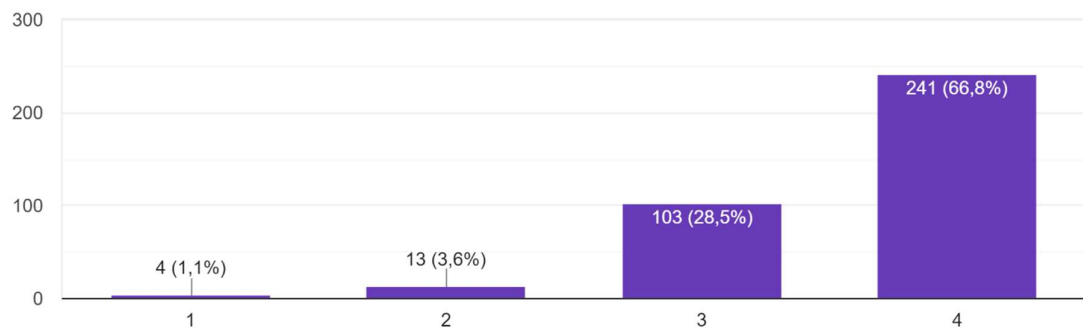C2_2_1_2: inclusive
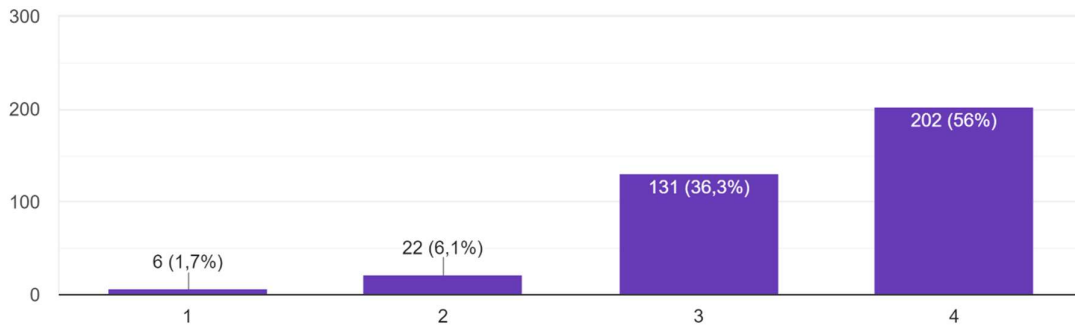C2_2_1_3: internationally comparable

C2_2_2: Job vacancies describe the required scientific knowledge, in such a broad way to include as many candidates as possible.

C2_2_3: The time allowed between the advertisement of the job vacancy and the deadline for reply is reasonable.
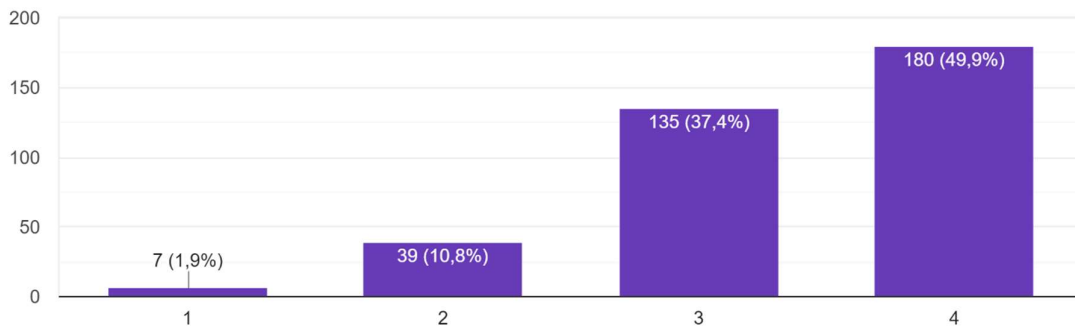

C2_2_4: Job vacancies are published in periods of regular academic activity.
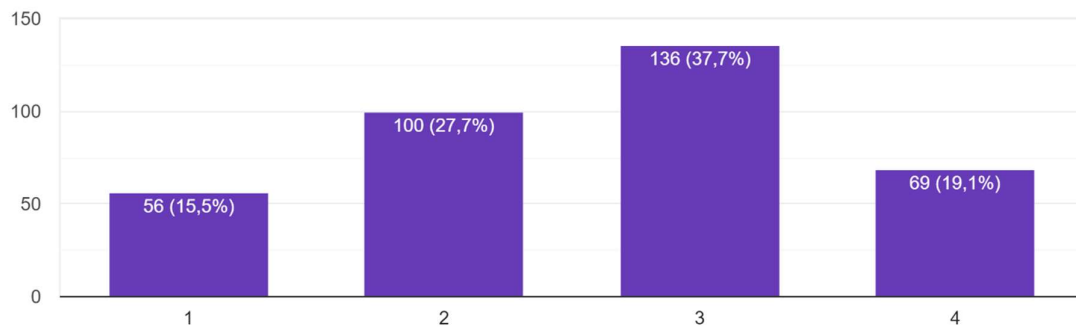
14- SELECTION (CODE)

C2_3: Selection procedures are adequate in order to evaluate the candidate's abilities in relation to the advertised job position.


15- TRANSPARENCY (CODE)

C2_4: After the selection process the University informs all candidates about the strengths and weaknesses of their applications.


16- JUDGING MERIT (CODE)

C2_5: Selection procedures take into due consideration the whole range of experience of the candidates and make use of a wide range of evaluation criteria, both quantitative and qualitative.
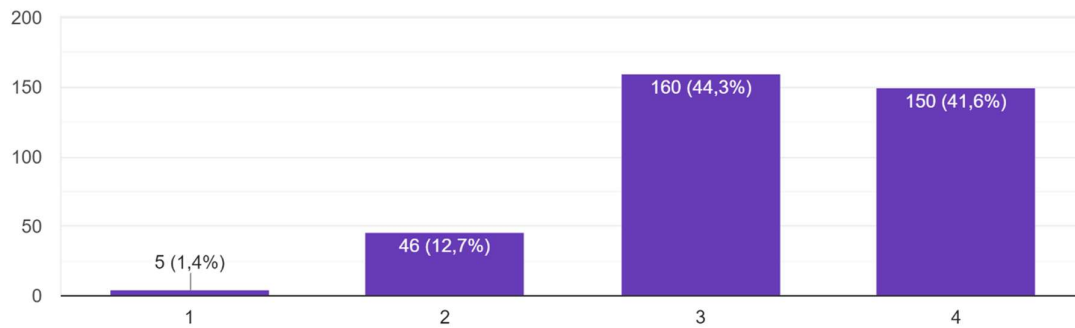
17- VARIATIONS IN THE CHRONOLOGICAL ORDER OF CVS (CODE)

C2_6: Career breaks and/or discontinuity in research as a result of other working experiences are evaluated as potentially relevant to the professional development of researchers.
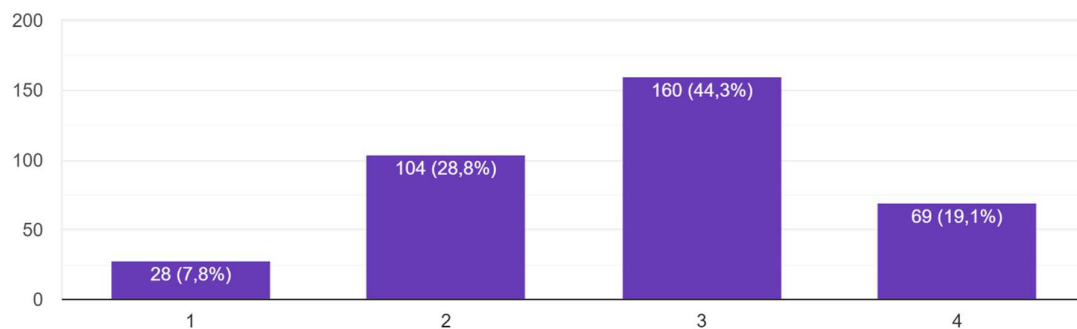
18- RECOGNITION OF MOBILITY EXPERIENCE (CODE)
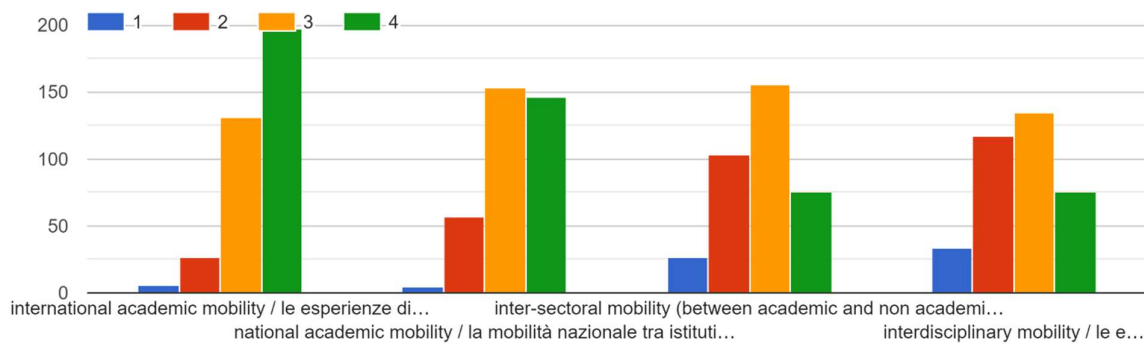
C2_7_1: During the selection procedures, the following experiences are considered positive factors for recruitment and selection: (Please choose the appropriate option for each item).

