## athena

# D2.3. Gender Equality Reports for ATHENA project partners 

Project Acronym: ATHENA<br>Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

## Grant Agreement no: 101006416



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## Lists of authors

| Country | Organisation/acronym | National coordinator | Authors compiling the organizational gender equality reports |
| :---: | :---: | :---: | :---: |
| Bulgaria | UNIVERSITY OF RUSE ANGEL KANCHEV/URAK | Prof. Dr. Diana Antonova | Prof. Dr. Yuliya Popova Assist. Prof. Dr. Ana Popova Reviewers: Assoc. Prof. Dr. Daniel Pavlov |
| Spain | AGENCIA CANARIA DE INVESTIGACIÓN, INNOVACIÓN Y SOCIEDAD DE LA INFORMACIÓN (ACIISI) | Antonio López Gulías | Ana Lidia FernándezLayos Javier Roo Filgueira |
| Poland | UNIWERSYTET JANA KOCHANOWSKIEGO W KIELCACH/UJK | Ana Kaminska | Ana Kaminska Joanna Rudawska Kinga Stęplewska Michał Stachura |
| Portugal | FUNDO REGIONAL DA CIÊNCIA E TECNOLOGIA/FRCT | Maria LP <br> Martin | Berta Miúdo, Paulo Fontes, Anna Silva Reviewers: Carolina Bettencourt, Gisela Nascimento |
| Romania | UNIVERSITATEA DIN BUCURESTI/UB | Laura Grunberg | Prof. Laura Grünberg, Faculty of Sociology and Social Work, University of Bucharest, director of UB/R0, Athena project Associate Prof. Anca Dohotariu, Faculty of Political Science, University of Bucharest, researcher, member UB/RO Athena team (coord. Qualitative research) PhD. Irina Costache, gender expert, member UB/RO Athena team Lecturer, PhD Corina llinca, University of Bucharest, member |


|  |  |  | UB/RO Athena team (coord. Quantitative research) <br> PhD Candidate <br> Stefania Chihaia, Interdisciplinary Doctoral School, University of Bucharest, research assistant Reviewers: Lecturer Diana Elena Neaga, gender expert, ANES <br> Alexandru Mihai Dinu \& Elena Simion, UEFISCDI |
| :---: | :---: | :---: | :---: |
| Slovenia | JOZEF STEFAN INSTITUTE/JSI | Romana Jordan | Vida Vukašinović, Ita Junkar, Borka Jerman Blažič, Ingrid Milošev, Melita Tramšek, Spomenka Kobe, Marina Santo Zarnik, Barbara Malič, Romana Jordan, Maja Remškar |
| Slovakia | USTAV VYSKUMU SOCIALNEJ KOMUNIKACIE SLOVENSKEJ AKADEMIE VIED/UVSK SAV | Gabriel Bianchi | Barbora Holubová, Miroslava Žilinská. Gabriel Bianchi |

## Acronyms and Abbreviations

| ACIISI | Agencia Canaria de Investigación, Innovación y Sociedad de <br> la Información |
| :--- | :--- |
| ANES | Agenția Națională pentru Egalitatea de Șanse între Femei și <br> Bărbați / <br> The National Agency for Equal Opportunity for Women and <br> Men |
| ANS | Platforma Națională de Colectare a Datelor Statistice pentru <br> Învătământul Superior / The National Platform for the <br> Collection of Statistical Data for Higher Education |


| ARACIS | Agenția Română de Asigurare a Calității în Învățământul Superior / <br> Romanian Agency for Quality Assurance in Higher Education |
| :---: | :---: |
| CCCDI | Colegiul Consultativ pentru Cercetare-Dezvoltare şi Inovare / Advisory Board for Research-Development and Innovation |
| CEDAW | Convention on the Elimination of All Forms of Discrimination against Women |
| CEMU | Consiliului de Etică și Management Universitar Council of Ethics and University Management |
| CEREFREA | Centre Régional Francophone de Recherches Avancées en Sciences Sociales <br> Francophone Regional Center for Advanced Research in Social Sciences |
| CNATDCU | Consiliul Naţional de Atestare a Titlurilor, Diplomelor si Certificatelor Universitare / <br> The National Council Attestation of University Degrees, Diplomas and Certificates |
| CNCD | Consiliul Național pentru Combaterea Discriminării / The National Council for Combating Discrimination |
| CNCS | Consiliul Național al Cercetării Științifice / The National Council of Scientific Research |
| CNECSDTI | Consiliul Naţional de Etică a Cercetării Ştiinţifice, Dezvoltării Tehnologice şi Inovării / National Council of Ethics of Scientific Research, Technological Development and Innovation |
| CNFIS | Consiliul Național pentru Finanțarea Învățământului Superior National Council for Financing Higher Education |
| CNSPIS | Consiliul Național de Statistică și Prognoză a Învațământului Superior <br> National Council of Statistics and Prognosis of Higher Education |
| EC | European Commission |
| EIGE | European Institute for Gender Equality |
| ERA | European research area |
| ERAC | European Research Area and Innovation Committee |
| EU | European Union |
| HEI | Higher Education Institution |
| HR | Human Resources |
| ENIND | National Strategy for Equality and Non-Discrimination Portugal |
| CRP | Constitution of the Portuguese Republic |
| CITE | Commission for Equality in Labour and Employment |
| CIG | Commission for Citizenship and Gender Equality |
| FCT | Foundation for Science and Technology |
| FRCT | Regional Fund of Science and Technology |

athena
gender equality to unlock
research potential

| GCI | Glass Ceiling Index |
| :--- | :--- |
| GE | Gender Equality |
| GEA | Gender Equality Audit |
| GEAR | Gender Equality in Academia and Research |
| GEI | Gender Equality Index |
| GEP | Gender Equality Plan |
| GEPI | Gender Equality Plan Institutional |
| GEPI | Gender Equality Plans Implementation Committee |
| Committee | Gender Studies |
| GS | Horizon 2020 Research Program |
| H2020 | Higher Education Institutions |
| HEI | Higher Education, Research and Innovation |
| HERI | Helsinki Group on Gender in Research and Innovation <br> (predecessor of SWG GRI) |
| HG | Human Resources |
| HR | Human Relations Strategy for Researchers |
| HRS4R | Interviews and focus groups results |
| INF | International School for Doctoral Studies (RO) |
| ISDS | Jožef Stefan Institute |
| JSI | Men |
| M | not applicable |
| n/a | Doctor of Philosophy |
| PhD | Not in Employment, Education and Training |
| NEET | Research and Development |
| R\&D | Research and Innovation |
| R\&I | Research, Development and Innovation |
| R\&D+I | Research funding organisation |
| RFO | Research performing organisation <br> RPO |
| RRI | Responsible Research and Innovation |
| SAS | Slovak (The Institute for Research in Social Communication at |
| STEM | Slovak Academy of Sciences) |


| W | Women |
| :--- | :--- |
| WLB | Work Life Balance |

## Introduction for the report

This report provides data and information collected within the WP2 of the project, namely the Task 2.1 Gender equality audit and assessment at the organisational level, the Task 2.2. Assessment of existing national provisions and the Task 2.3. Identification of existing gender bias at the organisational level (including Task 2.3.1. Staff survey on awareness of gender bias in RPOs and RFOs, Task 2.3.2. Storytelling interviews in RPOs and Task 2.3.3. Focus Groups).

Under these tasks, the project partners carried out quantitative and qualitative gender audits and data collection in their organisations. It aimed to provide a solid basis for the development of gender equality plans in project partners' organisations and will represent the basis to measure improvements at the end of the project.

This report merges gender equality reports from partners which summarize the outcomes of WP2, including also recommendations for the development of the GEPs. The list of partners included in the reported are listed in the Table 1.

Table 1: List of partners included in the report

| NO | Name | Acronym | Country | Gender Equality Report |
| :---: | :---: | :---: | :---: | :---: |
| 1. | CONSULTA EUROPA PROJECTS AND INNOVATION SL | CE | ES | $\mathrm{n} / \mathrm{a}$ |
| 2. | JOZEF STEFAN INSTITUTE | JSI | SI | $\checkmark$ |
| 3. | UNIWERSYTET JANA <br> KOCHANOWSKIEGO W <br> KIELCACH  | UJK | PL | $\checkmark$ |
| 4. | UNIVERSITATEA DIN BUCURESTI | UB | RO | $\checkmark$ |
| 5. | UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA | ULPGC | ES | $\mathrm{n} / \mathrm{a}$ |
| 6. | CONSIGLIO NAZIONALE DELLE RICERCHE | CNR | IT | $\mathrm{n} / \mathrm{a}$ |
| 7. | USTAV VYSKUMU SOCIALNEJ KOMUNIKACIE SLOVENSKEJ AKADEMIE VIED | UVSK SAV | SK | $\checkmark$ |
| 8. | UNIVERSITY OF RUSE ANGEL KANCHEV | URAK | BG | $\checkmark$ |
| 9. | AGENCIA CANARIA DE INVESTIGACIÓN, INNOVACIÓN Y SOCIEDAD DE LA INFORMACIÓN | ACIISI | ES | $\checkmark$ |
| 10. | FUNDO REGIONAL DA CIÊNCIA E TECNOLOGIA | FRCT | PT | $\checkmark$ |

# Gender Equality Report for Jožef Stefan Institute, Slovenia 

Project Acronym: ATHENA

Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

Grant Agreement no: 101006416

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## Executive summary (Jožef Stefan Institute)

The Jožef Stefan Institute is the leading Slovenian research organization with 1118 employees on 31 December 2021. Among them 960 researchers work in physics, chemistry and biochemistry, electronics and information science, nuclear technology, energy utilization and environmental science. Female researchers represent around $30 \%$ of all researchers. Gender policy at JSI was based by now on informal soft activities led by some senior female researchers, who represented a kind of antipode to the typical male way of organizing and leading. The problems female researchers face in their carrier and in the combination of personal family life with demanding research in natural science, like for example, a demand for postdoc stage abroad for promotion and as a criterion for a permanent job, frequently stopped female researchers and forced them to leave work in science. Although several activities and regulations at the national level for gender equality in society and research are set, they stayed at declaration levels. The gender aspects are not considered or accounted for national research programmes, in programme design and in implementation and evaluation. Slovenia also very slowly implements processes to promote the integration of a gender dimension in the research and innovation content of projects and studies. Therefore, the formation of a detailed action plan for gender equality stimulated by the demands of Horizon Europe is currently still in the preparing stage at Jožef Stefan Institute and also in many research and education organizations in Slovenia.

In 2020, the first database on gender-segregated statistics was established at JSI. In 2020, the proportion of women in total employment (1119) was $36.5 \%$. Among 856 researchers, $30.1 \%$ are women. $75 \%$ of these women are employed in Natural sciences and 25 \% in Engineering and technology. 46 \% of female researchers are young ( $25-34$ years), $37 \%$ in age period ( $35-44$ years), $13 \%$ in age period (45-54), and $13 \%$ older than 55 years. The number of graduations obtained by women decreased by more than $20 \%$ compared to those graduated in 2016. All women graduated in Natural sciences, mathematics and statistics, while 33.3 \% of men also graduated in Information and Communication Technologies. The decision-making bodies in the research hierarchy are still male dominated, the majority of awards from public money are given to men, and large majority of heads of the departments at JSI are men as well as members of the Scientific Council of the JSI. In the year 2000, around $15 \%$ of women were in decision-making bodies (heads of departments and members of the Scientific Council). This percentage gradually increased until the year 2018, when it abruptly dropped and returned to $15 \%$ in 2020.

The aim of this Gender equality report is to identify gender-specific obstacles in research careers, which can be removed or decreased in the near future. Based on a database built on general and specific indicators, individual interviews, discussion in focus groups, and mass participation in a survey on gender equality by researcher and support units of JSI, the main problems were identified, and some recommendations for the organization's changes are agreed.

The main barrier in the scientific promotion of women is the mandatory postdoc stage abroad soon after PhD defence when a woman decides to have a family or already has small children. Maternity and parental leave cause some delays in the scientific promotions of young parents of both genders, but especially of women, who still carry most of their family's responsibilities. Flexible promotion criteria should be introduced to help women in this period.

A Human Resources (HR) unit should be established at JSI, which would provide some necessary information for promotion and career development for the employees, and organize education courses on gender equality code with the aim to prevent mobbing or sexual harassment.

Composition of the decision-making bodies should be balanced by age and gender, and mandates of memberships have to be limited.

More flexible working hours with work from home/teleworking were proposed for better managing work and family responsibilities.

## Introduction

The field of gender equality in research is formally well regulated, but there is no evaluation of the legislations or results of the promotion activities on gender equality in research organizations.

On 1 April 2020, the population of Slovenia was 2.097.195 people. The share of women among Slovenian citizens was 51.2 \% (this share has been declining very slowly for many years); 33.4 \% of foreign nationals were women. In the school year 2019/2020, 66.066 students enrolled in university studies. $5 \%$ of them were PhD students (3.300). According to She figures $2021{ }^{1}$, the proportion of women among doctoral or equivalent graduates increased from 54 \% (2013) to 61.3 \% (2016) and decreased back to $54 \%$ in 2018. The absolute numbers of female graduates were 626 in 2013, 1308 in 2016 and only 249 in 2018. This strong decrease in the number of doctoral graduates reflects the consequences of the belated economic crisis, which was in Slovenia the most intensive in 2013 and too little investments in research. In 2018, 23 \% of women graduated in Health and Welfare, 22 \% in Arts and Humanities, 18 \% in Engineering, manufacturing and construction, $11 \%$ in Natural sciences, mathematics and statistics, and 10 \% in Business, administration and law. In the EU as a whole, 7.9 \% of female and $16.4 \%$ of male academic staff were in grade-A positions in 2018, while in Slovenia, 13.3 \% of female and 23.0 \% of male academic staff were in grade-A positions. In Humanities, $41.6 \%$ of female academics are in A-grade positions. This value is the fifth largest in Europe after Lithuania, Latvia, Finland and Croatia. In Natural Sciences, only $7.6 \%$ of female academics were in grade-A positions. This percentage is the lowest in Europe, where $20.8 \%$ is the average value. In Engineering and Technology, 24.0 \% of women were in grade-A positions. These two fields are the main fields of work at the Jožef Stefan Institute
(JSI), where 75 \% of female researchers are employed in Natural sciences and 25 \% in Engineering and technology.

The Jožef Stefan Institute is the leading Slovenian research organization. It is responsible for a broad spectrum of basic and applied research in the fields of natural sciences and technology. The staff of more than 1100 specialize in research in physics, chemistry and biochemistry, electronics and information science, nuclear technology, energy utilization and environmental science.

The Institute is closely connected with the Slovenian universities, where many scientists who initially developed their research talents at the Institute have been appointed to teaching posts, while retaining their research positions or research teams at the Institute. Since 1985, more than 1800 postgraduate students have gained their MSc. and Ph.D. degrees at the Institute. Close contacts are also established with secondary schools, providing work practice on research projects in natural sciences and organizing regular visits to the laboratories.

Gender policy at JSI is based by now on informal soft activities led by some senior female researchers, who represented a kind of antipode to the typical male way of organizing and leading. The women who succeeded in staying in a male society, and some were even promoted to leading positions in research society, represent an important role model for young female students and researchers. The main problem, which female researchers face in their careers, is how to combine personal family life with demanding research in natural science. The mandatory 9 -month long postdoc stage abroad as one of criteria for promotion frequently stops female researchers. It forces them to find a job in administration, high-level education or middle level management.

The aim of this Gender equality report is to identify gender specific obstacles in research careers, which can be removed or decreased in the near future. Based on a database built on general and specific indicators, individual interviews, discussion in focus groups, and mass participation in a survey on gender equality by researcher and support units of JSI, the main problems were identified, and some recommendations for the organization's changes are agreed.

## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection techniques implemented throughout the year 2020. The particular methodologies have been prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences.

The national provisions in terms of gender equality in research and higher education were assessed based on a desk-research and policy analysis related
to gender equality in society, research and higher education. Our team utilised extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of our organisation.

The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardised data collection on women in science She Figures. ${ }^{1}$ Our team collected the data with help of the JSI administration staff. The qualitative GEA indicators present unquantified aspects and measures to assess the situation in terms of gender equality.

To identify gender biases in the Jožef Stefan Institute, we used three data collection methods: online survey, story-telling interviews and focus groups. An online staff survey implemented by a standardised questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, 324 responders were included in the analysis.

The objective of the story-telling interviews was to search for the diversity of typical facilitators and inhibitors of gender awareness in the life-course of scholars. Based on pre-defined scenario, our team implemented 12 interviews with researchers in the following structure: 6 female researchers and 6 male researchers. Four female researchers are from junior level, they are PhD students, except one who is an assistant with PhD. They are of age between 25 and 40 , and all but one already have children. Two female researchers are from the senior level of different age groups ( 49 and 67 years). Both female senior researchers have children. Among the six male researchers, we interviewed 3 from junior levels and 3 from senior levels. Male researchers of junior level are in the age group between 25 and 45 . One is an assistant professor and has children, while the others are PhD students, they live with partners but have no children yet. Male researchers from senior-level are in the age group between 45 and 75 and have children. The interviews have been recorded, transcribed and analysed by the simple content analysis without coding. Thirdly, our team organised five focus groups in the following composition: GEPI, Young researchers, Researchers, Administration and supportive units, and Management. Then, using the standardised script, we transcripted the recorded discussions and analysed the data by simple content analysis without coding.

## 2. Outcomes of the assessment of the national provisions in Slovenia

### 2.1. Status of gender equality in society

On 1 April 2020, the population of Slovenia was $2,097,195$ people. The share of women among Slovenian citizens was 51.2 \%. Ministry of Labour, Family, Social

Affairs and Equal Opportunities of Republic of Slovenia is responsible for the GE policies and their implementation, monitoring and evaluation. They aim to implement the DIRECTIVE (EU) 2019/1158 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on work-life balance for parents and carers and repealing Council Directive 2010/18/EU. The same ministry is responsible for the area of equal opportunities and coordinates gender equality policy. It proposes, recommends, implements and facilitates programmes and actions aimed at promoting equality between women and men. The tasks of the Equal Opportunities Division include drawing up national programmes for equal opportunities for women and men, carrying out analyses and compiling reports, and conducting awareness-raising campaigns. It is responsible for the preparation and implementation of different activities, accordingly to the Equal Opportunities for Women and Men Act and the Implementation of the Equal Treatment Act.

The following acts are currently in power:

1. The Act on Equal Opportunities for Women and Men (Zakon o enakih možnostih žensk in moških) (Uradni list RS, št. 59/02, 61/07 - ZUNEO-A, $33 / 16-Z \operatorname{VarD}$ in 59/19) ${ }^{2}$, which defines general and special measures for the creation of equal opportunities, determines the holders of tasks, their competencies and obligations, introduces special informal treatment of cases of alleged unequal treatment of the sexes and the advocate of equal opportunities as an authorized person and the obligations of the entities involved in these cases. An unbalanced representation of the sexes in the sense of the previous paragraph is defined with the representation of one sex in an individual area of social life or its part lower than 40 \%.
2. Protection against discrimination Act (Zakon o varstvu pred diskriminacijo (ZVarD) (Uradni list: 33/2016, 21/2018-ZNOrg)³; Active since: 23. 5. 2016 , which provides for the protection of every individual against discrimination regardless of gender, nationality, race or ethnic origin, language, religion or belief, disability, age, sexual orientation, sexual identity and sexual expression, social status, financial status, education or any other personal circumstance.

The public sector salary system is regulated by the Public Sector Salary System Act (ZSPJS) ${ }^{4}$, which defines the fundamental and uniform rules on the functioning of the salary system and a unified methodology of calculating and paying salaries for all public sector activities. The fundamental principles of the salary system include equal pay for work in comparable positions, titles and functions, as well as transparency and salary incentives

### 2.2. Status of gender equality in research and higher education

In Slovenia, the field of gender equality is well regulated, but there is no evaluation of the legislation implementation or results of the promotion activities on gender equality in research organizations. The decision-making bodies in the
research hierarchy are still male-dominated, the majority of awards from public money are given to men.
In the school year 2019/2020, 66.066 students enrolled in university studies. $5 \%$ of them were PhD students (3.300). According to the She figures 2021 ${ }^{1}$, the data for 2014-2017 show that the total number of female researchers in Slovenia increased from 4387 in 2014 to 4549 in 2017 (for $3.7 \%$ ), while the number of male researchers increased from 7768 to 9530 (for 22.7 \%). The ratio of female researchers in 2018 was: 32.95 \% (Grade A), 40.77 \% (Grade B), 52.18 \% (Grade C), and 49.59 \% (Grade C). In total it was 45.95 \% of women in academic staff and 32.3 \% among all researchers. The number of doctoral graduates decreased from 1166 ( 626 women, 540 men) in 2013 to 461 ( 249 women, 212 men) in 2018. It is not clear what has caused this decrease, but "brain drain" did contribute for sure. The most popular fields for female graduates in Slovenia were Health and Welfare ( $23 \%$ ), Art and Humanities ( $22 \%$ ), and Engineering, Manufacturing and Construction (18 \%). In the field of Natural sciences, Mathematics and Statistics, which is by far the most popular field in Europe, only 27 women ( $11 \%$ ) and 38 men (18\%) graduated in 2018. It is possible to assume that other countries with higher salaries and better conditions for research increased the number of graduates in this field with PhD students from Slovenia. Regarding age, 19 \% of women of Grade-A are younger than 44 years, $36 \%$ are in the age group 45-54 years, while $33 \%$ are older than 55 years. The proportion of women among the heads of higher education institutions (31.8 \%) was the highest in Europe with exception of Baltic countries.

The research in Slovenia is mainly financed and regulated through the public Research Agency of Republic Slovenia (ARRS) ${ }^{5}$ and on a smaller scale by different ministries and industries for goal-oriented projects. Around $15 \%$ of research was financed by EU projects in the frame of Horizon, in the period 20142020. The ARRS in the document Strategy of work and development of 2016$2020^{6}$ lists different indicators to evaluate their impact on research. They monitor also the number of women working on research projects and the number of women among project leaders. Gender balance in decision-making and the enhancement of women's participation in research are regulated by the Rules on the Procedures of the (co)financing and Assessment of Research Activities and on Monitoring the Implementation of Research Activities ${ }^{7}$ : Article 35 (in the case of absence of the researcher due to parental leave in the duration of at least six months, this should be taken into account at project applications and also prolongs the period until PhD defence).

The gender balance in decision-making positions and professorships with adequate awareness-raising and training is not promoted in Slovenia. The gender-equality plans as an assessment tool in the accreditation of universities are currently in construction as an answer to Horizon Europe demands to make them mandatory for universities and research organizations. There is also no institutionalization of the proportion of women in Grade A/professor positions as an assessment criterion in institutional evaluations (higher education accreditation, performance contracts with universities). Guiding targets and/or
quotas for women in decision-making and professorships are neither set nor implemented through any measure, initiatives or even legislation. The fraction of women participating in decision-making is not evaluated regularly. There are no incentives for institutions adopting pro-active measures and/or sanctions for noncompliance with the set targets to increase women in decision-making and professorships.

The Ministry of Education, Science and Sport is responsible for implementation of the Research and innovation strategy of Slovenia (RISS) 2011-2020³, as well as for the UNESCO L'Oréal Scholarships. Under the Ministry, there is also a Committee for Equal Opportunities in Science ${ }^{9}$, which is very active in the area (research and data collection, suggestions of legal changes, including changes to create an action plan to improve career possibilities of women; awarenessraising; dissemination of research findings; promotion of gender equality...). Unfortunately, the Commission in collaboration with ARRS collected the data on statistics in science by gender for the period 2001-2010 for the last time. These old data are publicly available. There is no responsible unit or organization for the collection and processing the gender-disaggregated data on personnel in research and higher education. The data are on a demand by the Commission for Equal Opportunities in Science extracted from statistics by personnel of the ARRS. Otherwise, different groups for needs of EU projects collect the gender statistics occasionally and temporary (for the time of projects duration).

According to the She Figures $2021^{1}$, Slovenian female researchers are internationally less mobile (for $10 \%$ ) than male researchers in the postdoctoral period, which is the fourth smallest mobility rate in Europe, after Germany, Slovakia and Lithuania.

In Nov. 2021, The Act on Scientific Research and Innovation has been adopted by the Parliament of the Republic of Slovenia. It regulates funding in a way that enables the stability and autonomous development of scientific research activities and their performers. The target value is to allocate $1 \%$ of gross domestic product (GDP) of public funds for scientific research with a growth of $0.08 \%$ of GDP annually. This means that the budget for science is expected to double by 2027. In the last decade, the public funds for scientific research were only $0.4 \%$ (20112017), $0.79 \%(2019)$, and 0.52 (2021) of GDP. The adopted law, with the establishment of the National Council for Ethics and Integrity in Science, also addresses ethics and integrity in science and equal opportunities.

## 3. Outcomes of the gender equality audit at the Jožef Stefan Institute

## 3. 1. The pool of graduate talents

The data on the proportion of women among PhD candidates and students were collected for 2020: Among PhD candidates, 39.1 \% were women, while among selected new PhD students 30.8 \% were women. Among all active PhD students, 35.8 \% were women in 2020. In 201660 \% of all graduations were obtained by women, while in 2020 only $37.5 \%$. All women graduated in Natural sciences, mathematics and statistics, while 33.3 \% of men graduated also in Information and Communication Technologies.

At JSI, gender as a topic of research is out of the scope of scientific fields of the research with exception of participation in thematic EU projects, like Garcia, Athena, etc. We do not have courses devoted to or related to gender studies. The institute does not provide scholarships or career development grants for female scientists only, but it does provide for all talented students without consideration of their gender. We do not have any formal support for dual-career couples. We do not have career coaching for female scientists. There are no specific seminars on academic publishing for women students/scientists. The JSI does not take gender imbalance into account in the recruitment plans. Gender does not have any influence on recruitment.

Recently, the job-offer formulations usually take into account the grammatical gender and do not use generic masculine. But the description of a job does not contain any welcoming encouragement to apply for women or men if they are underrepresented in the field of the advertised position. The formulation of the advertisement of the internal promotions is gender-sensitive, the criteria of promotion are clear, the information of the procedure of the internal promotion is comprehensive, and everything is publicly available and accessible for both genders. The procedure of recruitment is not set with exception of deadlines, age and degree of education, the criteria of assessment are not standardised and quantified; the gender of applicants is revealed; the criteria of assessment are not gender sensitive and are applied equally for all genders.

## 3. 2. Gender balance in research

In 2020, the proportion of women in total employment (1119) was $36.5 \%$. Among 856 researchers, 30.1 \% were women. 75 \% of these women were employed in Natural sciences and 25 \% in Engineering and technology. 46 \% of female researchers are young (25-34 years), $37 \%$ in age period (35-44 years), $13 \%$ in age period (45-54), and 13 \% older than 55 years.

At JSI, we do not have a dedicated organizational arrangement (office, contact person, etc.) for the implementation of changes towards gender equality or any formal institutional background to support gender equality in the organization and research. Depending on the research field, the gender balance varies. The institute is in a phase of preparing a detailed Gender equality action plan (GEP) as an essential instrument for progress towards gender equality in the development and implementation of targeted gender equality plans. We are currently identifying gender gaps and reasons for their existence in the light of gender unbalanced pool of students interested in research in various research fields. A Gender Equality Action Plan, which defines the content and the timeline of the detailed GEP, was discussed among the heads of JSI units and adopted by the JSI director on 20 May 2021.

We plan to monitor and continuously evaluate the GEP in future. The monitoring mechanisms and responsible body for GEP evaluation will be set as well as the period of assessment. In case of unintended consequences generating further or new gender imbalance or discrimination, the update of the GEP will be assured. Currently, mostly men decide on spending of public resources, because they constitute the majority of decision bodies. Gender equality and women's rights are discussed only in public media around March 8, while at the institute such discussions are labelled as unnecessary.

In 2002, the Informal Network of Female Physicists was established, which works now in the frame of Association of Mathematicians, Physicists and Astronomers of Slovenia and includes also some female physicists employed at the JSI. Women working in nuclear science participate in the network Nuclear Society of Slovenia - section Alfa. There are no external networks and alliances of research organisations in Slovenia with an outstanding reputation on gender equality.

At the JSI, awareness-raising activities for students or employees on gender equality (dedicated web-page, campaigns, workshops, awards, competitions, etc.) do not run.

## 3. 3. Gender balanced career advancement

Age limit (28 years) for candidates for the young researcher position is extended for parents (mother or father) who have taken leave under parental care insurance for a period of at least six months. In this case, the age limit is extended for one year. The same applies to a longer, at least six months documented sick leave. Female researchers have the right on a part-time work and corresponding extension of the period of PhD stage. The right to work part-time can be exercised by one of the parents who cares for and protects the child until the age of three. In the case of two children, part-time is extended to the age of 6 years of the youngest child.

The JSI does not provide any mentoring programmes for female employees corresponding to the gender imbalances at the institute nor offers training on
gender equality in research. The JSI assures that both men and women have equal access to internal training, e.g., the adequate timing and form of the training, financial support, etc. There is no specific sabbatical for women scientists and neither for male scientists.

The criteria for career development and promotion are not gender sensitive and are applied equally for all genders.

## 3. 4. Gender balance in decision making

At JSI, no specific leadership programs are provided to support women in decision-making positions. There is also no regular gender training for managers provided, which would increase the gender competencies of the managers (heads of departments, decision-making committees, etc.). We do not have targets/quotas for gender balance on boards and committees. The JSI has never had a female director since it was established in 1949. Since 2020, we have a male director and for the first time a female deputy-director. Among Heads of departments, only 16 \% are women. In Scientific Council, $27 \%$ are women.

In the year 2000, around 15 \% of women were in decision-making bodies (heads of departments and members of the Scientific Council). This percentage gradually increased until the year 2018, when it abruptly dropped and returned to $15 \%$ in 2020. Because of relatively small absolute numbers, a loss of every woman at decision-making position strongly influences the ratio between men and women. Nevertheless, the decrease in the last three years cannot be explained just with a small perturbation, but it more likely reveals a trend and lack of awareness on gender balance. Considering that $30 \%$ of all researchers are women, one would expect that around one-third of decision-making positions would be occupied by female researchers, as it was in the period 2006-2018. The analysis shows two main problems: a) long-term memberships in Scientific Council by the same researchers for decades; b) continuation of the heads-ofdepartments leadership (long-term positions of Head of departments occupied by the same persons; their successors are selected by previous Heads and introduced to work by them). In the last 20 years, the men who occupied decisionmaking positions, did not select female successors in $84 \%$, and only one female head of department selected a woman to replace her. In addition, most of the Heads of departments are simultaneously members of the Scientific Council, so the problem is multiplied. The people who occupy triple or in some cases quadruple decision-making positions (head of department, memberships in Scientific Council, Committee for Promotion, and Advisory Board) are extremely busy. Therefore, such a position is not attractive for women in an age when they have to take care of children and simultaneously be progressive in scientific career. When they are older, a lack of experience in leading prevents them to apply for such a position.

## 3. 5. Gender balanced working conditions

In 2020, the average gross monthly earnings of the female researcher was 2.304 EUR in comparison with 2.556 EUR for the male researcher. The difference is $9.9 \%$ in favour of men. The average gross monthly earning of women professors (A-grade) was 4.615 EUR, while male professors earned 4.502 Eur. The difference is $2.5 \%$ in favour of women.

Equal pay measures: The JSI considers equal pay measures according to the Public Sector Salary System Act (ZSPJS) ${ }^{10}$, which defines the fundamental and uniform rules on the functioning of the salary system and a unified methodology of calculating and paying salaries for all public sector activities. The core salaries are not publicly accessible for all employees; the measures formally assure equal pay for the same work and the work of equal/comparable value. Differences in salaries originate from subtle variations of promotion rate in two directions: vertical is approved by the Scientific Council, while the horizontal one is approved by Heads of departments based on scientific excellence.

The JSI has clear pay transparency policies to avoid discriminatory remuneration based on sex/gender, age, family status, ethnicity, disability, and other possible grounds of discrimination. Gender pay audits/equality pay reports are prepared on demand and are not publicly available: The JSI does not regularly compile gender pay audits or reports on the pay of the male and female employees (and make the information publicly available).

The JSI organizes an appropriated workload and content of the work policy: A policy for assurance is in place that the workload of the employees is reasonable and respect their contracts; it does not constitute precarious and unsafe working conditions, e.g. burnout, disproportionate stress and unfulfillable working tasks, etc. Healthy and safe workplace and environment policy are in place. The workplace meets the health and safety regulations for all; for example, protect pregnant employees/students from unsafe circumstances; prevent chronic occupational diseases, etc. Equipment necessary for work/research is provided equally for both genders. It does not show any signs of unequal or discriminatory treatment of men and women (e.g. laboratory equipment, access to scientific databases, software, etc.).

The employees of the JSI have the possibility to arrange flexible working time. The employees can use teleworking (i.e. working remotely, home office, etc.) beyond the period of pandemic measures.

Possibility to work part-time: The employees of the JSI can work part-time (less than $50 \%$ or $50 \%$ of usual working time). In 2020, 151 researchers worked parttime, $25 \%$ of women and $75 \%$ of men. These numbers cover also the so-called complementary employment, where many researchers (mostly men) are $100 \%$ employed at Universities in Ljubljana, Maribor and Nova Gorica, and 20 \% at the JSI.

The JSI does not have its maternity and/or paternity institutional policy for students/employees beyond the national policy provisions. The JSI does not provide internal kindergarten services or on-demand/flexible childcare support for the employees/students. The JSI does not financially support/subsidise the internal childcare services; e.g. pays a part of the fee for the services, food for children, the wages for the educators, rent for the premises etc. The JSI has informal mechanisms to support employees in the re-entry after the leave period (e.g., maintaining contact during the leave period, guaranteeing the re-entry to the same position, etc.) The JSI does not provide baby changing facilities and room for breastfeeding upon demand to facilitate the reconciliation of work/research and family responsibilities. The JSI does not provide formal support for caring of employees' elders and/or dependent family members (special days off to accompany an ill family member to the hospital, adjusted work arrangement in case of long-term care, etc.), but does provide an informal support in agreement with the head of a group.

The guideline on gender-sensitive language is not formally compiled; the internal rules on the non-sexist language are not formally set and not publicly available. The responsible bodies with the mandate to objectively and independently monitor the anti-discrimination on gender are not established so far. A dedicated committee responsible for harassment at the institutional level is not set yet. Protocol on how to proceed in the sexual harassment and gender-based violence cases is not in place. The promotion of awareness measures to prevent harassment and sexist attitudes is not in place.

## 3. 6. Gender balance in research outputs

Share of female applicants - principal investigators of research funding for the year 2020 in national funds was $30 \%$ and it is the same as the share of female beneficiaries. The average grant's amount allocated to projects led by women was 62.827 EUR, while the average grant's amount allocated to projects led by men was 75.469 Eur. The difference is $20 \%$ in favour of men. The share of female applicants - principal investigators of research funding for the year 2020 in international funds was $29 \%$, while the share of female beneficiaries was 26 \%. The average grant's amount allocated to projects led by women was 197.416 EUR, while the average grant's amount allocated to projects led by men was 237.808 Eur. The difference is $20 \%$ in favour of men.

At the JSI, we have never had gender lectureships to assist departments on how to mainstream gender equality. Such lectures are planned in our GEP for Heads of departments and other employees. The gender-sensitive approach is informally integrated in teaching and experimental work through special attention on safe work in laboratories for pregnant women, ban of experiments with toxic chemicals and ionization irradiation. The principles/ guideline on how to integrate a gender-sensitive approach in teaching is not available. The JSI has not a specific guideline on the integration of the gender analysis into the research. The JSI does not offer women's and gender studies courses in the curriculum of
bachelor or master study programs. The gender perspective in the research funding schemes is not assured by a guideline/principles.

The gender perspective in submitted projects is considered and discussed only in international projects as fulfilling of demand of the call. There is no common guideline or institute template for gender equality part of the proposals and each principal investigator is left to his ingenuity in this task. Internal financial resources do not allocate primarily budget to gender aspects.

The sex-segregated data on research funds are not incorporated in the data collection system and not regularly collected, processed or being publicly available. The sex-segregated data on students (applicants, enrolled, in bachelor/master/PhD study programs and graduates) are not incorporated in the data collection system and are not regularly collected, processed or being publicly available. The sex-segregated data on staff and occupation (researchers, technicians, administration) are not incorporated in the data collection system and are not regularly collected, processed, or is publicly available. Also sexsegregated data on the authorship of research articles is not available.

## 4. Identified gender biases at Jožef Stefan Institute

## 4. 1. Outcomes of the staff survey

The JSI staff has participated to the staff survey with a statistically relevant proportion of the employees. A credible amount of data has been collected as 39 \% of the staff members voluntarily provided answers to the survey questions. Most of the survey questions were answered. The majority of the employed persons in the JSI research entities provided inputs to the survey as well as the staff from the administration units and technical support. The part-time or combined-time employed staff, which besides at JSI works also at the International Jožef Stefan Post Graduate School (cofounded by the JSI) or at the Department for Mathematics and Physics from the University of Ljubljana also took part in the survey.

## 1. Demography of the sample

Most of the survey responders are full time employed at JSI. The dedication to their academic career is high, as 36.2 \% of those who participated in the survey worked in the IJS laboratories during the weekends and spent more than 10 hours per day. Almost a third of the responders ( $27 \%$ ) reported that they sometimes work during the holidays. Most of the responders are married (59 \%) and $15 \%$
are single. Among them, 30.2 \% are parents of children younger than 17 years. As $39 \%$ of the JSI staff participated in the survey, it is considered that collected data are a good source for analysing the state of gender equality. The balance between the genders that answered the survey questions is appropriate as 52 \% of women and $48 \%$ of men form the sample. The same applies to the age of the responders as all age groups have answered the survey questions. Some participants in the survey did not reveal the exact department where they are working as this was allowed by the survey proposers for the sake of anonymity. The majority of the survey participants were younger than 30 years ( $40 \%$ of men and $33 \%$ of women). In the age group of 30-40 years, the percentage between men and women were similar. In the age group 50-60 years, there were 21.7 \% of men and $11.4 \%$ of women. The oldest group with age over 60 years shows $0.9 \%$ of men and $1.9 \%$ of women. The minority ethnic group is presented with $17 \%$ of men and $12.4 \%$ of women from the total sample.

The women worked in research departments (84 \%), in JSI technical support units (5 \%), and administration (11 \%). The men worked in the research departments (89 \%), in technical support units (9 \%), and administration (2 \%). The academic or scientific degree between women and men differs as $27 \%$ of men hold the position of senior researcher in comparison with $12 \%$ of women. The percentage of occupied positions as the full professor does not differ very much between the two groups, $5 \%$ are women and $7 \%$ are men. The academic fields where the JSI researchers work, showed a slight difference: women are less present in the engineering fields where men are represented with $38 \%$ compared to $26 \%$ of women. The same applies to natural sciences, but the difference between the percentage of men and women is lower, women represent $45 \%$ and men $55 \%$. Biomedical sciences show the opposite difference, more women are involved in these sciences compared to the group of men, $9.4 \%$ are women and $1.7 \%$ are men. Other non-specified fields of science are also more populated by women than with men: $11.5 \%$ versus $2.6 \%$.

## 3. Perceived gender equality of the JSI staff regarding its organization

Most of the survey participants agreed that gender equality increases the fairness of the working environment and proves the quality of scientific performance. No big differences were found between the male and female responses to this question. They agreed also with the opinion that gender equality makes it easier to balance work and family engagement. The JSI staff shows some differences regarding the suitability of women for some specific research fields, as 86.7 \% of women and $68.7 \%$ of men disagree with the statement that some scientific fields are not appropriate for women. They also disagreed with the claim that it is important to encourage boys more to pursue science careers than encouraging girls. The strong disagreement was expressed in $72.8 \%$ by women and $65.1 \%$ by men. The same finding applies to the claim that men have higher chances in their research careers, based on the belief that they have more innovative and creative thinking than women. The differences in the answers regarding the claim
that male scientists are better at information technologies and in using technical equipment than women scientists are very close to the division of positive and negative answers in the previous claims - encouraging girls or boys to study different sciences. Men and women from the sample in general (as total) disagree that these claims are correct. Women have expressed stronger agreement with the claim that men are preferred to be promoted when they apply for a higher position, but the men responders in their answers did not agree with this statement; they claim that these differences do not exist. The claim that women and men are in equal position when they apply for a position/employment, women supported with 47.5 \%, but men with 54.6 \%.

## 4. Reflection about the workplace at JSI in the context of equal chances between women and men regarding getting appropriate assignments, work place, research equipment, salaries and similar stuff.

Most of the answers in this group of questions or claims show that men and women differ in their opinion, although the differences between these two groups are not very high. For example, when appointing people to top managerial positions in research or academia, 17.1 \% of women and $12.3 \%$ of men claim that men have an advantage. The $28.6 \%$ of women feel that men are slightly preferred, but only $13.1 \%$ of the men responders agrees on that. In the case of specific bonuses and salaries, 28.3 \% of women feel that men have an advantage, while only $3.5 \%$ of men agree with this claim. However, almost half of the responders of both genders think that in general for getting specific positions men and women are equally treated. The same applies to a much higher percentage of the sample for the assignment and resources that are equally assigned to men and women researching at JSI. In cases when decisions about grants for submitted projects are made at the national level, a majority of the answers confirmed that men are preferred, but in the case of international grants the majority of the participants claimed that women and men are in equal position and equally treated. The distribution of tasks and resources in particular departments, as well as the assignments and roles between men and women, differ, as the majority of responders claim that there are visible differences between who get them, men or women. These differences in the opinions depend on age. In the age group 31-40 years, the $21.2 \%$ of women have claimed that men have an advantage, while only $12.5 \%$ of men agree with this claim.

## 5. Aspects related to the private life and circumstances that have a positive or negative impact on the staff member career

The majority of the responders answered that the relations between the number of women or men working in particular JSI departments is not an important and relevant factor for assuring gender equality. The current position of the responders regarding the possibility to get employment by applying to the advertised post, or by invitation or promotion with promise for a pay increase was assessed to have an equal chance for men or women regarding the positive outcome. The possibility that the institution enables professional development
was assessed as positive impact by half of the responders (48.7 \%). 21.3 \% of responders have already applied for promotion and were successful, others were either too young or without requested references, so they did not apply yet. Annual income was found to be rather low as majority of responders reported that their annual gross salary is between $10-20 \mathrm{~K}$ EUR especially given the nonexisting possibility for increasing the salary (close to $60 \%$ of the responders provided that answer). One individual provided the following answer: »As an employee of the public institution you cannot apply for a salary increase, salaries are defined by the state«. Obtaining the highest scientific/academic degree is equally available for men and women, but it is easier to get them for men (23.8 \% of the answers claimed that).

However, an important difference between men and women was found regarding the possibility to stay in the academic profession after getting a PhD as it involves a request for holding at least one academic year ( 9 -months) postdoctoral position in foreign country before obtaining a senior researcher position that is the crucial step towards the possibility of a permanent position in the organization. One of the answers from the responders reads: "For women, this requirement is stressful, because the period of the post-doctoral stage overlaps with time, which is after long studies still appropriate for having children. « More specific individual comments about that issue follow: a) »Postdoc positions abroad for one school year are a bit harder for women with kids compared to men with kids". b) »There is no formal requirement that would make things more difficult for women, however, maternity leave can make things more difficult for women and this is the time when men take advantage of their partner's maternity leave as a suitable time to go for a postdoc abroad. This is not an option for a woman who just had a baby«. c) »Postdoc abroad is almost impossible when a woman has little children. Women usually take over the maternity role, taking care of children and are overwhelmed, more tired, more absent from work". d) »There are differences between the employment of male and female representatives in high positions due to the very nature of work, which is more colourful for single people (or people who are less involved in family life) and financially stable individuals". e) »These circumstances - requested postdoctoral stay abroad for 9 months contribute to the obstacles in obtaining scientific/academic degree for women«.
22.5 \% of responders claim that time constraints to reconcile with family should be more flexible and that a lot of time is wasted in developing projects that are rejected ( $19.3 \%$ ). The majority of the responders also agreed with the statement that men usually get much ahead in research while women have little children ( 52.5 \% strongly agree, and 19.7 \% agree). Maternity leave was used by 19.6 \% of the women and 11.8 \% of the men have used paternal leave. Regarding the time distribution for the different tasks on the work, the majority of the responders selected the answer that they are quite satisfied.

## 6. Gender balance in decision-making position

The majority of the responders ( $61.2 \%$ ) answered that they are not members of the decision-making bodies at JSI, while $30.6 \%$ of them are leaders of project
teams. For not being a member of the decision making body, two main reasons were pointed: a) the age (too young for such position ( $57.5 \%$ ), and b) such position is not interesting for the responders ( $27.5 \%$ ). The mechanisms for the selection of decision-making bodies membership were assessed by the responders to be based on informal networks (51.4 \% agree and 30.2 \% strongly agree) and social contacts ( 57.2 \% agree). Replacement in appointing a new member of the decision-making body for a man with a woman or woman with a man was not indicated. However, the imbalance of the presence of men over women in decision-making bodies was not supported by the responders to be taken as natural. Only $3.1 \%$ of responders agree with the claims that »Women in the academy/research are not interested in decision-making", "Men are naturally more suited for leadership", and "Women are too emotional to be in a leading position". Only 2.2 \% of responders agree with the claim that "It is natural men are in leading positions and women do service/supporting". Disagreement with the last claim was $70 \%$. The individual experience presented by one responder reads: »All of the statements above are just perpetual that are out there and are blocking women being promoted. A pattern I have seen many times is to have a man and woman tandem leading projects. The man is usually listed as the project leader, while the woman does the actual coordination and administration work. These tandems are highly functional teams so I believe the division of work is fine for the purpose, but this should be reflected in an equal salary and equal credits for the project, which I do not believe is the case now".

## 7. Bullying and harassment

No direct question or answers directly addressing this theme was included in the survey, only one individual comment appeared, it reads: »Another factor is that women are discriminated against with remarks. Thus, women can be noncollegiate, ascendant, greedy, while men are responsible, ambitious." However regarding the workload, $84.7 \%$ of the responders have claimed that it happened several times in a month that they come from work too tired to do the chores which need to be done. 33.8 \% answered that it is difficult for them to fulfil commitments in their personal life because of the amount of time they spent on their jobs. $45.2 \%$ have complained that it is difficult for them to concentrate at work because of their private commitments at least once or twice a month.

## 8. Conclusion

The collected data from the survey has shown that gender equality at JSI is provided solely by equality principle and not by gender-sensitive approach. Thus, the policies and procedures to ensure equal opportunities to both sexes should be designed, implemented, and regularly assessed. A special focus should be given to the following areas and measures: improving the gender balance in decision-making positions and designing more flexible conditions for the postdoctoral stage abroad required for advancement in the career.

## 4. 2. Outcomes of the analysis of the interviews

Junior researchers of both sexes unanimously pointed out that parenting can negatively affect the development of a personal scientific career. They pointed out that this is also the most visible problem which can lead to gender inequality. They were unanimous that the negative impact of parenthood affected women more severely. Women are those, who are usually taking full parental leave. This results in a one-year dropout in their research career, which may influence the reduced number of published papers and the dropout of project funds. Younger researchers of both sexes also pointed out the demand for a long (one academic year) stage at a foreign institution during a PhD or soon after it as a very familyunfriendly. This requirement is one of the obligatory conditions for promotion to the senior researcher. They are united that such an outage affects both sexes, but especially women if they have already started a family during this period. They also testify that women are more likely to take care leave and stay at home with sick children. An interesting observation from one female interviewee was that the reason for this is in the fact that men who do not have a career dropout due to parental leave face faster career advancement. Consequently, their absence from work due to care leave has a bigger impact on the family budget.

One female junior researcher and one male junior researcher also testified about mobbing, which in both cases stemmed from the inferior treatment of women. The female junior researcher testified to her unequal treatment compared to her male colleagues in terms of merit for the work done and her competencies. The male junior researcher testified that he perceives gender differences in the workplace in favour of men, and when he loudly pointed out at a meeting that cynical remarks about women were inappropriate, this was not appreciated by the boss.

Most male junior researchers do not notice gender-biased differences in the workplace, but some male researchers report that they observed through their partners' personal experiences that it is harder for women to build personal careers. One of the male junior researchers pointed out that in his predominantly male field, the norms for achieving gender balance, "women's quotas" set by the EU commission in EU project calls feel like a burden.

Female senior researchers pointed out that they do not observe gender differences. One of them stated that the first time she had met this topic was with EU projects on gender balance. Nevertheless, another one argued that women need to work harder to prove their quality and also show some traditionally masculine qualities. At the same time, she emphasized that she did not have to give up her femininity.

Both female senior researchers highlighted socially-conditioned beliefs about the role of women, which can negatively affect the career development of an individual female researcher. The first one pointed out that certain fields of science are considered more masculine in society and therefore it is more difficult
for women to be recognized by their competencies, while the second pointed out that in her extended family she received negative remarks on an idea of women being a scientist. Both, on the other hand, think that the promotion system at the institute is equal for both sexes and that there are no differences.

They both mentioned that they did not have problems in reconciling the family with work and consequently career advancement. One of them had support in children care in her extended family, and the other took care of the child by herself, but did not perceive this as something that was sexually conditioned.

Among the negative experiences, one female senior researcher pointed out that during maternity leave, the status of a researcher does not freeze automatically and thus may slow down the progression compared to male colleagues. One highlighted the observation that the situation in the field of gender balance has been deteriorating over the years.

According to male senior researchers who have been assigned decision-making roles, it is perceived that they take an active role in establishing gender equality in the workplace. For the most part, there is a feeling that all-male senior researchers are aware that women find it difficult to build a scientific career at times, even though they agree that the rules for both sexes are the same and there is no inequality in this regard. They perceive female researchers' dropout after studying period. They cite biological differences between the sexes as a possible reason, saying that men usually find it easier to choose employment in which the employee is exposed to greater stress and insecurity. The possible reason is also the obligatory requirement of the postdoctoral stage abroad for further promotion, which coincides with the age period, when women usually decide to have children.

Two male senior researchers observed that people with a lower level of education and at the same time with a very important role (technicians, secretaries, cleaners, etc.) may be disposed to gender inequalities. At the same time, they observe that these persons are often female. One of the male senior researchers pointed out that it is necessary to think about changes much earlier, and make steps forward to inspire girls during their childhood to choose the profession of a researcher. He pointed out that here the family has the greatest influence.

The observation that women are often more negative about hiring a new woman than men was also highlighted. On the other hand, one male senior researcher said he is aware of cases where women were not employed due to possible maternity leave and a case where it was not clear that it was gender conditioned but it was insisted that instead of woman, the man was promoted for the work that was done.

Several male senior researchers touched with mixed responses on so-called positive discrimination of women at the expense of required women's quotas. The drawback of women's quotas, which favours women regardless of their scientific
results, was also highlighted. However, they agreed that women's quotas are, to some extent, a necessary mechanism for ensuring gender balance.

Senior researchers, regardless of gender, observe that the situation of gender balance elsewhere in Europe is often worse than in Slovenia. Although both junior and senior researchers observe that the burden of parenthood can have consequences on scientific careers and they acknowledge that this issue affects women more often, there is a feeling that younger researchers perceive this issue as more difficult to overcome compared to older researchers. In general, all researchers agree that the promotion system at JSI is the same for all researchers and do not perceive gender differences. All indications are that a more detailed analysis is necessary to determine how the system itself supports the socially conditioned role of each gender and whether it can be adapted to the extent that it will equally support both genders.

## 4. 3. Outcomes of the analysis of the focus groups

Overall, it was observed in all 5 focus groups (GEPI, Researchers, Management, Young Researchers and Administration) that unconscious bias regarding gender balance exists. All FG discussions took place by Zoom with approximate duration of $1,5 \mathrm{~h}$. The FG GEPI consisted of 9 participants ( 5 F and 4 M ) among which there were 2 Heads of department (1F, 1M), 3 young researchers (1F, 2M), 3 senior researchers ( $2 \mathrm{~F}, 1 \mathrm{M}$ ) and 1 from administration (1F). FG Researchers consisted of 12 participants ( $7 \mathrm{~F}, 5 \mathrm{M}$ ) among which there were 4 researchers at the beginning of their career (3F, 1M) and 8 senior researchers (4F, 4M). In FG Young Researchers 9 participants were present (5F, 4M). In FG Administration also 9 participants were present ( $6 \mathrm{~F}, 3 \mathrm{M}$ ), most of them were middle aged, only 3 (3F) were older. Ten participants were present at the meeting of the FG Management, all but one (female) in position of Heads of departments and units. Among them, two female Heads of department and two women at the leading positions in administration and management were present. All participants were in the age period above 45 years.

In recent years in Slovenia, issues regarding gender balance are more recognized and there are many workshops and roundtables organized on this topic, which are slowly changing stereotype thinking about gender and slowly reaching better gender balance in our society. Unfortunately, it is still expected from women that they take the completely maternity leave and childcare leave.

Almost all FGs, except Administration, exposed maternity leave and obligatory postdoc as the biggest barriers for gender equality, especially for their promotion. Maternity leave presents a serious drawback for young mothers, as they have at least one year of disadvantage compared to their male colleagues in terms of their scientific contribution, which makes for them harder to successfully apply for research grants. The Research Agency should consider these scientific gaps (lack of published articles, research activities) during maternity leave, similar as ERC projects where 18 months is added for each child as well as to evaluate
previous research years due to maternity leave. Nowadays, a sharp competition in society and also among the researchers for research grants on a basis of number of publications causes that young fathers cannot afford to take parental leave without a risk to be less successful in project applications. Appropriate changes in rules would correct this imbalance, more fathers would take the parental leave, and mothers-researchers would be able to continue their careers in research. The disadvantage situation for women is exposed already in recruitment for young researcher positions, where male candidates are preferred and women are in the job interview asked about plans to have children (also from female decision makers). The only advantage to be a woman was seen in more effective time management.

In the FG Young Researchers and Researchers, the discussion about the flexible working hours was exposed. Part-time work, flexible working hours, or work from home should be possible for young parents, as this would enable them easier balancing of work and family responsibilities. As young parents have to take childcare leaves often, work from home would enable them not to lose so many hours from work. In addition, working from home some days per week would enable young parents to save time, which is used for transport to work. It was also proposed to promote the family friendly institution, helping young parents with giving them a day or two free of work when they have to first send their children to kindergarten. Similar is already arranged for parents with kids entering primary school (first day of school is free for all parents having children from 1st to 3rd grade). A help to parents with small children with organization of kindergarten inside JSI or at a nearby dedicated institution is desired.

Obligatory postdoc represents a serious obstacle for young parents (men and women). In most cases, due to family responsibilities, they decide not to go abroad for one academic year as it is required. Therefore, they cannot be promoted scientifically, as the postdoc represents a necessary step for scientific promotion at JSI. It was suggested, that alternative evaluation criteria for promotion should be considered, like several short-time visits in abroad combined with work from home or work on EU projects, work at other research institutions in Slovenia or in industry. JSI should develop supporting mechanisms and measures to help the young parents with their career development, especially in organization of the postdoc abroad.

Moreover, a high decrease in the number of female researchers older than 45 years is observed at JSI. It was explained with employment in industry, public administration or at universities, where the workplace is more secure and less demanding. (One of the informal conditions for the permanent employment of researchers at JSI is a promotion to the title "Research Associate", which can be reached only after postdoc training abroad.) This usually happens in age period (35-44 years) for those who fulfil the strict criteria, among which are scientific excellence and obligatory postdoc in abroad.)

In FGs Management, Researchers and GEPI, a low number of women at the leading positions and in different decision boards at JSI was discussed in more detail. The ratio of women at the leading positions (membership in the Scientific council, head of department, other leaders), gradually increased from $15 \%$ in year 2000 to nearly $35 \%$ in year 2018, where the percentage reflected the ratio of female researchers at JSI. Then it abruptly dropped back to $15 \%$ in next three years, which is in contrary with the increase of female researcher employees.

It was observed that because there is a small number of available positions, a single exchange of a man with a woman and vice-versa causes a substantial change in the ratio between men and women. The low number of women at the leading positions can be correlated with women having more work at home as they primarily take care of children, more often take sick leaves for their children, take maternity leave. In addition, low number can be correlated with different approaches of women (their behaviour), as they are not as competitive as men, they are more prone to perfection and would not apply if they do not feel they have done all the things they should. Probably they are prone to take less risk as men, mostly because they can take the leading positions when they are older and their children are no longer needing much of their support. Reasons for unequal distribution of the leading positions by gender listed in FG Management were a small interest of women for some fields of study, small pool for recruitment of PhD students, reduction of number of female researchers due to already mentioned mandatory postdoctoral stage in abroad or due to demanding work as a scientist. Women are also not recognized for leading positions in general.

The ideas for changes were the following: a) identification of female and male researchers, who are willing to lead the research at different levels, their encouragement and training with distribution of some leading tasks or establishment of several assistant manager positions inside research departments with a special attention not to choose some preferred candidates too much in advance, which could demotivate others; b) active role of JSI in promotion of the studies with currently a strong gender imbalance; and c) increased visibility of successful female researchers.

It was proposed to organize trainings for leaders at different levels of organization to promote gender balance and to find the most suitable leaders as well as educate on soft skills and other leadership skills. Gender balance should be promoted/achieved in different committees at JSI. All institute's acts should be checked by a person responsible for equal opportunities and educational lectures on gender issues should be organized at JSI. It was also proposed that Human Resource unit should be established or career centre, which would help with recruitment of young researchers and offer career support and career opportunities for all employees. In particular, the FG Administration expressed that there are no or very limited career options in business and administration (B\&A), thus it is hard to stimulate good workers. It was proposed that awarding for good workers could also be in the form of educational seminars or other possibilities should be sought.

The discussion in FG Researchers revealed that women feel discriminated when they are invited to collaborate on research projects only because they are women (some project demands on gender equality). All participants expressed that they prefer to work in mixed groups, however at some departments there are mainly man or mainly women. Gender balance should be promoted/achieved in different committees at JSI, functions at JSI should be taken by different people not always the same ones in different committees, the retired researchers should give space to younger, and mandates should be given for participation in different committees.

In addition, other aspects were found, which relate to gender imbalance. It was observed that lack of mutual respect between different generations and stereotypes still present in society are reflected also at the workplace. In this case, women are less recognized for their scientific achievements, male researchers are preferred in project teams, while women get less responsible stereotype tasks (administrative tasks). Some cynic remarks at the workplace are present in many cases, especially young women receive them from male seniors (unconscious discrimination). Female researchers are overlooked in candidacy for leading positions or awarding and their achievements are not recognized.

The FG analysis overall showed that participants agreed that the acts of the institute do not support systemic discrimination, but also do not act proactively to help researchers-parents to combine family and professional work, or to get more equilibrium distribution of leading positions concerning gender. Unconscious discrimination exists, also as a result of generations' conflict.

## 5. Recommendations for development of gender equality plan at Jožef Stefan Institute

## Recommendation \# 1

## Introduction of flexible promotion criteria.

Based on interviews, discussions in focus groups and surveys, the main problem for the promotion of female researchers and their continuation of scientific careers is the 9 -month mandatory visit to a foreign institution in the period soon after PhD defence. This period overlaps with the time when a woman finally decides to become a mother or already has small kids. This strict rule causes that many women and also some fathers leave the JSI and find jobs in environments without this obligation. Those who stayed either considered this rule and postponed the family life or took the whole family with them, if financial resources and willingness of their partners allow this. The essence of postdoc training is in acquiring knowledge and skills that are not available at home institution and in establishing
of international contacts. Therefore, parents who cannot go to postdoc abroad are already supressed in comparison with their colleagues who can afford to go.

In addition, Slovenian tax system poses in some cases an additional and serious financial burden to postdoc students studied abroad, where the cost of living is generally higher, especially if they must financially take care for their families. To avoid this additional taxation, many of them permanently move abroad with their families.

In addition, this rule of the obligatory postdoc stage abroad is set for the period when researchers do not have a permanent position at the JSI and they also cannot get security or contract that they will be reemployed at the JSI after the return. Heads of departments decide on their employment later in their career, if other rules are also fulfilled, like scientific excellence and the ability to get projects financed. Therefore, many researchers stay abroad for longer periods or they may never return to the JSI, sometimes also due to better conditions for work abroad.

As a possible solution, it was suggested to adjust promotion rules to be more flexible and to consider parental role of young doctors. The obligatory 9 -month postdoc should be either postponed to a later period in a researcher's career or split to several shorter periods or eliminated as mandatory for promotion to the title "Research Associate". The rule is much stricter than the rules of the National Research Agency (ARRS), where a one-month research stay abroad is obligatory for promotion to the title of the Senior Research Associate and 3-month research stay for promotion to the highest scientific title (Research Advisor). The alternatives for a postdoc abroad, as example a postdoc training in industry, should be discussed at different levels of research hierarchy taking into account positive and negative aspects of current rules. Additional support to young parents by Human Resource Unit to continue research career would be in providing all necessary information and support about the relocation issues and on their status after their return at least for a certain period.

## Recommendation \# 2

## Flexible working hours with work from home/teleworking and use of surplus hours for absence from work

Interviewees agree that due to the set conditions for further promotion, young parents may find themselves in an unequal position compared to co-workers who do not opt for parenthood. However, because traditionally women in Slovenia still bear the greater burden of parenthood: from absence from work due to parental leave to absence from work due to care leave. This inequality affects younger women all the more.
One of the exposed problems in combination of work and family obligations is also a time consuming commute between home and the institution. A solution to work from home at least for a few days per week was suggested also for time
beyond COVID pandemic. Change of overtime to free days would also help parents with small children to combine family and professional life.

## Recommendation \# 3

## Establishment of Human resources (HR) unit

At JSI, there is no a HR unit established. The employment of the new staff is the decision of heads of departments and units based on their vision, financial resources and work needs. Gender plays a minor role in starting positions of PhD students. Women are desired as PhD students because they traditionally work hard, are accurate, and listen to their bosses. After PhD education, which is financed by the State, they are obliged to go abroad for the postdoc stage, and many of them cannot fulfil this obligation. Therefore, they leave the institute and do not present a burden to the departments to finance them until they successfully apply for the first individual project ( 2 -years postdoc projects also financed from the State) or become a part of a group, which is successful in the project application.

Among different traditional tasks of HR units, gender balance in recruitment, career progression and promotion should be monitored and regulated. Specific leadership programs should be provided to support researchers and other staff for decision-making positions. Regular gender training for managers should be provided, which would increase the gender competencies of the managers (heads of departments, decision-making committees, etc.).

The HR unit would take care of the daily needs of researchers and other employees at the JSI, especially in the most vulnerable periods, when they have small children and when they become older. An idea that a kindergarten is established for the children of JSI's employees at the JSI or very close to the JSI was expressed. This would allow young people to be able to devote themselves to research work without worry, knowing that their child is nearby and a parent can come to him/her at any time. Such an HR unit can help the JSI to play an active role in regulatory bodies, for the prolongation of the individual projects, which are headed by parents for the period of their maternity and parental leave. Nowadays, when a researcher comes back, she or he may face a loss of projects. The same reasons for prolongation should be considered also in the time slots for promotions, which have to be extended for the period of maternity and parental leave as well as for long-term care leave on request of an applicant for promotion.

Old age is also a "taboo" topic at the JSI for researchers who do not occupy leading positions in the scientific hierarchy and/or in decision-making bodies. It was observed that older female researchers prematurely withdraw from the research process. In the oldest period over the age of 65 , only 7 women in comparison to 21 men are still employed at JSI. Several reasons are possible, like permanent competition for research money with younger and younger
colleagues, forgotten achievements of women, overlooked in candidacy for awards, private reasons (children, elderly parents, grandchildren, fatigue, illness), etc. It was suggested, that those successful female scientists should be presented in local and general society more often as role models for new generations and their work achievements should be recognized.

The HR unit should provide all necessary information for promotion and career development, not only for researchers but also for other employees. Technicians and administrative staff have complained about the non-existing promotion path, which prematurely limits their careers financially and from the point of view of challenge and interest.

To avoid situations that could be labelled as mobbing or sexual harassment, some rules of behaviour should be established (what is appropriate and what is not), which leaders, as well as researchers, shall follow in regards to gender equality.

## Recommendation \# 4

## A balanced composition of the decision-making bodies by age and gender, and restriction of memberships to two or three mandates.

The majority of the responders, men and women, answered that they are not members of the decision-making bodies at JSI. It is possible to predict that without changes at the JSI there are small chances that they will get the decisionmaking positions in future.

The analysis shows the following main problems: a) lack of balanced composition of the decision-making bodies regarding gender; b) long-term memberships of the same researchers in the Scientific Council; c) continuation of the heads-ofdepartments leadership.

In addition, most of the Heads of departments are simultaneously members of Scientific Council and Advisory boards, some of them also of the Promotion Committee, so the problem is multiplied. The people who occupy triple or in some cases quadruple decision-making positions are extremely busy. Therefore, such a position is not attractive for women or parents in an age when they have to take care of children and simultaneously be progressive in their scientific career. When they are older, a lack of experience in leading prevents them to apply for such a position. Therefore, a permanent encouraging of women for memberships in decision-making bodies should be taken in place. A cultural change is also needed with awareness that both genders can and must contribute to research policy.

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# Gender Equality Report for Jan Kochanowski University of Kielce, Poland 

Project Acronym: ATHENA
Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

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## Executive summary (Jan Kochanowski University of Kielce)

The Jan Kochanowski University has received the distinction of "HR Excellence in Research" from the European Commission. This obliges the University to continuously develop its Human Resources and recruitment policies, including the development of equality policies in the form of The General Equality Plan for the Jan Kochanowski University.

The University has already implemented clear pay and recruitment transparency policies to avoid discrimination based on sex/gender, age, family status, ethnicity, disability, and other possible grounds of discrimination. However, advanced organizational solutions aimed at changing the awareness of gender equality considering the results of the diagnosis should still be implemented.

Analysis of quantitative and qualitative data indicates similar proportions of women and men working at the Jan Kochanowski University of Kielce, with a slight predominance of women in the group of academic teachers.

Significant divergences in the progress of the scientific career of women and men have been identified, consisting of an apparent slowing down of career for women at the doctoral level and problems encountered with academic promotion to higher degrees.

There was a slight discrepancy in salaries, which should be monitored, and appropriate regulations incorporated and enforced.

On the other hand, women predominate among those in decision-making positions at the Jan Kochanowski University of Kielce.

Importantly, in all groups, gender equality is understood as equal opportunities for development, but not as a balanced representation of women and men in decision-making positions, since the assumption of these positions is related to elections (rector, Senate members) or to scientific achievements and skills.

The respondents stated that they had not encountered situations of genderbased favoritism, although one group stressed the need to monitor the observance of gender equality in the recruitment process to work at the University.
In the group of academics, it was emphasised that interest in particular fields of science results from cultural factors rather than institutional barriers. And mutual relations between employees and between employees and faculty and University authorities are not determined by gender.

The academic community agrees that education is important in the field of diversity, tolerance, and understanding. Building a culture of gender awareness among the academic community is key to achieving improvements in gender equality area.

Respondents strive to ensure a balance between professional and personal life, however, irregular working hours, teaching at different times/days, additional research work, dissemination of research results (including participation in conferences), project implementation are activities that are undertaken by them with different intensity and periods of work.

For some women, it is an advantage to have flexible working hours, but for others it is a burden, making it impossible to separate work from private life, and destabilizing family life. In most cases, the line between private life and work is blurred.

It is necessary to take measures to support the development of scientific careers, as well as the greater activity of women in research and in obtaining grants.

It is essential to collect relevant data to examine the relative situation of women and men within the organization and its core activities.

Institutional change should be based on research findings and reliable, systematically collected data that integrate an intersectional perspective into the University's management processes.

## Introduction

The objective of the report is to provide a description of the departure situation in terms of gender basis for the development of appropriate Gender Equality Plan (GEP) for Jan Kochanowski University of Kielce (UJK).

One of the most important challenges facing European society is the elimination of all types of discrimination. Therefore, Jan Kochanowski University of Kielce joins other European institutions which aim to provide equal opportunities in the development of academic careers and takes action to create a safe workplace that allows development based on equality and diversity of staff, students, and PhD candidates.

Building a work environment in which the harmonious development and interaction of employees is ensured is one of the priorities of the University.

Equality of opportunity means a state in which women and men have equal social value, equal rights and responsibilities, as well as equal access to social resources (e.g., public services, labour market). It is a situation in which representatives of all genders can develop freely in the family and professional area, as well as make decisions based on their needs, dreams, and ambitions.

The Gender Equality Plan is not only the realisation of the idea of equality, but also a set of solutions created based on the provisions of Community and national law.

Appointed UJK research team, within Athena H2020 project, carried out desk research, quantitative and qualitive research. Although there was no single
document governing GE in the university to date, documents that were scattered throughout the organization and largely governed equality issues were reviewed.

The presented report provides data and information collected within the WP2 of the project Task 2.1 'Gender equality audit and assessment at the organizational level' and Task 2.2. 'Report on national status in gender equality in project partners countries - Legislative and Policy Backgrounds to Promote Gender Equality in Research' and partial research tasks within this ( 2.3 deliverable) Gender Equality Report thanks to which it was possible to prepare a full diagnostic report for Jan Kochanowski University of Kielce.

The report is structured according to the process of data collection, based on the gender equality audit, and adapted to the requirements of the diagnosis for Gender Equality Plans according to the guidelines of the European Commission² and Gender Equality Strategy 2020-20243.

The chapter 1 shortly describes methodology applied by UJK research team and data collection process undertaken within Athena project.

The chapter 2 is devoted to overall gender equality in Poland (general society) and research and innovation on country level. It mentions legislative framework, national bodies rules, strategic documents, and initiatives in Poland general and research and higher education sector.

The third part concentrates on Jan Kochanowski University of Kielce gender equality audit results. The quantitative indicators were grouped into six dimensions according to gender equality audit methodology (GEA).

In the fourth chapter gender biases at Jan Kochanowski University of Kielce were identified and described as a result of storytelling interviews and focus groups workshops as well as an outcome of online survey.

Using the indicators and research tools the final recommendations for development of the Gender Equality Plan for Jan Kochanowski University of Kielce were collected and summarized in the fifth chapter.

The findings and conclusions presented in this report are the very strong basis for the GEP designing process which is a next step planned at Jan Kochanowski University of Kielce

## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection technics implemented throughout the year 2020. The methodologies have been prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences.

[^1]The national provisions in terms of gender equality in research and higher education were assessed based on a desk-research and policy analysis related to gender equality in society, research, and higher education. Our team utilized extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of our organization.
Our research team collected the data from March to December 2021. The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardized data collection on women in science She Figures. ${ }^{4}$ The qualitative GEA indicators present unquantified aspects and measures to assess the situation in terms of gender equality. Analysis of the collected data was obtained in cooperation with the Human Resources Department, Payroll Department, Education Office, Science Department, Doctoral School, Project Management Centre. The measures were evaluated via an online data collection system using a simple online assessment tool.

To identify gender biases in Jan Kochanowski University we used three data collection methods: online survey, story-telling interviews, and focus groups. An online staff survey implemented by a standardized questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, 53 questionnaires were included in the analysis ${ }^{5}$.

The objective of the story-telling interviews was to search for the diversity of typical facilitators and inhibitors of gender awareness in the life-course of scholars. Based on in scenario, our team implemented 20 interviews with researchers incl.: 10 women, 10 men $^{6}$.

The research team organized 4 focus groups in which a total of 25 persons took part in the following composition: 16 women, 9 men $^{7}$. Then, using the standardised script, we translated the recoded discussions and analyzed the data using qualitative methods.

## 2. Outcomes of the assessment of the national provisions in Poland

### 2.1. Status of gender equality in society

Considering, the legislative framework, in Poland, the gender equality principle is enshrined in the Constitution adopted in 1997, where the article 33 underlines "the male and female have an equal right to education, employment and

[^2]promotions, to equal remuneration for work of equal value, to social security and to occupy positions, perform functions and obtain public dignity and decorations" 8 . Poland has also ratified most of the international legal acts supporting equality, including the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), as well as the Beijing Declaration and Platform for Action. Ratified international agreements constitute a particularly important source of the legal framework of equality policy in Poland, as they are listed as sources of universally binding legislation in the Polish constitution (Article 87).

Accession to the EU has contributed to a general improvement of the legal framework for equality, including significant changes in the labour code introduced in compliance with European principles. Both the Treaty on European Union and the Treaty on the Functioning of the European Union are supreme over national law. In 2010 the Polish parliament adopted The Act on the Implementation of Certain Provisions of the European Union in the Field of Equal Treatment. The Act sets general framework conditions for equal treatment policy in Poland, and it specifies the competent bodies in equal-treatment issues, that is, the Government Plenipotentiary for Equal Treatment and the Commissioner for Human Rights.

In Poland, there is no system of monitoring of implementation of the in-force antidiscrimination legislation. Gender mainstreaming is practically invisible. Even in specific policies, such as, related to domestic violence, the attention to gender is minimum. The collection of gender disaggregated data is not regulated by law, which does not help in creating gender-specific interventions. There is no practice of gender budgeting/auditing.

Following available data on gender equality to present situation in Poland, we use the Gender Equality Index (GEI). The score in 2020 ranks Poland on 55.8 out of the maximum 100-point score, it means that Poland falls below the EU-27 average which in 2020 was $67.4^{9}$. The GEl's score consists of six areas: money, knowledge, time, power, and health reflecting the EU gender equality framework. The domain scores reveal which areas pull the gender equality in the country down. As presented in Table 1 the greatest weakness concerns the domain of power which measures gender equality in decision-making positions across the political, economic, and social spheres.

Table 2 Gender Equality Index domain scores for Poland (2020)

| COUNTRY | Work | Money | Knowledge | Time | Power | Health |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Poland | 67.3 | 75.5 | 57.2 | 52.5 | 30.0 | 83.1 |
| EU-28 | 71.4 | 81.6 | 62.8 | 64.9 | 53.1 | 87.8 |
| average |  |  |  |  |  |  |

[^3]Source: EIGE Statistics Database, Gender Equality Index scores, domain
scores and sub-domain scores [index_data_index_scores]
One of the indicators showing worth mentioning is the gender overall earnings gap, which a presents persistent gap to the detriment of women. According to Eurostat ${ }^{10}$ in Poland. it is $30.7 \%$ (2018). This synthetic indicator considers three types of disadvantages for women in the labour market: lower hourly earnings, lower hours worked in paid work, and lower employment rates due to interruptions in childcare or other dependent family members. Disparities are therefore noticeable.

### 2.2. Status of gender equality in research and higher education

Standardized EU indicators of women and men in research and innovation place Poland considering the gender equity in science among EU-27 average ${ }^{11}$.

Overall, in Poland, considering the gender equality status in science and higher education, the share of women after doctoral studies exceeded 50\% (Table 2). Nevertheless, women continued to be under-represented among Ph.D. graduates in the fields of information and communication technologies. However, when analyzing engineering, manufacturing, and construction, the proportion of women is more than $40 \%$.

Table 3 Proportion of women among Ph.D. graduates in Poland (\%, 2018)

| Country | All fields of <br> study | Information and <br> communication <br> technologies | Engineering, <br> manufacturing, <br> and construction |
| :--- | :--- | :--- | :--- |
| Poland | 56,3 | 10,2 | 43,5 |
| EU - 27 average | 48,1 | 22,4 | 29,4 |

Source: She Figures, 2021
At the EU-27 level, women represented just under one-third ( $32,8 \%$ ) of the total population of researchers in 2018 (Table 3). Gender imbalance persisted in the proportion of women researchers is also below $40 \%$ in Poland, but it is a little bit higher than average in the EU.

Table 4 Proportion of women among researchers in Poland (\%, 2018)
Country 2018

Poland 38,1
EU-27 average 32,8
Source: She Figures, 2021

[^4]Regarding indicators of career advancement, it can be easily noticed that the share of grade A staff among all academic staff is gender unbalanced (Table 4). Men are more likely than women to reach grade A positions.