C2_7_1_1: international academic mobility

C2_7_1_2: national academic mobility

C2_7_1_3: inter-sectoral mobility (between academic and non academic sectors)

C2_7_1_4: interdisciplinary mobility

19- RECOGNITION OF QUALIFICATIONS (CODE)

C2_8: During the selection procedures, qualifications acquired in non-formal contexts are taken into consideration as part of the evaluation of the candidate's CV.
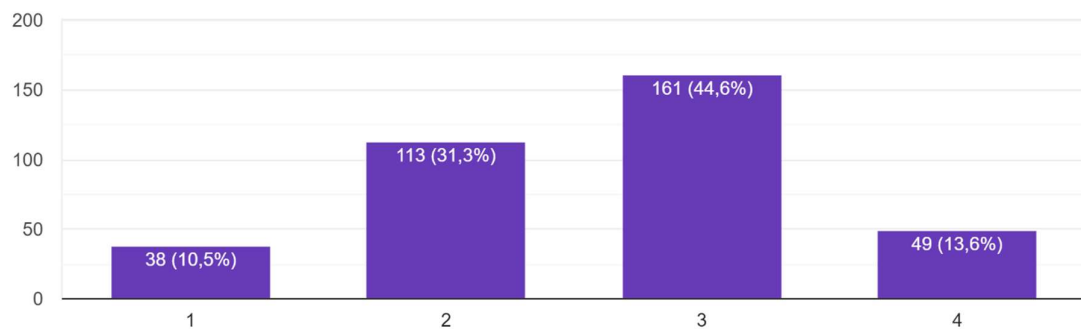
20- SENIORITY (CODE)

C2_9_1: Evaluation and appraisal during selection procedures are objectively focused on the candidates' achievements, regardless of the reputation of the Institution where the qualifications were gained.
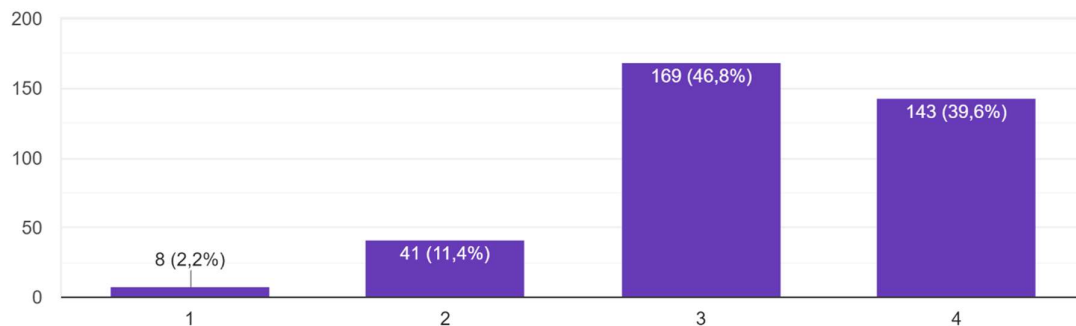
C2_9_2: The levels of qualifications and/or skills and competences completely meet the requirements of the advertised job position.

21- POSTDOCTORAL APPOINTMENTS (CODE)

C2_10_1: Postdoctoral researchers' career path is clearly identified: (Please choose the appropriate option for each item).

C2_10_1_1: with specific regard to the duration of postdoctoral status (i.e., maximum duration of the contract, renewals included), subject to the positive evaluation of the report about research achievements
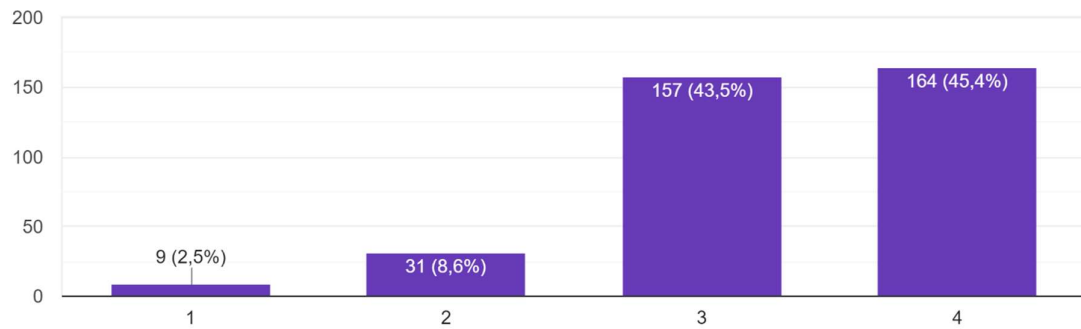
C2_10_1_2: with specific regard to its transitional character and professional career prospects
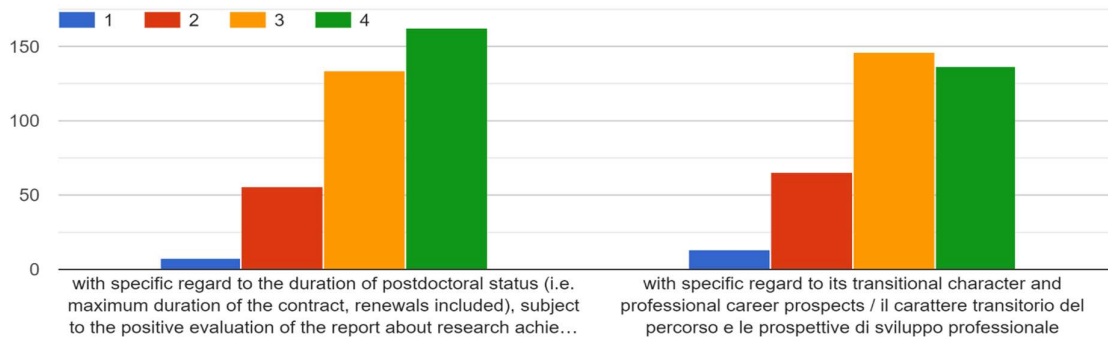
Tab. 2: DESCRIPTIVE TABLE – Section 2: Recruitment and Selection

	Mean	Median	SD
C2_1_1	3.27	3	0.801
C2_1_2	**2.92**	**3**	**0.818**
C2_1_M	3.09	3.00	0.709
C2_2_1_1	3.44	4	0.728
C2_2_1_2	3.40	4	0.731
C2_2_1_3	**3.05**	**3**	**0.882**
C2_2_1_M	3.30	3.33	0.692
C2_2_2	3.31	3	0.748
C2_2_3	3.61	4	0.614
C2_2_4	3.47	4	0.687
C2_2_M	3.42	3.58	0.577

	Mean	Median	SD
C2_3	3.35	3	0.750
C2_4	**2.60**	**3**	**0.967**
C2_5	3.26	3	0.729
C2_6	**2.75**	**3**	**0.853**
C2_7_1_1	3.44	4	0.705
C2_7_1_2	3.22	3	0.756
C2_7_1_3	**2.77**	**3**	**0.862**
C2_7_1_4	**2.70**	**3**	**0.904**
C2_7_1_M	3.03	3.00	0.671
C2_8	**2.61**	**3**	**0.849**
C2_9_1	3.24	3	0.737
C2_9_2	3.32	3	0.735
C2_9_M	3.28	3.50	0.663
C2_10_1_1	3.25	3	0.796
C2_10_1_2	3.13	3	0.830
C2_10_1_M	3.19	3.00	0.742
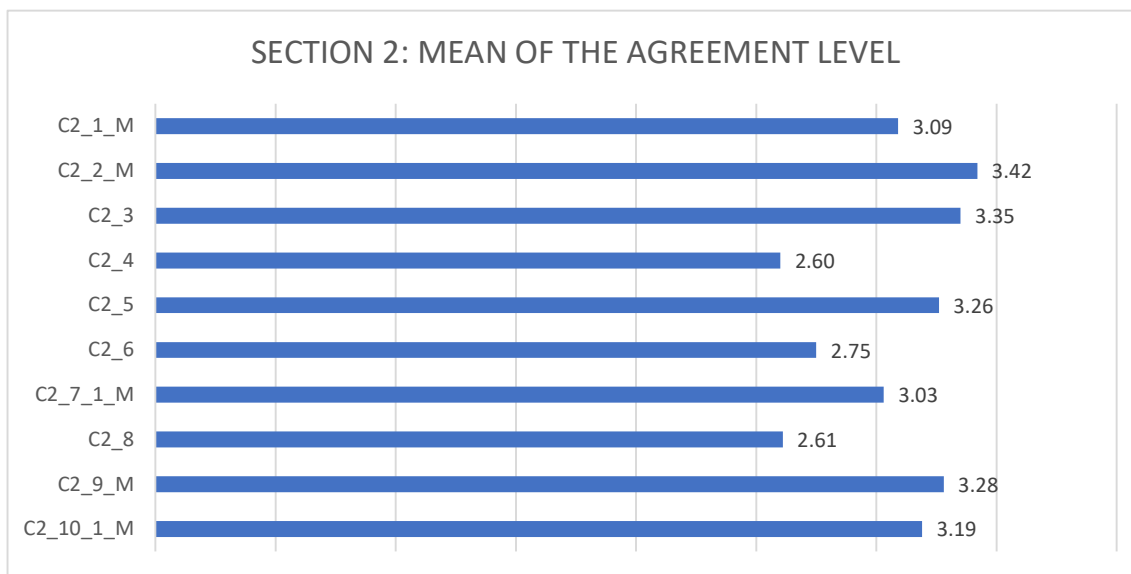
Fig. 2: Mean of the agreement level for section 2

C2_1_2: The University supports disadvantaged groups (researchers coming from other countries, disabled researchers, etc) or researchers resuming their research career after a break.

MEAN OF THE AGREEMENT LEVEL: 2.92

The item's mean of the agreement level is low and it has been further analysed taking into account a possible effect of gender (see Tab. 2.1). The mean of the level of agreement is insufficient both for women and for male respondents; however, the latter show a higher level of agreement.

Tab. 2.1

	Gender	C2_1_2
Mean	F	2.89
	M	2.95
Median	F	3.00
	M	3.00
Standard Deviation	F	0.804
	M	0.835

C2_4: After the selection process the University informs all candidates about the strengths and weaknesses of their applications.

MEAN OF THE AGREEMENT LEVEL: 2.60

The mean of the agreement level is clearly insufficient; results have been analysed, with reference to the respondents' academic position (*Tab. 2.2*).
All categories show a low level of agreement with the item; the lowest values are expressed by Junior Fixed-term researcher (RTD-a) and the highest are expressed by Senior Fixed-Term Researchers (RTD-b).