Table 5 Proportion of women among all academics' staff by grade in Poland (\%, 2018)

| Country | Grade A | Grade B | Grade C | Grade | Total | GCI |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | D |  |  |
| Poland | 25,2 | 39,3 | 50,5 | 51,2 | 45,1 | 1,78 |
| EU -27 | 26,2 | 40,3 | 46,6 | 47,1 | 42,3 | 1,58 |
| average |  |  |  |  |  |  |

Source: She Figures, 2021
The Glass ceiling index (GCI) shows the difference between women and men in terms of their chances of being promoted. The higher the value, the stronger the glass ceiling effect. The GCI in Poland in 2018 was slightly higher than average in the EU $(+0,2)$.

In term of gender-balance in decision making, the data from She Figure (2021) indicate that in Poland, the share of women is also below the EU-27 average (Table 5). Women in Poland are under-represented among scientific and administrative boards, advisory boards of a research organization, publicly/privately managed, and financed.

Table 6 Proportion of women on boards, members, and leaders, heads of universities in Poland (\%, 2019)

| Country | Members, including <br> leaders | Leaders | Heads of <br> universities |
| :--- | :--- | :--- | :--- |
| Poland | 24,9 | 19,4 | 10,9 |
| EU -27 | 31,1 | 24,5 | 17,9 |
| average |  |  |  |

Source: She Figures, 2021

Taking into consideration legislation that frames gender equality in research and higher education Poland does not have any comprehensive national strategy or road map to advance gender equality in research and innovation. There is no official law on gender in research and higher education. Only in 2018, together with the new law regulating higher education and science in Poland, the issue of parenthood among scientists was tackled by the Ministry of Science. The 2018 Law on Higher Education and Science ${ }^{12}$ guarantees students of first-, second-, long- and third-cycle programs to extend their study periods based on child-care

[^5]leaves. It prohibits denying access to individual education programs to female students expecting a child and students, who became parents - regardless of their gender. It allows taking (parental) leaves by students and Ph.D. candidates at their request. Moreover, it also states that child-care leaves extend the time of employees' internal evaluation process. In the case of young researchers, they are not included in the calculation of the time of holding the doctoral title while applying for the minister's stipend.

Apart from the above-mentioned recognition of scientists' role as parents, there are no other signs of gender mainstreaming in the field of R\&l in Poland at the national level. In Poland, there is no specific gender-sensitive recruitment policy applied in institutions of the public research sector apart from isolated solutions adopted by some universities. Also, no measures are in place that traces existing gender pay gaps in institutions of the public research sector and no specific programs to support the re-entry of the academic workforce into research careers imposed by law or included in national strategies.
Although there is no official law on gender in research and higher education, universities set up their internal regulations that prevent discrimination (including this based on gender) and/or refer to equality between women and men in their statutes and strategies for development to meet requirements set by the European Charter \& Code for Researchers and the Code of Conduct for the Recruitment of Researchers and to obtain very prestigious HR Excellence in Research logo. They also establish bodies responsible for equal treatment and work on the Gender Equality Plan.
There are other rules, not directly related to gender equality, which results from general rights guaranteed by Polish law. For example, in Poland, the issue of sexual harassment is regulated in the Labour Code in Article 18(3). It imposes an obligation on employers to prevent such behavior and to protect their employees. As for the public research sector institutions, university rectors and directors of research institutions are responsible for compliance with these regulations and additionally the Anti-Discrimination Standard for Universities in Poland (2018) developed by the Autonomy Foundation.

The detailed remuneration criteria are also regulated by the Act on Higher Education and Science and several ordinances. Universities determine the conditions of remuneration for work in a company collective agreement or remuneration regulations. The starting point is the professor's salary, which is determined by detailed ordinances. Other academic positions are paid as an appropriate percentage of the salary of the professorial position.

## 3. Outcomes of the gender equality audit at Jan Kochanowski University of Kielce

From the analysis of the figures for total employees at Jan Kochanowski University, as of the end of 2020 (Table 6), it is evident that women predominate in the organization (W: 60.3\%; M: 39.7\%). The gender disproportion is particularly
visible in the group of didactic staff (W: 62.9\%; M: 37.1\%) where the majority are women, as well as in the group of other employees, i.e., administrative (W: $70.2 \%$; $\mathrm{M}: 29.8 \%)$. However, this is a common phenomenon in Polish public units, where women predominate in support positions. On the other hand, it is worth noticing that in the group of research employees, the gender proportions are almost equal (W: 51.2\%; M: 48.8\%).

Table 7 UJK employment structure by gender (2020)

| No | Total | Number of the <br> indicator | Number of women <br> men | Women \% | Men \% |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1.Employees in <br> total | 1533 | 924 | 609 | 60.3 | 39.7 |
| 2.Research <br> employees | 713 | 365 | 348 | 51.2 | 48.8 |
| 3.Didactic <br> employees <br> (inc. lectors) | 243 | 154 | 89 | 63,4 | 36,6 |
| 4.Other <br> employees | 577 | 405 | 172 | 70.2 | 29.8 |

Source: Athena project, 2020-2021

### 3.1. The pool of graduate talents

An analysis of doctoral program applications by gender shows an comparable number of women and men (W: 51.8\%; M: 48.2\%). However, when it comes to the number of Ph.D. graduates in 2020, a higher number of women (70.4\%) than men (29.6\%) are noted (Table 7).

Table 8 The pool of graduate talents - UJK PhD candidates (\%) (2020)

## No. Title of the indicator

1. Proportion of women and men among PhD applicants (2020)
2. Proportion of women and men among PhD students (2020)
3. Proportion of women and men among PhD graduates in
3.12016
60.9
39.1
3.22020
70.4
29.6

Source: Athena project, 2020-2021

### 3.2. Gender balance in research

Analyzing the gender balance in research (that is, the proportion of women and men who are research workers), it can be seen that the differences even out over
the 4 years. In 2016, women in this group accounted for $42.3 \%$ and men for $57.7 \%$. In 2020, the proportion of women was already $51.2 \%$ and men $48.8 \%$ (Table 8).

Table 9 Number of UJK research employees, including women and men $(2016,2020)$


Source: Athena project, 2020-2021
The majority, $40.3 \%$, of all female research staff work in the social sciences, followed by the humanities (23.0\%), medical sciences (19.2\%), and the least in the natural sciences (17.5\%). For men, the distribution in scientific areas looks similar and shows the highest representation in social sciences (34.2\%), followed by humanities and arts (22.4\%), life sciences (21.8\%), medical sciences (21.3\%) (Table 9).

Table 10 Distribution of UJK researchers employed across fields of R\&D by gender (\%) (2020)

No. Type of indicator

1. natural sciences
2. engineering and technology
3. medical sciences
4. agricultural and veterinary sciences
5. social sciences
6. humanities and arts

Source: Athena project, 2020-2021

Women Men
$17.5 \quad 21.8$
$0.0 \quad 0.3$
$19.2 \quad 21.3$
$0.0 \quad 0.0$
$40.3 \quad 34.2$
$23.0 \quad 22.4$

Considering the stages of the academic career, there are significant differences in the proportion of women and men among total academic teachers with degrees, scientific titles. Men predominate, both among those with the title of full (titular) professor (W: 29.9\%; M: 70.1\%) and associate (university) and habilitated doctor (W: 46.1\%; M: 53.9\%). In contrast, among those with doctoral and master's degrees (assistant professors, assistants, and doctoral students), women significantly predominate. A particular disproportion is visible in the doctoral degree (W: 61.5\%; M: 38.5\%), where a large proportion of women end their careers or face obstacles.
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research potential

The presented results (Figure 1) indicate that the career development and promotion paths of women and men are not identical. This means that UJK must take the necessary steps to eliminate these disproportions.

Figure 1 Proportion of women and men among UJK academic staff by academic grade (2020)


Source: Athena project, 2020-2021

The Glass Ceiling Index, which compares the proportion of women among all academic staff to the proportion of women in group A, was 1.8675 for the year 2020. However, this value should be contrasted with the corresponding GCI for 2016, which was as high as 2.4704 , as well as with the already known GCI for 2021, equal to 1.7723. Thus, it is evident, in the context of the development of academic careers, the successive decrease in the GCl in recent years.

Analyzing the age of research staff, there is a dominance of workers aged 35-54 of both genders (Table 10). In the age group of 55 and above (close to $40 \%$ ), the predominance of men can be seen with $24 \%$ of all women (it is worth mentioning that women can retire at age 60 and they use this entitlement).

Table 11 Distribution of UJK research employees across age groups (\%), by gender (2020)

No. Title of the indicator

1. $25-34$
2. $35-44$
3. $45-54$
4. 55-64
5. 65 and over

Source: Athena project, 2020-2021

Women Men
$13.7 \quad 10.3$
29.0
22.1
$33.7 \quad 28.5$
$17.3 \quad 25.0$
$6.3 \quad 14.1$

From the Figure 2 it is possible to notice a clear pattern, women dominate over men in numbers for lower grades and lower ages, while the situation is reversed for groups with higher grades and older ages.

Figure 2 Number of women and men (UJK research, research didactic employees) by age and by academic grade (2020)


Source: Athena project, 2020-2021

The organizational arrangements for ensuring balance in research at UJK are not explicitly directed towards gender equality aspects (Table 11).
Table 12 Qualitative indicators on gender balance in research (UJK)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 -Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A;
No. Title of the indicator ..... UJK

1. A dedicated organisational arrangement (office, contact person, ..... 1
etc.) aimed at change towards gender equality
2. Gender equality action plan (GEP) ..... 1
3. Monitoring and continuous evaluation of the GEP ..... 1
4. Gender budgeting ..... 1
5. Women networks established ..... 1
6. External alliances of organisations with an outstanding reputation ..... 1 for gender equality created7. GE awareness-raising activities for students1
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gender equality to unlock
research potential
7. GE awareness-raising activities for staff

It seems necessary to take actions dedicated to the development of GEP, not only for the purpose of obtaining external funds from European Commission programs but to raise awareness around equality and diversity in organizations also in research and innovation.

### 3.3. Gender balanced career advancement

The Gender balanced career advancement assesses the HR measures promoting women scientists in their professional development. Now, additional tools to stimulate the development of women's scientific careers, such as monitoring programs, additional training, are not functioning at UJK (Table 12).

Table 13 Qualitative GEA indicators on gender balanced career advancement
(UJK)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 -Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A;

No. Title of the indicator UJK

1. Mentoring programmes for female employees 1
2. Gender training for employees 1

3 Equal access to internal training 4
4. Specific sabbatical for women scientists 1

Source: Athena project, 2021
It is essential to implement a gender equality program and activities that equalize the opportunities for women/men to develop scientific careers, facilitate work-life balance, and advance the careers of both genders, considering the role of women in society.

### 3.4. Gender balance in decision making

The study found differences between the participation of women and men in the management of the university and individual departments as well as in committees and other bodies (Table 13). Although at the time of the survey (2021) the highest position is held by a man (it is worth noting that in the history of UJK the position of Rector was held by a woman), the positions of vice-rectors, deans and vice-deans are significantly dominated by women.

This proportion differs from the general statistics in Poland and at the European Union level, where women are most often under-represented.

Table 14 Gender balance in decision making (\%) (UJK)
No. Title of the indicator Women Men

1. Rectors (at the top) of the university/organisation in
1.1. Previous term 0

100
1.2. Year 20210 100
2. Vice-Rectors (at the top) of the university/organisation in
2.1. Previous term $50.0 \quad 50.0$
2.2. Year $2021 \quad 75.0$
25.0
3. Scientific boards in 2021
52.0
48.0
4. Deans of Faculties/Institutes in $2021 \quad 62.5$
37.5
5. Vice-Deans of Faculties/Institutes in 2021
68.8
31.2

Source: Athena project, 2021

In Jan Kochanowski University regulations are ensuring appropriate parities in the bodies, committees, and councils. However, additional training programs, e.g., in leadership and strategic management, do not work (Table 14).

Table 15 Qualitative indicators on gender balance in decision making (UJK)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 -Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A;
No. Title of the indicator UJK

1. Gender-integrated leadership programme
2. Gender training for managers
3. Targets/quotas for gender balance in boards and 4

Source: Athena project, 2021

However, it is necessary to introduce measures to improve the equality and diversity competencies of staff in managerial positions. An example is a training programme to improve competencies in gender-integrated leadership.

### 3.5. Gender balanced working conditions

Gender balanced working conditions examine the organization's instruments and policies to support work-life balance, as well as standards to prevent sexual harassment in the workplace. They create an organizational culture. UJK has administrative arrangements in place to ensure transparent compensation policies, including equal pay, as well as a healthy, safe, and harassment-free work environment.

UJK set up internal regulations that prevent discrimination (including based on sex) and refer to equality between women and men in their statutes and strategies for development to meet requirements set by the European Charter \& Code for Researchers and the Code of Conduct for the Recruitment of Researchers and to obtain HR Excellence in Research logo. The organization has a Code of Ethics, Anti-Mobbing Policy, aiming to prevent discriminatory actions in all fields.

Nonetheless, the results of the survey indicate a discrepancy in the remuneration of $R \& D$ employees - the remuneration of men is $12.1 \%$ higher than that of women. In the case of research staff by $8.9 \%$, and exclusively teaching staff - by $3.1 \%$. Among support staff representatives, the difference is smaller - $1.6 \%$. In contrast, the salaries of male full professors (titular) are 1.7\% lower than those of women with the same output (Table 15).
Table 16 Gender pay gap based on average gross monthly wage (\%) (2020) (UJK)

| No. | Title of the indicator | UJK |
| :--- | :--- | ---: |
| 1. | Gender pay gap based on average gross monthly wage (\%) | 12.1 |
|  |  | 8.9 |
| 1.1. | Researchers | 3.1 |
| 1.2. | Didactics (only) | 1.6 |
| 1.3. | Other supporting staff | -1.7 |
| 2. | Gender pay gap in the organisation among A- grade |  |
|  | academics (\%) |  |

Source: Athena project, 2021
It is worth noting that this is an apparent phenomenon of the pay gap. Given the previous data and the fact that fewer women earn top degrees and tend to retire earlier, older male professors may overstate the average earnings of men as a whole.

This is confirmed by the results of the in-depth interviews and the conclusions reached during the focus group meetings indicate that the working conditions at the University do not put the respondents at a disadvantage compared to other UJK employees and the rules in force at the University apply to every employee regardless of gender. However, combining work and family life (work-life balance) is difficult from the point of view of both genders, especially in the case of women who are mothers (Table 16).
Table 17 Qualitative indicators on gender balance in working conditions (UJK)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 - Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A;
No. Title of the indicator

1. Equal pay measures 4
2. Pay transparency policies
3. Gender pay audits/equality pay reports prepared and publicly ..... 1 available
4. Appropriated workload and content of the work policy ..... 4
5. Non-discriminatory equipment necessary for work/research ..... 4 measures
6. Healthy and safe workplace/university environment policy ..... 4
7. Possibility to work part-time ..... 4
8. Flexitime ..... 4
9. Telework ..... 4
10. Maternity institutional policy ..... 1
11. Paternity institutional policy ..... 1
12. Childcare support (internal kindergarten, on-demand/flexible ..... 3 childcare support, etc.)
13. Support/subsidise childcare services ..... 4
14. Teaching free period after returning from parental leave ..... 1
15. Policy on care for elder/dependent family members of DKemployees

Source: Athena project, 2021

Flexible time or remote working solutions have emerged forced by pandemics and should not be directly linked to facilities for equal opportunities. The university should permanently develop solutions in remote/flexible working system.

It is worth emphasizing that caring for organizational culture manifests itself, among other things, in raising awareness of the academic community by combating stereotypes and prejudices and implementing solutions equalizing opportunities for scientific development (Table 17).

## Table 18 Indicators on adverse social behavior at the workplace (UJK)

Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 - Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A;
No. Title of the indicator ..... UJK
1 Internal guidelines/measures on the use of non-sexist ..... 4language in internal and external communication
2. Bodies mandated to implement and monitor policy of 'non- ..... 1discrimination on the basis of gender.
3. Specific person/committee/commission responsible for ..... 1
harassment at the institutional level
4. Protocol for preventing and tackling sexual harassment and ..... 4gender-based violence
5. Promotion of awareness measures to prevent harassment, ..... 2 sexist attitudes

Source: Athena project, 2021

The analysis leads to a conclusion that UJK has indirect documents, such as the Code of Ethics or the Anti-Mobbing Policy, and other scattered regulations compliant with the Labour Code.

However, there is a lack of additional solutions, especially preventive ones, which go beyond the basic actions required by law. This indicates the need to create such solutions, mainly concerning working conditions and salaries, but also building a friendly environment in which negative behaviors will meet with a firm response.
One of the actions conducive to a culture that equalizes the opportunities of women and men for the development of scientific careers, facilitating the reconciliation of professional and private life may be a policy that supports researchers-parents.

### 3.6. Gender balance in research outputs

The study shows that the issue of gender as a leading theme appears quite rarely in scientific publications or research projects conducted at UJK (Table 18).

The analysis of the numbers resulting from the application of the Gender balance in research outputs indicator also shows that the number of women and men applying for external funding for research projects is at the same level. However, a disproportion appears in the statistics on the effectiveness of obtaining a grant. The data indicate that in the analyzed period, men were (three times) more likely to obtain grants and the grants' amount were even seven times higher than those applied for by women. It is worth noticing that the disproportion applied to literally several grants in total, so "fluctuating" up or down by even 2-3 grants results in very high percentages. The grants given to men are in fields where funding is inherently high because they are fields with costly research.

Table 19 Qualitative indicators on gender balance in research outputs (UJK)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 - Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A;
No. Title of the indicator ..... UJK

1. Gender lectureships to assist faculties/departments on how to ..... 1mainstream gender equality
2. Integration of a gender-sensitive approach into teaching ..... 1
3. Integration of gender analysis into research ..... 1
4. Integration of women's and gender studies into the curriculum of ..... 1bachelor/Master courses
5. The gender perspective in the research funding schemes
6. The integration of the gender perspective in submitted and funded ..... 4 projects;
7. Finances for research projects primarily devoted to gender ..... 1 aspects allocated.
8. Sex-segregated data on research funds ..... 1
9. Sex-disaggregated data about students ..... 4
10 Sex-disaggregated data about staff ..... 4
Source: Athena project, 2021

Nevertheless, it is good to implement organizational solutions, which will support the use of the scientific potential of the staff and at the same time prevent the loss of human capital of the University.

Also, at the stage of recruiting new employees, it is necessary to maintain a high standard of transparency of vacancy announcements, to ensure the appropriate language of announcements, which will encourage both men and women to apply. It is indicated to support research teams including young, inexperienced staff, Ph.D. students.

## 4. Identified gender biases at Jan Kochanowski University of Kielce

### 4.1. Outcomes of the staff survey

The goal of the online survey was to identify how aware are the respondents on gender equality in science and research organisations and to identify the biases/stereotypes related to the women's and men's role in science and research organisations. UJK employees used a five-point Likert scale, to point their attitude to specific gender topics.

The invitation to complete the survey was sent to all UJK employees regardless of position, along with a reminder with a one-week interval. Only 91 people took part in the survey, and finally, 53 questionnaires were qualified for further analysis (completed by the respondents).

What is important is the specifics of the organization of the survey in combination with the obtained sample size and structure means that the sample structure cannot be considered representative. Therefore, an attempt to generalise the results of the sample of respondents to the population (all UJK employees) will not provide reliable/reliable conclusions

## The sample description

The respondents were predominantly heterosexual $94 \%$. Overall, the survey was predominantly female at $67 \%$. One person refused to specify gender. The majority of respondents were married or in a civil partnership (63\%), dominated by those who had no children under the age of 17. (57\%) or also did not have elderly people in their care (84\%).
$30 \%$ of the respondents were between the ages of $41-50,30 \%$ were between the ages of $31-40,1$ in 5 were under the age of 30 , and $17 \%$ were over the age of 51.
$68 \%$ of respondents indicated belonging to the majority ethnic group, only 3 people indicated minority, and $17 \%$ were unsure.
Considering occupation within the survey dominated academic/researcher (79\%), and administrative staff accounted for $19 \%$ (they were only W). $20 \%$ of the respondents were Associated professor (predominantly W), Ph.D. candidates $17 \%$, Researcher (with Ph.D.) - 15\%, Full professor - $6 \%$. The largest number of respondents represented social sciences ( $28 \%$ ).
The majority of the respondents were employed full-time (86\%). Considering earnings, within respondents dominated people with earning 10,000-20,000 Euros gross per year (37\%), but nearly a third earned less than 5,000 Euros (W was predominant in this group), and nearly a quarter of the respondents' salaries were in the $5,000-10,000$ Euro range.
More than half of the respondents (54\%) were not members of any decisionmaking body.

## Results of the survey

The vast majority of the respondents (Table 19) agreed with the statement that gender quality in their organisation is important for them personally ( $70 \%$ in total, with such an answer indicated by $90 \%$ of the administrative staff and $60 \%$ of the academic/researcher staff). Moreover, a significant number of respondents agreed that gender quality increases the fairness of the working environment (51\%) and makes it easier to balance work and family (47\%). However, more than half of the respondents disagreed with the statement that gender quality is an ideology enforced by liberals and increases the bureaucracy in the organization ( $57 \%$ and $51 \%$ respectively,), as well as nearly half, disagreed that gender equality puts too much burden on the management to regulate employees and it is only a conditionality for some EU research funding without any importance ( $45 \%$, 44\% respectively,). Both women and men had similar attitudes to the above statements, only with the statement on bureaucracy W negated the problem to a greater extent ( $57 \% \mathrm{~W}$ and $41 \% \mathrm{M}$ ) (Table 19).

Table 20 Attitudes towards gender equality in the organization (UJK)

| Gender equality in UJK | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{n}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| increases the fairness of the <br> working environment. | $7.55 \%$ | $5.66 \%$ | 35.85 <br> $\%$ | $28.30 \%$ | 22.64 <br> $\%$ | 53 |
| improves the quality of <br> scientific performance. | $7.55 \%$ | $7.55 \%$ | 49.06 <br> $\%$ | $20.75 \%$ | 15.09 <br> $\%$ | 53 |
| increases the bureaucracy in <br> the organization. | $13.21 \%$ | 37.74 <br> $\%$ | 26.42 <br> $\%$ | $11.32 \%$ | 11.32 <br> $\%$ | 53 |


| makes it easier to balance <br> work and family. | $3.77 \%$ | 18.87 <br> $\%$ | 30.19 <br> $\%$ | $28.30 \%$ | 18.87 <br> $\%$ | 53 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| is important for me personally. | $0.00 \%$ | 11.32 <br> $\%$ | 18.87 <br> $\%$ | $39.62 \%$ | 30.19 <br> $\%$ | 53 |
| puts too much burden on the <br> management to regulate <br> employees. | $13.21 \%$ | 32.08 <br> $\%$ | 32.08 <br> $\%$ | $15.09 \%$ | $7.55 \%$ | 53 |
| is only a conditionality for <br> some EU research funding <br> without any importance | $21.15 \%$ | 23.08 <br> $\%$ | 30.77 <br> $\%$ | $19.23 \%$ | $5.77 \%$ | 52 |
| Gender equality is an ideology <br> enforced by liberals. | 32.08 <br> $\%$ | 24.53 <br> $\%$ | 18.87 <br> $\%$ | 18.87 | 5.66 | 53 |

Notes:1-strongly disagree, 2-disagree, 3-neither disagree nor agree, 4-agree, 5 - strongly agree.

Source: Athena project, 2021

Considering intellectual capacity, creativity, talents of women and men (girls and boys) more than half of the respondents strongly disagree with the statements that women are not suited for specific research fields ( $64 \%$, dominated by persons aged 31-40), it is more important to encourage boys than to encourage girls to pursue a science career (58\%) and men have higher chances in the research, as they have more innovative and creative thinking (53\%). On the other hand, respondents strongly agree with the statement that women are just as capable of thinking logically as men (49\%, with the total share of responses supporting the statement amounting to $79 \%$ ). In the case of the statement: men scientists are better at information technologies and using technical equipment than women scientists, negation answers predominate ( $64 \%$ in total), and men disagree with this statement more strongly ( $53 \% \mathrm{M}, 31 \% \mathrm{~W}$ ). Data are presented in Table 20.

Table 21 Intellectual capacity, creativity, talents of women and men (girls and boys) (UJK)

| Do you agree or disagree with <br> statement? | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{n}$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| It is more important to encourage <br> boys than to encourage girls to <br> pursue a science career. | 58.49 <br> $\%$ | 26.42 <br> $\%$ | 11.32 <br> $\%$ | $3.77 \%$ | $0.00 \%$ | 53 |
| Women are not suited for specific <br> research fields. | 64.15 <br> $\%$ | 20.75 <br> $\%$ | $7.55 \%$ | $7.55 \%$ | $0.00 \%$ | 53 |
| Men have higher chances in the <br> research, as they have more <br> innovative and creative thinking. | 52.83 <br> $\%$ | 26.42 <br> $\%$ | $9.43 \%$ | 11.32 <br> $\%$ | $0.00 \%$ | 53 |
| Women are just as capable of <br> thinking logically as men. | $7.55 \%$ | $3.77 \%$ | $9.43 \%$ | 30.19 <br> $\%$ | 49.06 <br> $\%$ | 53 |
| Men scientists are better at <br> information technologies and using | 37.74 <br> $\%$ | 26.42 <br> $\%$ | 20.75 <br> $\%$ | 11.32 <br> $\%$ | $3.77 \%$ | 53 |

technical equipment than women scientists.
Notes:1-strongly disagree, 2-disagree, 3-neither disagree nor agree, 4-agree, 5 - strongly agree.

Source: Athena project, 2020-2021
When analysing questions about gender imbalances and disadvantages in the Recruitment and promotion process (Table 21), it should be stressed that the answer for each of them was: women and men are in an equal situation. About $2 / 3$ of the respondents expressed their opinion this way when answering the question about a decision about hiring someone (66\%) and salary or bonuses ( $64 \%$, with $34 \%$ women indicating a preference for men). Apart from these answers, there were more frequent indications of preference for men than for women (and here the answers given by women predominated), only a slight predominance of answers indicating a preference for women can be seen in the question concerning grants - international level (the answers given by men predominated).

Table 22 Imbalances and disadvantages in: Recruitment and promotion process (UJK)

| Do you agree or disagree with <br> statement? | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{n}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| When a decision is made about <br> hiring someone. | $3.77 \%$ | $3.77 \%$ | 66.04 <br> $\%$ | $9.43 \%$ | $3.77 \%$ | 53 |
| When appointing people to top <br> managerial positions. | $1.89 \%$ | $1.89 \%$ | 56.60 <br> $\%$ | 13.21 <br> $\%$ | 13.21 <br> $\%$ | 53 |
| When employees are striving for <br> a better position. | $1.89 \%$ | $1.89 \%$ | 58.49 <br> $\%$ | 15.09 <br> $\%$ | $7.55 \%$ | 53 |
| When the issue is salary or <br> bonuses. | $1.89 \%$ | $0.00 \%$ | 64.15 <br> $\%$ | 18.87 <br> $\%$ | $7.55 \%$ | 53 |
| When decisions about grants for <br> submitted projects are made at <br> the national level. | $1.89 \%$ | $3.77 \%$ | 52.83 <br> $\%$ | 11.32 <br> $\%$ | $0.00 \%$ | 53 |
| When decisions about grants for <br> submitted projects are made at <br> the international level. | $1.89 \%$ | $5.66 \%$ | 47.17 <br> $\%$ | $3.77 \%$ | $1.89 \%$ | 53 |

Notes:1-women are certainly preferred, 2-women are slightly preferred, 3-women and men are in equal situation, 4- men are slightly preferred, 5- men are certainly preferred, pozostałe odpowiedzi - don't know

Source: Athena project, 2020-2021
In a question about perceived gender advantage in selected aspects ${ }^{13}$ intermediate answers dominated, i.e. they did not clearly indicate advantage of

[^6]women or men (4 points on 7point scale, where 1 - Advantage towards women, 7 - Advantage towards men). However, analyzing the remaining answers, one can indicate the predominance of answers showing advantage towards men. These differences are most evident in issues related to: recognition of intellectual contributions, assignment of important tasks and roles, receiving positive feedback from management (total for points 5-7 respectively: 23\%, $21 \%, 21 \%$ ), they are also evident in: attention from senior management (19\%). The predominance of answers indicating advantage towards women concerns such issues as allocation of: administrative tasks and service roles and teaching (total for points 1-3 respectively: 34\%, 25\%, 12\%). The advantage towards men was more often indicated by women. The biggest differences in the distribution of women and men answers are visible in the following issues: receiving positive feedback from management, recognition of intellectual contributions (where women indicated advantage towards men more often) and allocation of service role (where women indicated advantage towards women more often).

Asking about work life balance and which of the aspects related to private life and characteristics had a positive and which negative impact on respondents' career (on a 7-point scale where 1 is a strong negative impact and 7 is a strong positive impact), respondents indicated that factors such as: having a supportive family and/or partner ( $79 \%$ - indicated as a positive influence, with as much as $53 \%$ as a strong positive influence), being able to easily relocate to another geographic location (49\% - positive influence) not having children or other caregiving responsibilities ( $42 \%$ - positive influence). On the other hand, taking maternity, paternity, adoption, or any other parental leave ( $40 \%$ - negative impact), and disclosing a disability to the employer ( $24 \%$ - negative impact) were most frequently cited as those factors that have a negative impact. The abovementioned issues were rated similarly by women and men, while differences were visible in the case of factors such as being married, in a civil union or a partnership, being in a cohabitation, and being older than average in a given field, where men more often indicated them as a positive influence (respectively: 29\%, $23 \%$ ).

Analyzing aspects related to respondents' work and the performance had a positive or negative impact on their career (Table 22), it should be noted that most of them were recognized by the respondents as factors having a positive impact. As factors with a strong positive impact, the following factors were most often indicated: flexible working hours (45\%) and being lucky (31\%), and as factors with a positive impact (5-7 points) the following factors were most often indicated: involved in well-regarded projects (69\%), successfully applying for grants (55\%). As a factor having a negative impact was unzipped having a heavy administrative load ( $60 \%$ of indications). The biggest differences between women and men answers are visible for being able to work long hours, where man much more often than women indicated a positive impact ( $82 \% \mathrm{M}$ ).

[^7]Table 23 Tools supporting gaining academic/scientific degree (UJK)

| $\begin{aligned} & \mathrm{W} \\ & \mathrm{~h} \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \text { perfol } \\ & ? \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Specification | 1 | 2 | 3 | 4 | 5 | 6 | 7 | n |
| Involved in well regarded projects | 0.00\% | 1.89\% | 0.00\% | $\begin{array}{r} 13.21 \\ \% \end{array}$ | $\begin{array}{r} 16.98 \\ \% \end{array}$ | $\begin{array}{r} 22.64 \\ \% \end{array}$ | $\begin{array}{r} 26.42 \\ \% \end{array}$ | 53 |
| Successfully applying for grants | 0.00\% | 0.00\% | 1.96\% | $\begin{array}{r} 15.69 \\ \% \end{array}$ | 9.80\% | $\begin{array}{r} 17.65 \\ \% \\ \hline \end{array}$ | $\begin{array}{r} 27.45 \\ \% \end{array}$ | 51 |
| Having relevant research output | 0.00\% | 0.00\% | 1.89\% | $\begin{array}{r} 20.75 \\ \% \end{array}$ | 9.43\% | $\begin{array}{r} 15.09 \\ \% \end{array}$ | 28.30 $\%$ | 53 |
| Flexible working hours | 0.00\% | 1.89\% | 1.89\% | 9.43\% | 9.43\% | $\begin{array}{r} 15.09 \\ \% \end{array}$ | $\begin{array}{r} 45.28 \\ \% \end{array}$ | 53 |
| Receiving formal and regular mentoring | 1.89\% | 0.00\% | 1.89\% | $\begin{array}{r} 22.64 \\ \% \end{array}$ | $\begin{array}{r} 15.09 \\ \% \end{array}$ | $\begin{array}{r} 16.98 \\ \% \end{array}$ | $\begin{array}{r} 15.09 \\ \% \end{array}$ | 53 |
| Having visible role models | 0.00\% | 1.89\% | 3.77\% | $\begin{array}{r} 20.75 \\ \% \end{array}$ | $\begin{array}{r} 18.87 \\ \% \end{array}$ | $\begin{array}{r} 16.98 \\ \% \end{array}$ | $\begin{array}{r} 22.64 \\ \% \end{array}$ | 53 |
| Having a heavy administrative load | $\begin{array}{r} 36.54 \\ \% \end{array}$ | $\begin{array}{r} 13.46 \\ \% \end{array}$ | 9.62\% | $\begin{array}{r} 11.54 \\ \% \end{array}$ | 5.77\% | 3.85\% | 9.62\% | 52 |
| Being lucky | 0.00\% | 0.00\% | 3.85\% | $\begin{array}{r} 21.15 \\ \% \end{array}$ | $\begin{array}{r} 17.31 \\ \% \end{array}$ | $\begin{array}{r} 15.38 \\ \% \end{array}$ | $\begin{array}{r} 30.77 \\ \% \end{array}$ | 52 |
| Being able to work long hours | 5.66\% | 7.55\% | 0.00\% | $\begin{array}{r} 11.32 \\ \% \end{array}$ | $\begin{array}{r} 16.98 \\ \% \end{array}$ | $\begin{array}{r} 20.75 \\ \% \\ \hline \end{array}$ | $\begin{array}{r} 28.30 \\ \% \end{array}$ | 53 |

Notes: 7point scale, where 1-strongly negative impact, 7 - strongly positive impact, others- not applicable
Source: Athena project, 2020-2021

Over $50 \%$ of respondents think it is easier for a men to obtain the highest scientific/academic degree, around $40 \%$ feel it is the same for women and men.
No respondents indicated that it was easier for women in this regard (Figure 3), but women were significantly more likely to indicate that it was easier for men to reach the highest level (66\%), and men were more likely to indicate equal access (59\%). Family and parenting issues emerged most frequently (in open-ended responses) as a factor hindering women's ability to attain the highest degree.

Figure 3 Do you feel it is easier for a man or a woman to obtain the scientific/academic degree? ( $\mathrm{n}=53$ ) (UJK)


Source: Athena project, 2020-2021
If we analysis the pull of questions according to Participation in decision making, $68 \%$ of respondents agreed that they didn't experience in organisation any awarding the decision-making position to a man instead of a women or a women instead of a men despite the expert and educational requirements have been the same or they don't know ( $28 \%$ ), only $4 \%$ know such a case.

Analyzing the statements related to the decision-making positions (Table 23) it should be noted that the respondents mostly did not support the statements showing the better position of women or men Over $50 \%$ of the respondents strongly disagree with the statement that naturally, men are in leading positions and women do service/supporting work, moreover the respondents disagreed with the statements that women in the academy/research are not interested in decision-making positions (43\%) and women are less assertive than men (40\%). Men more often than women disagree with statements that women are less assertive than men $(75 \% \mathrm{M}, 42 \% \mathrm{~W})$ and men are more competitive than women ( $69 \%$ M, $50 \%$ W).
Table 24 The statements related to the decision-making positions (UJK)

| Specification | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{n}$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Women in the academy/research <br> are not interested in decision- <br> making positions. | 29.41 <br> $\%$ | 43.14 <br> $\%$ | 21.57 <br> $\%$ | $0.00 \%$ | $0.00 \%$ | 51 |
| Men are more competitive than <br> women. | 25.49 <br> $\%$ | 31.37 <br> $\%$ | 31.37 <br> $\%$ | $3.92 \%$ | $3.92 \%$ | 51 |
| Women are less assertive than <br> men. | 12.00 <br> $\%$ | 40.00 <br> $\%$ | 26.00 <br> $\%$ | 12.00 <br> $\%$ | $6.00 \%$ | 50 |
| Men are naturally more suited for <br> leadership. | 31.37 <br> $\%$ | 33.33 <br> $\%$ | 19.61 <br> $\%$ | $9.80 \%$ | $1.96 \%$ | 51 |
| Women are too emotional to be in <br> a leading position. | 33.33 <br> $\%$ | 29.41 <br> $\%$ | 19.61 <br> $\%$ | $7.84 \%$ | $5.88 \%$ | 51 |
| It is natural that men are in leading <br> positions and women do <br> service/supporting work. | 50.98 <br> $\%$ | 21.57 <br> $\%$ | 15.69 <br> $\%$ | $7.84 \%$ | $0.00 \%$ | 51 |

Notes:1-strongly disagree, 2-disagree, 3-neither disagree nor agree, 4-agree, 5 - strongly agree, others - don't know, Source: Athena project, 2020-2021

The last area of research was dedicated to the Experiences of harassment in the workplace. Respondents were asked how often have they experienced the following behaviour at their workplace? (Table 24).

Table 25 How often have you experienced the following behaviour at your workplace? (UJK)

| Specification | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{n}$ |
| :--- | ---: | :---: | :---: | :---: | :---: |
| Inappropriate comments about my <br> appearance or clothes. | 82.35 <br> $\%$ | 13.73 <br> $\%$ | $3.92 \%$ | $0.00 \%$ | 51 |
| Inappropriate remarks about my skills <br> and competencies. | 64.71 <br> $\%$ | 25.49 <br> $\%$ | $7.84 \%$ | $1.96 \%$ | 51 |
| Inadequate and unfair critics. | 43.14 <br> $\%$ | 43.14 <br> $\%$ | 11.76 <br> $\%$ | $1.96 \%$ | 51 |
| Humiliation and degrading. | 76.47 <br> $\%$ | 13.73 <br> $\%$ | $9.80 \%$ | $0.00 \%$ | 51 |
| Unwanted physical or sexual contact. | 96.08 <br> $\%$ | $1.96 \%$ | $1.96 \%$ | $0.00 \%$ | 51 |
| Unwanted phone calls, emails, <br> voice/text messages, pictures or <br> videos with sexual subtext. | 96.08 <br> $\%$ | $1.96 \%$ | $1.96 \%$ | $0.00 \%$ | 51 |
| Threats of verbal, nonverbal, <br> psychological or physical abuse. | 82.00 <br> $\%$ | 12.00 <br> $\%$ | $6.00 \%$ | $0.00 \%$ | 50 |

Notes:1-never, 2-rarely, 3-sometimes, 4-very often.
Source: Athena project, 2020-2021

The respondents indicated that each of the listed situations happened at the workplace, with responses dominated by rarely or sometimes. Most often the respondents experienced inadequate and unfair critics (43\%-rarely, 12\% sometimes, more often these responses were indicated by women - 62\% and administrative staff - 70\%). Moreover, $1 / 4$ of the respondents indicated that they experienced inappropriate remarks about my skills and competencies (but rarely). Overall/Generally in the situations presented, the vast majority of the respondents answered that they have never experienced a situation - which is a very positive sign.