Tab. 2.2

	Academic position	C2_4
Mean	PO	2.50
	PA	2.59
	RU-RTDb	2.83
	RTDa	2.47
	Post-Doc	2.56
	PhDcandidate	2.54
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	2
	Post-Doc	3
	PhDcandidate	2
Standard Deviation	PO	0.911
	PA	0.970
	RU-RTDb	0.868
	RTDa	1.12
	Post-Doc	0.968
	PhDcandidate	1.07

2.3. Section 3: working Conditions and Social Security

22- RECOGNITION OF THE PROFESSION

C3_1: The University's academic community adequately recognises to all researchers, including those at the beginning of their career (e.g., PhD candidates, post-docs), their competencies and the relevance of their contribution.
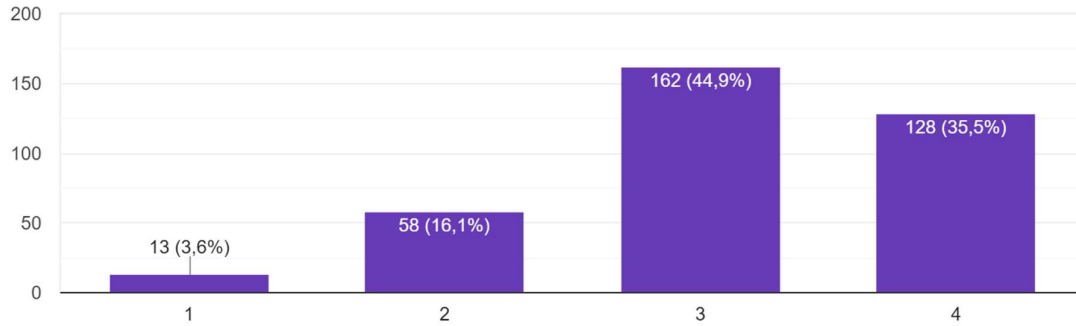
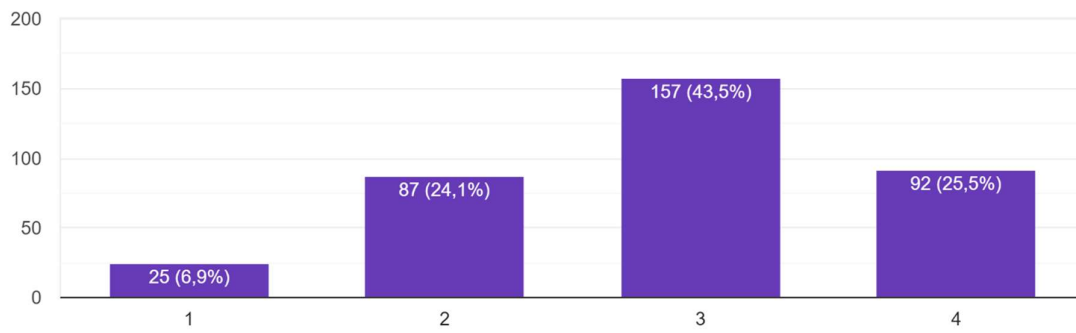23- RESEARCH ENVIRONMENT

C3_2_1: Research environment fosters collaboration over research networks, encouraging researchers to share their results with the national and international scientific community.
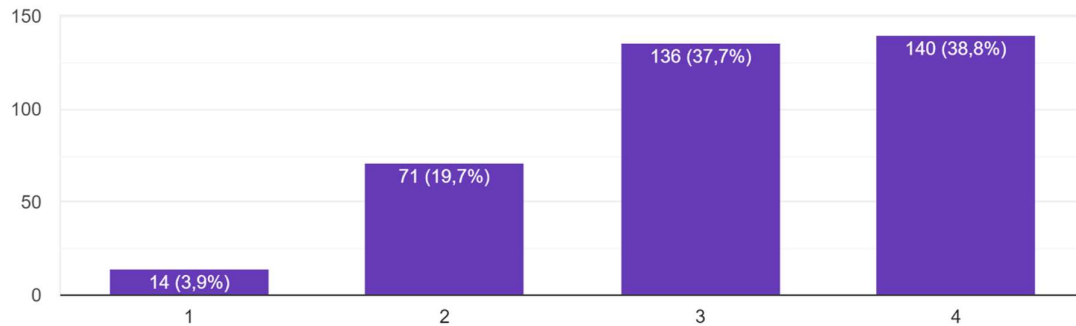
C3_2_2: The environment within the University/Department offers suitable equipment/materials, spaces and facilities to allow the achievement of results, useful to the advancement of knowledge.

C3_2_3: The research environment complies with national regulations on health and safety.
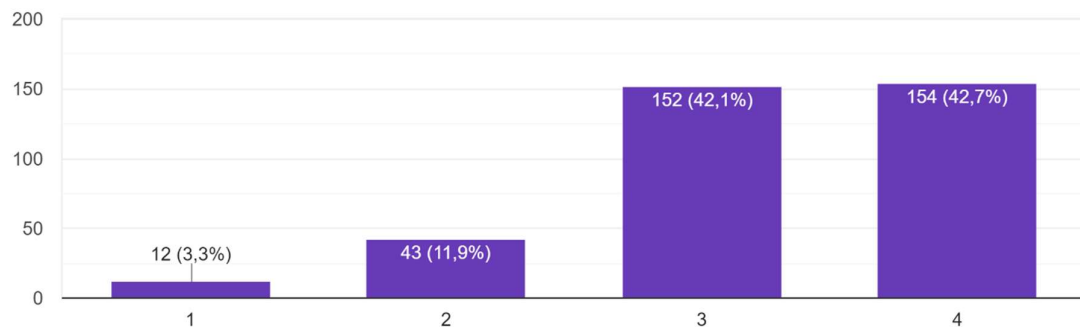
24- WORKING CONDITIONS

C3_3: The University ensures me the possibility to organise my research activity combining career and family, by resorting to part-time working, tele-working and services.
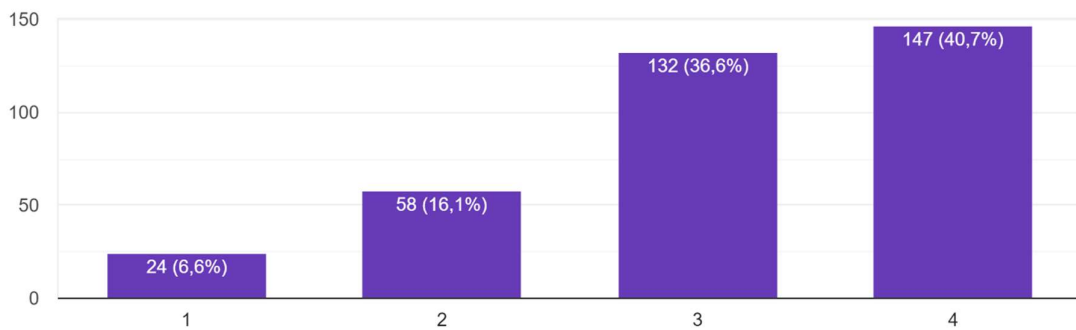
25- STABILITY AND PERMANENCE OF EMPLOYMENT

C3_4_1: The University is committed to ensuring the stability of contracts of fixed-term researchers, by securing the necessary resources.

C3_4_2: The University encourages fixed-term researchers' professional growth, in order to promote their access to stable employment.
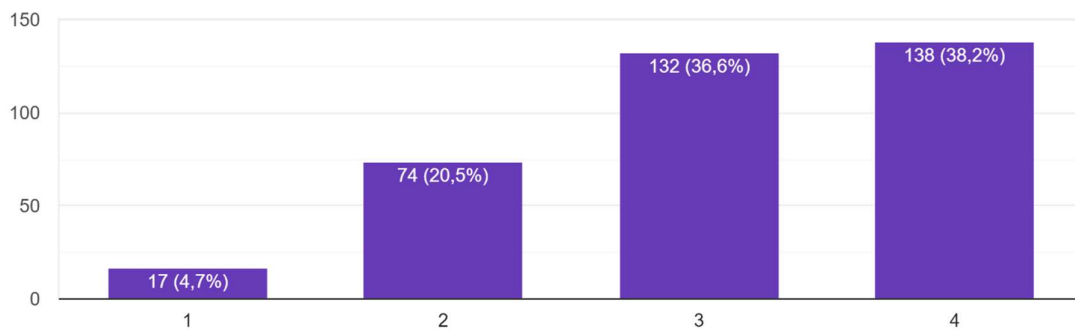
26- FUNDING AND SALARIES

C3_5: The University ensures me 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).
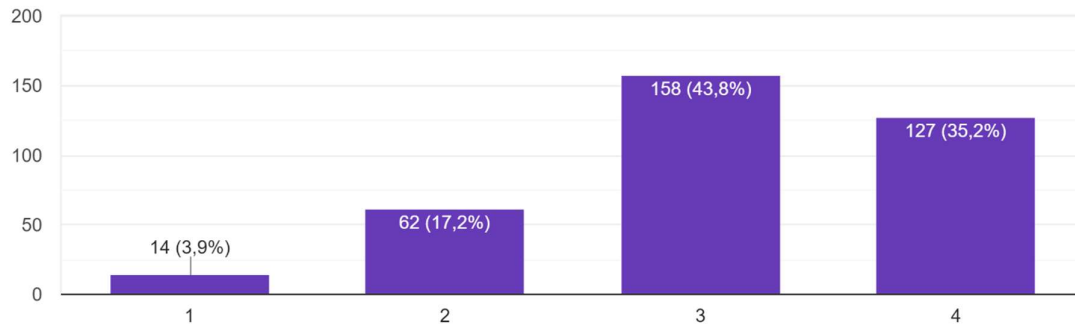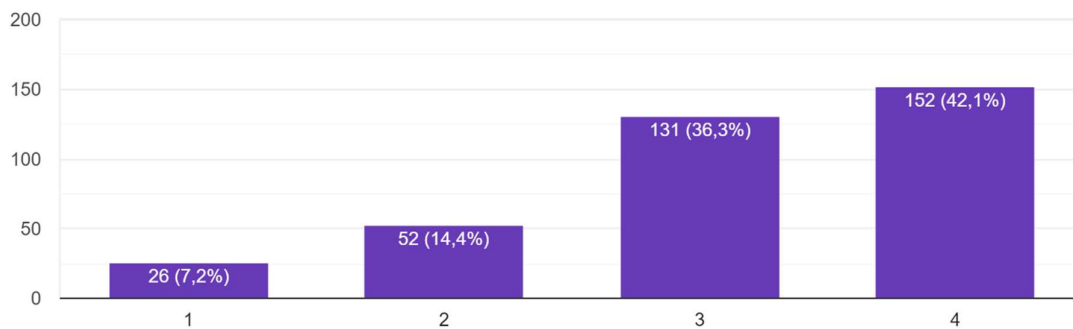

27- GENDER BALANCE

C3_6: The University actively pursues gender balance at all levels of staff, including supervisory and managerial level, though without taking precedence over quality and competence criteria.
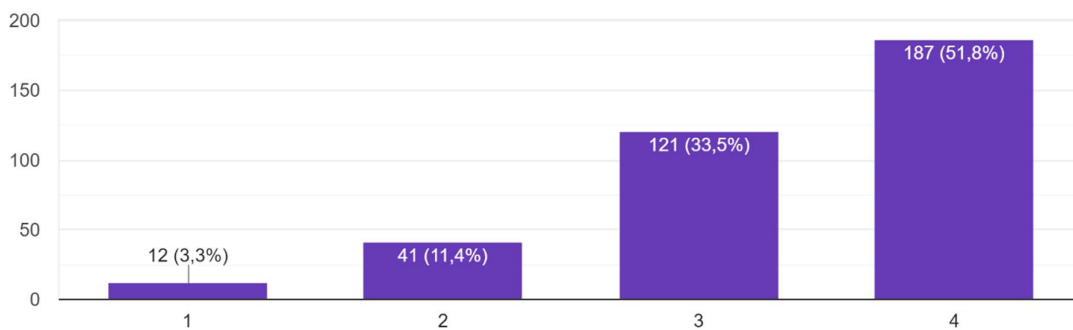
28- CAREER DEVELOPMENT