Around $70 \%$ of survey participants ( $n=51$ ) were satisfied with their current job in the organization, with $14 \%$ being very satisfied. Nearly $1 / 4$ could not determine the degree of satisfaction. Very satisfied respondents were mostly young people (up to 30 years old), mainly Ph.D candidates. Among the undecided, people aged 4150 years prevailed.

### 4.2. Outcomes of the interviews analysis

Gender, sexuality is a topic known to all the respondents, they had their own experiences, observations from the environment. Respondents understand gender as a set of traits, characteristics and behaviors that are attributed to human beings divided into two main sexes: female and male. They associate it neutrally with other people, with their gender identity, with which they personally identify.

The respondents declare that they are tolerant of sexuality, it does not influence their perception, evaluation of the other person. They recognize examples of equality and inequality related to working life in different industries/branches (outside the university). They concern pay disparities, opportunities, and availability for promotion. They disagree with such practices and oppose them.

Gender awareness in all the respondents' cases was initiated in the family and has been shaped since childhood. It was mainly family patterns, division of roles, and growing up in specific relationships with relatives that shaped the respondents' attitudes and their perception of sexuality in subsequent stages of life. A large role in this respect played the mother, her position in the family hierarchy. The respondents had a traditional family model in Poland, in which mother is responsible for the family taking care of the children, and the husbandfather is responsible for providing financial support and well-being. These patterns function to this day as a kind of stereotype of a woman's role. But from the other side respondents mention that equal sharing of responsibilities and promotion of a partnership lifestyle is something normal. Despite being instilled with traditional patterns, they shape their partnerships and would like to pass such patterns on to their children (especially young participants).

The acquisition of knowledge about sexuality, gender equality of the respondents was influenced by education (schools, teachers, peers), and by cultural aspects. The environment in which the respondents grew up influenced their perception of social roles, male and female, the requirements for each role. For some of the respondents, religion has played an important role in building attitudes about family, social roles, tolerance, equality, respect for others, including femininity/masculinity.

It is worth noting that in case of some respondents - a woman - gender had an impact on their choice of profession, they decided to work at the university, sought to ensure flexible working hours, to be able to reconcile professional and family responsibilities in the future, to be able to respond to emerging situations dynamically.

On another side, among the respondents, women emphasized greater pressure and the need to reconcile professional activities with family life, childcare. The respondents agree that it is more difficult for women in this aspect (of scientific development) due to motherhood and family responsibilities, expectations of the environment and stereotypes of a woman-mother in society. The respondents believe that women have been more active in organizational, administrative and
project work at the university, taking on additional responsibilities. They felt the pressure of the environment, the fear of losing their jobs, the need to show themselves in different fields to prove their work value.

In scientific work (pressure of positive evaluation of scientific achievements, constant, regular assessment, organizational duties, and teaching load) often block scientific work and professional career. These elements were indicated by all the surveyed individuals, regardless of gender, position, and professional experience.

In addition, the aspect of work-life balance, which according to the respondents is not possible to achieve fully, deserves attention. Each of the respondents strives to ensure a balance between professional and personal life, however, irregular working hours, teaching at different times/days, additional research work, dissemination of research results (including participation in conferences), project implementation are activities that are undertaken by the respondents with different intensity in different periods of work.

For some women, it is an advantage to have flexible working hours, but for others it is a burden, making it impossible to separate work from private life, and destabilizing family life. In most cases, the line between private life and work is blurred. They achieve stability thanks to the support of loved ones and the division of household responsibilities.

Women more often indicated a lack of private life, time for themselves, a day filled with work or taking care of children. The greater ability to reconcile work and private life was shown by unmarried men without children.

In the study group, discriminatory practices that are/were taking place at the university towards the respondents were not explicitly indicated. But the respondents admitted that they were witnesses when some situations or language bore the hallmarks of discriminatory behavior at work in the university. Some admitted that they could not relate to behaviors that were discriminatory or hurtful to either gender, they took it as the norm (sometimes just bad parenting).

According to the respondents, there are spheres of life/organizations where gender equality occurs, but there are also areas/organizations where there is much to be done, and the lack of adherence to the general principles of gender equality will reduce the opportunities of women (especially in case of lower degree, who must choose between a career and focusing on building a family or later caring for children).

### 4.3. Outcomes of the analysis of the focus groups

In all the focus groups studied, gender equality is understood to represent an advantage in terms of development; however, gender equality is not understood to represent a balanced representation of women and men in decision-making positions, since these positions are linked to elections or to academic development, skills.

Working conditions do not put the respondents in an unfavorable position
compared to other employees and the rules in force at the University apply to every employee regardless of gender.

The research carried out shows that respondents don't see any problem of unequal treatment of the gender at the University. Similarly, there are no disparities between the pay levels of women and men in any group.

According to the study group, there are no major disparities between the number of women and men in the group of professors and, if there is such a difference, it is, in the view of the respondents, a sign of self-employment and not of systemic or behavioral barriers at the university.
In one research group, the need to appoint a gender equality the officer is stressed, in the other groups this possibility is accepted, but there are also positions where this need is not recognized.

The respondents were not confronted with a situation of gender discrimination, although in one group the need to monitor the observance of the principles of equal opportunities in the process of recruitment and employment at the University was stressed. In one group, the possibility of adopting a regulation (or any other document in force at the University) containing rules to support equal treatment of women in various aspects of the University's activities - from employee-employer relations to the rules in force during job interviews at the University - has been highlighted. The representative (coordinator, ombudsman) should be responsible for gender equality policies and should cooperate closely with the University authorities. It is also possible to appoint proxies (coordinators, ombudsmen) in all departments of the university.

In one of the surveyed groups - administrative employees - it was pointed out that in case of child illness or the need to take care of a child, there should be the possibility to provide work online, which would make it easier to reconcile family and professional duties.
In the group of researchers, it was emphasised that the interest in particular fields of science is due to cultural conditions rather than institutional barriers. In the opinion of the participants in the study, gender issues do not influence the quality of the research process, nor do the studies reveal a situation of unequal treatment on grounds of gender.

The relationship between members of staff and between members of staff, faculty and university management is not determined by gender. Both men and women do not experience discrimination on grounds of gender.

The establishment of a family can have the effect of slowing down women's careers, which is linked to the possibility of taking advantage of maternity and parental leave, but attention is also drawn to the fact that parental leave can also be taken up by male researchers.

In the "management staff " group, respondents emphasised that access to high positions is equal for both women and men.

## 5. Recommendations for development of gender equality plan at Jan Kochanowski University of Kielce

5.1. Recommendation \# 1

An important aspect of changing disproportions in all areas is an active education policy from the earliest years in the field of equality, tolerance, prejudice, discrimination, and raising awareness on gender (in)equalities issues by access to information, training, conferences. Awareness efforts should target students as well as UJK employees in all departments and academic disciplines, regardless of age, grade, or gender.

### 5.2. Recommendation \# 2

It is necessary to take measures to ensure and sustain equal access to the university in the recruitment process for both doctoral school and scientific and administrative positions, as well as transparent rules of professional promotion.
Already at the stage of recruiting new employees, it is necessary to maintain a high standard of transparency of vacancy announcements, to ensure the appropriate language of announcements that will encourage both men and women to apply. Transparent rules and procedures are a key aspect of a socially responsible university and ensure equal access to positions, verified only by the level of knowledge and professional experience.

### 5.3. Recommendation \# 3

Currently, at Jan Kochanowski University there is no disproportion in the share of women in managerial positions, however, men may be an underrepresented group in this area. We should strive to maintain equal access to leadership positions and ensure transparency in this area, regardless of gender.

### 5.4. Recommendation \# 4

Findings indicate a significant career slowdown for women and difficulty in obtaining academic advancement especially after a doctorate. The research indicates that this is often connected with the decision to start a family.
It is recommended that actions be taken to eliminate the disparities and accelerate professional careers through access to mentoring programs, training, ensuring access to funding or support aimed at greater participation of women and men in research and grant acquisition. Implementation of such organizational solutions will support the use of the scientific potential of the staff and at the same time prevent the loss of talents of the University.
5.5. Recommendation \# 5

Work-life balance is an important aspect of working conditions and applies to both men and women. The specificity of work at the university often requires
matching availability to teaching and research duties, working on weekends and in the afternoons. It is recommended to implement clear rules for flexible working time, regulate the principles of remote work and implement solutions, facilitating parents to combine work with private life (e.g. additional leave, subsidies for child care, care in a kindergarten, etc.).

### 5.6. Recommendation \# 6

Measures should be taken to encourage research on gender equality in various scientific fields. It is important to stress that such research is not only about equality, but can touch on different aspects by gender. Conducting and disseminating research results is an important educational element as it contributes to raising awareness based on scientific knowledge, which leads to combating established stereotypes or (sometimes unconscious) prejudices. On the other hand, research in gender areas in various disciplines can serve to develop the scientific and R\&D potential of many fields, e.g. medical sciences, psychology, sociology, pedagogy, economics.

### 5.7. Recommendation \# 7

It also seems necessary to include gender issues in the curricula for students (e.g. inclusion of equality and diversity topics such as gender in the Ethics course) as well as through access to training and information in intra-organisational communication.

### 5.8. Recommendation \# 8

Some negative elements are noticed: behaviors, language towards women, especially with less seniority, without degrees/titles and administrative staff. It is essential to respond effectively to discriminatory actions, sexual harassment through appropriate regulation and assigned individuals monitoring the subject on organization level.

### 5.9. Recommendation \# 9

The Jan Kochanowski University of Kielce should implement a system of monitoring actions taken throughout the organization in the area of gender equality, including regular audit and publication of a report on changes among employees, students and doctoral students by gender. This will ensure the possibility of continuous improvement of the university and its transformation into a socially responsible university.

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## Annexes (Jan Kochanowski University of Kielce)

## Annex 1 The sample structure of the online survey

Table 26 Sample description - online survey by sex, grades etc. (UJK)

| Participants | Women | Women (\%) | Men | Men (\%) |
| :---: | :---: | :---: | :---: | :---: |
| By sex | 35 | 67,31 | 17 | 32,69 |
| Age (distribution) |  |  |  |  |
| Less than 30 | 6 | 17,14 | 4 | 23,53 |
| 31-40 | 10 | 28,57 | 5 | 29,41 |
| 41-50 | 13 | 37,14 | 5 | 29,41 |
| 51-60 | 4 | 11,43 | 2 | 11,76 |
| 61-65 | 2 | 5,71 | 1 | 5,88 |
| 66 and over | 0 | 0,00 | 0 | 0,00 |
| Occupations (distribution) |  |  |  |  |
| Academic/Researcher | 26 | 74,29 | 16 | 94,12 |
| Technical staff | 0 | 0.00 | 1 | 5,88 |
| Administrative staff | 9 | 25,71 | 0 | 0,00 |
| Academic/scientific degree (distribution) |  |  |  |  |
| Director of research | 1 | 2,86 | 0 | 0,00 |
| Full professor | 1 | 2,86 | 2 | 11,76 |
| Senior researcher | 1 | 2,86 | 0 | 0,00 |
| Senior lecturer | 1 | 2,86 | 0 | 0,00 |
| Associated professor | 8 | 22,86 | 5 | 29,41 |
| Lecturer | 2 | 5,71 | 2 | 11,76 |
| Researcher (with PhD) | 6 | 17.14 | 2 | 11,76 |
| Research assistant (without PhD) | 0 | 0.00 | 1 | 5,88 |
| PhD candidate | 5 | 14,29 | 4 | 23,53 |
| Academic field (distribution) |  |  |  |  |
| Natural sciences | 5 | 14,29 | 5 | 29,41 |
| Engineering and | 0 | 0,00 | 1 | 5,88 |
| technology | 2 | 5,71 | 2 | 11,76 |
| Bio-Medical sciences | 10 | 28,57 | 5 | 29,41 |
| Social Sciences | 8 | 22,86 | 4 | 23,53 |
| Humanities and arts Other | 10 | 28,57 | 0 | 0,00 |

Source: Athena project, 2021

## Annex 2 The sample structure of the storytelling respondents

Participants in the study were: 20 UJK representatives, including 10 women and 10 men.

Table 27 Sample description - storytelling research by sex, grades (UJK)

| Gender | A grade | B grade | C <br> grade | D grade |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | asistant | student at the doctoral school |  |
| Women | 0 | 2 | 6 | 1 | 1 | 10 |
| Men | 3 | 2 | 2 | 1 | 2 | 10 |
| Total | 3 | 4 | 8 |  | 5 | 20 |

Mean age of subjects: 43.65 (the age range of those surveyed is 27 to 71 ). Among the respondents, managerial functions are/have been: 4 women and 2 men.
Among respondents 13 are married, 1 is in a civil partnership, 2 are divorced, 1 is a widower and 3 are single.
There are 13 respondents who have children, 3 respondents who are married and have no children.

## Annex 3 The sample structure of the focus groups

Table 28 Sample description - focus group research by sex, age, occupation and degree (UJK)

| Participants | Number | \% |
| :---: | :---: | :---: |
| Total | 25 | 100 |
| Women | 16 | 64 |
| Men | 9 | 36 |
| Age |  |  |
| 20-25 | 6 | 24 |
| 30-40 | 3 | 12 |
| 40-50 | 11 | 44 |
| Over 50 years | 5 | 20 |
| Occupations |  |  |
| Researcher | 7 | 28 |
| Student | 6 | 24 |
| Teacher | 0 | 0 |
| Technicians | 0 | 0 |
| Administrative staff | 6 | 24 |
| Other - managers | 6 | 24 |
| Academic/scientific degree |  |  |
| Student and doctoral | 6 | 24 |
| students | 8 | 32 |
| Doctor | 5 | 20 |
| Post-doctoral fellow, professor | 6 | 24 |
| Administration |  |  |
| Scientific/study field |  |  |
| Political science | 5 | 20 |
| Health sciences | 1 | 4 |
| Security science | 8 | 32 |
| Biological sciences | 1 | 4 |
| Pedagogy | 1 | 4 |
| Law sciences | 3 | 12 |
| Administrative staff | 6 | 24 |

Source: Athena project, 2021

# Gender Equality Report for the University of Bucharest, Romania 

Project Acronym: ATHENA

Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

Grant Agreement no: 101006416

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## Executive summary (University of Bucharest)

University of Bucharest, the largest public university in Romania, is embarking on the process of establishing a Gender Equality Plan in a context that is not friendly to gender issues. The COVID-19 pandemic brought health and economic crises in all European countries, including Romania. The Recovery \& Resilience Plans (RRPs) for all EU countries focus on major important issues but pay little attention to gender equality aspects.

From a national legal and institutional perspective, Romania might be, at first glance, an example of good practice in advancing gender equality. Romania signed the CEDAW Convention 35 years ago, and in 2016 signed the Istanbul Convention. Legislation has improved permanently in the spirit of EU requirements and even stipulates the need for all public institutions to implement GEPs. There is a satisfactory anti-discrimination legislation (including provisions for multiple discrimination, for sexual, psychological and moral harassment, and regulating the profession of equal opportunity expert and equal opportunity specialist) and quite a solid formal institutional infrastructure designed to deal with issues of equal opportunities and gender equality.

Compared with other countries, Romania ranks $25^{\text {th }}$ of 27 countries in the EU in the 2021 Gender Equality Index ${ }^{14}$, with a slow progress, and 43 rd out of 129 countries in the 2019 SDG Gender Index Report ${ }^{15}$. The latest Gender Barometer shows (Grünberg, 2019a, 2019b) that Romanians' perceptions on gender equality have diversified, with a tendency towards modernization and openly accepting equal participation of women and men in public power positions. On the other hand, a gender backlash has been visible in Romania in the last period of time. Attacks on "gender ideology" translated in important challenges, mainly in the area of reproductive rights, right to sexual education, and the institutionalization of Gender Studies. There have been several initiatives to restrict and forbid teaching Gender Studies, and in general, concerns against using the concept of "gender" have been voiced. The attacks and hostility towards the domain of gender equality has increased since the last election (2020) when a new conservative, nationalistic, euro sceptic, anti-globalization, antivaccination, anti-Semitic party (AUR, The Alliance for the Union of Romanians) got to power.

In this specific national context, the education sector in general and the sector of higher education, research and innovation (HERI) in particular have been, for decades, severely under budgeted domains (the year 2022 being the worst to date), and they are not considering gender equality as a strategic priority. There is no specific legal or institutional frame designed to specifically promote gender

[^8]equality in higher education and research. Gender equality is mainly perceived as formal equality, in terms of access to education and promotion, while little attention is paid to other aspects, such as horizontal and vertical segregation, glass ceiling, the pipe-line phenomenon and work-life balance policies, gender gaps in mobility, reverse gender gaps, gendering budgets, etc.

Historically, Romania has been a good tradition within the HERI sector in Romania for a gender-balanced representation in HERIs, including STEM areas. Romania is above the EU average with respect to the share of women researchers, and among the few European countries with a balanced proportion of women among graduates and researchers in STEM domains (Chioncel and Del Rio, 2017). According to latest She Figures Report, Romania has an over representation of women researchers in Social Sciences (EC, 2021). Also, Romania achieved best scores in the assessment report for ERA/Priority 4, focussed on gender equality and gender mainstreaming in research (EC, 2018). Important bodies regulating the HERI (such as UEFISCDI and ARACIS) have GEPs under implementation. There is also a visible progress in the area of data collection in general, and gender disaggregated data in particular (e.g. the National Platform for the Collection of Statistical Data for Higher Education ANS, under UEFISCDI coordination, an integrated information system dedicated to higher education in Romania, brings together the main statistical data on tertiary education accessible to all interested actors and includes some gender sensitive data.

As far as the University of Bucharest is concerned, the biggest university in Romania ( 34.000 students and over 1300 academic staff, 19 faculties ${ }^{16}$ ), in SWOT language, there are strengths and opportunities, as well as threats and worries in the area of promoting gender equality. De jure, but specifically de facto implementation of a GEP within the organization will be challenging.

UB has a managerial team with an open interest for promoting gender equality. The number of women in power position at the level of Rectorate is the highest it has ever been; a project of establishing an integrative data base with predefined indicators (including good gender-sensitive ones) is under development; a master programme in Gender Studies (at the Faculty of Political Sciences) exists and a number of gender sensitive courses are taught in different faculties; many bachelor, master and doctoral theses have an implicit or even explicit gender dimension; some researchers from UB have been involved in a series of gender sensitive research projects; the university also recently launched a campaign "UB for Women in Science" to promote the scientific results of women academics and to open the dialogue about gender equality in the sciences. Last but not least, the increased internationalization process contributes to more contact for UB academics and students with progressive attitudes towards gender equality.

The documentation and research component of the ATHENA project outlined a series of aspects that should be taken into consideration in the design and implementation of the GEP-UB.

Quantitative data available indicate at first glance an optimistic picture: there are more women than men as graduates across all levels of study at university level, teachers in humanities, social or exact sciences, young employees, as well as administrative staff. However, BA men graduates are more likely to be employed than women, whereas at the MA level the differences decrease. Research outcomes of women translated in professional achievements of higher positions are on average at lower levels and postponed (pipe line phenomenon).

Nevertheless, the data from the staff survey indicate among other things that: 1) men are more satisfied than women with respect to their position in UB; 2) women have in general lower aspirations compared with men when it comes to managerial positions; 3) the higher women aspire, the less they succeed to top positions (glass-celling);4) stereotypes about gender persists with regards to gender roles and relations and many women are trapped in the "meritocracy and "hard work" myth as key ingredients of academic success; 5) family responsibilities, specially having children, are perceived as impediments for women's professional carriers (and men also recognize this); 6) the young staff is more affected in the carrier path knowledge advancement by insufficient child care support and administrative responsibilities. In the context of a poor knowledge about gender equality concepts and topics, opportunities for gender informative/sensitive trainings are almost not existing.

In qualitative terms, the research indicates that UB employees have diverse, often contradictory opinions about gender equality. This is why gender equality poses numerous dilemmas as a topic of institutional reflection and some if these perceptions will also guide the process and the obstacles around adopting and successfully implementing a GEP. There are at least 3 categories of employees: gender sensitive/knowledgeable, gender blind, and employees that are hostile to gender equality. Most often, the UB staff (including many women) equates gender equality with numerical/essentialist equality, and is rather reluctant to gender equality measures (using mostly arguments of meritocracy, fear of victimization, or claiming that gender equality has already been achieved).

A set of interrelated factors (such as position of power within UB, age, family status, family background) combined with gender proved to play an important role in understanding the differences in their perception and attitudes towards gender equality.

A formal creation of a GEPI-UB seems to be relatively well accepted within the organization, but mainly as a top-down pressure imposed by EU requirements, and not as a necessary internal endeavour.

Among the problems identified by many of the participants in the research process there are certain similarities such as : reproduction of gender stereotypes present and persistent at societal level; the existence of informal (male) networks of influence and information; family care responsibilities (specially for employees with children) imposing constrains on career development and not being perceived as connected with gender equality topics (mainly work-life balance); low level of knowledge and information in the area of gender equality combined with few training opportunities in this respect; gender violence (in language, sexual and moral harassment) as an unreported phenomenon;

In terms of recommendations, based on the documentation and research findings, the report points out several aspects that require action. Thus UB should: continue to encourage/develop international exchange programmes for professors, researchers, students; envisage a data driven strategy for the design and implementation of its GEP with more gender sensitive data collected and a methodology that will allow for longitudinal but also transversal indicators; offer wide, systematic formal/informal gender awareness and information campaigns and trainings on gender equality issues for its staff; envisage a large internal consultation for the implementation of the GEP; pay special attention within the GEP to work life balance problems identified by the research and specially to the ones affecting the young members of staff; revise the visual representation of women and men personalities in its public premises; deal with reverse gender gap too; put in place procedures, regulations in the area of gender violence and endorse more clear the principles of gender equality in all its official documents.

Resistance towards the implementation of such a strategic approach to gender equality has many faces: from denial or trivialization of the importance of such an endeavour to claims that gender equality is a system of left-wing ideology taking over academic establishments in Romania; equating the feminization of the sector with gender equality; neoliberal perspectives on the role of education in general; considering gender equality as an enemy of meritocracy; negative feelings towards affirmative policies/quota system, etc. The big challenge will not be the formal establishment of the GEP, but budgeting it, monitoring its activities and making it sustainable over long term.

## Introduction

The main objective of this gender equality assessment is to evaluate a baseline situation regarding gender equality within University of Bucharest, Romania.

This report is a revised, updated, enriched version of document T.2.2. produced in the incipient phase of the ATHENA project. In that moment, the emphasis was put on detailing more (a) the general national legislative and institutional framework dealing with gender equality in Romania and (b) the national education sector/ higher education framework in place for dealing with gender equality and (c) an incipient outline of the state of affair in the University of Bucharest.

This new report (D.2.3) changes the focus from the general picture to a more detailed description and analysis, based on a research methodology, of the gender dimension of the University of Bucharest.

This assessment, its findings and its evidence will be the main drivers guiding the process of adopting a gender equality plan at University Bucharest. Following best practice examples of evidence-based policy processes, the outcomes of this report will be presented to key stakeholders in the design of the GEP. Moreover, results obtained through the gender equality assessment (i.e. this report) will be used as a starting point in the monitoring and evaluation processes of future actions of the GEP.

The sections of the report present information in the following way:
The first chapter explains the research methodology behind this report. This was prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences and was similar for all Athena partner institutions. The Athena research team at University of Bucharest followed the main guidelines of the project methodology.

The second chapter looks at the relevant national policy context describing the general framework regarding gender equality in Romania, main trends and indicators related to gender equality and higher education, key policies related to higher education and research and gender equality and an overview of existing EU-funded projects focusing on setting up gender equality plans in HEls and RPOs domestically.

The third chapter presents key findings related to the following 6 fields addressed in the gender equality audit. Each section presents both quantitative and qualitative findings in the following areas: 1) pool of graduate talent; 2) gender balance in research; 3) gender balance and academic career advancement, 4) gender balance in decision making, 5) working conditions and work-life balance; 6) gender balance and research outputs.

Drawing on data from the staff survey as well as on data from the interview and focus groups conducted, chapter four examines existing gender bias within the University of Bucharest. The chapter covers topics such as perceptions of gender equality within the university community, the gender impact in decision-making and career progression, remuneration such as salary and other financial benefits, experiences with work-life balance within UB, gender-based violence

The last section of the report (chapter 5) gives a series of recommendations based on the findings of the gender equality audit. The list of recommendation is not exhaustive but aims to capture the main issues identified and highlighted as urgent in this initial assessment. They will serve the wide consultation process to be applied within the UB, process coordinated by the GEPI-UB Committee and the implementation team.

This report is a short glimpse into the realities of gender (in) equalities at the University of Bucharest, a starting point of a long process that aims not only to improve women's standing within an academic institution to transform the institution into a more gender equal, more inclusive and more future oriented one. At the end of the line, this assessment is a tool that can be used to guide the University of Bucharest into strengthening its mission and role as a public university that caters for a diverse community.

## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection technics implemented throughout the year 2020. The particular methodologies have been prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences.

The national provisions in terms of gender equality in research and higher education were assessed based on a desk-research and policy analysis related to gender equality in society, research and higher education. Our team utilised extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of our organisation.

The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardised data collection on women in science She Figures ${ }^{17}$. Our team collected the data by finding the relevant structure to provide data on each

[^9]indicator. We firstly translated the indicators and created categories based on the structure that it is able to provide them, taking into account availability. We discussed with representatives from each administrative structure and gathered the data: from the Human Resources department, the Research department, the General Secretary Department, and from as structure dedicated to create a platform for research outcomes management. We followed the indicators that were proposed at the level of Consortium and the results were either prepared by the representatives of each structure, or by our team. The qualitative GEA indicators present unquantified aspects and measures to assess the situation in terms of gender equality. The measures were evaluated via an online data collection system using a simple online assessment tool in order to gather the results at the level of Consortium. Within our team, we evaluated the university on each indicator, provided reasons for each choice, and disseminated it internally for receiving feedback.

To identify gender biases in the University of Bucharest, we used three data collection methods: online survey, story-telling interviews and focus groups. An online staff survey implemented by a standardised questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, 177 respondents were included in the analysis. ${ }^{18}$
The objective of the story-telling interviews was to search for the diversity of typical facilitators and inhibitors of gender awareness in the life-course of scholars. Based on in scenario, our team implemented 20 interviews with researchers. The sample has been designed in accordance with the requirements proposed by the standardized methodology. Personal contacts and snow ball method help us produce the sample in the following structure:

Sample: 20 individual interviews, conducted with 10 female and 10 male employees of the University of Bucharest who hold tenured teaching positions.

Faculties/ fields of specialization: 19 faculties and 1 Sports Department: Sociology \& Social Work (2 women, 1 man), Philosophy ( 1 man), Foreign Languages (1 woman, 1 man), Law (1 woman, 2 men), Geography (1 woman), Physics (1 woman, 2 men), Sports (1 woman), Biology (1 woman), Psychology \& Education (1 woman, 1 man), History (2 men), Journalism \& Communication (1 woman).

University degree/ professional position: 10 women, as follows: 3 assistant professors, 3 associate professors and 4 professors; 10 men as follows: 1 assistant professor, 5 associate professors, and 4 professors.

Leadership positions: 10 female interviewees with the following leadership positions: 5 without any leadership position, 2 vice-rectors, 1 doctoral school director, 1 department director, 1 vicedean; 10 male interviewees with the following leadership positions: 4 without any leadership position, 2 vice-rectors, 1 doctoral school director, 1 department director, 1 vice-dean and 1 president of the Senate.

Age group: 3 women under 35 years old; 6 women between 36 and 54 years old; 1 woman over 55 years old; 8 men between 36 and 54 years old; 2 men over 55 years old.

[^10]Marital status: 10 female interviewees with the following marital status: 2 single, 1 separated/ single, 2 living in a partnership, 5 married; 10 male interviewees with the following marital status: 2 living in a partnership, 1 LAT (living apart together), 6 married, 1 widow.

Children: 7 women with no children at all, 1 woman with 1 child, and 2 women with 2 children; 4 men with no children at all, 4 men with 1 child, 1 man with 2 children, 1 man with 4 children.

Religious beliefs: 3 women declare themselves to be agnostic; 5 women "believers but not religious"; and 2 women declare themselves to be religious; 1 man declares himself as an agnostic, 4 men "believers but not religious", 1 man religious and 4 men atheist.

The interviews have been recorded, transcribed and analysed using the method of thematic analysis in order to identify patterns and themes within collected data (following the basic steps required: familiarization, coding, generalizing themes, reviewing them, naming and writing).

Thirdly, our team organised 4 focus groups in the following composition:
Participants: sampling was in accordance with the project's methodology, as follows:

- 1 FG with the HR personnel (with no decision-making positions). UB has an almost entirely feminized HR department (around 20 female and 2 male employees);
- 1 FG with higher and middle management (Deans, Vice-Deans and Department Directors);
- 1 FG with the administrative staff holding decision-making positions (Heads of Directions and Offices within the Rectorate);
- 1 FG with researchers (without teaching responsibilities) and professors (teaching staff), with no leadership responsibilities.

Then, we used the standardised script, we transcripted the recoded discussions and analysed the data through standard thematic discourse analysis mentioned above. 19

## 2. Outcomes of the assessment of the national provisions in Romania

### 2.1. Status of gender equality in society

The main sources of gender equality law in Romania are the national legislation, international treaties ratified by Romania that become a part of national

[^11]legislation, EU law which have supremacy over national law, and Constitutional Court decisions, which are mandatory.

The Romanian Constitution provides for equality and non-discrimination in broad terms. From a legislative point of view, in Romania, equality among all citizens is guaranteed by the Constitution, Art. 4 (2): 'Romania is the common and indivisible homeland of all its citizens, without any discrimination on account of race, nationality, ethnic origin, language, religion, sex, opinion, political adherence, property or social origin', and Art. 16 (1): 'Citizens are equal before the law and public authorities, without privileges and discriminations. ${ }^{20}$

The area of gender equality is mainly framed in Romania by Law 202/2002 ${ }^{21}$. The Law contains provisions concerning the promotion and implementation of gender equality principles and the elimination of all forms of gender discrimination in all public and private social spheres of activity. The Law has been amended several times to better reflect European and global contexts in the area of gender equality (introducing a clear definitions of sex and gender; making references to multiple discrimination; introducing the definition of gender violence in conformity with the Istanbul Convention; regulating, for the first time, the profession of equal opportunity expert and equal opportunity specialist; requesting gender equality plans from all public institutions and creating the possibility for public and private employers with more than 50 employees to hire a specialist in equal opportunities; introducing clarifications and sanctions for sexual, psychological and moral harassment).

Romania has been also permanently active in adjusting and transposing, through the lens of laws, but also within major national public strategies, the EU regulations in the area of gender equality. The interest has been partially pragmatic and opportunistic, as funds from the EU depended on these fulfilment criteria.

Overall, the legislative framework on gender equality in Romania is good. There are, nevertheless, some limitations. Provisions related to equal treatment based on sex/gender do not apply within religious denominations and within the private lives of individuals; there is a lack of national protection against discrimination for transgender, intersex and non-binary persons; there are no legal regulations in case of surrogacy; no national legislation to recognize unmarried relationships (the law only recognizes married spouses in the context of the Directive

[^12]2010/41/EU with respect to public pensions and the public health insurance schemes).

The central Law no. 202/2002 also specifies the national institutional frame in the area of implementing gender equality policies. At governmental level, the National Agency for Equal Opportunities for women and men (ANES) represents the public national official structure that assures promotion of the gender equality principles and combating of domestic violence ${ }^{22}$. In conformity with the central Law, all public institutions (including universities and research institutions!) have responsibilities in the area of promoting gender equality (e.g., to elaborate GEPs and request endorsement from ANES). The Ministry of Family, Youth and Equal Opportunities (created in December 2021), the National Institute for Statistics, the Social and Economic Council (special commission), trade unions, the Special Commissions on Equal Opportunities in place both at the Senate and the Chamber of Deputies of the Romanian Parliament, The National Council for Combating Discrimination ${ }^{23}$ are some of the important public institutions with noticeable attributes in the area of gender equality. There are also a number of specialized NGOs active in monitoring the governmental initiatives and developing their own gender-sensitive agenda. A solid Coalition for Gender Equality ${ }^{24}$ has been recently established and, and, due to its visibility, succeeded in having a representative elected in the Economic and Social Council. At this moment, the Coalition is involved in an extensive project called EGALIS: Gender Equality through social change and education, project supported by SEE and Norwegian Grants 2014-2021 through the Active Citizens Fund in Romania, the issue of gendering education being an important component of the project.

From a legal and institutional perspective, Romania might be, at first glance, a case of good practice. Romania signed the CEDAW Convention 35 years ago, and in 2016 (by Law 30/2016) signed the Istanbul Convention. Legislation has improved permanently in the spirit of the EU requirements and even stipulates the need for all public institutions to implement GEPs. There is quite a solid formal institutional infrastructure designed to deal with equal opportunities/gender equality issues. There is also a critical mass of gender experts produced by higher education institutions, professional NGOs and by ANES. Notably, the profession of 'expert in equality of opportunities/chances' is an occupation officially recognized and included in the Occupation Classifications in Romania. The know-how in the area of gender mainstreaming research projects and/or do gender-focused studies exists (see, for example, the Polirom collection on Gender Studies, other publishing houses-such as Hecate or Tritonic or the

[^13]Journal for Gender and Feminist Studies ${ }^{25}$, to which a lot of Romanian specialists brought their contribution).

As the 2018 Gender Barometer shows (Grünberg, 2019a, 2019b), today there is a more dynamic Romania in terms of gender perceptions, with visible tendencies towards diversification and modernization. Romania oscillates between conservative, compliant and modern attitudes regarding gender equality issues, with more traditional views connected with the private sphere responsibilities, and much more modern attitudes towards gender equality in public domains. There is, nevertheless, still a general context of low perception of the need for equal opportunities policies, due to ignorance of potential issues, such as the case of family-life - work-life balance, or the perception that gender issues have been resolved and are not a priority anymore.

Beyond the previous optimistic image and certain undeniable improvements, a number of problems affect any future gender sensitive public agenda. Gender mainstreaming policies have never been a priority (gender discrimination may be considered an opportunistic issue, a "must have" priority due to our European membership), and in the current gender backlash visible at the national, regional and global level, it will be even harder to promote GM strategies in any sectors. Systemic lack of adequate budgeting for gender equality (for the institutions created in support of gender equality) makes the formally created infrastructure less efficient than it could be. Lack of political stability is also among the biggest impediments that do not allow for any type of continuity of the good practices implemented over time. Lack of integrative operational gathering of gender sensitive data able to support and argue for stronger gender sensitive policies in all areas is another important negative aspect. Additionally, weak, unconsolidated collaboration between GOVs themselves and also between them and NGOs makes any effort in the area more difficult. The pandemic period is, of course, not helping either, and the Recovery \& Resilience Plans (RRPs) for EU countries in general, and for Romania in particular, do not include a strong gender dimension within their main areas of concern.

### 2.2. Status of gender equality in research and higher education

In Romania, Research and Higher Education are approached as separate sectors. At this moment the Ministry of Education is bureaucratically split between a Ministry of Education and a Ministry of Research, Innovation and Digitalization.

The education sector in general and higher education, research and innovation (HERI) in particular, have been severely underbudgeted domains for decades,

[^14]with the year 2022 being the worst case. For 2021, the national budget for education was $2.55 \%$ of GDP, for 2021 is foreseen to be $2.28 \%$ of GDP, by far the lowest in the EU region. With respect to investments in research, Romania devoted $0,48 \%$ of the GDP in the area, placing again Romania on the last position among UE countries (see She Figures 2018, 2021).

Such a chronically under-financed context leaves little room for making gender equality a priority in the area of (higher) education and research. There is thus no specific legal or institutional national strategy to promote gender equality in higher education, research and innovation (HERI). Gender equality in education is mainly perceived as formal equality, in terms of access to education and promotion, while little attention is paid to other aspects, such as horizontal and vertical segregation, glass ceiling, the pipe-line phenomenon and work-life balance policies, gender gaps in mobility, academic highly rate publications, reverse gender gaps, gendering budgets, etc.

Despite such unfavourable general environment, some data looks good. Romania is above the EU average with respect to the share of women researchers and among the few countries with a balanced proportion of women among graduates and researchers in STEAM domains (Chioncel and Del Rio, 2017). Also the country achieved best scores in the assessment report for ERA/Priority 4 - focused on gender equality and gender mainstreaming in research (EC, 2019). On the other hand, beyond the feminization of the sector (or in spite of it), it is relevant to remind us that, for example, there are only 3 female Rectors acting in the 54 public universities in Romania (losif, 2019) and few women leaders/managers of research institutions (as of 2021). Gender (in)equalities are also visible either through the lens of the access to education, or through the lens of the extent to which gender is included (or not) in higher education institutions and curricula (Băluță, 2020). For instance, the current National Strategy for Equal Opportunities reminds us that, in Romania, in the field of Information and Communication Technologies (ICT) or Engineering, in 2017 only about $30 \%$ of the enrolled students were female. On the opposite side, over $70 \%$ of the female students were enrolled in the fields of the Sciences of Education, Social Sciences, Journalism and Information, Health and Social Assistance were female. At the same time, the share of women continuing their studies at the doctoral level generally decreases, if compared to the number of female students enrolled in MA programs, which suggests that less women than men decide to continue their studies at doctoral level, including in feminized fields of education.

The legislation in force as well as several national strategic documents contain implicit references and measures to promote equal opportunities between women and men in HERI. The National Education Law is the main national legislative norm that regulates higher education and universities' organization and functioning in Romania. Article 118, para. 1 stipulates that: the national higher education system in Romania is based first and foremost on the principle of university autonomy; fundamental aspects of the university autonomy are
specified within University Charter, approved by the university Senate, in accordance with the legislation in force; and that "discrimination based on age, ethnicity, sex, social origin, political or religious orientation, sexual orientation or other types of discrimination are not permitted in higher education, except for affirmative actions provided by law." ${ }^{26}$ Given the university autonomy principle, the Ministry of Education can make recommendations in accordance with EU regulations and the national existing stipulations, but the legal responsibility for advancing gender equality in HEls can thus only be taken at university level, where the highest decision and deliberation body is the university Senate.