C3_7_1: The University encourages its researchers' lifelong training (courses, seminars, congresses/conferences etc) within a specific career development strategy.
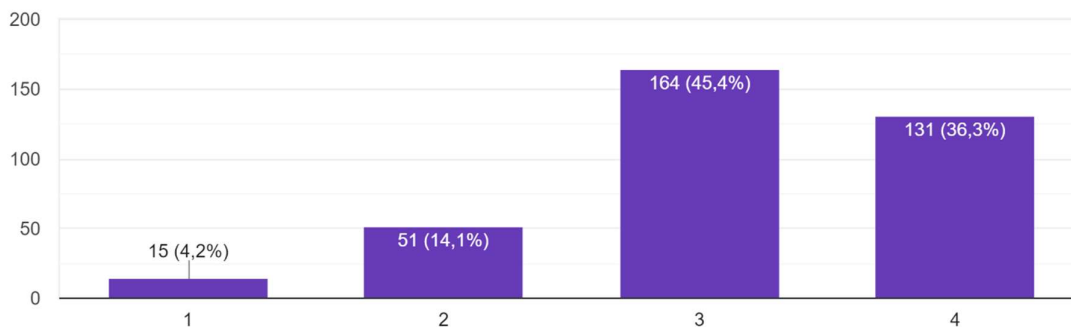
C3_7_2: The development of services devoted to support, professional orientation and mentoring are useful to all researchers' career development.
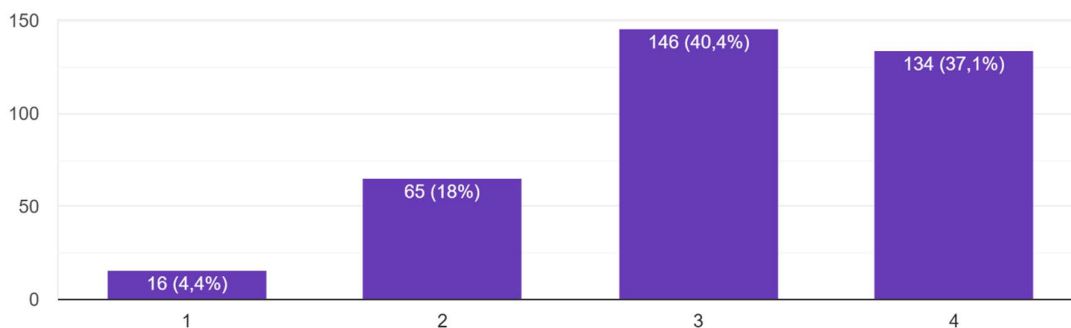
29- VALUE OF MOBILITY

C3_8_1: The University's and Department's strategies actively encourage and adequately recognises the mobility of researchers for scientific purposes towards academic institutions in Italy and abroad.
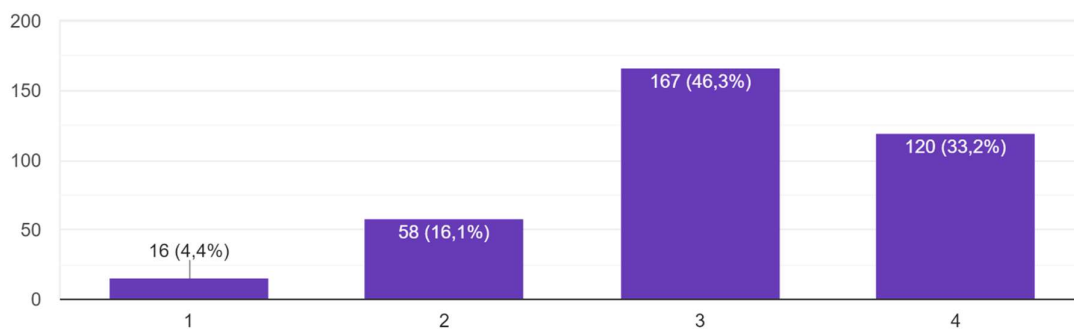
C3_8_2: The University recognises and enhances cooperation and mobility experiences towards the public and private sectors for the purposes of career development.
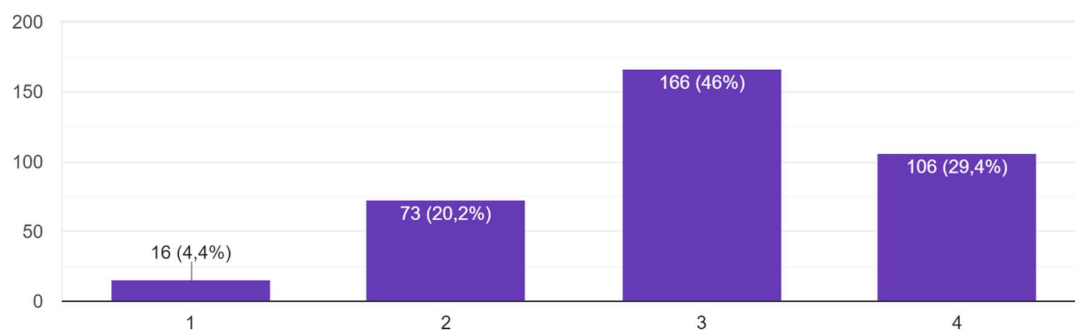
30- ACCESS TO CAREER ADVICE

C3_9: The creation of an office ensuring career development to all researchers, regardless of their career stage, would be useful to the researchers' career development.
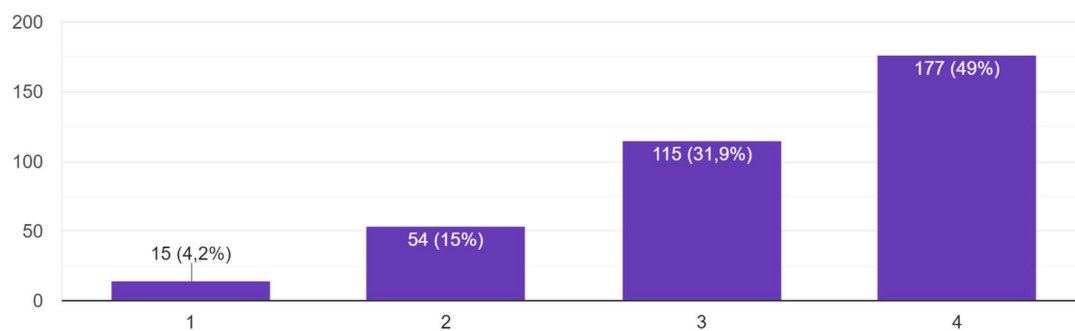
31- INTELLECTUAL PROPERTY RIGHTS

C3_10_1: I am aware of the editorial policies I subscribe to when I publish my research outputs.
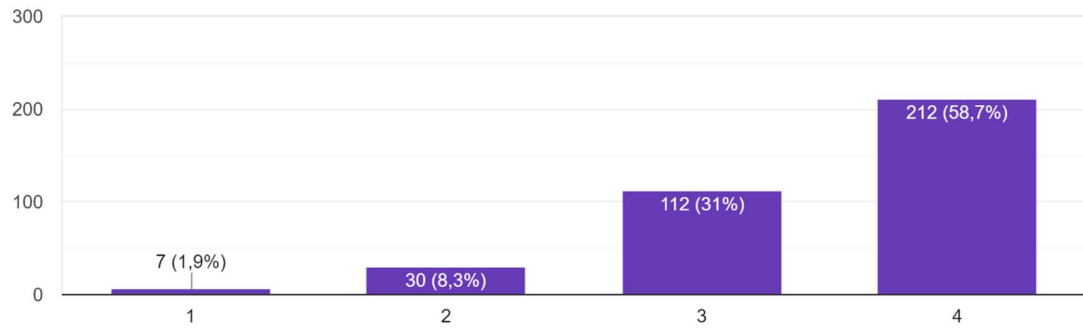
C3_10_2: I am aware of the University's practices ruling the protection and valorisation of industrial property (patents, utility models; new plant varieties; software etc.)
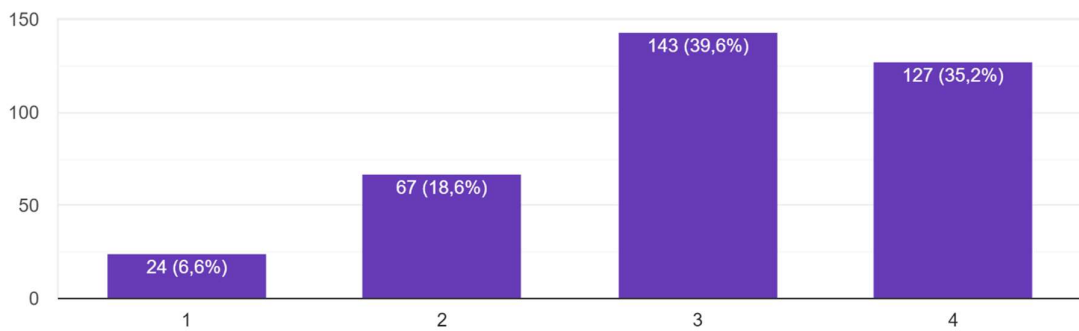
32- CO-AUTHORSHIP

C3_11: The University ensures me the right to be recognised, in the context of my actual contributions, as co-author of papers, patents etc., and to publish independently from my supervisor(s).
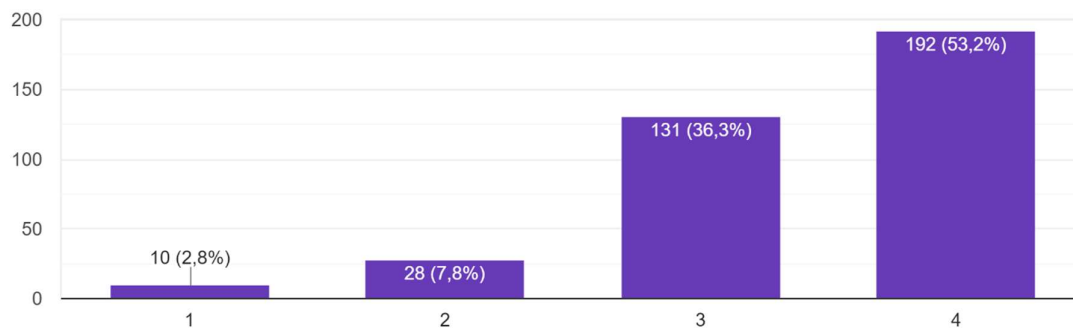
33- TEACHING