Consequently, regarding for example policies aiming at the prevention of sexual harassment in the field of HERIs, there is an important set of norms at the national level that regulate the problem of all forms of violence (mainly Law 202/2002), but it is up to HERIs whether they decide to adopt (or not) a special Protocol for preventing and tackling (sexual) harassment and gender-based violenceotherwise, these issues can be referred only to in the Code of Ethics adopted by each organisation. On the same grounds, as regards the area of recruitment and career development, universities and other academic and research organisations are in accordance with the legislation and policies in force at the national level (related to work and employment, equal opportunities and non-discrimination, etc.), yet they are not gender-equality oriented: there are no affirmative incentives for promoting women in higher education or in research ${ }^{27}$. Such initiatives could come only within the universities, based on their autonomy. Similarly, as regards gender equality in decision-making in HERIs, the national legislation in force is in accordance with this principle. Law 202/2002 stipulates that all institutions and public bodies have to promote and to support the balanced participation of women and men in leadership and decision-making, including the balanced participation in expertise boards, groups or other managerial or consulting structures (Articles 21 and 22). On the other hand, given the principle of university autonomy and the rest of the regulations in the fields of HERI, there are no incentives or plans at the national level aimed at leading institutions to adopt proactive measures to increase the number of women in decision-making and professorships.

Among other national documents that make sporadic references to gender equality in (higher) education and research, one can mention: the National Strategy for Equal Opportunities and its Implementation Plan for 2021-2027 (elaborated by the Ministry of Labour and Social Protection-ANES); the National Strategy for Sustainable Development 2030 (elaborated under the coordination of the Ministry of Education by the Romanian Academy) ${ }^{28}$; National Strategy for

[^15]Tertiary Education 2015-2020, elaborated by the Ministry of Education) ${ }^{29}$; National Strategy for Research, Development and Innovation 2014-2020, elaborated by the Ministry of Education ${ }^{30}$.

Apart from the national strategies and policies there are important national plans and programs aiming at reforming the entire educational system, such as "Educated Romania" 31 , project under the auspices of the Romanian Presidency for 2018-2030. The project refers to social inequalities as one of the most important factors that reinforce inequalities related to access to education, without, however, mentioning the principle of gender equality ${ }^{32}$.

As far as the research system in Romania is particularly concerned, the latest National Strategy for Research, Development and Innovation (2014-2020) contains relevant information regarding the way in which the Romanian system works in the field, the institutional actors that ensure its governance and that take the legal responsibilities for implementing and monitoring all research related policies ${ }^{33}$.

An important public institution involved in the implementation of gender legislative and policy measures in public research \& HE institutions is the Executive Agency for Higher Education, Research, Development \& Innovation Funding in Romania (UEFISCDI). As a public entity of the Central Administration in Romania under the ultimate authority of the Ministry of Education, it functions as a research funding agency that manages approximately $22 \%$ of the public funds allocated to research, development and innovation. One
from: $\quad$ https://www.edu.ro/sites/default/files/Strategia-nationala-pentru-dezvoltarea-durabila-a-României-2030.pdf

29 Ministry of Education (2015), Strategia Nationala pentru Invatamantul Tertiar 2015-2020 (National Strategy for Tertiary Education 2015-2020). Retrieved from: https://edu.ro/strategia-națională-pentru-învățământ-terțiar

30 Department of Sustainable Development (2018), Strategia Națională pentru Dezvoltare Durabilă a României 2030 (Romanian National Strategy for Sustainable Development 2030). Available at: https://www.edu.ro/sites/default/files/Strategia-nationala-pentru-dezvoltarea-durabila-a-României-2030.pdf
31 Romania Educata (Educated Romania), Project Results 2020. Available at: http://www.romaniaeducata.eu/rezultatele-proiectului/
32 Romanian Parliament, "Legea nr 202 din 19 aprilie 2002 privind egalitatea de șanse și de tratament între femei si bărbați" (Law no. 202 of April 19, 2002 on equal opportunities and treatment between women and men). Published 5 June 2013. Retrieved from: http://legislatie.just.ro/Public/DetaliiDocument/35778
${ }^{33}$ In the field of RDI, the Ministry of Education closely collaborates with national advisory bodies such as: a) the National Council for Science, Technology and Innovation Policy (CNPSTI);
b) institutions with scientific coordination role (that are part of the national advisory bodies), such as the Romanian Academy or other Academies conducting research in specific areas; c) the Advisory Board for Research and Development and Innovation (CC-CDI) as main specialized advisory body of the Ministry of Education; and d) the National Council for Scientific Research (CNCS).
of its main responsibilities is to organize competitions and to further monitor the implementation of projects accepted for funding. In 2013, UEFISCDI was selected through competition to elaborate the National Strategy in Research, Development and Innovation 2014-2020.

Another specific body that is/can be involved in implementing gender-related policy measures in higher education is the Romanian Agency for Quality Assurance in Higher Education (ARACIS) whose mission is to carry out the external evaluation of the quality of education at graduate level in Romania. All higher education programs in Romania have the obligation to respect ARACIS standards and methodologies.

Although there is no national strategy for implementing gender equality in higher education, research and innovation (HERI), different initiatives aiming to stimulate (young) women in research, especially in the fields of life sciences and physical sciences exists-e.g., the L'Oréal - UNESCO Private Scholarship Program for Women in Science ${ }^{34}$, launched in Romania in 1999. As a result, during the last dossier-based competition, a number of Romanian female scientists under the age of 40 were granted scholarships.

There are also several European programmes, such as the EU - HORIZON 2020 ones, that focus on gender equality and are implemented are under implementation within HEls, Research-Funding and/or Research-Performing Organizations from Romania: TARGET ${ }^{35}$ (ARACIS among partners, GEP under implementation); CALIPER ${ }^{36}$ (UEFISCDI among partners, GEP under implementation ${ }^{37}$ ) or GENERA ${ }^{38}$ ("Horia Hulubei National Institute for R\&D in Physics and Nuclear Engineering" among partners, GEP implemented). A series of other HEls in Romania decided to start undertaking steps towards designing GEPs, mainly in view of preserving the opportunities to apply for future EU HORIZON projects.

Additionally, there are some European strategic documents pushing the issues of gender equality that are endorsed by many Romanian universities and research organizations, e.g., the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, documents endorsed so

[^16]far by 15 Romanian universities and research organisations (out of at least 53 public universities at national level).

In conclusion, in Romania there are norms, institutions and actors that can be involved in the implementation of the principle of gender equality, especially since the principle is present in the legislation in force. However, from the point of view of higher education, research and innovation, gender (in)equality is not identified as an important target/issue to be addressed.

Nevertheless, certain windows of opportunities to push forward a gender sensitive agenda exist:

- A general national legislation that is favourable towards gender equality;
- An increased process of internationalisation that allows more contact with European/international higher education \& research models more committed to gender equality.
- A historically good tradition within the HERI sector for a gender-balanced representation in HEls, including STEAM areas;
- GEPs under development or implementation within important bodies (UEFISCDI and ARACIS)-this sets a precedent to follow and creates a window of opportunity for making gender issues more visible within academia and research institutions;
- The promising progress made in the area of data collection in general, and gender disaggregated data in particular in the field. A lack of transparency, as well as the lack of a culture of sharing research data between governmental institutions and researcher communities still persist, and there are topics still not covered by gender sensitive data. Nevertheless, Ministry of Education, UEFISCDI and also some universities themselves-such as UB have developed better dat gathering systems. The National Platform for the Collection of Statistical Data for Higher Education (ANS), under UEFISCDI coordination, is an integrated information system dedicated to higher education in Romania, compatible with data collection systems at the European level that brings together the main statistical data on higher education accessible to all interested actors. Some relevant sex segregated statistics are gathered and more may be collected in the future ${ }^{39}$.
- The two existing MA programs functioning at public HEls that offer specialization in gender studies ${ }^{40}$. They contribute to the development of a community of academics with graduates with expertise in gendered public policies and gender sensitive research. In the same area, the existence in some of the universities located in major cities of diverse modules/courses adrressing gender issues directly (GS) or doing gender mainstreaming.

[^17]
## 3. Outcomes of the gender equality audit at University of Bucharest

University of Bucharest is the larger public university in Romania with 34.000 students enrolled, over 1.300 academic staff, 500 researchers and 50 research centres, 1300 administrative staff, 19 Faculties and 21 Doctoral Schools in various domains (official data from 2021).

### 3.1. The pool of graduate talents

### 3.1.1. Qualitative indicators

The main problem concerning an evaluation of the degree of gendering of the content of the curricula within the UB faculties, the BA, MA or PhD theses and the research projects is the lack of a systematic gender sensitive reporting and gathering mechanism. An effort in this area is crucial for the future better institutionalization of gendered knowledge and gender mainstreaming of research within the UB. It will provide evidence of (i) the existing interest for undergoing gender sensitive research within the UB (of course much visible within social and political areas or humanities), (ii) the quality of the courses/research, and (iii) the existing pull of professors and researchers with interest and know-how in the area.

There are no fellowships, grants or training on academic publishing dedicated to women students, professors or researchers only and there is an unfavourable attitude towards such affirmative politics. The situation is similar with the dualcareer couples in research working at the University of Bucharest, with no measures for gender equality being implemented. Gender-targeted specific career coaching was never implemented.

Non-discriminatory internal policies/regulations and norms, including those related to gender balance, are being implemented in accordance to the national legislation on gender equality and the non-discrimination principle; however, important UB documents (such as Carta UB: https://unibuc.ro/wp-content/uploads/2018/12/CARTA-UB.pdf and Rector's Strategy 2020-2023, https://unibuc.ro/despreUB/strategiaUB) make explicit or implicit reference to the need of gendered balanced internal policies. The current management team took a look at general statistics based on sex and it is also including sex/gender in line with other characteristics such as age or academic position. However, the current project aiming at building the Gender Equality Plan, through the indicators employed, helps at creating more specific gender targeted indicators (beyond simple counting for women and men in different areas). The status of gender balance in recruitment is planned to be implemented.

Job offers documents do use gender balanced forms (i.e. masculine/ feminine) in some instances and in certain situations the addressing formulas are gender inclusive. Nevertheless, for the moment, Romanian official language does not allow the feminisation of professions and this is a more complex issue in our country. We can consider that this indicator is planned to be implemented. Another instance where the gender-balanced form is implemented is the questionnaires developed by the Statistical office of University of Bucharest, where each question takes into account grammatical gender (as a binary category-aspect that can also be revised).

Overall, we may consider that internal promotions are equally presented, without any differentiation (at least a visible one for assessment), thus it can be considered currently being implemented. Moreover, the policy of nondiscrimination is visibly stated in all major official documents of the University of Bucharest (the Carta, the Strategy of the university, the Code of Ethics and Deontology).

### 3.1.2. Quantitative indicators

For students, we can notice that there are differences between domains of study in terms of the number of people enrolled in first year and those who actually graduated by sex. For graduates across levels of study and domains of study, also we can see that there are some domains more popular for men, such as Computer science. 59\% of the doctoral students in 2020 are women, $63 \%$ of the PhD graduates between 2009 and 2016 are women, and in $202056 \%$ of PhD graduates are women.

Figure 4. \% of women PhD graduates in 2020 across fields (UB)


### 3.2. Gender balance in research

### 3.2.1. Qualitative indicators

At the moment, there is no dedicated organisational arrangement for dealing with issues of gender equality. There is also no monitoring or continuous evaluation of a Gender Equality Plan since there is no one implemented. Gender budgeting or women' networks are also on the list of measures that are not implemented until now.

However, University of Bucharest is part of various international networks, some of them being gender specific, courtesy of the professors and researchers working at the university:

- The International Research Association of Institutions of Advanced Research Studies (RINGS) ${ }^{41}$;
- External alliances, such as: CEREFREA- Centre Régional Francophone de Recherches Avancées en Sciences Sociales (CEREFREA, Villa Noël), (one component dealing also with gender issues);
- University networks, such as (with gender sensitive strategy included) ${ }^{42}$ :
"Inclusiveness will permeate all our actions while developing these missions, as we commit ourselves fully to gender equality, non-discrimination and social equity. The involvement of our universities in this alliance will help reduce the gaps, strengthen access to quality education and create real chances of success for all our students" ${ }^{43}$

Workshops, awards ceremonies, promotion materials about women's contribution to the prestige of UB are organised (as possible as GE awarenessraising activities) mainly yearly with the occasion of 8th of March. However, these activities are neither compulsory nor organised on a regular basis.

Best academic achievements (such as publication in prestigious Journal with high Impact Factor) are each year rewarded financially on a competitive process within the University of Bucharest Senate - many women being on the final list. It is worth mentioning that the UB representative with the highest number of published articles in 2020 is a woman- Prof. Carmen Chifiriuc, Vice Rector of the University of Bucharest, according to internal reports created by Times Higher Education representative.

[^18]Researchers (both women and men) are invited to participate in round tables and public events on gender equality; yet, for the time being, there are no gender specific activities dedicated to the rest of the university staff (i.e. for the administrative personnel and maintenance staff). Professors and students in the academic community are part of organizations dedicated to gender equality which organize activities within those organizations.

### 3.2.2. Quantitative indicators

This topic is relevant in the context of people achieving higher level positions at an age close to retirement age officially in our country, spending their younger ages in administrative and other research activities that are not extensively valued for promotion and research outcomes at the level of academic, in national and international classifications. In 10 out of 17 faculties (in 2 faculties there are no women professors), women, on average, achieve the highest academic position (professor) later in life compared with men. On average, more women than men spend their 30s and 40s at lower level of the academic carriers and produce less research outputs in comparison with men. This means difference in academic evaluations, and lower incomes. The strategy of increasing the income from collective research projects and publishing of the results is less fruitful if we take into account the national calculus of the value of research outputs: if a research article has more authors, the values of the articles and its citations are lower than an article with fewer authors (the value is computed based on the impact factor of the journal divided by the number of authors of the article; situation valid for social sciences, to be further investigated in other sciences).

Table 29. Projects in competitions for funding 2019-2021 (UB)

| Year Competition |  | Submitted |  | Financed |  | Success rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  | F | B | F | B | F | B |
| 2021 |  | 71 | 69 |  |  |  |  |
|  | PD | 14 | 6 | Competition under development |  |  |  |
|  | TE | 24 | 19 |  |  |  |  |
|  | PCE | 33 | 44 |  |  |  |  |
|  |  | Submitted |  | Financed |  | Success rate |  |
|  |  | F | B | F | B | F | B |
| 2020 |  | 40 | 52 | 7 | 16 | 18\% | 31\% |
|  | PCE | 40 | 52 | 7 | 16 | 18\% | 31\% |
|  |  | Submitted |  | Financed |  | Success rate |  |
|  |  | F | B | F | B | F | B |
| 2019 |  | 78 | 76 | 22 | 28 | 28\% | 37\% |
|  | PD | 17 | 27 | 7 | 17 | 41\% | 63\% |


| Year Competition | Submitted |  | Financed |  | Success rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TE | 39 | 25 | 12 | 9 | 31\% | 36\% |
| PED (coord.) | 22 | 24 | 3 | 2 | 14\% | 8\% |

### 3.3. Gender balanced career advancement

### 3.3.1. Qualitative indicators

Further measures dedicated to female researchers with small children, such as extended age limit in calls or measures that do not discriminate based on years worked, are not currently implemented. Also, mentoring programmes for female employees, gender training for employees and specific sabbatical for women scientists were not considered in the history of the university. There is no sabbatical period for women only - sabbatical is regulated for both male and female researchers (Carta of the University of Bucharest, art. 26, al. $2^{44}$ ). However, equal access to internal training can be added to the list of currently implemented measures because the university is investing in various ways of communication. There are neither discriminatory equal access specifications related to internal training, nor gender specific ones. In the same time, we can provide a good example from the Faculty of Sociology and Social Work, which stated in the current Strategy of development for 2020-2024 that it has "a team of professors of high quality, relatively young and well distributed on age and gender categories" ${ }^{45}$.

### 3.3.2. Quantitative indicators

Even if women on average enter slightly earlier than men in the academic path (age for women assistants is 40.1 compared with 40.5 for men), there are important differences in terms of vertical segregation and pipe line instances (delays in academic carrier for women) between faculties. Examples of faculties where women become professors later than men: Faculty of Chemistry, Faculty of Philosophy, Faculty of Physics, Faculty of Geography, Faculty of History, Faculty of Letters, Faculty of Mathematics and Computer Science, Faculty of Sociology and Social Work, and Faculty of Orthodox Theology.

[^19]
### 3.4. Gender balance in decision making

### 3.4.1. Qualitative indicators

There are no specific leadership programmes designed to support women in decision-making positions; however, there is an informal interest in terms of gender balanced boards and commissions. Gender training for managers targets or quotas for gender balance in boards and committees have never been provided until now. However, the current team of Vice-Rectors is composed of more women than before. This situation can be considered as an informal target or quota for gender balance that was explicitly and publicly mentioned during the electoral campaign (see the videos of public debates ${ }^{46}$ ). Again, we mention a general attitude against any kind of quota system to be introduced.

### 3.4.2. Quantitative indicators

In general, gender sensitive correlations of data show the existence of gender gaps in decision making. Some data is obvious. Some other should be read in a larger gendered context. For example, the fact that there are 4 women vice-rector and 5 men vice-rectors, a balanced picture, needs to corelate also with the total number of women (729) and men (581) and do the percentages in order to see the state of affair beyond the much-prayed feminization reality.

There are only few faculties with a majority of female professors (in general the small size ones). Deans and Directors of Department are more likely to be men than women, whereas Vice-Rectors have a more equal gender balance. Taking into account the available data, women are more likely to obtain the so called gradatii/gradation given step by step along the employment period.

Table 30. Percentage of women professors by place of work (UB)

|  | No of females | \% | Total |
| :--- | ---: | ---: | ---: | ---: |
| Professor univ.dr. | $\mathbf{1 1 6}$ | $\mathbf{4 4 \%}$ | $\mathbf{2 6 2}$ |
| $\quad$ Management of the University | 4 | $44 \%$ | 9 |
| The Department of Physical Education <br> and Sports | 3 | $75 \%$ | 4 |
| $\quad$The Faculty of Business and | 7 | $54 \%$ | 13 |
| Administration | 13 | $87 \%$ | 15 |
| $\quad$ The Faculty of Biology | 4 | $50 \%$ | 8 |
| $\quad$ The Faculty of Chemistry | 11 | $48 \%$ | 23 |
| $\quad$ The Faculty of Law |  |  |  |

[^20]|  | No of females | \% | Total |
| :---: | :---: | :---: | :---: |
| The Faculty of Philosophy | 1 | 13\% | 8 |
| The Faculty of Physics | 4 | 36\% | 11 |
| The Faculty of Geography | 7 | 54\% | 13 |
| The Faculty of Geology and |  |  |  |
| Geophysics | 1 | 20\% | 5 |
| The Faculty of History | 4 | 27\% | 15 |
| The Faculty of Journalism and |  |  |  |
| Communication Studies | 4 | 80\% | 5 |
| The Faculty of Foreign Languages |  |  |  |
| and Literatures | 24 | 71\% | 34 |
| The Faculty of Letters | 12 | 52\% | 23 |
| The Faculty of Mathematics and |  |  |  |
| Computer Science | 2 | 8\% | 26 |
| The Faculty of Psychology and |  |  |  |
| Educational Sciences | 5 | 42\% | 12 |
| The Faculty of Sociology and Social |  |  |  |
| Work | 4 | 29\% | 14 |
| The Faculty of Political Science | 5 | 45\% | 11 |
| The Faculty of Baptist Theology |  | 0\% | 1 |
| The Faculty of Orthodox Theology |  |  |  |
| "Justinian the Patriarch" | 1 | 11\% | 9 |
| The Faculty of Roman-Catholic |  |  |  |
| Theology |  | 0\% | 2 |
| Rectorat |  | 0\% | 1 |
| Total | 116 | 146 | 262 |

Table 31. Management positions by sex: Number of persons (UB)

|  | Females | Males | Total |
| :--- | :--- | :--- | :--- |
| Dean | 4 | 15 | 19 |
| Director CSUD |  | 1 | 1 |
| Director of department | 28 | 35 | 63 |
| Director of Doctoral School | 11 | 10 | 21 |
| President of the Senate |  | 1 | 1 |
| Vice Dean | 29 | 22 | 51 |
| Vice-Rector | 4 | 5 | 9 |
| Rector |  | 1 | 1 |

Note: to keep in mind that there are more women than men as academic staff ( 729 women and 581 men)

### 3.5. Gender balanced working conditions

### 3.5.1. Qualitative indicators

Equal pay measures and pay transparency policies can be considered to be currently implemented because the salary policies of the university are in accordance with both the labour legislation and the anti-discrimination legislation. Wage differences may occur due to differences in 'continuity' at work and/or the leaky pipeline phenomenon. However, gender pay audits or reports have not been prepared or publicly available. Within the current project we gathered data in this respect and it seems that even if there are more females in total or if we compare based on the type of position (professors/ researchers, non-teaching or teaching assistants), the average income is higher for men than for women. So, a gender pay gap is present within our university. And need further investigation.

Moreover, we can consider that appropriated workload is currently implemented, with human resources services well extended and that can be easily adapted to new requirements that will be needed when the Gender Equality Plan is implemented. In the same time, healthy and safe workplace is undertaken, with a focus on developing the current buildings and services. Non-discriminatory equipment for work or research is available as well. The possibility to work parttime and flexitime exist but is not used systematically: there is an important distinction between teaching, research and other professional activities; beyond the period of pandemic measures, teaching was on-site only, and the rest of activities were more flexible both in terms of working time and place. Part-time in UB is possible according to the national legislation in force; however, the parttime system in UB needs further detailed explanations in order to highlight its specificities (as for example, being able to work for a limited number of hours, with a different salary scheme). Telework as work remotely or home-office became relevant in times of Coronavirus pandemic for students and professors, whereas the administrative staff worked both remotely and from the headquarters of the university, in shifts, in order to continue the academic administrative work.

Maternity and paternity institutional policy is currently implemented. There are some maternity support measures that go beyond the existing national policy measures (e.g.as a PhD student one is allowed to freeze the period of studies for three years, for child-raising and parental reasons).

There are different informal arrangements in view of supporting employees, students or on other situations of care for dependent family members; moreover, they may differ in between faculties. Child care support through the creation of kindergartens for faculties or creating contracts between university and
kindergartens that offer opportunities for child care to students and professors of the university are measures included in the current Operational Plan ${ }^{47}$.

Support for re-entry after leave periods is not currently implemented, as well as teaching free period after parental leave or policy on elderly care for family members of students or professors. University of Bucharest can improve with regard to the family and baby-friendly environment overall.

In terms of internal guidelines on non-sexist language in communication, the university has not implemented such measures until now. UB has not for the moment envisaged an institutional strategy to address the new gender fluid environment-at least in terms of offering basic information for the staff in terms of the new language to be used for non-binary individuals. There are no bodies to implement and monitor policy of non-discrimination on gender issues. There is no special body/commission/person in charge with gender equality aspects in general; nevertheless, there are several bodies within the current UB diagram where issues of discriminatory policies, harassment, gender-based violence can be handled, such as:

- a legal office that deals with all legal aspects regarding employees' work;
- a Commission of Ethics in Research at UB level;
- Commissions of Ethics within each of the 19 Faculties;
- Ombudsman Office;
- Bureau for Social and Educational Inclusion;
- Statistical office (offering analysis data).

There is no institutional implemented protocol in the area of prevention sexual harassment and gender-based violence. In the same time, there is a lack of promotion of awareness measures of prevention on this topic.

### 3.5.2. Quantitative indicators

In terms of income, on average, men have higher salaries than women, even though there are more women independent of the type of occupation: teaching or administrative.

[^21]athena
gender equality to unlock
research potential

Table 32. Income by sex and type of occupation (UB)

| Category |  | Number of people | $\%$ of the total nr . of employ ees | Average gross monthly incomeall employees | Average gross monthly income/ employe | Average men's salaries Average women's salaries) / <br> Average men's salaries * 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Teaching | Men | 581 | 44.35 | 6,100,596 | 10,500 | 13.08\% |
|  | Wom en | 729 | 55.65 | 6,653,808 | 9,127 |  |
|  | Total | 1,310 |  |  |  |  |
| Nonteaching and workers | Men | 248 | 39.43 | 992,856 | 4,003 | 14.69\% |
|  | Wom en | 381 | 60.57 | 1,301,246 | 3,415 |  |
|  | Total | 629 |  |  |  |  |
| Auxiliary staff | Men | 187 | 24.83 | 1,022,178 | 5,466 | 3.66\% |
|  | Wom en | 566 | 75.17 | 2,980,330 | 5,266 |  |
|  | Total | 753 |  |  |  |  |
| TOTALUB | Men | 1,016 | 37.74 | 8,115,630 | 7,988 | 18.31\% |
|  | Wom en | 1,676 | 62.26 | $\begin{aligned} & 10,935,38 \\ & 4 \end{aligned}$ | 6,525 |  |
|  | Total | 2692 |  |  |  |  |

### 3.6. Gender balance in research outputs

### 3.6.1. Qualitative indicators

Gender awareness (informative and formative) lectureships to provide assistance to different structures within the university were not implemented until now. Integration of gender analysis into research or teaching is not done systematically, or based on institutional guidelines but conjunctural, mainly where there are professors, researchers with gender expertise and interests in the area.

The good part is that there is a team of gender experts within the UB spread along different faculties and gender studies/knowledge are/is integrated within the current curricula: Faculty of Sociology and Social Work, Faculty of Journalism and Media Studies, Faculty of Political Science, Faculty of History, Faculty of Philosophy, Faculty of Literature and foreign Language. Gendered topics are not present, but certain courses have the potential to easily integrate gender aspects
at: Faculty of Orthodox Theology (Department of Theology and Social Work) or Faculty of Geography. Gender as a subject is not integrated within current curricula: Mathematics, Physics, Chemistry, Biology. A deeper analysis is needed to have an overall evaluation of the integration of gendered knowledge at UB (an initiative that could be part of the GEP planning).

At institutional level at the UB, all PhD students, first year, from all specialization from the 19 faculties have compulsory modules on "Ethics in academic research" (with references to sexual harassment, verbal or written insults, power abuse or bullying and other forms of discriminations are mentioned in the UB Code of Ethics). All MA students, first year, from all specializations from the 19 faculties, have a compulsory module on "Ethics and academic writing" (with topics relevant also for gender equality). Many BA, MA and PhD theses include explicitly or implicitly a gender component (due to a lack of monitoring of the doctoral themes it is impossible to make some numeric estimates).

The compulsory period of practice (at least for the students from social and political sciences and humanities) includes opportunities to work with GOVs and NGOs involved in the area of gender equality (e.g. ANES, CNCD, EU Parliament, different women's NGOs), to collaborate within various research projects with a gender dimension (e.g. Gender Barometer - Romania or Athena project).

The Research Institute of the University of Bucharest (ICUB), although it does not have a specific gender component, has a number of professors with gender expertise who promote gender sensitive topics and it is open to research themes that are gender sensitive. Other Research Centres within different faculties of UB are also undergoing gender sensitive projects. One in particular (The Centre for the Study of Equal Opportunity Policies (CPES) - within the Faculty of Political Science) is dedicated to gender areas of research: "it is an academic research, teaching and know-how unit, with interdisciplinary and international vocation, that aims to investigate the processes of democratization and citizenship building, the design and evaluation of public policies, as well as the social processes of constructing gender, class, ethnic, racial and sexual differences or other forms of social hierarchies" (http://www.fspub.unibuc.ro/cpes). CPES hosts the joint project on anti-gender campaigns in Europe entitled «Campagnes "anti-genre" en Europe : enjeux de savoir, enjeux de pouvoir» (CAGE), coordinated by the University of Bucharest, the University of Bulgaria and l'Université Libre de Bruxelles ${ }^{48}$ ).

The International School for Doctoral Studies (ISDS) and a series of affiliated Doctorate Schools (from Faculty of Sociology and Social Work, Faculty of Communication and Journalism, Faculty of History, Faculty of Political Science, Faculty of Philology) offer, through the thematic publicly offered by different PhD coordinators, possibilities to undertake gender specific topics and/or to integrate

[^22]gendered academic knowledge and research. A master programme on Gender and Equal Opportunities Policies is institutionalized within the Faculty of Political Sciences, as part of the European E.G.A.L.E.S. consortium (http://egales.univlyon2.fr/). In many of the UB faculties there are, in different stages of development and institutionalization (compulsory or optional) courses, modules on gender specific topics. Of course, the majority are to be found at faculties from the social sciences, political sciences and humanities. A repertoire of such academic offers and an assessment of their quality is crucial for combating the gender backlash phenomenon.

In research funding schemes, submitted or funded projects, gender aspects are not included. Budgeting to projects focused on gender aspects is not allocated. However, sex-disaggregated data on research funds, about students or staff is available.

### 3.6.2. Quantitative indicators

Men travelled less than women, but on a slightly longer period of time between 2018 and 2020. Nevertheless, the financial value of international projects signed and implemented by a woman manager is lower than the one managed by men. Data provided by the Research Department focuses only on number of projects. It should also focus on amount of money correlated with gender of the manager, taking into account other classifications also. If we take a look at the projects currently under development, $54 \%$ are led by men. The success rate of getting funds for research projects is lower for women than for men in 2019 and 2020, even if in 2019 slightly more projects were proposed by women.

Based on the dataset used to populate the Focus platform under development currently, and dedicated to manage the publications and reporting regarding to them, we analysed a small sample of articles (the first unordered 137 articles with data gathered in 2020, received from the dedicated body of development of the platform for managing research outputs; more data should be processed to test these hypotheses) and found out that women tend to publish more in national ISI articles than in international ones. Women in national ISI published articles are more likely to be lead author. Nationally it is also much more likely to publish as a unique author. There are fewer co-authors, on average, in national articles than in international ones. Also, in many domains, the number of authors is important as you need to process the impact factor of the journal where you published by dividing it to the number of authors of the articles when it comes to processing the value of citations. This pattern results in less points for articles with many authors than for those with fewer authors.

Table 33. International articles: Analysis of a sample of 15\% of published articles in 2020 (UB)

|  | Sum of <br> Nr. of <br> women | Sum of Lead <br> women author | Sum of Unique <br> woman as author | Sum of Total no <br> of authors |
| :--- | :--- | :--- | :--- | :--- |


| National <br> articles | 102 | 24 | 15 | 361 |
| :--- | :--- | :--- | :--- | :--- |
| International <br> articles | 27 | 12 | 0 | 2012 |
| Total | $\mathbf{1 2 9}$ | $\mathbf{3 6}$ | $\mathbf{1 5}$ | $\mathbf{2 3 7 3}$ |

Please see Annex 1 for more data.

## 4. Identified gender biases at University of Bucharest

### 4.1. Outcomes of the staff survey


#### Abstract

Within the ATHENA project, a staff survey collected data on gender equality attitudes and experiences within the organization between late November and early December 2021. The invitation to take part to the survey was sent to employees: professors, researchers, and administrative staff. A number of 177 respondents started to fill in the questionnaire, whereas 116 finished providing answers to all questions, numbers similar to other studies conducted within university by the Statistical Office, an administrative structure dedicated to opinion barometers for the academic members.


In terms of sexual orientation, there were 3 employees describing themselves as bisexual ( 1 woman and 2 men), 3 men describing themselves as gay, 1 man as other, 8 people preferred not to say exactly ( 6 women and 2 men), whereas all the others said they are heterosexual. Even if the overall number of answers being not so high, people with other sexual orientation are also present in our study.

Below are some of the results (the data gathered combined with the other research results offer more opportunities for future transversal analysis).

## Fairness and increase of the quality of work correlated with gender equality climate

Attitudes towards gender equality within organization show that most respondents (3 out of 4) consider gender equality measures to increase fairness at workplace and is important for respondents. This perception is somehow in contradiction with results from the qualitative study where people more frequently argued that gender equality may decrease quality of work, being against meritocracy. 6 out of 10 respondents said that it improves scientific outputs within academia, whereas about 1 in 2 respondents said it provides an easier way to work - life balance. If we compare responses provided by women and men, we find out that women are more likely to have a positive attitude towards gender equality than men.

## Gender equality measures useful mainly for women in general and specially for academic women.

More women find gender equality measures to be useful than men, with 8 out of 10 women considering them useful personally, compared to 6 out of 10 men with this opinion. Attitudes towards fairness increase within academic environment are
similar between men and women, with about 7 in 10 people with this position. Negative attitudes are more likely to be found in men, though only a few, 2 out in 10 , with this rejection of gender equality measures.

## Meritocracy and "hard work" bring success...even for women!

1 in 10 respondents express stereotyped values in terms of gender roles in academia. The topic with less people sharping such views is with respect to the connection between fields and gender. They think that even if some domains in their discriminative perception are not suitable for women, if they succeed in working on those positions, women become suited for them. Still, 3\% of respondents think that some domains are not suitable for women. In this respect, training regarding gender equality is especially needed. In this respect, training regarding gender equality is especially needed.

## The higher women aspire the less they succeed (glass celling)

Advantage towards men on important positions is perceived by more people than advantage towards men in regular positions in academic. Informal circles of influence seem to be present within our academic community and men are perceived to be advantaged by this characteristic by more people (1 in 3) compared to other academic positions. Preference towards men for managerial positions is reported by 1 in 2 female respondents and 1 in 4 male respondents. Efforts for a better position are reported by 1 in 3 female respondents, with only $14 \%$ by male respondents. Differences are also noticed to other indicators of preferences for hiring, with 2 in 10 respondents feeling that males are more likely to be preferred.

## Family responsibilities and having children - impediments for women's professional carriers

For professional achievements, 7 in 10 respondents declared that family and supportive partners are important. 4 in 10 respondents consider that not having children or other caring responsibilities are useful for professional achievements. Childcare and elderly care value substantially, thus caring services may improve parents' lives and people with responsibilities of elderly care, but also would encourage decisions to have children. The level of incomes in academia are pretty low per se without involvement in research projects or without taking another job, claims that also resulted from open-ended questions where respondents explained their choices. Thus, people in academia, especially women, may be worried about being able to raise a child and develop professionally in the same time. Encouraging both men and women to take parental leave with a flexible plan that allows people to be included in research projects or publishing activities, activities that do not need necessarily real-time interactions, could support them to be able to have higher level of incomes from professional activities, develop further professionally and keep connections with colleagues. Currently, if a woman is in childbirth leave, even if she is part of a research project, she will not receive more than her basic salary, whereas the income from research activities is not covered on this period of time, a gender discriminative measure taking into account that only women experience this kind
of situation. Moreover, the Romanian government offers to people who start working in less than 6 months from childbirth 1500 lei support until the child is 2 years of age, amount that can be allocated to childcare services. This measure can be promoted, connected with flexibility in working conditions and more time allocated to research.

## Young staff more affected in their carrier path by insufficient childcare support and administrative responsibilities' burden

Negative impact of childcare is perceived by more young men (1 in 3) than young women (2 in 10) of less than 30 years of age. In the category of 31-40 years of age, men and women have similar options, with 4 in 10 considering childcare having a negative impact on the professional life. Only elderly women, in the category of 61-65 years ( $25 \%$ ), are more significantly numerous than men (17\%) in considering childcare with a negative impact on professional life.
Having flexible working hours independently of childcare status are valued by 8 in 10 respondents for professional achievements. Only 2 in 10 people think that having administrative responsibilities are useful for professional development. If administrative load would be externalized to applications and people who are dedicated to administrative activities, research and teaching, but especially research would be improved based on time allocated to reading, field and laboratory testing and paper drafting. This topic is also relevant in the context of people achieving higher level positions at an age close to retirement age officially in our country, spending their younger ages in administrative activities and other research activities that are not extensively valued for promotion and research outcomes at the level of academic, in national and international classifications. In a lot of faculties, the age at which women achieve the highest academic position is later than the age of men.

## Gender balance allocation of prizes for excellence

The winners of the prizes provided by the Senate of the University of Bucharest, a good initiative for promotion excellence in the institution, were allocated in 2020 to slightly more men than women, but the differences are small. Providing recognition/prizes to both women and men (without any kind of quota introduced) is important in terms of promoting gender equality in teaching and research.

## Gender sensitive training almost not existing

Only $4 \%$ of the respondents declared that they participated to gender equality trainings, whereas 4 in 10 respondents said that they did not receive any trainings in the last 3 years. Education with respect to gender equality and other connected topics is highly needed in this context, resulting the need to provide targeted training opportunities to all members of the academia- from academic staff to administrative staff and students.

## Lower aspiration for women vs. men in terms of acceding to high level positions.

With respect to applications for a promotion, it is interesting that men are more likely to say, even if the percent is low (16\%) that there is no higher level position where they can apply, compared to women (10\%). Moreover, women are more likely to have lower aspirations for a higher position than men, $12 \%$ compared to $4 \%$ for men. These aspirations can be encouraged explicitly by reinforcing the importance of publishing and by underlining that it is not an aspect of personal choice for promotion, but it affects the university due to low publication rates.

## Men more satisfied than women with their status quo

$50 \%$ of the men in their 30s and 40s declared that they are satisfied with their position, whereas for women percentages are lower, but they are getting higher as women get older. In their 40s are more likely to be Lecturers, whereas in their 50s more women are starting to want to become Senior Lecturers and Professors (see the audit at our university in the previous chapter). When achieving the title of Full Professor, 4 in 10 women said that they do not have higher aspirations compared to only 7\% of men. Even the position of Associate Professor is enough for $17 \%$ of women, whereas no men declared this satisfaction with a position that it is close to the highest one.

## Different perceptions on the impact of gender on carrier pattern

Perception on the ease to obtain a degree in academia is only for $43 \%$ of women in the gender equality logic, whereas the others say it is easier for men, whereas $57 \%$ of men think there is gender equality in this respect and the others tend to say it is easier for men as well as women say. As people are getting higher on the academic ladder, tend to say that it is easier for men in a higher proportion. Moreover, men tend to say that family responsibilities and other work may represent obstacles in promotion ( 7 in 10 men, and 6 in 10 women). 6 in 10 people independently of gender think that while women have little children, men are more likely to gain professional success. In terms of reasons for not obtaining a management position, women are more likely to say, even if a small part of the sample, that time constraints are an issue. For almost all men, 9 in 10, informal networks are very important for management positions elections. $13 \%$ of respondents declared that they know a woman was denied a management position in comparison with a man with similar abilities.