C3_12_1: Teaching duties are compatible with my research activity.
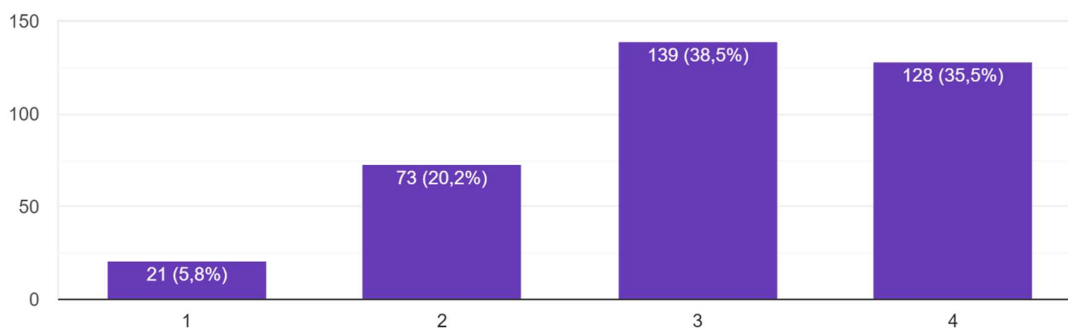
C3_12_2: Teaching duties are compatible with my research activity.
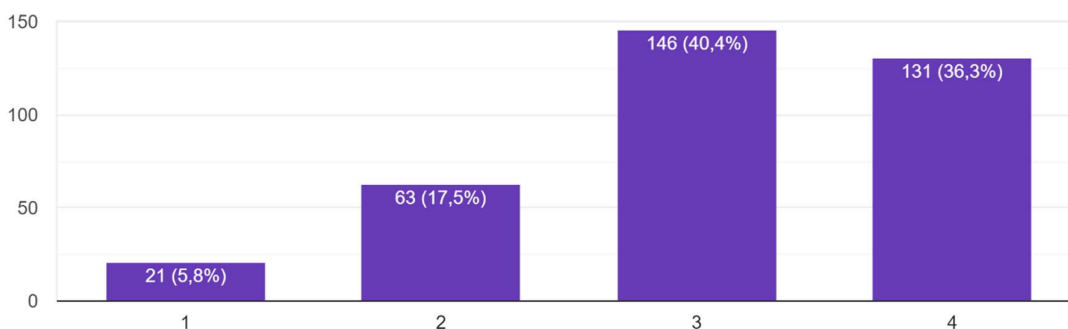
34- COMPLAINTS / APPEALS

C3_13: The University has appropriate procedures to deal with complaints/appeals of researchers, as well as to solve conflicts between supervisors and early-stage researchers.
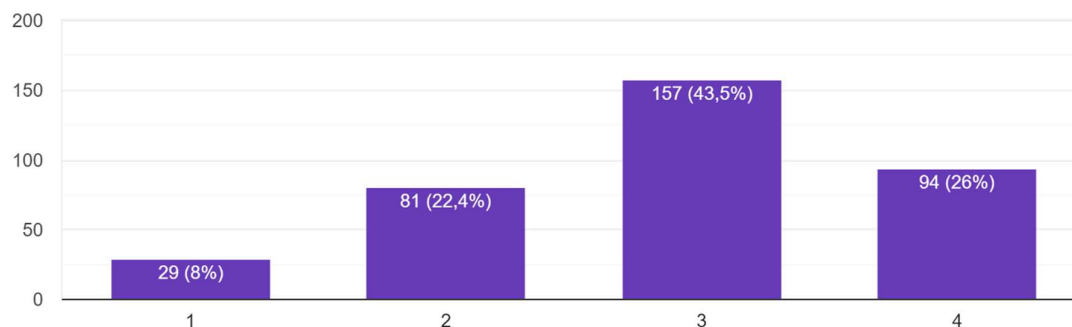
35- PARTICIPATION IN DECISION-MAKING BODIES

C3_14: The University provides for the researchers' participation in its consultation and decision-making bodies, so as to protect and promote their individual and collective interests as professionals and to actively contribute to the workings of the institution.
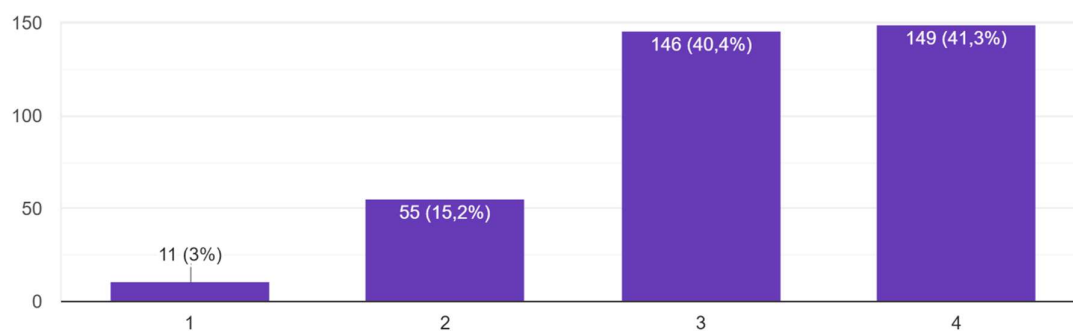
Tab. 3: DESCRIPTIVE TABLE Section 3: Working Conditions and Social Security

	Mean	Median	SD
C3_1	3.12	3	0.804
C3_2_1	3.11	3	0.854
C3_2_2	**2.88**	**3**	**0.871**
C3_2_3	3.24	3	0.789
C3_2_M	**3.08**	3.00	0.690
C3_3	3.11	3	0.907
C3_4_1	**3.10**	**3**	**0.819**
C3_4_2	**3.08**	**3**	**0.878**
C3_4_M	**3.09**	3.00	0.791
C3_5	3.13	3	0.915
C3_6	3.34	4	0.808
C3_7_1	3.14	3	0.808
C3_7_2	**3.10**	**3**	**0.849**
C3_7_M	3.12	3.00	0.715
C3_8_1	**3.08**	**3**	**0.816**
C3_8_2	**3.00**	**3**	**0.822**
C3_8_M	**3.04**	3.00	0.755
C3_9	3.26	3	0.861
C3_10_1	3.47	4	0.730
C3_10_2	**3.03**	**3**	**0.897**
C3_10_M	3.25	3.50	0.730
C3_11	3.40	4	0.750
C3_12_1	**3.04**	**3**	**0.889**
C3_12_2	**3.07**	**3**	**0.876**
C3_12_M	**3.05**	3.00	0.751
C3_13	**2.88**	**3**	**0.890**
C3_14	3.20	3	0.806
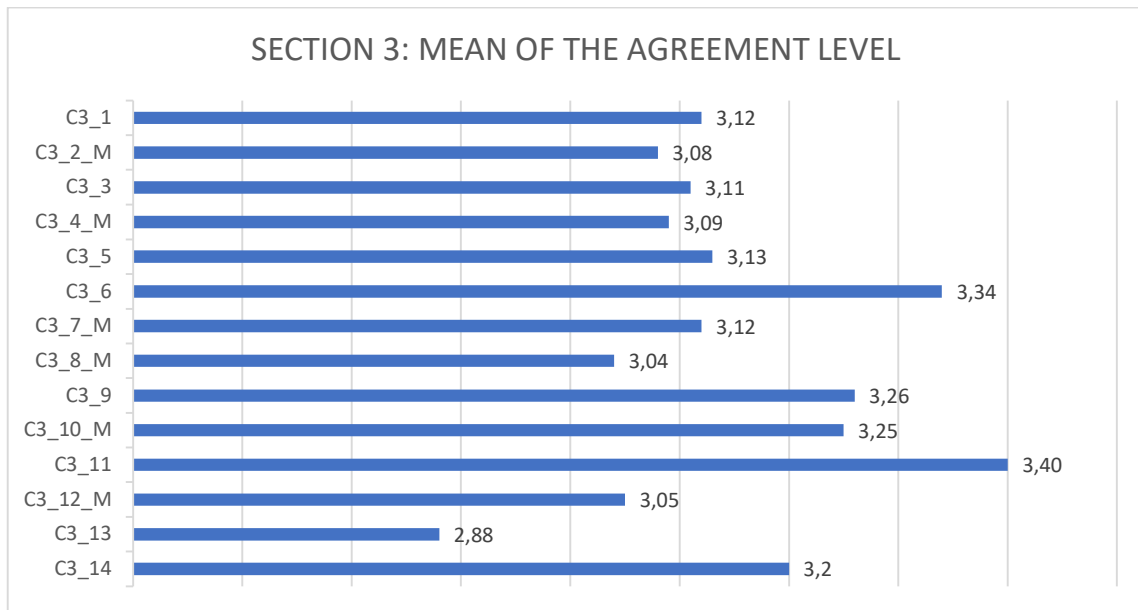
Fig. 3: Mean of the agreement level for section 3

C3_2_2: The environment within the University/Department offers suitable equipment/materials, spaces and facilities to allow the achievement of results, useful to the advancement of knowledge.

MEAN OF THE AGREEMENT LEVEL: 2.88

Considering the low level of mean agreement level, the item's results have been analysed in detail to identify possible effects of the research area to which the respondents belong on their answers (*Tab. 3.1*).
The highest level of agreement (which is, by the way, barely sufficient) is expressed by researchers belonging to the GEPS area (Juridical, Economic, Political, Social); the Scientific area expresses the lowest agreement. The mean of the agreement level expressed by researchers from the Humanities area is insufficient.

Tab. 3.1

	AREA	C3_2_2
Mean	GEPS	3.04
	Scientific	2.69
	HUmanities	2.98
Median	GEPS	3.00
	Scientific	3.00
	Humanities	3.00
Standerd Deviation	GEPS	0.796
	Scientific	0.893
	Humanities	0.870

C3_3: The University ensures me the possibility to organise my research activity combining career and family, by resorting to part-time working, tele-working and services.

MEAN OF THE AGREEMENT LEVEL: 3.11 (ITEM MARKED AS A PRIORITY BY 131 RESPONDENTS)

The mean of the agreement level corresponding to this item is sufficient. However, the results have been further analysed considering the high priority expressed by the respondents towards the corresponding principle (see below), focussing on the respondents' gender.
Tab. 3.2 shows that the mean of the agreement level is significantly higher among male respondents, while it is insufficient among female respondents.

Tab. 3.2

	Gender	C3_3
Mean	F	2.97
	M	3.26
Median	F	3.00
	M	3.00
Standard Deviation	F	0.940
	M	0.852

C3_4_2: The University encourages fixed-term researchers' professional growth, in order to promote their access to stable employment.