Several recommendations resulted from the quantitative research and they are presented in the following chapter.

### 4.2. Outcomes of the interviews analysis

Interviews with academics that hold tenured teaching positions within the University of Bucharest show that interviewees incorporate and (re)produce or reject all kinds of social roles and relationships that are gendered by definition. At
the same time, academics' gender awareness depends on both different levels of understanding gender issues, as well as on different personal and professional interests. More precisely, while some interviewees still embrace an essentialist and binary perspective on gender as synonymous for the biological sex, others are more familiarised with gender studies' findings, meaning that not all academics share the same understandings whenever they refer to gender (in)equalities. Furthermore, the degree of personal gender awareness also depends on a whole variety of interests - interviewees who get involved into EU applications for research funding are more inclined to be gender-sensitive; interviewees interested in diversity and justice issues also develop certain degrees of gender awareness, and interviewees that are closer to conservative attitudes and values are more inclined to perceive gender issues as a real threat to personal/national identities. The variety of cases identified within our qualitative field research can also be explained through the lens of the variable distance between, on the one hand, interviewees' values, ideas and principles regarding gender and gender equality (i.e. the ways in which they perceive and understand gender and other social inequalities), and, on the other hand, interviewees' concrete practices and experiences (i.e. the ways in which they live, within their everyday social life, power relationships and social differentiations). This variable distance can also explain some narratives which seem to be contradictory at a first glance - e.g. interviewees who declare to be "feminists" and yet they have rather conservative principles or behaviour.

Moreover, interviews reveal a whole variety of interrelated factors which play an important role in relation to personal approaches and attitudes towards gender equality and which contribute to different degrees of openness or reluctance to gender issues. Among these factors the most important are the following: interviewees' educational background, namely their family of origin socialisation and/or their life-long educational training and formation, interviewees' ideological beliefs and cultural meanings regarding gender equality and diversity, ranging from left-wing to right-wing oriented approaches and attitudes, and also interviewees' personal positioning in relation to power relationships at all social levels (micro, mezzo and macro level, i.e. personal, professional and political/societal levels).

Overall, our qualitative field research allowed us to identify three main patterns of gender awareness, as follows:
a) gender-sensitive academics: academics who are aware of, sensitive and also supportive and interested in gender issues and gender (in)equalities. 'Sensitiveness' regarding gender issues is not homogeneous, it covers multiple cases. First, there are interviewees who have benefitted from gender
studies formations and who have integrated gender as a transversal matter within all their teaching materials and courses at UB (int. 1, 2, 3, 5 and 19): Once you receive the intellectual tools, you can unravel the world, you can dissect it. You can explain it to yourself and you can also explain it to others. Just like that, gender is a lens that you cannot take off, once you put it on. Once you see it, it cannot be unseen anymore. (Int 1) Second, there are interviewees who do not have any gender related formation, and yet their gender sensitiveness has been developed through other familial or educational channels (int. 4, 9, 13, 14 and 18): for instance, one female interviewee has been educated since childhood to be an independent woman and to fight back any possible gender biases, at both personal and professional levels of life (int. 4); another male interviewee became gender aware thanks to his doctoral studies in France, which were not related to gender studies, but represented an academic milieu particularly open to gender diversity; another relevant example is the one of a female academic whose specialisation and field of interest has nothing to do with gender, and yet, as vice-rector, she became aware of gender differentiations when it comes to leadership and authority (i.e. she observed different attitudes when it comes to male and female academics holding decision making positions).
b) gender-blind academics: academics who believe that gender does not and/or should not matter. According to our qualitative field research, gender blindness can also be present under different forms. First, there are interviewees who are aware of extant gender inequalities, but they either strongly believe that "gender should not matter", or they simply do not "see" it within UB, as a generally feminised institution (int. 6, 12, 15, 16, 20). Second, there are interviewees who are neither aware and interested in gender issues, nor against them (int. 7, 17): they consider that, in principle, female academics can do absolutely anything their male peers can do; more precisely, they perceive professional capacities as the direct result of individual work and efforts meritocracy myth, without making any connection between all social differentiations that occur all along personal educational and professional trajectories and gender imbalances at the workplace.
c) gender-hostile academics: academics who are totally against paying attention to gender issues: these interviewees usually stick to a binary conception of the biological sex, they completely overlap the principle of gender equality with LGBTQ+ issues, and, all in all, they believe that gender is just an EU imported idea that has nothing to do with the 'real' needs and problems of the Romanian society in general, or of the University of Bucharest in particular (int. 8, 11).

Beyond this general overview related to interviewees' different degrees of gender awareness, specific topics addressed during individual interviews are also suggestive for gender biases within UB, as follows:

### 4.2.1. Topic \# 1 - Gender equality within UB: 'no claims, no complaints'

First of all, most of the interviewees declare that the Athena project elicited their first experience of an 'official' discussion about gender inequalities within UB. Their main explanation for the fact that gender is not a subject of general interest is related to the regular absence of official claims and complaints related to gender inequalities. Moreover, gender issues are considered to be subjects "out of the ordinary" that usually produce a certain reluctance. On the one hand, some interviewees observe that gender inequalities issues in academia cannot become visible as long as those who are subjects of such inequalities do not speak out loud about their problems. On the other hand, others observe that academic women are very different and have different needs (they cannot simply be regrouped under one and the same category), they are hasher with themselves comparatively to men, and, at the same time, having a feminized institution does not necessarily guarantee feminine solidarity or more gender equality: It goes without saying that, if you are a woman, women will not necessarily support you! This is the lesson of my life (Int 19).

Regardless their degree of gender awareness, the majority of the interviewees do not interrogate the meritocracy myth - i.e. they consider that both women and men have to work hard in order to be successful in building an academic career. At the same time, some observe that 'successful' female academics are 'exceptional' women: not only they are totally dedicated to their professional tasks (in order to gain solid and incontestable professional competencies), but they also benefit from a certain support (mainly financial and/or family support) which is indispensable in order to be able to fully consecrate their time to research and teaching activities.

Gender blind or gender hostile academics often perceive gender issues and gender equality as either non-representative for the domestic academic milieu or even as a real threat for personal/national identity. Hence, the two categories of interviewees generally consider that there is no need to just 'import' EU principles and values related to gender equality, as long as they do not reflect the local needs of the researchers who live in Romania and who do not face the same kind of problems as their peers living in Western societies (such as, for instance, mandatory geographical mobility).

Interviewees also agree that the university's official discourse is rather gender neutral. This is part of the wider national context in which the official communication formulations in Romanian are rather masculinized. Consequently, attempts to feminize the official language that can be used within
professional communication are often criticized, as they are perceived as ridiculous, or at least hilarious. Only some interviewees are aware of the need to develop communication and linguistic tools that integrate diversity in general, and gender diversity in particular and even shared experiences dealing with fluidity of gender identities among the new generation of students for example: It is the language which creates the social reality (Int. 20).

### 4.2.2. Topic \# 2 - leadership / decision making positions: 'competencies matter the most'

Interviewees can also be regrouped into the same three categories in relation to affirmative actions as possible measures for implementing gender equality i.e. supportive, blind and hostile. First, only a few interviewees are supportive for such measures. They are aware that affirmative actions are necessary but insufficient in order to implement the principle of gender equality (e.g. Affirmative measures represent equal chances for different competitors. They are very complex, but one cannot expect to simply have some gender quotas in order to solve gender inequalities in Romania, just like that! (Int.1)). For instance, one interviewee underlines that such measures should be enforced and implemented at national level by the Ministry of Education before being adopted by each university. Second, the majority of interviewees is either reluctant or against affirmative actions, including gender quotas, and their position also depends on the degree of feminization of the faculties they belong to (the more faculties are feminized, the harder is to justify the necessity of affirmative actions). Most often interviewees also reject the idea of gender quotas as they either reproduce the meritocracy myth (i.e. it is not the biological sex but the professional competencies that matter), or they associate it with totalitarian measures similar to those taken under the former political regime. For example: Gender quotas in leadership are welcome as long as there is a selection pool large enough to have eligible women. Otherwise, we will go back to the former imposed quotas and we will have women holding management positions without having the related necessary skills, and a woman who is not prepared for being a leader is certainly worse than a man who does have the necessary leadership competencies (Int.3).

Overall, gender imbalances in leadership are not visible as long as one focuses only on the number of women that hold such positions. Moreover, gender imbalances are not visible at a formal level - i.e. university polities and regulations are rather gender neutral. At the same time, some interviewees observe that, while men usually have to deal with 'serious' concerns (such as norms, rules and regulations and 'hard' management decisions), and they also benefit from more legitimacy, women usually have to deal with "small" managerial aspects (such as students' concerns). Additionally, informality (e.g. informal - male - networks) play a very important role regarding gender imbalances in leadership (while men that hold decision making positions usually benefit from their informal networks' support, women are not that interested in being part of informal networks of academics).

Another observation that worth attention is related to the commonly shared perception according to which, during the last decades, the university has not necessarily witnesseda clear endeavor to have a more gender-balanced leadership-on the contrary, frictions and claims were more about generational replacements, regardless the biological sex of those interested in holding decision making positions.

Interviewees also generally consider that women often avoid leadership positions within UB especially because of their family obligations. At the same time, beyond this general perception which is not based on scientific knowledge regarding academic women's tendency to postpone or to give up for good pregnancy and maternity experiences, interviewees consider leadership to be a personal choice rather than an institutional matter. Therefore, the stereotype according to which women do not want to hold decision making positions can easily be identified within many narratives: In my opinion, we will also have female leaders when such persons, with leadership capacities, will stand up from the crowd in order to lead. If you are a woman and you want to be a leader, you don't have to set any equality criteria or anything like that to prove that you are a leader. That's where I think the problem is, namely the fact that women have to be willing to take the responsibility for such a position (Int. 17).

Overall, at the UB there are, on the one hand, gender blind narratives related to leadership, and on the other hand, gendered differentiations related to decision making positions, such as: women in leadership often make huge mistakes, they do not delegate tasks, they are too 'hands on', they are also too 'maternal', they do not trust their subordinates enough, they always expect them to lie or to betray them they are often obsessed in having everything done on time (Int. 19).

### 4.2.3. Topic \# 3 - career promotion: 'between CNATDCU criteria and family obligations'

Most interviewees mention that career promotion depends, first and foremost, on CNATDCU criteria (which consists of a long list of items regarding research results - namely publications hierarchized upon their impact factor and visibility, and other university activities), and also on the support one has on behalf of his/her colleagues. However, only some interviewees are aware of some professional-related differences in meeting CNATDCU criteria: while men usually are interested in highly valued subjects of research (which make their publications more visible and better evaluated, and, at the same time, their courses more prestigious), women usually develop their specialization in relation to more 'marginal' subjects (which implicitly makes their career advancement slower). Also mentions have been made (mainly by women) about the lack of any evaluation of the teaching qualities and achievements within the mentioned criteria.

At the same time, only a few interviewees are aware of the fact that, within a generally feminized university, at least from the point of view of the teaching
personnel, there are still certain gender imbalances at the top of the professional hierarchy - i.e. the more seniority, the more gender imbalances increase. Interviewees who observed this gender bias consider that the situation is not due to discriminatory university policies, it is rather generated by the fact that women have to face maternity during their professional trajectory (this makes them postpone their career advancement) and this creates gender imbalances within the same generations of women and men. All in all, interviewees (mainly the women but also the men that recognize the burden not for them) perceive family life obligations as a burden which is a personal problem/choice more than an institutional issue. At first, it was not very difficult. Back then [in 1997] it was easier to benefit from career promotions, as there were no specific evaluation standards. The promotion was above all based on seniority, not to mention that the didactic activity counted more than it does nowadays. Later on, indeed, it was a little bit more difficult for me to become associate professor, followed by professorship. But it was as difficult as for any other colleague of mine, regardless of his or her sex! Considering the topic of our discussion, I would like to say that I did not feel that, as an academic woman, it was harder for me to get any promotion. Nevertheless, as a woman, on the other hand, it was indeed a little harder for me, because from this point of view, we have to admit that women have more extracurricular activities: I am both a mother and a wife, and my time has always been hard to manage and to split into so many directions. So, when I had to set up my promotion file, it was of course a more difficult period, that's true. I think that a woman, from this point of view, is much busier and really goes through a much harder period if she also has family responsibilities. (Int 10)
> 4.2.4. Topic \# 4 - remuneration / salaries - 'gender equality, unless it is about money'

Beyond the fact that salaries are confidential, interviewees generally state that they are not aware of gender imbalances in remuneration, which has to be in accordance with the national legislation in force that cannot entail any payment related discriminations. More precisely, interviewees agree that, although the legislation in force is not gender-pay-gap oriented, de jure, there are no gender differences regarding academics' salaries within UB). However, some interviewees state that family responsibilities are the main reason that can lead to de facto differences in remuneration: Salaries in pure research, I mean in research institutes, are clearly higher than in the university. At the same time, I don't think that in our university there are gender differentiations in remuneration. (...) A woman, a mother in the first place, I think she might face a differentiation in remuneration mostly because of the time that she has to spend at home instead of her working place. So, this difference in remuneration is not because she is a mother, but because she does not have the necessary time for professional activities. (...) Otherwise, I don't think there are any other gender differences in remuneration. (Int 9). Furthermore, women who have family-care obligations and thus have less time for their professional responsibilities fail in meeting the official criteria required to obtain a competition-based salary increase for five years
('gradația de merit'). Mentions have been made that few faculties revised in this respect their criteria.

One example which worth being referred to is the one of a female professor who holds a leadership position: on the one hand, she calls herself a 'feminist', as she is convinced that women are in general 'better' than men (women are more solving-problems oriented, more efficient, free thinkers, more adaptable and open to newness, stronger, better team members, and they do not complain as often as their male colleagues do). On the other hand, in spite of her attitude, the interviewee still remains convinced that remuneration and any other financial incentives have to stay under the principle of academic 'excellence', regardless any sex/gender/age related differentiations.

Some interviewees also consider that it is more important to assess salary variations through the lens of age and generations, more than through the lens of gender. In this regard interviewees believe that younger academics work more and have considerably lower salaries than older academics, which also makes generational replacement hard and less attractive for those who are at the beginning of their career.

### 4.2.5. Topic \# 5-WLB and care responsibilities: 'just personal issues'

Gender sensitive interviewees, both women and men, generally consider that the academic career is not family-friendly, especially for women who uptake a double burden and thus have to work harder in order to meet the academic standards of performance. As for gender blind interviewees, they do not correlate gender equality and WLB (work-life balance): they consider that, while the former is an institutional related issue, the latter is a purely personal concern determined by personal choices that have nothing to do with the university. In addition, they consider that biological differences prevail and women take their family obligations 'naturally', as it is simply up to them to find their best solutions in order to reach a certain WLB.

At the same time, regardless their degree of gender awareness, interviewees admit that there are gender differences in relation to care and family responsibilities. While some of them underline that it is not 'fair' for them to be asked to sacrifice their family life in favour of their professional life, or vice-versa, others remain puzzled and do not see any solution in order to solve this concern as they consider that women cannot simply be replaced by their male partners in childcare activities.

Moreover, we may consider that UB is a reflection of the society general perception and attitudes towards gender equality. Often women are the one that perpetuate this state of affair as they regularly incorporate a certain logic of selfsacrifice legitimated by their "duty" as "care takers" (for their children, elders, family relatives-including their men partners, etc.). In addition, academic women
who have children usually benefit from the classical support from their own mothers who, instead of enjoying retirement and their resting time, have to raise their grandchildren. This is related to a very deeply rooted cultural model which makes women see themselves as primary caregivers (in this case, grandmothers).

All in all, interviewees are either aware or not aware of the gender imbalances that occur at the personal and family life (gender asymmetric values and concrete behaviour can manifest themselves not only in relation to care activities, but also in relation to domestic tasks and other home-based social practices). On the one hand, some interviewees consider that the traditional family life style has changed: nowadays women and men can equally negotiate their domestic obligations, therefore, gender imbalances at the level personal life are not anymore that easily to identify: Basically, we have both equally assumed that: he knows that I'm vice-rector and that I have some career stuff and obligations and ... he completely accepted that he would not have hot soup for dinner every day. (Int. 6). On the other hand, other interviewees do not perceive any inconvenience regarding gender asymmetries within their lifestyle: they had no explicit negotiations regarding domestic tasks or childrearing, as they happened "naturally": All went naturally ... my wife takes more care of the house and the housework, clearly more than me, and I help her or support her with my contribution whenever it is necessary. And everything went very well, smoothly, in my opinion. (Int 7)

Beyond the national legal framework (i.e. parental leave policies), the university does not have any specific institutional policy related to childcare. It is only at the level of each faculty that one can find solutions regarding the configuration of timetable or individual job-related responsibilities ("încărcătura normelor didactice"). Moreover, the university has a problem of geographical dispersion (there is no unique university campus), therefore, it would be impossible to offer childcare services for employees geographically located in so many areas.

### 4.2.6. Topic \# 6 - forms of violence (discriminations, harassment, etc.): 'an elite professional milieu with just informal/unofficial forms of violence'

Our field research reveals that there are two categories of interviewees: a) those who declare that they have never heard of any forms of violence within the university (they explain that the university represents higher education as an 'elite' professional milieu with educated employees, who could not participate in any discrimination against or harassment situations), and b) those who refer to some concrete, but 'rare' situations of discrimination or harassment, in the case of both professors and students, which, however, have not turned into official complaints. For instance, while women are often subject of discussions impregnated with sexual allusions, which take place in front of everyone (e.g. "Well, how old are you?" he asked me. "Aren't you afraid that your eggs are
dying?" he said. "Professor, as long as you are not afraid that yours are dying, considering your age, I hope that mine are just fine, too!" What else to tell him!? Our talk was as simple as that.), men, in their turn, are also subject to other forms of violent allusions (e.g. A few years ago, the same professor, addressing a doctoral student, poor him: "Since when haven't you had sex anymore? Anyone can see the acne on your face!". Or, another one (a male student): "I'm sending you some teaching materials so you don't say I'm discriminating against you for being a gypsy! Though we all know you are a gypsy. Anyway, a gypsy is still a gypsy!" And many other remarks of this kind ... He was simply unstoppable".).

Interviewees also make the distinction between the formal and informal levels related to the ways in which different forms of violence or gender and other inequalities are being treated within UB. From a formal point of view, the university functions in accordance with the anti-discrimination and fight against any forms of violence legislation in force, which entail very complicated procedures, legal skills and technical requirements that make the official handling of complaints very hard to manage. Certain cases can be addressed to the existing Ethics Committees. But the general perception is that gender violence (from inappropriate language to sexual harassment) is rare in UB, strictly related to some individuals, has more to do with private life/relations in which the institution should not intrude. Respondents consider that some procedures/mechanisms should be clarified but it is not among priorities.

### 4.3. Outcomes of the analysis of the focus groups

The results of the focus-groups are quite similar compared to those obtained through individual interviews. First, likewise interviewees, FG participants declare that they had never officially discussed about gender equality before the Athena project within UB (the same has been show by the staff survey!). In some cases, this was their first experience of this kind, and they confess that they participated in the Athena group discussion out of curiosity. In other cases, FG interviewees encountered the interest for this topic only with the occasion of different academic events organised aboard (conferences or exchanges of research experience), or with the occasion of European funded projects.

Second, FG interviewees can be regrouped in the same three categories previously identified through individual interviews, as follows:
a) gender-sensitive FG participants, who are aware of gender inequalities and are favorable to the principle of gender equality and to related measures,
b) gender-blind FG participants, who perceive gender inequalities as a general societal problem, but they hardly identify them within UB, as a generally feminized public institution, and
c) gender-hostile FG participants, who are convinced that there are no gender inequalities within UB and who are, therefore, totally against gender equality measures.

Unlike the twenty individual interviews that were conducted with only UB teaching staff with tenured positions, the sample of the four group discussions contains two main categories of interviewees: teaching and research employees, as well as administrative personnel. The latter works within different administrative departments of the university/ Rectorate, such as human resources, IT, communication and public relations, etc. (the university's maintenance personnel-e. g., gate keepers, cleaning ladies, technicians, and others, have not been included within our qualitative field research). Considering both individual and group discussions, it is worth to mention that participants perceive hierarchic differences between teaching/research employees and HR/administrative personnel, especially when they do not hold leadership positions. However, in spite of the fact that university's administrative staff is rather feminized, they do not understand these hierarchies as being first and foremost gendered. On the one hand, female FG participants working within the HR department and without any leadership responsibilities consider that, within the general professional environment at UB, age differences prevail as compared to gender differences - e.g. the younger female interviewees feel more vulnerable as their older peers (FG1). On the other hand, only 2 out of all participants with teaching/research positions mention frictions between professors and administrative employees. For instance, one of the interviewees refers to concrete situations of inappropriate attitudes and forms of communication that most often do not become 'official', but which are relevant for asymmetric power relationships between 'the great Professor' - usually represented by (older) men, with a patronizing behaviour, and 'the humble secretary' - usually women (Int. 18). Another interviewee, an associate professor who also worked as part of the university's administrative staff, refers to "the hidden world of the administrative personnel". According to this interviewee, academics who hold management positions often patronize and criticize the administrative staff for not working hard enough for their monthly salaries; nevertheless, the former are rarely aware of the professional problems taken from the grassroots that the latter have to face on a daily basis (Int. 5).

Beyond these specific professional hierarchies and frictions that have a gender dimension that should be further investigated, FG discussions reveal some attitudes, values and experiences in relation to gender (in)equalities that are generally similar to those identified within individual interviews, as follows:

### 4.4. Topic \# 1 - gender equality within UB

a) Gender-sensitive FG participants notice that, considering the general societal context in Romania, which is very conservative, Romanian universities in general, and UB in particular, are also conservative and reluctant to the principle of gender equality. This category of interviewees observes that, in spite of the fact that some
faculties are rather feminized, academic women are not necessarily feminist and/or gender-equality oriented (note: confusion exists also concerning what means to be a feminist). This observation has also to be correlated with the fact that the number of academic women with small children (babies and toddlers) is relatively small, as part of a generally ageing socio-professional environment. Moreover, gender sensitive participants suggest that, for the UB academics, it is not clear enough how gender inequalities issues are being defined (what do they mean, what exactly do they refer to, how to tackle them).
b) Gender-blind FG participants do not perceive gender (in)equalities as a topic of concern for UB. They consider that there are specific inequalities that prevail as compared to gender inequalities, such as age and generational differences within an ageing institution.
c) Gender-hostile FG participants often perceive gender equality as a principle imposed by EU that does not correspond to the 'real' needs and problems that exist at the societal level or within the University of Bucharest. For instance, some interviewees consider that gender inequalities are just a "catchy yet false problem" within UB, which has nothing to do with the institution's stringent problems, such as insufficient financial resources and patrimony/ buildings, decreasing number of students, poor academic ratings, etc. In other words, UB's faculties face other problems that are easier to identify and clearly more urgent than a possible GEP. Moreover, this category of interviewees does not agree with the tendency to genderize or to feminize official communication language, including professors' titles - they consider it to be a 'barbarian' linguistical practice that is even contrary to women's best interests.

Overall, the meritocracy myth and the capabilities' prevalence are one of the most common and deeply rooted beliefs, regardless interviewees' degree of gender awareness. More precisely, interviewees generally consider that women or students who do not have the necessary skills and capabilities should not be pushed forward to the detrimental of their more capable peers: After all, we are an institution, an administration that needs to function and to perform, so gender balance has nothing to do with it - the institution does not need affirmative actions. It has to be managed by people who are able to lead! (FG2, R8, male participant). Most FG participants do not agree with positive discriminations. Without questioning the conditions that are indispensable in order to acquire professional skills and competencies, the idea according to which affirmative measures are not necessarily a useful solution is commonly shared. In this regard, one long FG extract is particularly relevant: From an economic point of view, I do understand gender equality and I can see many reasons why it is necessary to promote different types of actions in this field (...) For example, it is clear the international statistics show that there is a big problem in relation to payment, right? Women are generally paid less than men for the same activities. There is also an obvious problem with equal treatment of women and men at the workplace. There is a problem with equal representation in leadership, right? Whenever we refer to business and other private market organizations ... but
they have nothing to do with public institutions, such as our university! There is also the issue of equal access to training, for men and women. And, finally, there is the issue of the benefits of companies and institutions when it comes to promoting gender equality. However, if I apply this model of analysis to the situation at the University of Bucharest, the situation is completely different, as follows: for example, we do not need policies promoting affirmative actions as we are all equally paid: we belong to the public sector in which it is known that no such differences are made (...) If we talk about equal treatment (...) in terms of promotion, right? The career promotion depends on fair criteria adapted to each academic specialization. If we talk about equal representation, here we can see that at the University of Bucharest, in general, there are no major differences in terms of leadership positions (...) So, to put it shortly, we really need to see the extent to which these affirmative policies are really needed at UB. As for as we are concerned, as an institution, I really do not think that there is any urgent need for these types of actions. (FG2, R4, male participant).

### 4.5. Topic \# 2 - decision making / leadership positions

Only a few FG interviewees observe gender imbalances from the point of view of leadership positions. For example, some FG participants notice that professors' attitudes are different in the case of women and men holding leadership positions: women are often invested with less legitimacy than their male peers are. Another example is that of only one FG participant who refers to misogynist, homophobic and trans-phobic female deans and department directors, which can explain the fact that an increasing number of women in leadership is a necessary but insufficient condition in order to implement gender equality.

Most of the FG participants seem to remain gender blind in what concerns decision making positions. First, the meritocracy myth prevails: women are considered to be as 'capable' as men to hold leadership positions (interviewees do not contextualize these 'capacities' and they perceive them as a pure agendered accomplishment). At the same time, participants often reproduce gender stereotypes, such as "unlike men, women have multitasking capabilities" (FG1, female participant). Moreover, some participants explain that masculinized leadership positions are a simple result of both "fair" competition and "democratic" behavior expressed through electors' votes, and thus it has nothing to do with gender. Other participants consider that gender has never been an issue of concern in the case of feminized faculties in which inevitably that there are more women than men holding leadership positions.

Another 'explanation' for gender imbalances at the level of decision making is the idea according to which women generally lack the desire to assume management responsibilities, most often because such responsibilities are very demanding, and also because of their family obligations, which are 'naturally' women's issue. Furthermore, the fact that there has never been a woman as Rector of UB is symbolically represented by the paintings with just male succeeding Rectors of the University, which are exhibited nearby the Rector's office. However, some
interviewees consider that this only a historical fact which is no longer representative for the current situation considering that, compared to the previous Rector's mandates, there are currently more female vice-rectors than ever.

Overall, the argument regarding the number of women and men at the level of decision making invites us to reflect upon the distinction between leadership positions that are based on legitimate authority and representation and power relationships (usually elections-based positions) and management positions that are subject to hierarchical subordination (such as Vice-Rectors and Vice-Deans, who are simply "named"/ put in charge by their superiors). Ascribing an important number of women to management positions often leads to the perception that management is generally gender-balanced, when, in fact, key-leading positions could remain masculinized.

### 4.6. Topic \# 3 - career promotion

Gender sensitive FG participants, especially women in our qualitative sample, underline that it is harder for female academics to benefit from professional advancements, as they never have enough time, either because of their teaching obligations or because of their family responsibilities teaching obligations). In their turn, men get career promotions more often, as they have more time for research activities. In other words, although career promotion criteria are the same for all employees, regardless of their sex, gender differences in career advancement can be explained through family responsibilities, which are usually still undertaken mostly by women.

Moreover, for interviewees working in almost entirely feminized administrative departments, it is hard to perceive the gendered dimension of career advancement strategies and trajectories. For example, HR interviewees are convinced that the difficulties and the slowness related to career promotion are not gendered, they are rather directly related to the structure and the functioning of the university as a public institution:

> R7: It is hard to get a promotion within UB. That's the way I see it.
> R1: It's not true, one can get it, though ... The head of the office, Mrs. N., she has been working within our institution for more than 18 years, if I remember well.
> R4: And she got her career promotion 2 years before her retirement.
> R1: Yeah, just 2 years before her retirement (laughing). Though she was head of the office, and after that she became director. Hence one can benefit from career promotion, right!? (FG1, HR employees, all women)

As for teaching/research FG participants, most often they reproduce the meritocracy myth - i.e. they are convinced that career promotion criteria have nothing to do with employees' biological sex and are based, first and foremost, on personal merit/accomplishments. Moreover, similarly to their colleagues working in administration, academics who belong to feminized faculties can hardly identify gender imbalances in career promotion, especially since they refer
to examples of faculties where the number of women holding a professorship position exceeds that of men with similar stages of career advancement.

### 4.7. Topic \# 4 - remuneration / salaries

The overall situation of individual income is very heterogeneous within UB. Each domain or field of specialisation has its own specificities in relation to income strategies. For instance, in the case of IT, men often combine university careers with other jobs within the private sector, which increases their individual monthly income regardless of any university payment policy. All in all, individual income depends on labour legislation in force regarding salaries/monthly financial remuneration, which prevents gender-based discriminations or any other kind of differentiations, and which is implemented by the university as such. At the same time, income also depends on the particularities of each field of activity that can be either market-oriented (such as IT, psychology, sociology, sports, etc.) or public-institutions oriented (such as political science, theology, etc.) or research oriented (nature sciences).

Gender imbalances in remuneration are also closely connected to the issues of career promotion and work-life balance. Formal rules and regulations regarding payment do not include any specific differentiations between employees. Nevertheless, individual strategies are relevant for gender differences that occur whenever one has to 'sacrifice' the necessary time for research and career promotion in favor of care obligations, and vice-versa.

Last but not least, it is worth to mention that HR participants explain that one of the main reasons for which their department is rather feminised is precisely the fact that the level of salaries is rather low compared to the private sector: all female HR participants declare that their monthly salaries are lower than their spouses'/ family partners'.

### 4.8. Topic \# 5 - WLB and care responsibilities (childcare, elderly care)

FG discussions have not revealed any gender differences regarding the issue of flexibility in working arrangements, including the possibility to work on a part-time basis. For instance, FG interviewees generally agree that the university's employees are not motivated to work on a part-time basis because of financial reasons (less work implies less payment). Moreover, they perceive their work as already flexible enough: on the one hand, the administrative staff often compares their positions to similar ones within the private sector, and researchers and professors do not have any complaints regarding their time-related working arrangements.

FG participants generally agree that women are more inclined to uptake family responsibilities, to the detrimental of the time necessary for professional
activities. However, they consider that work-life-balance (WLB) is a purely personal matter, that has nothing to do with the university (in other words, they do not perceive any link between WLB and asymmetric gendered relationships at both personal and professional levels): R5: WLB is not institution's business. As professors and researchers, we already have a lot of flexibility and freedom in the way we organize our working schedule. If necessary, our working arrangements allow us to easily deal with problems that can occur within our personal lives. (FG2, male participant).

Moreover, participants generally agree that childcare, especially in the case of babies and toddlers, is first and foremost women's responsibility. At the same time, within an ageing university, cases of men that take parental leave are rather exceptional and dictated mostly by financial reasons - these situations occur especially when male academics earn less than their spouses. As for elderly care, there is no institutional support of any kind for employees who have the responsibility of taking care of their elder parents or other elderly relatives. At the same time, participants in FGs do not formulate any claim in this regard: unlike childcare, they perceive elder care as an entirely personal issue.

### 4.9. Topic \# 6 - forms of violence / violation of rights (discrimination, harassment, etc.)

Both in the case of administrative staff and in the case of research and teaching employees, FG participants generally consider that there are no flagrant forms of violation of rights or of violence against the university's employees: R9: No, nothing of that kind ... Absolutely nothing over time. Some male and female colleagues only got married to each other, but that is all, nothing more. (FG2, male participant) Although there are some concrete situations of discrimination or harassment that have occurred over time, they are not only very rare, but they also have remained unformalized (victims usually refuse to produce written complaints in order to defend themselves). At the same time, participants consider that harassment situations against female students have diminished, compared to some decades years ago.

## 5. Recommendations for development of gender equality plan at the University of Bucharest

The following recommendations are formulated based on the documentation and research component of the project. Some are based on the statistics (existing and/or produced by the ATHENA team), the staff survey results and the analysis of from the interviews and focus groups. For the elaboration of the future plan for gender equality the GEPI-UB Committee and the implementation team started
consultations with different stakeholders in order to identify kea areas for intervention and specific initiatives for each of them.

### 5.1. Recommendation \# 1 A data driven strategy for the GEP with more gender sensitive data gathering and a methodology of monitoring that will allow for longitudinal but also transversal data collection.

The management of data collection, data analysis and data presentation has improved at university level. Nevertheless, as results from this report show, there is a need for expending gender equality indicators to highlight other areas that have not been captured. The lists of figures and tables in the report contain the data analysed as well as a series of indicators that can be included in the Gender Equality Plan but additional indicators must be also developed. More work with data collection and processing is needed in areas such as:

- Incorporation of gender indicators that are non-binary; more data should be gathered in order to allow for more intersectional analysis of existing data (sex, gender, age, marital status, number of children correlated with teaching positions, publications, payment, etc.)
- Additional data collection related to research projects. (e.g. the financial value of projects - total amount comparison by gender and type of financing national or international)
- Additional data regarding research outputs such as published articles. These data should take into account the sex/gender of the authors, number of females, lead authors unique author female and total number of authors. Introducing these indicators would make possible more refined analysis of the instances of gender inequality in research.
- Statistical information and statistical methodology related to the gender pay gap.
- Statistical gender disaggregated data on student and teaching staff applications. It is important to track the percentage of women among BA, MA, and PhD applicants as well as the percentage of women who apply for university teaching and research positions.
- Other research indicators after creating the SINEV integrated dataset with connected data from all the members of academic community: students, graduates, professors and administrative staff.


### 5.2. Recommendation \# 2 Encourage/develop international exchange programs for professors, researchers, students

This report indicates that community members (students, academic staff, researchers) who benefited from all sorts of experience in international programs/projects are the one more informed and sensitive to gender equality issues and are more likely to support and help the implementation of a GEP.

### 5.3. Recommendation \# 3. Wide consultation process in designing the UB-GEP

This report indicates that there are several types of resistance to in introducing a GEP at UB. Thus, for securing support and progress on the measures adopted in a future GEP, a consistent bottom-up approach with ample stakeholder consultations should be undertaken. These consultations processes should be complementary to the work, consultation, advice and guidance undertaken by GEPI-UB.

### 5.4. Recommendation \# 4 Institutional wide, systematic gender smart awareness campaigns, trainings, guiding materials

As this research indicates there is a very low level of information and knowledge about gender equality and its related topics within the UB. There are still many misunderstandings or misconceptions regarding gender equality within the community and these will need to be addressed both though GEP activities as well as throughout other phases of the ATHENA project. The implementation of a systematic, tailored, gender equality training with both formal and informal/ adult-friendly methodologies will benefit the academic community and will strengthen the adherence to GEP principles and activities.

### 5.5. Recommendation \# 5 Facilities and flexible working hours in support of UB staff with children

Work-life balance issues proved to be important for the UB staff (most acutely for women, and for young employees). Work- life balance concerns might not always be perceived as an institutional issue but rather as an issue connected to household arrangement and family choices. However many respondents were interested in setting up childcare facilities within the University such as kindergartens or after-school programs. This benefit could enhance women's participation in managerial positions, better research outcomes of women researchers and, at the same time, and also reputation of the University as worklife balance employer. Flexitime working hours was also mentioned as a need to go beyond the collegial/informal support that exists.

### 5.6. Recommendation \# 6 Address gender based violence

The research shows that within the university community there are forms of gender-based violence ranging from sexist comments, verbal violence to incidents of sexual harassment. These incidents, while not representative of the UB community do take place and there are very few mechanisms in place to address gender based violence incidents or offer support to victims. For the UB, gender based violence is "the elephant in the room" as there are no public discussions, no research conducted so far, and no clear official procedures of complaint, no services for victims.

### 5.7. Recommendation \# 7 Address the reverse gender gap too

Horizontal segregation persists but it goes both ways. Women and men are underrepresented in certain disciplines (e.g. men in Social Sciences and Humanities) or overrepresented in others (e.g. women in HR and administration departments). Some consider necessary to envisage incentives, initiatives in support of a decreasing gender gaps, including reverse gender gaps.

### 5.8. Recommendation \# 8 Revision of the gender gap in visual representation of men and women in UB public premises

The overrepresentation of men (name of classrooms, amphitheatres, the visuals on the UB walls, etc.) has been interrogated. The persisting gender stereotypes with regard to women's role in science could be for example approached within the GEP by certain initiatives in the area. On the long term more efforts could be made (e.g. through a dedicated collection produced by the UB Printing House) to promote women personalities with contribution to the prestige of the UB but, much wider, for their contribution to the culture of Romania. Such an effort will support implicitly an increase of confidence among women in terms of their professional and managerial aspirations. Especially for the young generations of students and employees the contact with such role models is important.

### 5.9. Recommendation \# 9 Stronger institutional engagement with regard to promotion of gender equality

Participants (mainly the ones involved in various European and international exchange programmes) appreciated the type of official gender sensitive written engagements present in many documents from European higher education and research institutions (on their site and other promotion materials, in the guidelines for admission, recruitment, promotion, etc.). Simple formulation such as "UB respect and promote gender equality principles in..." has an important symbolic value indicating that gender equality is an important principle guiding the institution.