MEAN OF THE AGREEMENT LEVEL: 3.08

The mean of the agreement level for this item is barely sufficient. Further analysis of the results took into account the respondents' academic position (*Tab. 3.3*) and showed that the level of agreement is insufficient among researchers at the early stages of their career (PhD candidates and Research Fellows), barely sufficient among Junior Fixed-Term Researchers (RTD-a) and Associate Professors, fully sufficient for Senior Researchers (RU), Senior Fixed-Term Researchers (RTD-b) and Full Professors.

Tab. 3.3

	Academic position	C3_4_2
Mean	PO	3.38
	PA	3.03
	RU-RTDb	3.40
	RTDa	3.00
	Post-Doc	2.67
	PhDcandidate	2.79
Median	PO	4.00
	PA	3.00

Tab. 3.3

	Academic position	C3_4_2
	RU-RTDb	4.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.715
	PA	0.823
	RU-RTDb	0.710
	RTDa	0.943
	Post-Doc	0.982
	PhDcandidate	1.01

C3_8_1: The University's and Department's strategies actively encourage and adequately recognises the mobility of researchers for scientific purposes towards academic institutions in Italy and abroad.

MEAN OF THE AGREEMENT LEVEL: 3.08

The mean of the agreement level towards the item is barely sufficient. Results have been analysed taking into account the respondents' academic position (*Tab. 3.4*). This further analysis shows an uneven distribution of the level of agreement, with lower values among Junior Fixed-Term Researchers and Research Fellows (Post-Docs), barely sufficient for Associate and Full Professors and fully sufficient for Senior Researchers (RU), Senior Fixed-Term Researchers (RTD-b) and PhD candidates.

Tab. 3.4

	Academic position	C3_8_1
Mean	PO	3.07
	PA	3.09
	RU-RTDb	3.20
	RTDa	2.89
	Post-Doc	2.92
	PhDcandidate	3.12
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.778
	PA	0.787
	RU-RTDb	0.844

Tab. 3.4

	Academic position	C3_8_1
	RTDa	0.875
	Post-Doc	0.957
	PhDcandidate	0.758

C3_8_2: The University recognises and enhances cooperation and mobility experiences towards the public and private sectors for the purposes of career development.

MEAN OF THE AGREEMENT LEVEL: 3.00

The mean of the agreement level towards the item is barely sufficient. The analysis of the collected data, taken on taking into consideration the academic position shows that the agreement is lower among Junior Fixed-Term Researchers (RTD-a) and Full Professors; the agreement of the Associate Professors is barely insufficient, that of Research Fellows (Post-Doc) is barely sufficient. Only Senior Researchers (RU) and Senior Fixed-Term Researchers (RTD-b) expressed a sufficient mean of the agreement level (*Tab. 3.5*).

Tab. 3.5

	Academic position	C3_8_2
Mean	PO	2.87
	PA	2.94
	RU-RTDb	3.17
	RTDa	2.84
	Post-Doc	3.08
	PhDcandidate	3.07
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.833
	PA	0.837
	RU-RTDb	0.780
	RTDa	0.898
	Post-Doc	0.839
	PhDcandidate	0.776

C3_10_2: I am aware of the University's practices ruling the protection and valorisation of industrial property (patents, utility models; new plant varieties; software etc.)

MEAN OF THE AGREEMENT LEVEL: 3.03

The mean of the agreement level towards the item is barely sufficient. The analysis of results, carried out taking into consideration the respondents' academic position, showed that researchers at the early stages of their career (PhD candidates, Research Fellows, Junior Fixed-Term Researchers) have an insufficient knowledge of the practices ruling the protection and valorisation of industrial property. Knowledge of these practices is barely sufficient among Associate Professors and fully sufficient among Full Professors, Senior Researchers (RU) and Senior Fixed-Term Researchers (RTD-b) (*Tab. 3.6*).

Tab. 3.6

	Academic position	C3_10_2
Mean	PO	3.18
	PA	3.06
	RU-RTDb	3.16
	RTDa	2.89
	Post-Doc	2.90
	PhDcandidate	2.81
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.792
	PA	0.897
	RU-RTDb	0.810
	RTDa	1.05
	Post-Doc	0.995
	PhDcandidate	0.953

C3_12_1: Teaching duties are compatible with my research activity.

MEAN OF THE AGREEMENT LEVEL: 3.04

The mean of the agreement level for this item is barely sufficient. The analysis carried out on the basis of the respondents' academic position shows an uneven distribution of disagreement: Junior Fixed-Term Researchers expressed the lowest level of agreement; the level of agreement is barely insufficient among Associate Professors and PhD candidates; barely sufficient among Senior Researchers (RU) and Senior Fixed-Term Researchers (RTDb); fully sufficient among Full Professors and Research Fellows (Post-Docs) (*Tab. 3.7*).

Tab. 3.7

	Academic position	C3_12_1
Mean	PO	3.13
	PA	2.97
	RU-RTDb	3.04
	RTDa	2.79
	Post-Doc	3.26
	PhD candidate	2.98
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.791
	PA	0.909
	RU-RTDb	0.955
	RTDa	0.976
	Post-Doc	0.818
	PhDcandidate	0.876

C3_12_2: The University provides all researchers with adequate training activities concerning teaching strategies and methodologies.

MEAN OF THE AGREEMENT LEVEL: 3.07

The mean of the agreement level towards this item is barely sufficient. Further analysis was carried out taking into consideration the respondents' academic position (*Tab. 3.8*). The level of agreement is insufficient among researchers at the early stages of their career (PhD candidates; Research Fellows); barely sufficient among Junior Fixed-Term Researchers (RTD-a); fully sufficient among Senior Researchers (RU), Senior Fixed-Term Researchers (RTD-b), Associate Professors and Full Professors.

Tab. 3.8

	Academic position	C3_12_2
Mean	PO	3.15
	PA	3.23
	RU-RTDb	3.21
	RTDa	3.00
	Post-Doc	2.62
	PhDcandidate	2.82
Median	PO	3.00

Tab. 3.8

	Academic position	C3_12_2
	PA	3.00
	RU-RTDb	3.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.840
	PA	0.773
	RU-RTDb	0.720
	RTDa	0.816
	Post-Doc	1.07
	PhDcandidate	1.02

C3_13: The University has appropriate procedures to deal with complaints/appeals of researchers, as well as to solve conflicts between supervisors and early-stage researchers.

MEAN OF THE AGREEMENT LEVEL: 2.88

The mean of the agreement level towards this item is insufficient. The analysis of the collected data, carried out taking into consideration the respondents' academic position (*Tab. 3.9*) shows that the level of agreement is sufficient only among Senior Researchers (RU) and Senior Fixed-Term Researchers (RTD-b); conversely the level of agreement is particularlty low among Associate Professors and Junior Fixed-Term Researchers (RTD-a).

Tab. 3.9

	Academic position	C3_13
Mean	PO	2.93
	PA	2.79
	RU-RTDb	3.04
	RTDa	2.74
	Post-Doc	2.90
	PhDcandidate	2.81
Median	PO	3.00
	PA	3.00
	RU-RTDb	3.00
	RTDa	3
	Post-Doc	3
	PhDcandidate	3
Standard Deviation	PO	0.821
	PA	0.909

Tab. 3.9

| Academic position	C3_13
RU-RTDb	0.824
RTDa	1.05
Post-Doc	0.912
PhDcandidate	0.934

## 2.4. Section 4: Training and Development

36- RELATION WITH SUPERVISORS

C4_1_1: The supervisors are willing to listen and learn from their supervisees, as well as handling the different point of view during the research activity.
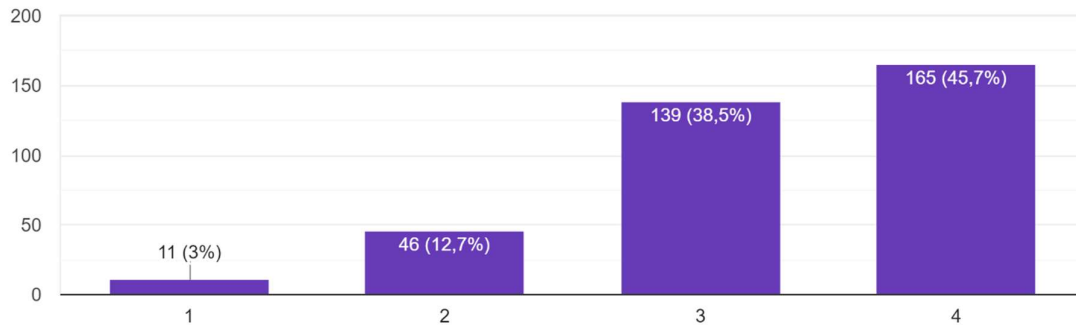

C4_1_2: The supervisors facilitate both the integration of the junior researchers in the University/Department community and their collaboration with the administrative staff.
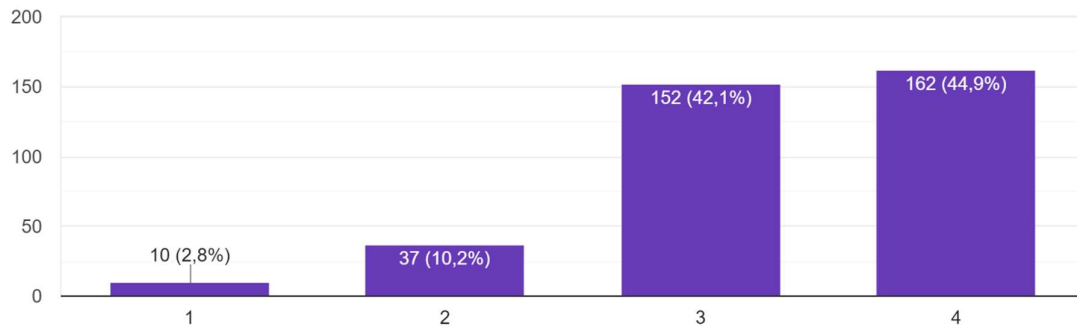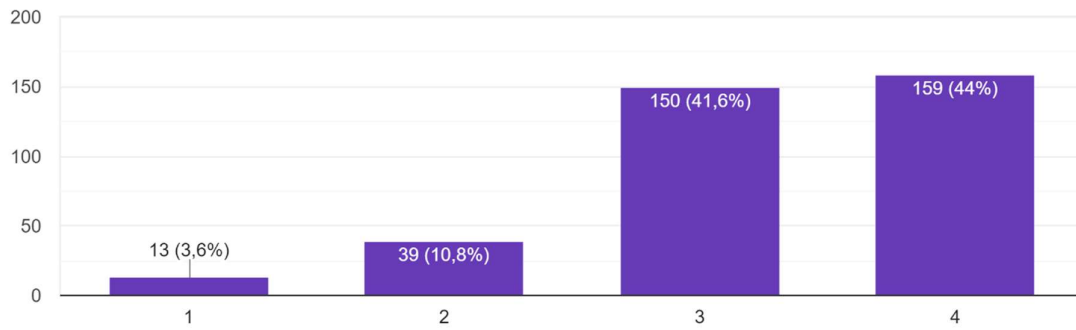