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## Annexes (University of Bucharest)

## Annex 1. Administrative data

Figure 5. Percentage (\%) of women employed across occupations (UB)


Figure 6. Percentage (\%) of women by academic grade (UB)


Figure 7. Percentage (\%) of women across fields (UB)


Figure 8. Percentage (\%) of women across age groups (UB)


Table 34. Professional mobilities in 2018-2020 by sex (UB)

|  | Average <br> duration | Number of travels |
| :--- | :--- | :--- |
| Women | 8 | 660 |
| Men | 10 | 581 |

Table 35. Value of international projects 2019-2020 (UB)

|  | Informed <br> (Rejected) | Informed <br> (Reserve <br> List) | Signed | Submitted <br> final (call <br> closed) |
| :--- | :--- | :--- | :--- | :--- |
| Men | 3774882 | 1977455 | 3101598 |  |
| Women | 3801501 | 830737 | 914155 | 746811 |
| Total | $\mathbf{3 7 8 6 6 1 2}$ | $\mathbf{1 1 1 7 4 1 7}$ | $\mathbf{2 6 1 5 4 9 9}$ | $\mathbf{7 4 6 8 1 1}$ |
| Notes: Values in LEI. |  |  |  |  |

Figure 9. Projects under development 2021 by sex (UB)


Table 36. Data on students compared to their graduation status by sex: Data at January 1, 2021 - BA level (UB)

|  | Domain | Year 1 (2017/201 <br> 8) | Women $1^{\text {st }}$ students | Graduate <br> s | Wome n graduat es |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Business Administration | 249 | 148 | 162 | 102 |
| 2 | Visual arts | 17 | 12 | 15 | 12 |
| 3 | Social work | 264 | 234 | 189 | 175 |
| 4 | Biochemistry | 68 | 60 | 46 | 41 |
| 5 | Biology | 103 | 91 | 78 | 68 |
| 6 | Computers and information technology | 100 | 29 | 74 | 27 |
| 7 | Chemistry | 135 | 110 | 71 | 61 |
| 8 | Cybernetics, statistics and economic computer science | 21 | 6 | 13 | 2 |
| 9 | Law | 974 | 672 | 666 | 495 |
| 10 | Philosophy | 148 | 81 | 47 | 39 |
| 11 | Physics | 72 | 37 | 58 | 35 |
| 12 | Geography | 563 | 319 | 340 | 221 |
| 13 | Geology | 28 | 11 | 14 | 9 |
| 14 | Computer science | 375 | 96 | 223 | 65 |
| 15 | Geologic engineering | 91 | 37 | 84 | 39 |
| 16 | History | 233 | 121 | 121 | 71 |
| 17 | Language and literature | 1129 | 951 | 712 | 624 |
| 18 | Applied modern languages | 427 | 367 | 341 | 293 |


|  | Domain | Year 1 (2017/201 <br> 8) | Women $1^{\text {st }}$ students | Graduate s | Wome n graduat es |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Marketing | 144 | 87 | 83 | 58 |
| 20 | Maths | 184 | 103 | 87 | 57 |
| 21 | Psychology | 298 | 248 | 243 | 216 |
| 22 | International relationships and European studies | 169 | 98 | 108 | 74 |
| 23 | Sociology | 421 | 300 | 273 | 214 |
| 24 | Environmental studies | 112 | 62 | 61 | 38 |
| 25 | Administrative studies | 283 | 220 | 196 | 166 |
| 26 | Communication studies | 623 | 489 | 396 | 338 |
| 27 | Education studies | 504 | 488 | 410 | 401 |
| 28 | Applied engineering studies | 15 | 6 | 6 | 4 |
| 29 | Political science | 156 | 91 | 107 | 70 |
| 30 | Cultural studies | 145 | 122 | 84 | 75 |
| 31 | Security studies | 45 | 22 | 25 | 14 |
| 32 | Theology | 296 | 60 | 221 | 49 |

Figure 10. \% of graduates by sex employed after finishing BA studies longitudinal data (UB)


Source: Statistical Office, UB, report under development: https://unibuc.ro/despre-ub/organizare/administratie/directia-orientare-strategica-evaluare-monitorizare-si-politici-publice/biroul-de-statistica/

Figure 11. \% of graduates by gender employed in the domain of study when finishing MA studies - longitudinal data (UB)


Source: Statistical Office, UB, report under development: https://unibuc.ro/despre-ub/organizare/administratie/directia-orientare-strategica-evaluare-monitorizare-si-politici-publice/biroul-de-statistica/

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Table 37. Graduates by sex and level of studies at January 1, 2021 (UB)

|  | Domain | Graduates BA | Women | Graduates MA | Women | Graduates PhD | Women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Business Administratio n | 162 | 102 | 120 | 74 |  |  |
| 2 | Visual arts | 15 | 12 |  |  |  |  |
| 3 | Social work | 189 | 175 | 158 | 38 |  |  |
| 4 | Biochemistry | 46 | 41 |  |  |  |  |
| 5 | Biology | 78 | 68 | 173 | 153 | 7 | 3 |
| 6 | Computers and information technology | 74 | 27 |  |  |  |  |
| 7 | Chemistry | 71 | 61 | 42 | 33 | 4 | 3 |
| 8 | Cybernetics, statistics and economic computer science | 13 | 2 |  |  |  |  |
| 9 | Law | 666 | 495 | 423 | 300 | 26 | 11 |
| 10 | Philosophy | 47 | 39 | 44 | 26 | 19 | 10 |
| 11 | Physics | 58 | 35 | 73 | 38 | 17 | 10 |
| 12 | Geography | 340 | 221 | 207 | 154 | 24 | 10 |
| 13 | Geology | 14 | 9 |  |  | 9 | 4 |
| 14 | Computer science | 223 | 65 | 123 | 43 |  |  |
| 15 | Geologic engineering | 84 | 39 | 19 | 8 |  |  |
| 16 | History | 121 | 71 | 94 | 44 | 15 | 8 |
| 17 | Language and literature | 712 | 624 | 285 | 253 | 44 | 28 |
| 18 | Applied modern languages | 341 | 293 |  |  |  |  |
| 19 | Marketing | 83 | 58 | 41 | 31 |  |  |
| 20 | Maths | 87 | 57 | 25 | 17 | 7 | 4 |
| 21 | Psychology | 243 | 216 | 250 | 216 | 10 | 8 |


|  | Domain | Graduates BA | Women | Graduates MA | Women | Graduates PhD | Women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | International relationships and European studies | 108 | 74 | 92 | 61 |  |  |
| 23 | Sociology | 273 | 214 | 241 | 188 | 10 | 9 |
| 24 | Environment al studies | 61 | 38 | 42 | 30 | 2 | 1 |
| 25 | Administrativ e studies | 196 | 166 | 153 | 125 |  |  |
| 26 | Communicat ion studies | 396 | 338 | 223 | 190 | 2 | 2 |
| 27 | Education studies | 410 | 401 | 355 | 337 | 15 | 15 |
| 28 | Applied engineering studies | 6 | 4 |  |  |  |  |
| 29 | Political science | 107 | 70 | 49 | 40 | 15 | 7 |
| 30 | Cultural studies | 84 | 75 | 57 | 50 | 1 | 1 |
| 31 | Security studies | 25 | 14 |  |  |  |  |
| 32 | Theology | 221 | 49 | 210 | 46 | 15 | 2 |

Figure 12. Percentage of female doctoral students and graduates (UB)


Figure 13. Percentage (\%) of women in decision making positions (UB)


Note: take into consideration also the feminization factor (total nr of academic staff: 729 women and 581 men).

Table 38. Gradation of employees by sex - January 2021 (UB)

| Level | Females | Males | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| 0 | 4 | 5 | 9 |  |
| 1 | 12 | 7 | 19 |  |
| 2 | 69 | 54 | 123 |  |
| 3 | 99 | 74 | 173 |  |
| 4 | 138 | 95 | 233 |  |
| 5 | 392 | 341 | 733 |  |

Table 39. Citizenship by gender (Data: January 2021) (UB)

|  | F | M | Total |
| :--- | ---: | ---: | ---: |
| Romanian | 709 | 565 | 1274 |
| Foreign - outside EU | 1 | 1 | 2 |
| EU | 4 | 10 | 14 |

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Figure 14. Parental leave by sex ( $\mathrm{N}=16$ ) (UB)


Note: Out of 16 people currently in parental leave, 1 is male. He teaches within the Faculty of Geology and Geophysics. Data provided by the Human Resources Department on 31.03.2021.

Table 40. Average age by position and gender (UB)

|  | Females | Males | Total |
| :--- | ---: | ---: | ---: |
| 0. Assistant doctoral student | 31.6 | 32.7 | 31.9 |
| 1. Assistant, PhD | 40.1 | 40.5 | 40.3 |
| 2. Lecturer | 47.6 | 49.8 | 48.6 |
| 3. Associate Professor (Conf.) | 52.8 | 57.0 | 55.0 |
| 4. Professor | 57.2 | 56.5 | 56.8 |
| Total | $\mathbf{4 6 . 7}$ | $\mathbf{5 0 . 1}$ | $\mathbf{4 8 . 3}$ |

Note: Results computed by the author. Data received from the Human Resources Department on March 19, 2021.

Table 41. Average age by sex, type of teaching position and faculty (UB)

|  | F | M | Total |
| :--- | :--- | :--- | :--- |
| The Faculty of Business and |  |  |  |
| Administration | $\mathbf{4 3 . 7}$ | $\mathbf{4 7 . 8}$ | $\mathbf{4 5 . 9}$ |
| 0. Assistant doctoral student | 32.5 | 31.0 | 32.2 |
| 1. Assistant, PhD | 34.0 | 34.0 | 34.0 |
| 2. Lecturer | 44.1 | 48.3 | 46.4 |
| 3. Associate Professor (Conf.) | 47.9 | 47.2 | 47.6 |
| 4. Professor | 49.4 | 55.5 | 52.7 |
| The Faculty of Biology | 46.6 | 51.7 | 47.7 |
| 0. Assistant doctoral student | 29.6 | 27.5 | 29.3 |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| M | Total |  |  |
| 1. Assistant, PhD | 39.2 | 44.3 | 39.9 |
| 2. Lecturer | 48.2 | 53.4 | 49.2 |
| 3. Associate Professor (Conf.) | 55.2 | 57.0 | 55.8 |
| 4. Professor | 55.7 | 50.0 | 55.0 |
| The Faculty of Chemistry | 52.7 | 52.3 | 52.6 |
| 1. Assistant, PhD | 45.8 | 49.0 | 46.1 |
| 2. Lecturer | 50.9 | 51.5 | 51.1 |
| 3. Associate Professor (Conf.) | 57.6 | 56.3 | 57.4 |
| 4. Professor | 59.0 | 52.3 | 56.0 |
| The Faculty of Law | 45.8 | 48.7 | 47.5 |
| 0. Assistant doctoral student | 33.1 | 32.1 | 32.5 |
| 1. Assistant, PhD | 48.1 | 37.2 | 40.5 |
| 2. Lecturer | 44.0 | 50.8 | 47.4 |
| 3. Associate Professor (Conf.) | 52.1 | 54.9 | 54.0 |
| 4. Professor | 52.6 | 55.5 | 54.4 |
| The Faculty of Philosophy | 44.2 | 51.1 | 49.5 |
| 1. Assistant, PhD | 30.5 | 36.2 | 33.7 |
| 2. Lecturer | 44.1 | 48.9 | 47.9 |
| 3. Associate Professor (Conf.) | 56.0 | 57.9 | 57.5 |
| 4. Professor | 65.0 | 60.4 | 61.0 |
| The Faculty of Physics | 50.1 | 55.3 | 53.9 |
| 0. Assistant doctoral student | 28.0 | 29.4 | 28.9 |
| 1. Assistant, PhD | 42.5 | 48.3 | 47.3 |
| 2. Lecturer | 48.5 | 52.0 | 50.9 |
| 3. Associate Professor (Conf.) | 57.1 | 62.6 | 61.5 |
| 4. Professor | 62.8 | 57.7 | 59.7 |
| The Faculty of Geography | 45.7 | $\mathbf{4 8 . 6}$ | 47.3 |
| 0. Assistant doctoral student | 29.0 | 30.5 | 29.8 |
| 1. Assistant, PhD | 41.6 | 43.8 | 42.4 |
| 2. Lecturer | 45.0 | 49.2 | 47.3 |
| 3. Associate Professor (Conf.) | 51.9 | 53.2 | 52.8 |
| 4. Professor | 55.3 | 47.8 | 51.5 |
| The Faculty of Geology and |  |  |  |
| Geophysics | 51.6 | 58.0 | 55.6 |
| 1. Assistant, PhD | 40.5 | 35.0 | 37.2 |
| 2. Lecturer | 51.8 | 54.9 | 53.4 |
| 3. Associate Professor (Conf.) | 55.3 | 65.4 | 63.9 |
| 4. Professor | 58.0 | 66.0 | 64.7 |
| The Faculty of History | 49.3 | 51.4 | 50.8 |
| 1. Assistant, PhD | 51.0 | 38.0 | 43.2 |
| 2. Lecturer | 47.6 | 49.0 | 48.5 |
| 3. Associate Professor (Conf.) | 51.7 | 55.7 | 54.7 |
| 4. Professor |  |  | 58.3 |


|  | F | M | Total |
| :---: | :---: | :---: | :---: |
| The Faculty of Journalism and |  |  |  |
| Communication Studies | 44.4 | 45.5 | 44.8 |
| 0. Assistant doctoral student | 35.6 | 38.0 | 36.5 |
| 1. Assistant, PhD | 41.2 | 44.8 | 43.0 |
| 2. Lecturer | 45.3 | 46.4 | 45.7 |
| 3. Associate Professor (Conf.) | 54.9 | 68.0 | 55.9 |
| 4. Professor | 50.5 | 60.0 | 53.7 |
| The Faculty of Foreign Languages and Literatures | 46.9 | 48.0 | 47.1 |
| 0. Assistant doctoral student | 31.2 | 38.2 | 32.5 |
| 1. Assistant, PhD | 42.0 | 35.7 | 40.6 |
| 2. Lecturer | 48.0 | 47.8 | 47.9 |
| 3. Associate Professor (Conf.) | 54.3 | 57.5 | 55.1 |
| 4. Professor | 58.4 | 59.3 | 58.7 |
| The Faculty of Letters | 47.5 | 52.6 | 49.3 |
| 0. Assistant doctoral student | 29.1 | 34.3 | 31.2 |
| 1. Assistant, PhD | 37.9 | 42.5 | 38.9 |
| 2. Lecturer | 48.4 | 50.9 | 49.3 |
| 3. Associate Professor (Conf.) | 53.3 | 63.7 | 57.3 |
| 4. Professor | 62.2 | 60.4 | 61.7 |
| The Faculty of Mathematics and |  |  |  |
| Computer Science | 38.8 | 45.2 | 43.2 |
| 0. Assistant doctoral student | 29.7 | 29.5 | 29.6 |
| 1. Assistant, PhD | 32.5 | 36.1 | 34.9 |
| 2. Lecturer | 45.7 | 47.9 | 47.2 |
| 3. Associate Professor (Conf.) | 43.3 | 50.0 | 48.8 |
| 4. Professor | 61.0 | 54.5 | 54.7 |
| The Faculty of Psychology and |  |  |  |
| Educational Sciences | 45.8 | 51.1 | 47.8 |
| 0. Assistant doctoral student | 34.3 | 32.8 | 34.0 |
| 1. Assistant, PhD | 37.0 | 32.6 | 35.8 |
| 2. Lecturer | 47.6 | 51.2 | 49.0 |
| 3. Associate Professor (Conf.) | 45.1 | 49.6 | 46.0 |
| 4. Professor | 59.8 | 60.3 | 60.1 |
| The Faculty of Sociology and Social |  |  |  |
| Work | 45.9 | 48.4 | 47.0 |
| 1. Assistant, PhD | 40.3 | 40.9 | 40.5 |
| 2. Lecturer | 44.9 | 47.8 | 46.1 |
| 3. Associate Professor (Conf.) | 48.6 | 48.2 | 48.4 |
| 4. Professor | 59.6 | 55.3 | 56.9 |
| The Faculty of Political Science | 46.9 | 52.6 | 49.5 |
| 1. Assistant, PhD | 44.8 | 41.0 | 43.0 |
| 2. Lecturer | 46.0 | 53.1 | 48.6 |


|  | F | M | Total |
| :---: | :---: | :---: | :---: |
| 3. Associate Professor (Conf.) | 47.1 | 57.1 | 52.8 |
| 4. Professor | 55.4 | 56.0 | 55.8 |
| The Faculty of Baptist Theology | 64.0 | 57.4 | 57.9 |
| 1. Assistant, PhD |  | 59.0 | 59.0 |
| 2. Lecturer | 64.0 | 57.9 | 58.4 |
| 3. Associate Professor (Conf.) |  | 54.0 | 54.0 |
| The Faculty of Orthodox Theology "Justinian the Patriarch" | 51.7 | 50.5 | 50.6 |
| 1. Assistant, PhD | 47.0 | 45.8 | 45.9 |
| 2. Lecturer | 51.4 | 49.3 | 49.6 |
| 3. Associate Professor (Conf.) |  | 54.7 | 54.7 |
| 4. Professor | 63.0 | 57.6 | 58.5 |
| The Faculty of Roman-Catholic |  |  |  |
| Theology | 54.3 | 55.0 | 54.7 |
| 0. Assistant doctoral student | 46.0 |  | 46.0 |
| 2. Lecturer | 53.6 | 51.9 | 52.6 |
| 3. Associate Professor (Conf.) | 62.0 | 63.6 | 63.1 |
| 4. Professor |  | 55.0 | 55.0 |

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## Annex 2. Survey results

Figure 15. Attitudes towards gender equality in the organization (UB)


Note: The percentages presented resulted from adding the categories "Agree" and "Strongly agree" with the statement.

Table 42. Attitudes towards gender equality within organization by gender (UB)

|  | Women | Men |
| :--- | :--- | :--- |
| is important for me personally. | $79 \%$ | $60 \%$ |
| increases the fairness of the working environment. | $76 \%$ | $71 \%$ |
| improves the quality of scientific performance. | $69 \%$ | $49 \%$ |
| makes it easier to balance work and family. | $54 \%$ | $31 \%$ |
| is only a conditionality for some EU research funding <br> without any importance | $15 \%$ | $11 \%$ |
| increases the bureaucracy in the organisation. | $13 \%$ | $16 \%$ |
| puts too much burden on the management to regulate <br> employees. | $5 \%$ | $16 \%$ |
| gender equality is an ideology enforced by liberals. | $5 \%$ | $18 \%$ |

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Figure 16. Attitudes towards gender equality in general (UB)


Note: The percentages presented resulted from the addition of the answers "Agree" and "Strongly agree" with the statement.

Figure 17.Preference for men in some situations described (in general by respondents) (UB)


Note: the figure presents the sum of percentages for the answers "Men are slightly preferred" and "Men are certainly preferred" for each statement.

Table 43. Preference for men in some situations described (split by sex of respondents) (UB)

| When appointing people to top managerial positions. | Women | Men |
| :--- | :--- | :--- |
| When employees are striving for a better position. | $35 \%$ | $14 \%$ |
| When the issue is salary or bonuses. | $27 \%$ | $9 \%$ |
| When decisions about grants for submitted projects are <br> made at the national level. | $25 \%$ | $9 \%$ |
| When a decision is made about hiring someone. | $24 \%$ | $14 \%$ |
| When decisions about grants for submitted projects are <br> made at the international level. | $20 \%$ | $5 \%$ |

Note: the table presents the sum of percentages for the answers "Men are slightly preferred" and "Men are certainly preferred" for each statement.

Figure 18. Perceived advantage towards men (UB)


Note: The distribution reflects the sum of answers from 5 to 7 to the question "How do you perceive the distribution of tasks and recourses in your department? Do you perceive an advantage towards women or advantage towards men in the following items? Rate each of the following items on a scale where 1 means advantage towards women and 7 means an advantage towards men".

Figure 1719. Private life aspects influencing professional achievements: positive aspects (UB)


Note: the distribution shows the sum of the codes 5 to 7 to the question "Which of the following aspects related to your private life and characteristics had a positive and which negative impact on your career? Rate each of the following items on a scale from 1 to 7 , where 1 is strong negative impact and 7 strong positive impact".

Figure 20. Perception of a negative impact of having children or other caring responsibilities (UB)


Notes: The negative impact was measured as a sum of results for the categories 5 to 7 to the question "Which of the following aspects related to your private life and characteristics had a positive and which negative impact on your career? Rate each of the following items on a scale from 1 to 7 , where 1 is strong negative impact and 7 strong positive impact" for the item "Not having children or other caring responsibilities".

Figure 21. Work related aspects influencing professional achievements (UB)


Note: the distribution presents the sum of answers from 5 to 7 to the question "Which of the following aspects related to your work and performance had a positive and which negative impact on your career? Rate each of the following items on a scale from 1 to 7 , where 1 is strong negative impact and 7 strong positive impact".
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Figure 22. Winners of excellence prizes provided by the Senate of the University of Bucharest in 2020 (UB)


Figure 23. Training opportunities available (UB)


Note: The distribution presents the answers to the question "We are interested in the training opportunities available to you in the last 3 years at your institution. Please indicate which, if any, of the following you have received. Tick all that apply to you".

Table 44. Applications for a promotion in the last 3 years (UB)

|  | Women | Men | Total |
| :--- | :--- | :--- | :--- |
| None of the above | $9 \%$ | $16 \%$ | $11 \%$ |
| Yes, I applied and was successful. | $27 \%$ | $29 \%$ | $28 \%$ |
| Yes, I applied and was <br> unsuccessful. | $4 \%$ | $7 \%$ | $5 \%$ |
| No, I have not become eligible for a <br> promotion at that time. | $26 \%$ | $22 \%$ | $24 \%$ |
| No, there are no positions above <br> mine that I can apply for. | $10 \%$ | $16 \%$ | $12 \%$ |
| No, I am satisfied with my current <br> position. | $12 \%$ | $4 \%$ | $9 \%$ |
| No, I wanted but felt unable to. | $5 \%$ | $4 \%$ | $5 \%$ |
| Other. | $9 \%$ | $2 \%$ | $6 \%$ |
| Total | $65 \%$ | $35 \%$ | $100 \%$ |

Note: The table provides the distribution for the question "Have you applied for a promotion in your organisation in the last 3 years? Choose one option".

Figure 24. Percentage of persons satisfied with current position by sex and age (UB)


Table 45. Percentage of persons satisfied with current position by sex and type of position (UB)

|  |  | Men |
| :--- | :--- | :--- |
| Associated professor | Women |  |
| Director of research | $17 \%$ |  |
| Full professor | $7 \%$ | $40 \%$ |


| Lecturer |  |  |
| :--- | :--- | :--- |
| None of these | $25 \%$ |  |
| Other | $20 \%$ |  |
| PhD candidate (student of PhD. Study <br> programme) <br> Postdoc; newly qualified researcher with PhD. | $25 \%$ |  |
| Research assistant (without PhD.) |  |  |
| Researcher (with PhD.) | $10 \%$ |  |
| Senior lecturer |  |  |
| Senior researcher |  |  |

Table 46. Perception of the ease to obtain an academic degree for men or women (UB)

|  | Women | Men |
| :--- | ---: | ---: |
| Much easier for a woman. | $0 \%$ | $0 \%$ |
| Easier for a woman. | $0 \%$ | $2 \%$ |
| Slightly easier for a <br> woman. | $0 \%$ | $5 \%$ |
| The same for women and <br> men. | $43 \%$ | $57 \%$ |
| Slightly easier for a man. | $16 \%$ | $11 \%$ |
| Easier for a man. | $16 \%$ | $7 \%$ |
| Much easier for a man. | $13 \%$ | $7 \%$ |
| Don't know | $11 \%$ | $11 \%$ |

Note: The table presents the distributions by gender to the question "Do you feel it is easier for a man or a woman to obtain the highest scientific/academic degree? Choose one option".

Table 47. Considering it is the same for women and men to obtain the highest academic degree by type of position (UB)

|  | Men | Wome <br> n |
| :--- | :--- | :--- |
| Associated professor | $40 \%$ | $33 \%$ |
| Director of research | $64 \%$ | $60 \%$ |
| Full professor | $38 \%$ | $30 \%$ |
| Lecturer | $25 \%$ | $13 \%$ |
| None of these | $33 \%$ | $30 \%$ |
| Other | $33 \%$ |  |
| PhD candidate (student of PhD. study <br> programme) |  |  |
| Postdoc; newly qualified researcher with PhD. | $50 \%$ |  |
| Research assistant (without PhD.) |  |  |
| Researcher (with PhD.) | $100 \%$ | $50 \%$ |
| Senior lecturer | $50 \%$ | $30 \%$ |
| Senior researcher |  |  |

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Table 48. Obstacles for promotion (UB)

|  | Women | Men |
| :--- | :--- | :--- |
| Low financial coverage. | $55 \%$ | $56 \%$ |
| Time constraints to reconciled with other work. | $61 \%$ | $72 \%$ |
| Time constraints to reconcile with family <br> responsibilities. | $57 \%$ | $67 \%$ |
| Wasted time in developing projects that are <br> rejected. | $38 \%$ | $37 \%$ |
| Low space for research. | $50 \%$ | $40 \%$ |
| Limited internship and study visits abroad. | $49 \%$ | $42 \%$ |

Note: The percentages represent the sum for codes 4 and 5 to the question "What are the obstacles to obtaining the highest scientific/academic degree according to you? Please rate each item on a scale below", from 1 "Not at all an obstacle" to 5 "Totally an obstacle".

Figure 22. Attitudes towards gender inequality in research (UB)


Note: The figure presents the sum of percentages for answers "Agree" and "Strongly agree" with each statement for the question "Please indicate the degree to which you agree or disagree with each statement related to the scientific/academic career. Use the scale below".

Table 21. Reasons for not holding a management position by gender (UB)

|  | Women | Men |
| :--- | :--- | :--- |
| Not interested | $40 \%$ | $42 \%$ |
| Time constrains | $28 \%$ | $13 \%$ |
| Applied but not <br> successful | $9 \%$ | $21 \%$ |

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| Too little practice | $9 \%$ | $8 \%$ |
| :--- | :--- | :--- |
| Too young for the <br> position | $15 \%$ | $17 \%$ |

Note: The table presents the answers to the question "If you are currently in no decision-making position, what reasons do you have for this? Choose one option that most applies to you".

Table 49. Mechanisms for being elected on management positions by gender (UB)

|  | Women | Men |
| :--- | :--- | :--- |
| Exclusively on the bases of <br> competences. | $29 \%$ | $37 \%$ |
| Social contacts are important. | $76 \%$ | $74 \%$ |
| Informal networks are important. | $75 \%$ | $86 \%$ |
| On the basis of working experience. | $56 \%$ | $63 \%$ |
| On the basis of the merits/credits. | $51 \%$ | $56 \%$ |

Note: Percentages by gender representing the answers to the question "What do you think, what are the current ways and mechanisms in the election into the decision-making position in your organisation?".

Figure22. \% of experienced instances of gender discrimination in the organization (in promotion for top management position) (UB)


Note: The figure presents the answers to the question "Did you experience in your organisation any awarding for decision-making position to a man instead of a woman or to a woman instead of a man despite the expert and educational requirements having been the same? Tick all that applies to you".

Figure 253. Stereotyped opinions (UB)


Notes: The figure represents the sum of percentages for responses "Agree" and "Strongly agree" with each statement.
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## Annex 3. Sample description - Interviews within UB

| Participants | Number |
| :---: | :---: |
| Total | 20 |
| Women | 10 |
| Men | 10 |
| Women's Age: < 35 | 3 |
| Women's Age: 36-54 | 6 |
| Women's Age: > 55 | 1 |
| Men's Age: < 35 | 0 |
| Men's Age: 36-54 | 8 |
| Men's Age: > 55 | 2 |
| Leadership position / out of the total |  |
| - none | 9 |
| - vice - rector (vice - chancellor) | 4 |
| - president of the Senate | 1 |
| - vice - dean | 2 |
| - doctoral school director | 2 |
| - department director | 2 |
| Academic/scientific degree |  |
| - Assistant professors (lectures) | 3 |
| - Assistant professors (lectures) | 1 |
| - Associate professors | 3 |
| - Associate professors | 5 |
| - Professors | 4 |
| - Professors | 4 |
| Scientific/study field / out of the total |  |
| - Sociology \& Social Work | 3 |
| - History | 2 |
| - Philosophy | 1 |
| - Foreign Languages | 2 |
| - Law | 3 |
| - Geography | 1 |
| - Physics | 3 |
| - Sports | 1 |
| - Biology | 1 |
| - Psychology \& Education | 2 |
| - Journalism \& Communication | 1 |
| Marital status / out of the total |  |
| - single | 3 |
| - lives in a partnership | 4 |
| - married | 11 |
| - widow | 1 |
| - dating but living alone | 1 |
| Children |  |
| - 0 | 11 |
| - 1 | 5 |
| - 2 | 3 |
| - 4 | 1 |

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## Annex 4. Qualitative research: Sample description - Focus Groups within UB

| Participants | Number |
| :---: | :---: |
| Total | 32 |
| Women | 18 |
| Men | 14 |
| Women's Age: < 35 | 3 |
| Women's Age: 36-54 | 15 |
| Women's Age: > 55 | 0 |
| Men's Age: < 35 | 0 |
| Men's Age: 36-54 | 13 |
| Men's Age: > 55 | 1 |
| Occupations |  |
| - Researcher | 2 |
| - Researcher | 2 |
| - Teacher | 5 |
| - Teacher | 8 |
| - Administrative staff (managers) | 4 |
| - Administrative staff (managers) | 4 |
| - Administrative staff (ne leadership positions) | 7 |
| Academic/scientific degree |  |
| - Assistant professors | 1 |
| - Assistant professors | 5 |
| - Associate professors | 2 |
| - Associate professors | 3 |
| - Professors | 2 |
| - Professors | 2 |
| Scientific/study field (only FG2 and FG4) |  |
| - History | 1 |
| - History (Archaeology) | 1 |
| - IT \& Mathematics | 1 |
| - IT \& Mathematics | 1 |
| - Business \& Administration | 1 |
| - Business \& Administration | 1 |
| - Geography | 1 |
| - Geography | 1 |
| - Foreign Languages | 1 |
| - Psychology | 1 |
| - Biology | 1 |
| - Biology | 1 |
| - Chemistry | 1 |
| - Political Science | 1 |
| - Journalism and Communication Science | 1 |
| - Sociology and Social Assistance | 1 |

# Gender Equality Report for the Slovak Academy of Sciences, Slovakia 

Project Acronym: ATHENA
Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

Grant Agreement n: 101006416

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## Executive summary (Slovak Academy of Sciences)

The report provides a complex picture of the baseline situation in terms of gender equality in the Slovak Academy of Sciences (SAS) as of 2020. Based on a mixed methodology design, we assessed the status of gender equality in 6 dimensions: the pool of graduate talents, gender balance in research, decision balance in career advancement, gender balance in decision making, decision balance and gender balance in research outputs.

The organisational change towards fairer gender-equal SAS is embedded in the overall political and societal environment, legislation, and policies in gender equality in society and research.

Slovakia is performing deficiently in terms of overall gender equality in society. Slovakia ranks on the Gender Equality Index below the EU's average score long term. Two index domains are dragging Slovakia down permanently: low women's representation in decision-making positions and the disproportionate allocation of time spent on domestic work, care for children, and older and disabled people to women. Despite relatively elaborated legislation, its enforcement lacks behind and does not bring substantial improvement. The development of gender equality policies and institutional background in recent five years deteriorated by the emergence of the anti-gender movement.

In Research and Innovation area, Slovakia ranks among the modest performers among the EU28 regarding R\&D expenditure and commercial and non-commercial R\&D outputs. In Slovakia, a comprehensive national strategy or roadmap on gender equality in research and innovation is missing. No special recruitment and career development policies are advancing the gender balance in research. Moreover, the language of the public research and academic institutions is sexist, making women invisible. Slovakia does not have specific measures targeting existing gender pay gaps in public RPOs or HEls. The absence of any effort also stems from the lack of data and awareness on gender gaps in public research and academic institutions. Slovakia does not regularly compile any comprehensive statistical report on gender equality or women in research and academia.

The overall awareness of gender equality in SAS is ambivalent. On the one hand, gender equality in SAS increases fairness in the workplace and is important to the employees personally. Most respondents consider that neither men nor women are preferred, and the chances are equal for both genders (SUR). On the other hand, surveying specific issues of gender equality, the awareness of its importance decreases (SUR) and brings confusion. Gender equality is articulated as a qualitative aspect, rejecting the quantitative indicators (gender balance) as less important or arbitrary (INF).

SAS's position in the promotion of gender equity is highlighted. SAS could be a promoter of GE for the institution and as a role model of social change. Gender equality efforts should challenge the existing institutional culture (INF).

Despite the overall relative gender balance of women in SAS, the disparities occur across the fields of sciences, occupations and academic grades. The overall proportion of PhD applicants, students, and graduates in SAS is slightly skewed towards women in the long term (GEA). Women employees presented $54,2 \%$ and female researchers $46,2 \%$ in 2020. The existing gender balance in SAS is explained by the poor funding condition in Slovak science. However, while women researchers comprise $58 \%$ of all women employees, men researchers account for up $79 \%$ out of all men employees. In natural sciences and engineering, women researchers present around 30\% (GEA). Grade A women researchers present only $24 \%$ of all A Grade researchers. The share is lower than $30 \%$ in all scientific fields except for medical sciences (GEA).

While most of the resources and tasks are perceived as equally distributed between women and men, some disadvantages towards women have been revealed. Assignment of important tasks and roles, access to informal circles of influence and recognition of intellectual contributions were recognised as an advantage towards men by a quarter of the respondents. On the other hand, administrative tasks and service roles are disproportionally distributed towards women (SUR). Women technicians and supporting staff comprise $41 \%$ and men $20 \%$ of all employees (GEA).

There are few opportunities for both men and women for promotion in general. The career plans are not fully understood and promoted among employees (GEA). The absence of transparent recruitment and career progression policies was highlighted (INF). More women than men have not received any training in the last three years. Men have generally received more training of all kinds except language courses, funding, HR, and biases (SUR). The current funds for creating postdoctoral positions are "gender neutral" and do not reflect the different needs of women researchers. Special mentoring programmes for women is not applied yet (GEA).

One of the reasons for women's unused research potential is the lack of proper policies to mitigate the impact of unfair gender caring responsibilities. The career is negatively impacted by taking any parental leave (SUR). While women in SAS spent nearly 13,5 thousand days in total on any of the leaves related to caring responsibilities, men only 8 hundred days in 2020 (GEA). Consequently, women have more problems than men to reconcile personal and working duties (SUR). Despite this, SAS did not yet implement any special measures, programs and policies focused on families (such as special baby-friendly environment, policy to support elder/dependent family members). The establishment of a kindergarten will be only considered in the near future (GEA).

Women in research face multiple burdens in working conditions. Gender workload is present in the institutes' division of labour, which consists mainly of tasks beyond the job description or in the project administration (INF). The nature of science is perceived as strongly masculinist and performance-oriented. The conditions in the evaluation of science are set a priori to disadvantage women in the current social setting (INF). The workload in SAS is high. Only around 17\%
of the respondents never worked on weekends, more than 10 hours per day or during holidays. The rest needed to accomplish their tasks outside the regular hours. Women more than men work very often during the weekend and holidays. Women have more problems than men to reconciling personal and working duties (SUR).
Structural and internal obstacles jeopardise young women researchers' careers. A major challenge is compensating women scientists while they are on maternity/parental leave. Either they continue to work on projects as an unpaid workforce or part-timers. Both options negatively affect young female scientists' social security and career advancement. Low salaries in Slovak science are an obstacle for young people, putting women into a greater vulnerability when planning to start a family or live independently. Additionally, the chain of fixedterm contracts for young people makes them extremely vulnerable. On the one hand, it is seen as a powerful management tool, but it is partly abused and creates an atmosphere of constant uncertainty for young employees (INF).

Despite the high number of women researchers in SAS, only one-fifth reached the highest qualification grade. The glass ceiling index, alerting the proportion to the representation of women in top academic positions, reached the value of 1,8 in 2020 (GEA). In addition, $43 \%$ of women to $26 \%$ of men perceived that men have it slightly or easier than women to gain the highest degree. Moreover, $30 \%$ of women and $14 \%$ of men agree that some requirements for the highest qualification degree are more difficult to meet for women or men (SUR). However, the most rated obstacles to gaining the highest scientific degree in SAS, in general, are the time constraints related to family and work reconciliation (56\%). Further barriers identified are time constraints to reconcile with other work and low financial coverage. Except for the financial conditions, all the obstacles are perceived by women more intensively than by men (SUR).

The higher the level of decision-making, the fever women are represented. A woman has never headed the Slovak Academy of Sciences, and there are only three female members of the current Presidium of the Slovak Academy of Sciences, comprising $20 \%$ of women. In the Scientific Council of the SAS, 18.2\% are women (including external members and members). In addition, there are 18 women in the Institute/Centre Director position out of 47 posts of directors (38,3 \%) (GEA). Women agree more than men that to be elected in decision-making positions is based not only on competencies and working experience but also on informal networks and working conditions (SUR). The findings are consistent with the perception of science as a "boys club" (INF).

The absence of effective procedures on sexual harassment is seen as highly problematic (GEA). Women, in general, have to face various comments and prejudices and often see it as a natural part of life. Even though disturbing, they have to live with that (INF). Overall, $46 \%$ of respondents experienced at least rarely inadequate and unfair critics, $34 \%$ inappropriate remarks about their skill and competencies. In addition, $24 \%$ came across at least rarely with inappropriate comments about appearance or clothes. Except for emails with sexual context and verbal and nonverbal abuse threats, all the other micro-
attacks have been experienced by women more often (at least "rarely") than by men (SUR).


#### Abstract

SAS is failing in systematic monitoring and regular evaluation of gender equality. Gender budgeting has never been implemented in the institution. Nor are any pay transparency reports compiled, not speaking about several institutes' unwillingness to provide the data on specific gender aspects. More detailed analysis is needed to identify additional, hidden gender imbalances contributing to the unfair working environment in SAS.


## Introduction

The report has been compiled within the framework of the Athena project (W2/T2.4) by the Institute for Research in Social Communication of SAS. The objective of the report is to describe the departure situation in terms of gender equality to set up an appropriate gender equality plan at the Slovak Academy of Sciences.

Based on mixed methodology design, the gender balance in PhD. students and graduates, in decision making, academic career, working conditions and research outputs were evaluated. The preliminary results of the gender audit have been already used to outline the first draft of a Gender Equality Plan that was approved by the Presidium of SAS in December 2021 (SAS, 2021). ${ }^{49}$ However, the historically first GEP will be updated and specified in 2022 based on the other results of the Athena project.

The European Research Area continues to suffer a significant loss due to the untapped potential of talented women. European Commission has been drawing attention to this for years and encourages the Member States to take measures that:

- remove barriers to the recruitment and career development of women researchers,
- address gender imbalances in management and decision-making,
- strengthen the gender perspective in research programmes (EC, 2012).