C4_1_3: The supervisors encourage a collaborative approach and mutual respect.
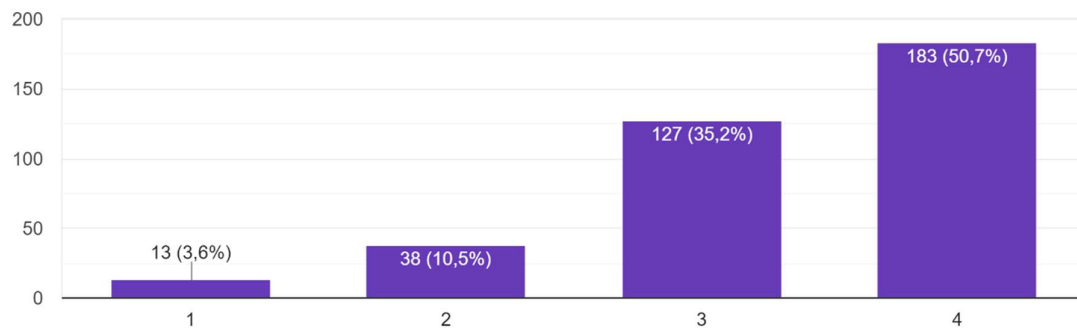
C4_1_4: The regular continuity of the scheduled research is founded on a stable and constructive relationship between the researchers and the supervisors.
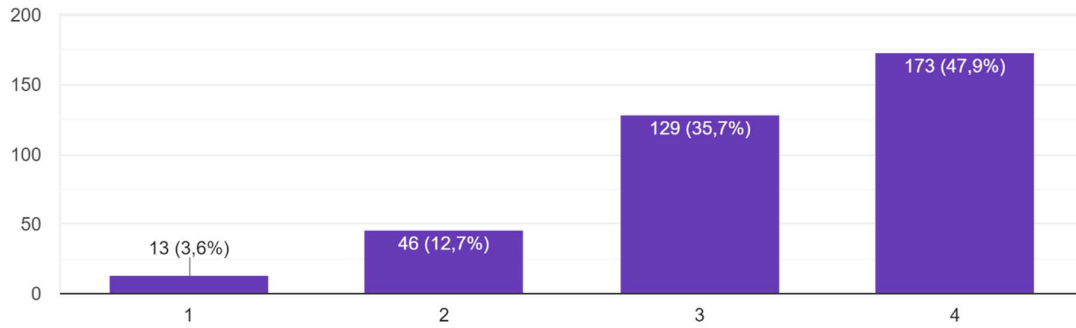
C4_1_5: The progress of the research activities is supplemented by supervisors' feedback.
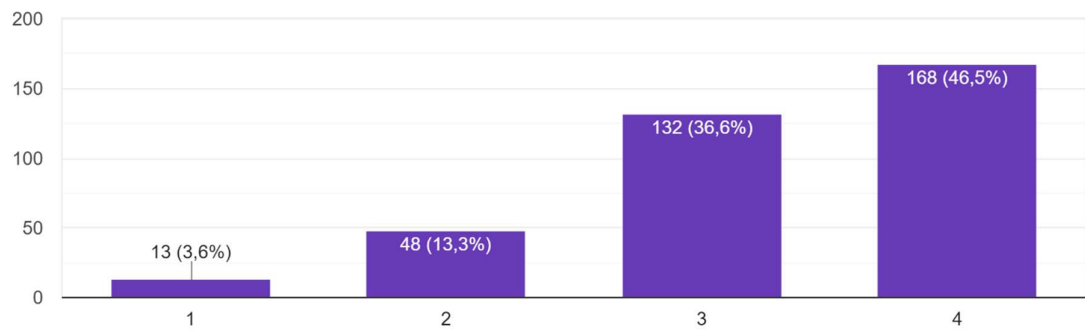

37- SUPERVISION AND MANAGERIAL DUTIES

C4_2_1: Senior researchers encourage early-stage researchers to carry out an original and high-quality research and to acquire autonomy.
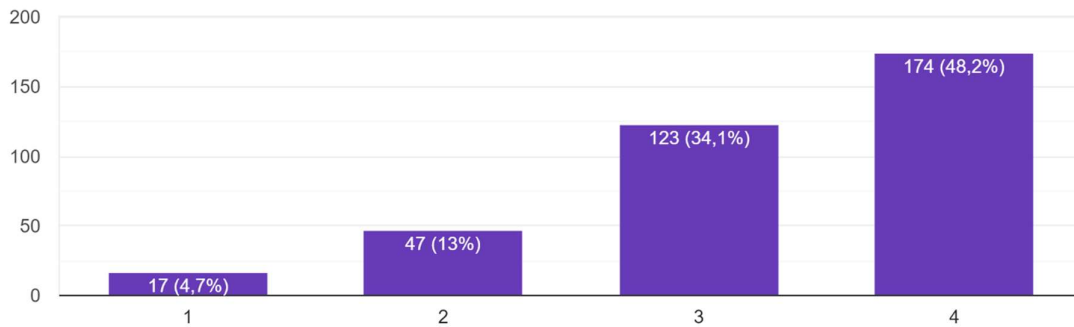
C4_2_2: The senior researchers, with regard to their role as supervisors, lie the foundation for an efficient transfer of knowledge and a successful professional development.

38- CONTINUING PROFESSIONAL DEVELOPMENT

C4_3: I continually strive to update and strengthen my skills and competences.
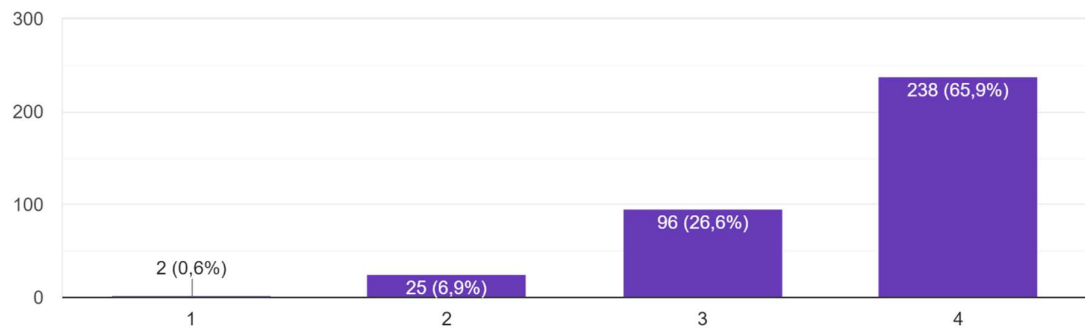
39- ACCESS TO RESEARCH TRAINING AND CONTINUOUS DEVELOPMENT

C4_4_1: The University guarantees researchers the access to resources to improve: (Please choose the appropriate option for each item)

    C4_4_1_1: scientific skills
    C4_4_1_2: teaching skills
    C4_4_1_3: professional skills that are expendable outside of academia
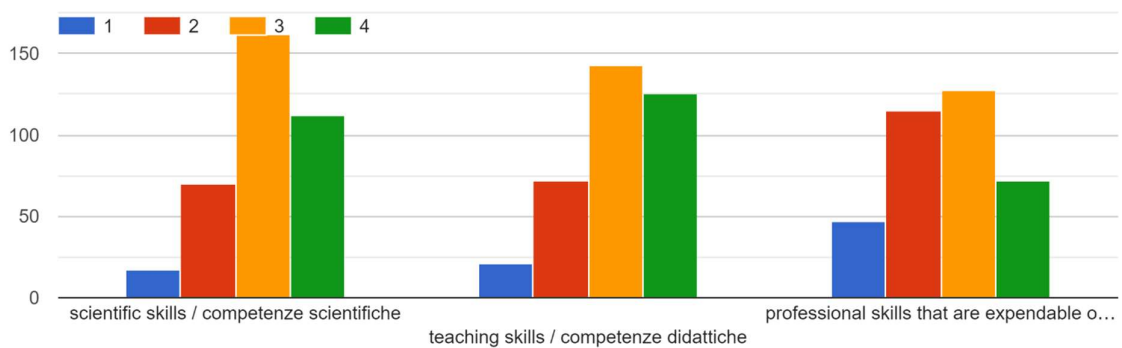
C4_4_2: The University's measures to foster the continuous development of researchers are: (Please choose the appropriate option for each item)

C4_4_2_1: regularly planned
C4_4_2_2: properly communicated
C4_4_2_3: periodically updated
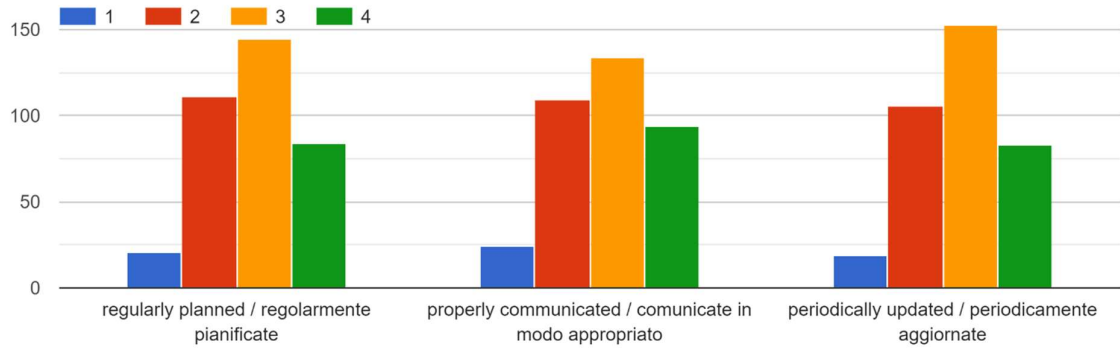
40- SUPERVISION

C4_5_1: Supervisors assigned to early-stage researchers are expert and competent to provide the necessary support.

C4_5_2: The supervisors are assigned to researchers with transparent and appropriate procedures.

Tab. 4: DESCRIPTIVE TABLE – Section 4: Training and Development

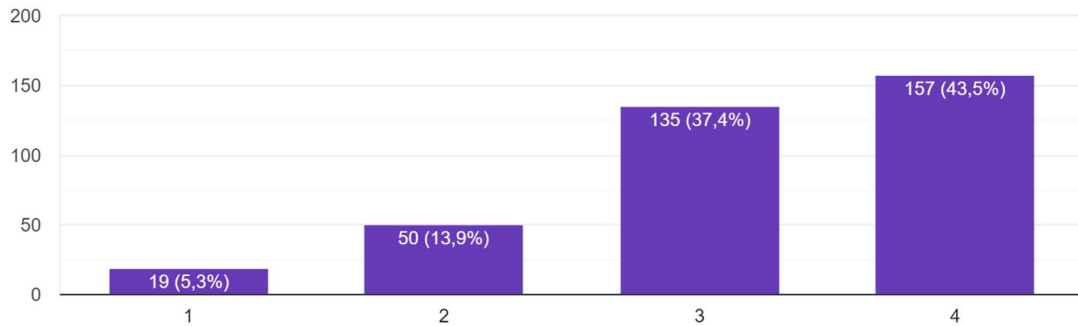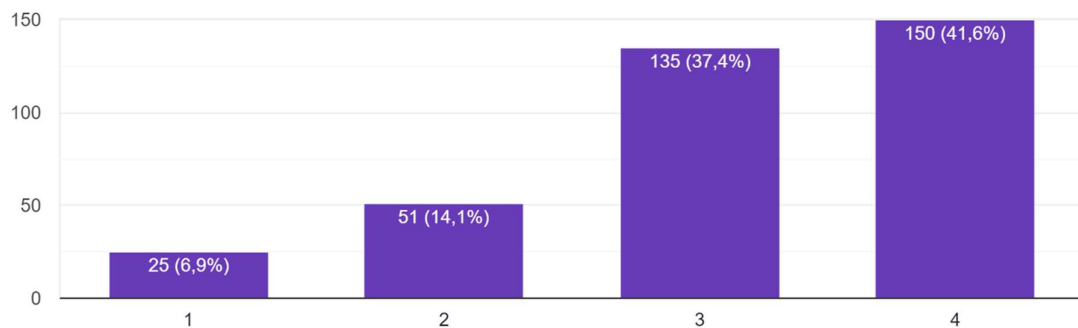|	Mean	Median	SD
C4_1_1	3.27	3	0.797
C4_1_2	3.29	3	0.761
C4_1_3	3.33	4	0.806
C4_1_4	3.28	3	0.821
C4_1_5	3.26	3	0.791
C4_1_M	3.29	3.40	0.717
C4_2_1	3.26	3	0.858
C4_2_2	3.26	3	0.822
C4_2_M	3.26	3.50	0.803
C4_3	3.58	4	0.645
C4_4_1_1	**3.02**	**3**	**0.833**
C4_4_1_2	**3.03**	**3**	**0.883**
C4_4_1_3	**2.62**	**3**	**0.947**
C4_4_1_M	2.89	3.00	0.778
C4_4_2_1	**2.81**	**3**	**0.859**
C4_4_2_2	**2.83**	**3**	**0.894**
C4_4_2_3	**2.83**	**3**	**0.841**
C4_4_2_M	2.82	3.00	0.819
C4_4_M	2.86	2.83	0.749
C4_5_1	3.19	3	0.866
C4_5_2	3.14	3	0.904
C4_5_M	3.16	3.00	0.838

SECTION 4: MEAN OF THE AGREEMENT LEVEL

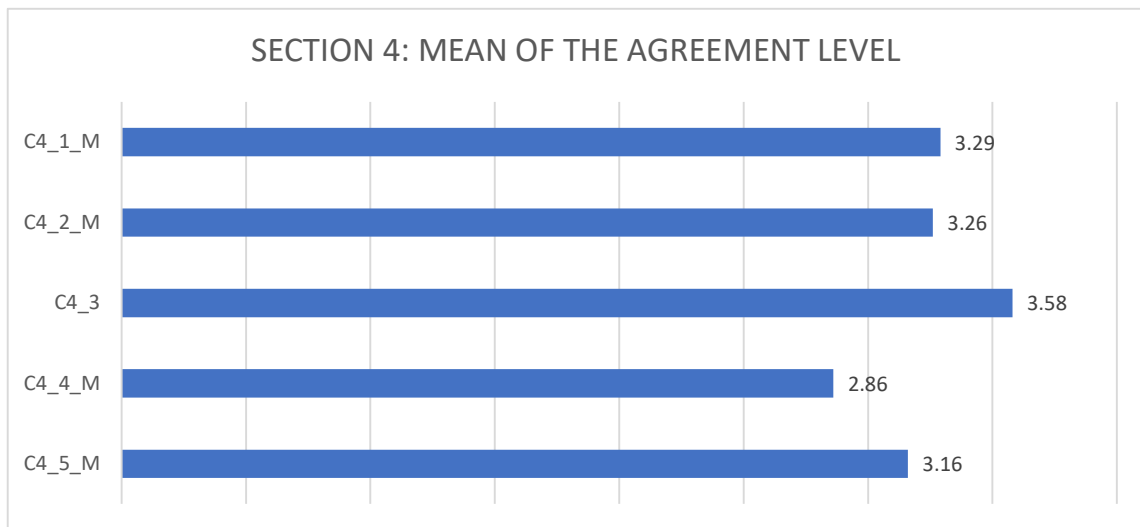|	
C4_1_M	3.29
C4_2_M	3.26
C4_3	3.58
C4_4_M	2.86
C4_5_M	3.16

Fig. 4: Mean of the agreement level for section 4

3. Analysis of the expressed priorities

At the end of each section of the survey, respondents were requested to mark a maximum of three principles among those included in the preceding section as priorities. Compiling this field was not mandatory, so researchers could avoid filling it if they did not consider any of the preceding principles as priorities.

When analysing the data, the answers corresponding to each section were collected and considered together to reorder the 40 *C&C* principles in a single scale of priorities (*Fig. 5*).

To investigate the perceived needs compared to the level of agreement, the priority level and the level of agreement corresponding to each principle have been displayed in a scatter plot (*Fig. 6*). When more than one item refers to the same principle, the mean of the agreement level has been calculated for the principle, arising from the mean values corresponding to each item.
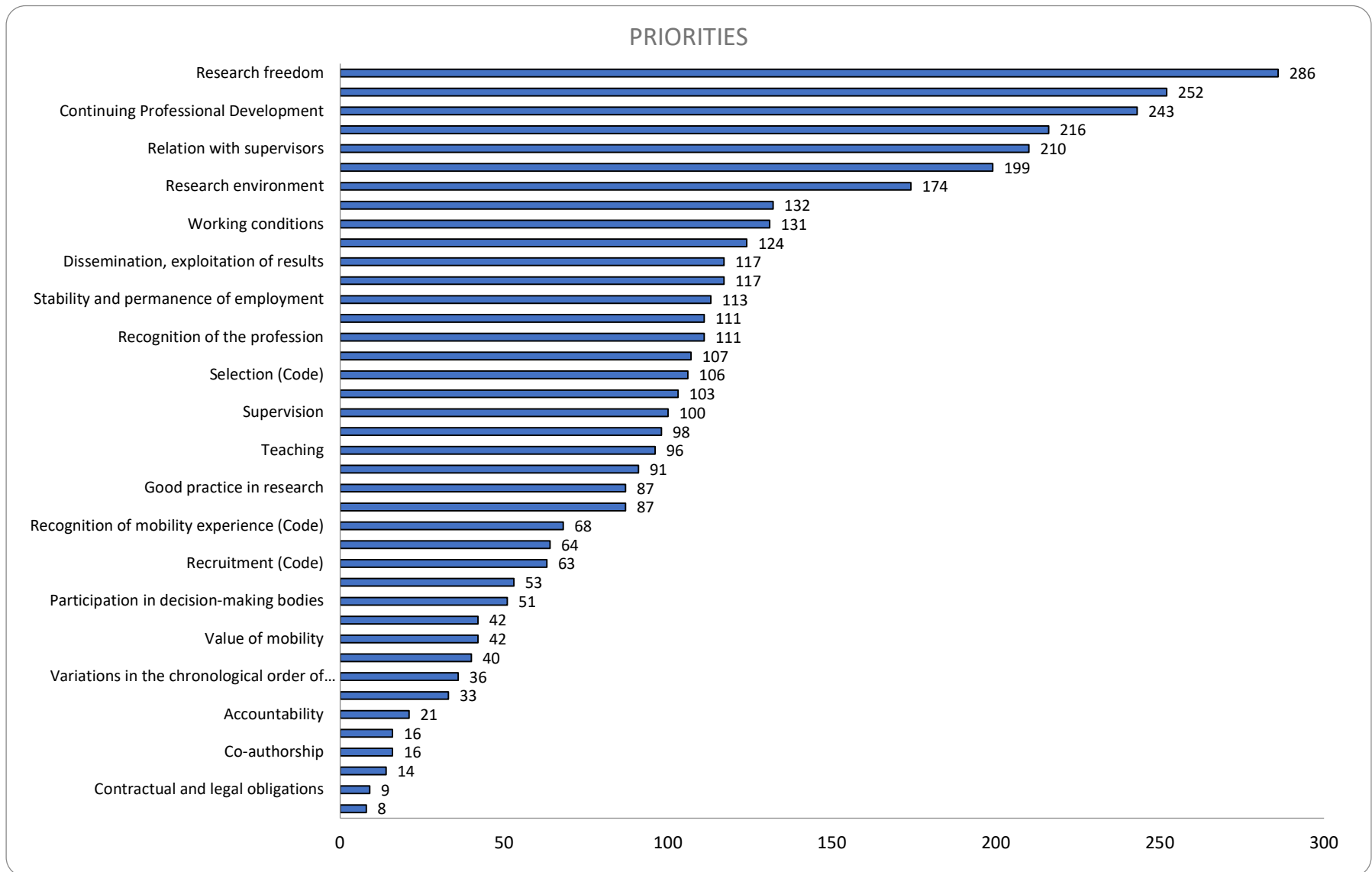
PRIORITIES

Priority	Value
Research freedom	286
	252
Continuing Professional Development	243
	216
Relation with supervisors	210
	199
Research environment	174
	132
Working conditions	131
	124
Dissemination, exploitation of results	117
	117
Stability and permanence of employment	113
	111
Recognition of the profession	111
	107
Selection (Code)	106
	103
Supervision	100
	98
Teaching	96
	91
Good practice in research	87
	87
Recognition of mobility experience (Code)	68
	64
Recruitment (Code)	63
	53
Participation in decision-making bodies	51
	42
Value of mobility	42
	40
Variations in the chronological order of…	36
	33
Accountability	21
	16
Co-authorship	16
	14
Contractual and legal obligations	9
	8

Fig. 5: Scale of priorities

ANALYSIS PRIORITIES - AGREEMENT

Fig. 6: Scatter Plot: priorities-agreement