Horizon 2020 funded Gendered Innovations Expert Group in its report (EC, 2020) outlines the key reasons for integrating the category of sex and/or gender in research and innovation. This integration:

- provides added value to research in terms of excellence;
- increases creative and commercial opportunities in research;
- undermines existing stereotypes or gender norms and facilitates the introduction of new models;
- increases the societal relevance of research by addressing diverse needs

[^23]EU population;

- better responds to demand in new markets and provides overall support for goods and services that better respond to market needs.

There are several reasons for moving towards gender equality. In the context of research, these are in particular (EC, 2021):

- Gender equality improves the quality of scientific outputs because it helps to consider diverse perspectives and approaches.
- Gender equality creates better working conditions that help produce quality results and harness the whole team's potential.
- Gender equality prevents talent wastage and attrition.

Ability to reflect critically on gender in science and research and promote the principles of gender equality (including intersectionality - multiple disadvantages due to gender and other characteristics such as age, ethnicity, health status, etc.) thus become essential for the future of the European Research Area. Institutional and cultural change is a prerequisite for removing barriers to gender equality. We know that equality and the promotion of diversity in research workplaces help achieve better and more innovative outputs and develop research potential. Also, thanks to the Gender Equality Plan, the Slovak Academy of Sciences will be one of Europe's modern research institutions. The Plan will help us to reflect better dynamically changing world and to fulfil the vision and values of the Slovak Academy of Sciences (SAS, 2019c).

The challenges of gender equality do not exist in isolation and are deeply rooted in the existing system, such as human resources management. A gender equality plan should be implemented in synergy with the European Charter for Researchers, the Code of Conduct for the Recruitment of Researchers, and be consistent with implementing the Human Resources Strategy for Researchers (HRS4R). Gender issues go beyond gender, for example, and relate to cultural background. The GAP analysis (gap analysis) in the preparation of the HRS4R identified the following as one of the critical barriers in human resources management is the absence of documents in the English language. There is also a lack of more precise and more transparent standards in recruitment, barrierfree accessibility in organisations' buildings, lack of support for childcare for female researchers (e.g. in the form of a kindergarten). The GAP analysis confirmed and highlighted the issue of gender imbalance in management and decision-making. There is also a lack of more explicit strategies for career support (SAS, 2019a). Therefore, there is a need for a gender equality plan to be implemented in synergy with the HRS4R Action Plan for SAS (SAS, 2019b).

## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection technics implemented
throughout the year 2020 ad 2021. The particular methodologies have been prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences.

The national provisions in terms of gender equality in research and higher education were assessed based on a desk-research and policy analysis related to gender equality in society, research and higher education. Our team utilised extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of SAS.

The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardised data collection on women in science She Figures (EC, 2019). The indicators also rely on the internationally standardised classification of the OECD Frascati Manual (OECD, 2015). The common set of indicators covers all the gender dimensions, core and advanced indicators. Also, specific indicators have been proposed. Our team collected the available data sourced from the annual reports of all research institutes of SAS and data requested directly from the particular research institutes in SAS ("on request data").
The qualitative GEA indicators present unquantified aspects and measures, and policies in place to assess the situation in terms of gender equality in SAS. The measures were evaluated using a simple online assessment tool via an online data collection system. A standardised list of specific policies and measures related to 6 dimensions of gender equality in research have been evaluated by the national coordinator of the project Athena.

Additionally, to identify gender biases in the Slovak Academy of Sciences, we used three data collection methods: online survey, interviews and focus groups. An online staff survey implemented by a questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, 290 were included in the analysis. ${ }^{50}$
The objective of the interviews was to search for the diversity of typical facilitators and inhibitors of gender awareness in the life-course of scholars. Based on a scenario, our team implemented 15 interviews with researchers in the following structure: 10 women and 5 men, primarily researchers, GEPI members, leaders, representatives of students, and lower coverage of administrative staff. The interviews have been recorded, transcribed, and analysed using the thematic analysis method. Thirdly, our team organised 3 focus groups comprised of the members of the GEPI, directors of the research institutes and young researchers. The sample of the focus groups includes 26 participants, 19 women and 7 men, mainly from the social sciences and humanities research fields. Then, using the standardised script, we transcript the recoded discussions and analysed the data by frame analysis method. ${ }^{51}$

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## 2. Outcomes of the assessment of the national provisions at the national level in Slovakia

The organisational change towards fairer gender-equal Slovak Academy of Sciences can be influenced by the overall political and societal environment and legislation and policies settings in gender equality in society. At the same time, national policies are in many respects dependent on or at least inspired by international and Pan-European legally or politically binding commitments. The following section provides a broader picture of the environment in which the change at the organisational level takes place and a selective list of measures that can be used towards the desired status.

### 2.1. Status of gender equality in society

Slovakia ranks 24th out of the EU on the Gender Equality Index. The 56 points out of 100 are 12 points below the EU's average score. Since 2018, Slovakia's score has increased by only 0.5 points (EIGE, 2021). The country's score is drowned down by low women's representation in decision-making positions across the political, economic and social spheres (score 26.3 points.) The second dimension significantly negatively impacting the Gender Equality Index score is the time-domain revealing the disproportionate allocation of time spent on domestic work, care for children, and older and disabled people to women (EIGE, 2021).

Although the EU legislation on equal pay for equal work or work of equal value for men and women is enshrined in Slovak legislation for two decades, the overall gender earnings gap was $37.3 \%$ (2014), and the recently available gender pay gap in unadjusted form is 18,4 \% (2019) (EIGE, 2022). Despite the public universities and research institutions have regulated remuneration system based on standardised tariffs and criteria on degrees of responsibility and complexity of the occupations, the women university and higher education teachers earn 6,5\% less than their male counterparts, the women research and development managers $18 \%$ and physicists and astronomers $17 \%$ less (SO, 2020).

In promoting and enforcing gender equality and equal treatment policies and legislation, including women's rights, Slovakia underwent relatively dynamic development. Essential legislative amendments, specifically those adopted in the country's accession to the European Union, contributed to a greater awareness among the public and professionals regarding direct and indirect forms of discrimination and created the main framework for gender equality enforcement. The promotion of gender equality in most societal areas is backed by several national strategies and action equality plans. The institutional administrative machinery was established hence with modest personal resources.

Besides the Constitution Act No. 460/1992 Coll. setting out the equality between human beings in dignity and rights and prohibits discrimination on the ground of sex (Article 12), several other acts back the equality between women and men, such as Act no. 365/2004 Coll. on Equal Treatment in Certain Areas and Protection against Discrimination (the Antidiscrimination Act). According to the act, the anti-discriminatory principle is defined as the duty not to discriminate and prevent discrimination (Lamačková, Becková, 2009). A relevant principle to remedy the historically and politically rooted sex/gender disadvantages is Article 8a of the Anti-Discrimination Act which allows the adoption of temporary balancing measures (positive affirmative action.). The temporary balancing measures can be adopted and applied in all public administration bodies and legal entities (EC, 2020a).

Protection from discrimination is also highlighted in Act no. 131/2002 Coll. Act on Higher Education Institutions and Amendments to Certain Acts (the Higher Education Act) prohibits discrimination based on sex, gender, age and other characteristics.

The equal treatment and prohibition of discrimination also mirror the Act no. 311/2001 Coll. Labour Code. The regulation sets, among others, the rules on working time, flexible working conditions and fair remuneration. According to Section 6, women and men shall have the right to equal treatment concerning access to employment, remuneration and promotion and vocational training. Section 2 stays that women and men have the right to equal pay for equal work and work of equal value. In Slovakia, no measures set out by Recommendation to strengthen the principle of equal pay between men and women through transparency have been implemented (Veldman, 2017).

The Labour Code also defines the right for maternal or parental leave for mothers and fathers. Firstly, women have a right to use a maternal leave from work for 34 weeks ( 37 weeks for single women). After that, women can continue to take full custody of a child (or children) for up to 3 years in the form of parental leave (If a parent takes care of a child with health problems, the parental leave can be extended). Men can also use maternal and parental leave; both parents can use both leaves.

The benefits for parents are higher for those working before the maternal or parental leave. Before 2021, all students had to rely only on the Parental benefit, which is relatively low, mainly because students did not meet the criteria on the paid sickness insurance tied to the working contract. Putting it into the GE in a research context, even with the new Pregnancy scholarship, this situation leaves many PhD students (mostly female) in a very precarious position.

In terms of affordable early childcare services, there have been around 11000 rejected applications for placement of a child in a pre-school facility in Slovakia in 2020. The Ministry of Education, Science, Research and Sport of the Slovak

Republic recently announced support for the establishment of kindergartens at universities (MINEDU, 2021).

The effectiveness of eliminating gender inequalities in society, establishing a fairer environment for women, and fully employing their talents is low. Based on the fundamental gender equality indicators, the unequal and gender imbalanced situation has stalled or even worsened. Despite relatively elaborated legislation, its enforcement lacks behind and does not bring substantial improvement.

The development of gender equality policies and institutional background in recent five years deteriorated by the emergence of the anti-gender movement. The conservative groups supported by church and ultra-conservative lobbying agencies succeeded in penetrating political parties and government administration and prevented adopting several policies documents, including the Convention on preventing and combating violence against women and domestic violence.

### 2.2. Status of gender equality in research and higher education

In Research and Innovation area, Slovakia ranks among the modest performers among the EU28 regarding R\&D expenditure and commercial and noncommercial R\&D outputs. Higher education institutes rank low in international scoreboards ${ }^{52}$, and the country faces the persistent emigration of students and young, particularly educated and highly skilled people abroad. The relatively high share of women researchers in the total researchers' headcount ( $41 \%$ in 2019) is explained by the dominance of the public sector in R\&D employment. The percentage of women researchers in the business enterprise sector is only $15.9 \%$. The explanation of the low share of women researchers in private enterprise could be the highly competitive and performance-driven environment and lack of work-life policies. In the research funding organisations, the proportion of women in decision-making positions is 15.5 \% (2020) (EIGE, 2022).

No national law or policy encourages institutions of the public research sector, i.e. research performance organisations, universities and research funding agencies, to adopt gender equality measures, including gender action plans. The only pressure stems from the European Union framework in research and innovation, namely programmes such as Horizon Europe, to comply with the requirement to have GEP active to get funding from the programme. ${ }^{53}$ Usually, if the adoption of gender equality measures is not legally binding and no sanction stems from the non-compliance, no action will be taken.

[^25]
## www.athenaequality.eu

In Slovakia, a comprehensive national strategy or roadmap on gender equality in research and innovation is missing. Neither is gender equality in science nor gender in the content of research integrated as a cross-cutting topic into strategic policy documents in R\&I. In general, Slovakia is lacking behind in any of relevant state research strategy.

No special recruitment and career development policies are advancing the gender balance in research. Moreover, the language of the public research and academic institutions is sexist, making women invisible. For example, gender-sensitive language is rarely used in a new position announcement or documents and websites.

The re-entry of the academic workforce, e.g. after maternity leave, is partially supported by a national policy. According to the Labour Act, the employee is responsible for keeping the working position for women and men after the maternal/parental leave. However, this may not always be as straightforward as a permanent working contract conditions this duty. Young adults usually receive the fixed-term working contract, often related to the project funding at the beginning of their research career.

Moreover, according the Labour Act, the chaining fixed-term contracts are allowed in HEIS and RPOs in Slovakia. ${ }^{54}$ Despite that according the Act the repeating of the fixed-term contracts is limited, sector of research and universities is an exception. The measure contributes to even higher social insecurity for the mostly young and junior researchers.

Slovakia does not have specific measures targeting existing gender pay gaps in public RPOs or HEls. The absence of any effort also stems from the lack of data and awareness on gender gaps in public research and academic institutions. For example, the gender pay gap for all university and higher education teachers was $6,5 \%$, and research and development managers in public and private RPOs was $18 \%$ to the detriment of women (SO, 2020).

In research and higher education, gender equality, advancement of women and gender in research/science are not prominent at the national level. Instead, the topic of women in science is dealt with intermittently, usually upon the EU initiatives or research funding explicitly devoted to women in science or gender imbalance in research and innovation.

Regarding policies addressing sexual harassment and gender-based violence in academia and RPOs and RFPs, Slovakia does not have any specific guidelines on these issues. For example, the latest available data on sexual harassment in HEIST from 2020 revealed that $2 / 3$ of students had experienced gender-based harassment (Kuruc, Valkovičová, 2020).

[^26]www.athenaequality.eu

Despite the continual unfavourable situation in women's representation in a decision-making position in public RPO/FRFO and HEIS, Slovakia does not have any specific measures, training or awareness-raising initiatives regarding gender equality in decision-making.

Slovakia does not regularly compile any comprehensive statistical report on gender equality or women in research and academia. Instead, partial information is spread within several statistical publications providing only a very narrow and skewed picture of the reality of women in research and academy.

In Slovakia, the overall commitment for gender equality in research, innovation and HEI is limited. The low engagement of the national governmental institutions results in the lack of national strategies, plans or programs that would promote and advance the situation of women in research and HEI.

## 3. Outcomes of the gender equality audit at the Slovak Academy of Sciences

The following chapter presents the outcomes of the quantitative and qualitative gender equality audit (GEA) undertaken in the Slovak Academy of Sciences throughout 2021. The data present the status as of 2020 if not defined otherwise.

### 3.1. The pool of graduate talents

The dimension of the graduate talents refers to gender balance among the PhD. applicants, students and graduates presenting the supply of the future researchers. At this dimension, the qualitative assessment indicators evaluate the measures encouraging women to pursue research careers.

Table 50. Quantitative GEA indicators on the pool of graduate talents (SAS)

| Title of the indicator | Value |
| :--- | :--- |
| Proportion of women among PhD applicants (\%) | 50 |
| Proportion of women among PhD students (\%): | 59,6 |
| - all students | 60,2 |
| Proportion of women among PhD graduates (\%) in: |  |
| - 2016 | 58,9 |
| - 2020 | 59,7 |

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| Distribution of PhD graduates across fields of study, by sex <br> (W/M) headcounts | $\mathrm{n} / \mathrm{a}^{55}$ |
| :--- | :--- |
| Proportion of women PhD students early leavers of the PhD <br> study (\%) | 72 |

The proportion of PhD applicants, students, and graduates is slightly skewed towards women based on the quantitative indicators. The skewness shows both in 2016 and 2020. Out of 25 PhD students who dropped out of the study in 2020 have been $72 \%$ were women. The reasons for the preliminary ending of the study programme have been not explored.

## Table 51. Qualitative GEA indicators on the pool of graduate talents (SAS)

Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer.

| Title of the indicator | Value |
| :--- | :---: |
| Gender as a topic of research as a topic | DK |
| Scholarships or career development grants for female scientists | 1 |
| Support for dual-career couples | 1 |
| Career coaching for female scientists | 1 |
| Fellowship for women students and researchers only <br> Specific seminars on academic publishing for women <br> students/scientists <br> Gender balance is taken into account in recruitment <br> Formulation of the job/position offers are in a gender-balanced form | DK |
| Applicants of all genders invited in a job offer, but underrepresented <br> gender is emphasised | 1 |
| The advertisement for internal promotions ensures an equal level of <br> information | DK |
| Policy of non-discrimination in recruitment on the ground of gender. | 1 |

The presence of gender as a topic of the PhD theses cannot be assessed as this would need specific enquiry within the SAS research institutes. There are no special scholarships or grants for female scientists. Instead, the SAS organises an annual competition for young scientists.
As it is quite common that all documents in Slovakia use masculine language, it is a small positive step that the document about the competition contains a footnote claiming that even though the document uses masculine language when describing students and scientists, it also refers to women. The participation in the competition is limited to age 35, not reflecting the fact that many women usually have a career break during that time.

Currently, the academy does not offer any programs to support dual-career couples working as scientists. However, no possibilities for career coaching or

[^27]fellowship for female scientists are formally present. Seminars to promote academic and scientific skills are present to some extent, but none is aimed specifically or exclusively at women.

The recruitment process in the SAS must follow the existing legislative procedures which guarantee a non-discriminatory approach. Nevertheless, there are limits to face. According to the HRS4R Action plan, procedures for recruiting and selecting candidates are not formalised according to Open, Transparent and Merit-Based Recruitment of Researchers (OTM-R) principles. As stated in the GAP analysis during the HRS4R implementation in the recruitment and selection of the candidates, there were some limits identified, based on the absence of unified processes, transparency and merit-based recruitment, and conflict of interest prevention. No formal affirmative actions are applied as well as other actions or campaigns that would aim to promote underrepresented gender within the selected research fields.

According to the academy's website and its institutes, the gender-balanced formulations in the job offers is not mandatory. Some offers also highlight the feminine form of the position's name. Some offers do not.

### 3.2. Gender balance in research

Gender balance in the research focuses on the gender distribution among the employees, researchers by academic grades and other characteristics, and gender equality policies.

Table 52. Quantitative GEA indicators on gender balance in research (SAS)

| Title of the indicator | Value |
| :---: | :---: |
| Proportion of women among total number of employees (\%) | 54,2 |
| Proportion of women among total number of employed researchers (\%) in: |  |
| - 2016 | 46,8 |
| 2020 | 46,2 |
| Distribution of researchers employed across fields of R\&D by sex (\%) |  |
| - natural sciences (W/M) | 36/64 |
| - engineering and technology (W/M) | 27/73 |
| - medical sciences (W/M) | 63/37 |
| - agricultural and veterinary sciences (W/M) | 46/54 |
| - social sciences (W/M) | 46/54 |
| - humanities and arts (W/M) | 53/47 |
| Distribution of researchers employed across age groups (\%), by sex |  |
| 25-34 (W/M) | 30/22 |
| 35-44 (W/M) | 27/26 |
| 45-54 (W/M) | 16/15 |
| 55-64 (W/M) | 20/18 |
| 65 and over (W/M) | 7/15 |
| Distribution of R\&D personnel across occupations (\%) and within sex |  |
| Researchers (W out of all women employees /M out of all men employees) | 58/79 |
| Technicians (W out of all women employees / M out of all men employees) | 33/12 |
| Other supporting staff (W out of all women employees /M out of all men employees) | 8/8 |
| Proportion of women among academic staff by academic grade (\%) |  |
| Grade A (professor) | 24,1 |

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| Grade B (associate professor, Senior researcher) | 41,9 |
| :--- | :--- |
| Grade C (Post doc) | 53,3 |
| Grade D | 57 |
| Glass Ceiling Index | 1,83 |
| Proportion of A grade women (professors) among all A grade staff by the main fields of <br> R\&D (\%) |  |
| - natural sciences | $13 / 87$ |
| - engineering and technology | $13 / 87$ |
| - medical sciences | $51 / 49$ |
| - agricultural and veterinary sciences | $27 / 73$ |
| - social sciences | $20 / 80$ |
| - humanities and arts | $32 / 68$ |

Notes: The R\&D fields related to the categorisation of the Frascati Manual; The academic grades in terms of SAS related Grade $A=$ Qualification level I; Grade $B=$ Qualification level IIa; Grade $C=$ Qualification level IIb; Grade $D=$ All other researchers

Vertical segregation refers to the concentration of men or women in higher job positions, managerial positions or higher skill levels. Such roles are often associated with 'desirable' roles, including higher pay, prestige and security. In research and innovation, an example of such segregation is the high representation of men in management in scientific institutions and universities.

The representation of women and the proportion of women in different positions in the SAS is an important but not the only indicator of gender equality. In 2020, women accounted for $54 \%$ of all women employees of the SAV, but this ratio is not reflected in all levels equally. On the contrary, it is similar to other EU countries (Dubois-Shaik, Fusulier, 2015). The phenomenon is also emerging in the SAS leaky pipeline. While in non-scientific positions (other staff, professional staff with full secondary education and professional staff with a university degree) are dominated by women (up to 71 \%), professional staff (male and female R\&D staff) this predominance drops to $57 \%$, and for scientific staff (male/female scientists) women account for 44 \%.

The glass ceiling metaphor represents the invisible barriers that prevent women from career advancement. The glass ceiling index is an indicator that alerts us to the proportion of women in academia and research (in positions $A, B, C$ : in the SAS context is equal to the qualification level I, Ila and Ilb) in proportion to the representation of women in top academic positions (qualification level I). A score equal to 1 indicates no difference in the chance of career progression between men and women. A score of less than 1 indicates that women are more likely to be represented in the institution's top academic position. Conversely, a score higher than 1 indicates the presence of a glass ceiling, i.e. a situation where women are less often represented in the highest academic positions. The higher the number, the thicker this imaginary glass ceiling is. 15 While the EU's glass ceiling index was 1.64 and Slovakia's 1.74 in 2016, SAS achieved an index of 1.83 in 2020.
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Table 53. Quantitative GEA indicators on gender balance in research (SAS)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 - Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer.

| Title of the indicator | Value |
| :--- | :---: |
| A dedicated organisational arrangement (office, contact person, etc.) aimed at change <br> towards gender equality | 1 |
| Gender equality action plan (GEP) | 1 |
| Monitoring and continuous evaluation of the GEP | 1 |
| Gender budgeting | 1 |
| Women networks established | 1 |
| External alliances of organisations with an outstanding reputation for gender equality created | 1 |
| GE awareness-raising activities for students | 1 |
| GE awareness-raising activities for staff | $\mathbf{1}$ |

The Slovak Academy of Sciences runs a Commission on Equal Opportunities, which according to its status, operates in relation to the Anti-discrimination Act and Action plan on the Action plan for gender equality in Slovakia for the years 2014-2019. Nevertheless, the commission's responsibility and utility may be questioned as the commission has met only six times in the last 16 years.

The academy so far has not applied a gender equality plan or any other similar documents. There is no systematic monitoring and evaluation of GE or GE violations within the academy, although it may be the competence of the Commission Equal Opportunities.

The preliminary results of the gender audit have been already used to outline the first draft of a Gender Equality Plan that was approved by the Presidium of SAS in December 2021. However, the historically first GAP will be updated and specified in 2022 based on the further results of the Athena project.

Gender budgeting has never been implemented in the institution; similarly, there are no networks to support female scientists at the institutional level. The organisation Young Scientists of SAS operates, aimed to help young scientists and doctoral students at the beginning of their career, no particular focus on women is made (as the official name of the organisation uses only a generic masculinum).

Overall, there are only limited activities related to promoting gender awareness in research for students or research employees in Slovakia. The academy cooperates on the, in principle ambiguous, L'ORÉAL-UNESCO for Women in science Slovakia Award which is annually honoured to women in natural sciences for its exquisite work. Institutional webpage and other information about the organisation or doctoral studies use the generic masculinum. On the bright side, the latest video-focused where the president of SAS recruits future doctoral students shows dominantly female scientists.

### 3.3. Gender balanced career advancement

The Gender balanced career advancement assesses the HR measures promoting women scientists in their professional development. No quantitative indicators have been calculated due to the constraints in data availability.

Table 54. Quantitative GEA indicators on gender balance in research (SAS)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer.

| Title of the indicator | Value |
| :--- | :---: |
| Age limit extended in calls for female researchers with children under a certain age | 1 |
| Mentoring programmes for female employees | 1 |
| Gender training for employees | 1 |
| Equal access to internal training | 1 |
| Specific sabbatical for women scientists | 1 |

According to the analysis, the career plans are not fully understood and promoted among employees, and it is planned to work on this issue.

The Štefan Schwarz Support Fund aims to create postdoctoral positions in the SAS. This fund does not explicitly promote support for female researchers, but its conditions may be seen through gendered lenses. According to the conditions, the possibility to get the fund for the postdoctoral position is limited to 4 years after the student graduates. This condition nevertheless reflects the issue of family life, and years spent on maternal or parental leave are not included in these four years. On the other hand, the fund is conditioned by 6-month research mobility (in some relevant cases, these criteria may not be taken into account), which may be a barrier for female researchers with children.

There are no formalised mentoring programs at all. It is planned to develop a mentoring scheme as a part of the HRS4R process, yet the particular focus on mentoring for women is not so far present. No training on GE for the employee is open at this time, although some workshops on recruitment and candidate selection may be organised as part of the HRS4R.

### 3.4. Gender balance in decision making

Dimensions of the Gender balance in decision-making show the distribution of women at the top of departments and relevant decision bodies at the level of the organisation. The qualitative indicators asses then the existence and implementation of specific targeted measures and broader policies that can contribute to more gender-balanced decision-making.

Table 55. Quantitative GEA indicators on gender balance in decision making (SAS)

| Title of the indicator | Value |
| :--- | :---: |
| Women among Directors (at the top) of the university/organisation in: | 0 |
| - Previous term | 0 |
| Proportion of women in the Presidium of SAS (\%) in: | $\mathrm{n} / \mathrm{a}$ |
| - Previous term | 20 |
| Proportion of women in the Scientific Council of SAS (\%) | 18,2 |
| Proportion of women among directors of institutes/cetres (\%) (out of 47 institutes) | 38,3 |
| Proportion of women among deputy directors of institutes/centres (\%) | 34,5 |

The gender disparity in representation in the SAS is most pronounced in management. A woman has never headed the Slovak Academy of Sciences, and there are only three female members of the current Presidium of the Slovak Academy of Sciences, comprising $20 \%$ of women. In the Scientific Council of the SAS, $18.2 \%$ are women (including external members and members).
There are 18 women in the position of Institute/Centre Director out of 47 positions ( $38,3 \%$ ), and $20(34,5 \%)$ women out of 58 deputy directors positions.

## Table 56. Qualitative GEA indicators on gender balance in decision making (SAS)

Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer

| No. | Title of the indicator | SAS |
| :---: | :--- | :---: |
| 25. | Gender-integrated leadership programme | 1 |
| 26. | Gender training for managers | 1 |
| 27. | Targets/quotas for gender balance in boards and committees | 1 |

According to the audit, there is a gender misbalance in management and decision-making bodies favouring men. Quotas or targets for the more genderbalanced representation in boards and committees are not set. Trainings and mentoring programs for leaders are also limited and identified as issues that need to be developed during the HRS4R (SAS, 2019b).

### 3.4.1. Gender balanced working conditions

In the area of working conditions, the audit on quantitative data collection focused on an area of pay inequalities, career breaks due to caring responsibilities precarious working conditions defined as the work contract less than 12 months. A particular set of indicators targets the prevention of sexual harassment in the workplace.

Table 57. Quantitative GEA indicators on gender balance in working conditions (SAS)

| Title of the indicator | Value |
| :---: | :---: |
| Gender pay gap of all employees based on average gross monthly wage (\%) | 9,2 |
| Gender pay gap in the organisation by R\&D occupations (\%): |  |
| - Independent researchers (\%, data provided only from 15 out of 47 institutes in SAS) | -8,25 |
| Researchers (\%, data provided only from 15 out of 47 institutes in SAS) | 2,93 |
| Technicians | n/a |
| Other supporting staff | n/a |
| Gender pay gap in the organisation among A-grade academics (\%) | n/a |
| Proportion of persons employed part-time among researchers by sex (\%) (W/M) | 33/67 |
| Proportion of persons working on fixed-term contracts among researchers, by sex (\%) (W/M) | 56/44 |
| Proportion of women working on fixed-term contracts less than 12 months long | 45 |
| Proportion of women working on a contract based on agreements outside the employment relationship | 48 |
| Annual number of researchers on maternity/paternity or parental leave in the given year by sex (W/M) | 62/6 |
| Number of working days spent on maternal leave for all caregivers (W/M) | 3395/638 |
| Number of working days spend on parental leave for all caregivers (W/M) | 10089/178 |

Equal pay measures are grounded in the Slovak legislative (e.g. Antidiscrimination Act, Act no. 553/2003 Coll. Act on Remuneration of Certain Employees in the Performance of Work in the Public Interest and on Amendments to Certain Acts). Fixed pay measures are defined by qualification (education, years of working). Other parts of the salaries as extra remuneration for work are flexible and are in the competence of the institutions, often tied to project funding. Based on the experience from the Gender Equality Audit, several research institutions of SAS are unwilling to uncover all the information about the salaries (even when the data are anonymised).

The findings on the gender pay gaps are incomplete and have significant limits. Total gender income difference at the level of SAS in unadjusted form could not be identified due to the unwillingness to provide the data. Only 23 research institutes out of 47 provided data covering all their regular staff and 15 organisations provided a detailed breakdown of the data: separately for all scientists and their subset - independent researchers. Analysis of these incomplete data indicates the gender pay gap of all regular employees at the level of $9.2 \%$ to the detriment of women. For the researchers, the gap is smaller at almost $3 \%$, to the detriment of women. Paradoxically, in the subcategory of independent researchers, the gap was to the detriment of men, $8.25 \%$. This is probably a specific situation in the environment of the 2nd department sciences (where the vast majority of the 15 organisations in question were). Women's career acceleration is evident in this environment (this finding can be confronted with a consistent trend of representation of women in category personnel (senior researchers), which is the highest in the medical sciences, agricultural and natural. The ambition to identify pay gaps for the future is to find out the total gender income difference for all components of SAS, but also the differences in personal allowances, bonuses, and the breakdown of individual departments of the SAS.

Table 58. Qualitative GEA indicators on gender balance in working conditions (SAS)

Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer

| Title of the indicator | Value |
| :--- | :---: |
| Equal pay measures | DK |
| Pay transparency policies | 1 |
| Gender pay audits/equality pay reports prepared and publicly available | 1 |
| Appropriated workload and content of the work policy | 1 |
| Healthy and safe workplace/university environment policy | 4 |
| Non-discriminatory equipment necessary for work/research measures | 1 |
| Possibility to work part-time | 4 |
| Flexitime | 4 |
| Telework | 4 |
| Maternity institutional policy | 1 |
| Paternity institutional policy | 1 |
| Child care support (internal kindergarten, on-demand/flexible child care support, etc.) | 3 |
| Support/subsidise childcare services | 1 |
| Support for re-entry after leave periods | 1 |
| Teaching free period after returning from parental leave | DK |
| Family and baby-friendly environment for employees/students | 1 |
| Policy on care for elder/dependent family members of employees | 1 |

Pay transparency policies are missing on the academic level, and no reports on equality in pay are public. However, the reason for this situation may be diverse. One hypothesis may be related to the risk of discriminatory practice. A rivalry among the institutions and a fear about the future funding may be why not to be willing to publish the current salaries and income from projects.

Appropriated workload, the content of the work policy, health and safe workplace environment is guaranteed by the existing legislative policies (e.g. Labour Code). Possibilities for part-time work, flexi-time or telework exist within the academy and are used. The SAS does not have any particular or above-standard paternal policy; it must follow existing legislative regulations described in the previous chapter.

According to the HRS4R there is a plan to establish a kindergarten/daycare center for children. This effort was also present in the past (around the year 2006) as a recommendation from the Commission of the SAS for Equal Opportunities. The previous actions for the daycare centre ended after a few months due to lack of demand (other reasons are not evaluated or publicly recorded). Additional support for childcare services within the academy does not exist.

The guaranty of re-entry to the same position exists in the case when the employee (woman or man) take a maternal/paternal leave and has worked under a permanent working contract. Otherwise, the organisation does not have to prolong the contract with an employee (e.g., when an employee works for the
project for a fixed period or at the beginning of her/his career, s/he has a right to receive only a fixed-term contract for two years).

No special measures, programs and policies focused on families (such as special baby-friendly environment, policy to support elder/dependent family members) are set. For example, a break for breastfeeding is defined in the Labour Code (2 breaks until a child is six months old, one break for a child up to 1-year-old), but no special utilities are provided.

Table 59. Indicators on adverse social behaviour at the workplace (SAS)
Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer

| Title of the indicator | Value |
| :--- | :---: |
| Internal guidelines/measures on the use of non-sexist language in internal and external <br> communication | 1 |
| Bodies mandated to implement and monitor policy of 'non-discrimination on the basis of <br> gender. | 4 |
| Specific person/committee/commission responsible for harassment at the institutional level | 4 |
| Protocol for preventing and tackling sexual harassment and gender-based violence | 1 |
| Promotion of awareness measures to prevent harassment, sexist attitudes | 1 |

In Slovakia, most public institutions use generic masculinum in their materials and webpages. The Slovak Academy of Sciences dominantly uses generic masculinum, and it is probably a personal initiative when gender-sensitive language is used.

Even though a commission exists, its competencies are limited or not fully applied. Systematic implementation and monitoring of GE policies are missing. The issue of sexual harassment and gender-based violence is not covered by internal policies and procedures (only as defined in the legislative regulations).

### 3.5. Gender balance in research outputs

Gender balance in research outputs looks, for example, at the distributions of the funding success between the female and male grants beneficiaries and measures like integrating the gender-sensitive approach into the teaching or gender analysis in the research.

Table 60. Quantitative GEA indicators on gender balance in research outputs (SAS)

| Title of the indicator | value |
| :--- | :---: |
| Funding success rate difference between women and men principal investigators <br> applying for the national research funds for the given year: |  |
| Applicants W/M | $28 / 26$ |

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| Beneficiaries W/M | 129/262 |
| :---: | :---: |
| Funding success rate difference between women and men principal investigators applying for the international research funds for the given year: |  |
| Applicants W/M | 3/14 |
| Beneficiaries W/M | 66/90 |
| The average grants' amounts allocated to research projects conducted by men and women - principal investigators from national research funds for the given year (EUR): |  |
| Lead by women | n/a |
| Lead by men | n/a |
| The average grants' amounts allocated to research projects conducted by men and women - principal investigators (international research funds) for the given year (EUR): |  |
| Lead by women | n/a |
| Lead by men | n/a |
| Funding success rate difference between women and men national coordinators within international consortium applying for the international research funds for the given year: |  |
| Applicants (W/M) | 28/34 |
| Beneficiaries (W/M) | 82/187 |
| The ratio of the first authorship to the authorship by men and women in the Scientific Section of SAS ${ }^{56}$ |  |
| - Section 1 (Physical, Space, Earth, and Engineering Sciences) | 1,714 |
| - Section 2 (Life, Chemical, Medical, and Environmental Sciences) | 1,291 |
| - Section 3 (Social Sciences, Humanities, Arts, and Culture) | 1,074 |

In the gender audit, we looked at the proportion of women principal investigators in each type of national and international project. In 2020, women accounted for a total of $40 \%$ of principal investigators of national projects and $43 \%$ of women principal investigators of international projects of type A projects (i.e. the SAS organisation is the principal research institute) and $31 \%$ of type $B$ international projects (the SAS organisation is a co-investigator). These proportions are close to the actual representation of women scientists ( $44 \%$ women), but not the proportion of women researchers with the highest scientific qualifications.

For national A projects, men are more successful than women (4.7 times more successful). However, the opposite trend is present in international projects, where women are more successful overall when comparing submitted and ongoing projects (10.8 times more successful). Again, the success rate in the ratio of submissions to awards is for international type B projects.

Overall, the success rate in terms of the number of projects submitted is skewed in favour of men ( 2.3 times more successful). These figures represent a cross-section for the year 2020, so they do not consider possible distortions due to grant call announcements, etc. Together with the indicators of the high proportion of women as first authors of cutting-edge scientific publications, however, they promise the possibility of positive developments.

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One of the SAS specific indicators relating to the outputs - performance is the index presenting the ratio of the first authorship to the authorship by men and women in SAS in top scientific publications. This index is relative, based on the actual status of female/male authorship and does not show how many female and male authors, or first authors, there are in absolute numbers. It only expresses the ratio of women to men in the categories of first authorship and authorship. The baseline parameter was the proportion of women to men in the authorship category. The figures in the table show that in the case of the first authorship, the ratio of women to men is 1.05 to 1.738 times greater than that of the overall authorship category. Relatively, the highest proportion of female first authorship is in Section 1 of the sciences (1.714). The lowest, but still above 1.0, is in the 3rd Section of Sciences (1.074). Thus, in Section 3 of the sciences, women figure as first authors (compared to men) about the same as they figure in the authorship category.

## Table 61. Qualitative GEA indicators on gender balance in research outputs (SAS)

Legend: 1 - Was never implemented; 2 - Planned to be implemented; 3 - Was implemented in the past; 4 Currently being implemented; 5 -In place but not used; DK - Don't know/No information available; N/A; Other (specify) - Include comments or specify your answer

| Title of the indicator | Value |
| :--- | :---: |
| Gender lectureships to assist faculties/departments on how to mainstream gender equality | 1 |
| Integration of a gender-sensitive approach into teaching | 1 |
| Integration of gender analysis into research | DK |
| Integration of women's and gender studies into the curriculum of bachelor/Master courses | 1 |
| The gender perspective in the research funding schemes | 1 |
| The integration of the gender perspective in submitted and funded projects; | 1 |
| Finances for research projects primarily devoted to gender aspects allocated | 1 |
| Sex-segregated data on research funds | 1 |
| Sex-disaggregated data about students | 1 |
| Sex-disaggregated data about staff | 1 |

Currently, no specific measures or policies are integrating the gender balance in the research outputs.

## 4. Identified gender biases at the Slovak Academy of Sciences

### 4.1. Outcomes of the staff survey

Approximately 290 respondents have been included in the following analysis. The number varies upon the responses to the particular questions. Women comprise $59 \%$ and men $38 \%$. Most of the respondents, $90 \%$, are researchers, $40 \%$ junior and $33 \%$ senior. PhD candidates include an additional $20 \%$. Most of the
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researchers, nearly 50\%, have been from the natural sciences, $28 \%$ less than 30 years old and $52 \%$ in the age category $31-50$ years. ${ }^{57}$

## \# Perception of gender equality in research

Based on the survey results, the perception of gender equality in research is relatively positive. According to the respondents, gender equality in SAS increases fairness in the workplace for most respondents (65\%) or is important to them personally ( $63 \%$ ). Gender equality as a burden to management, formality due to EU funding or an ideology is perceived by less than $20 \%$ of respondents.

Table 62. Perception of gender equality in research ( $\mathrm{N}=291$ ) (SAS)

| Gender equality in my organisation ..... | Disagree | Neither <br> disagree <br> nor <br> agree | Agree |
| :--- | ---: | ---: | ---: |
| Increases the fairness of the working <br> environment. | $13 \%$ | $22 \%$ | $65 \%$ |
| Improves the quality of scientific performance. | $14 \%$ | $32 \%$ | $54 \%$ |
| Increases the bureaucracy in the organisation. | $45 \%$ | $36 \%$ | $19 \%$ |
| Makes it easier to balance work and family. | $16 \%$ | $38 \%$ | $45 \%$ |
| Is important for me personally. | $16 \%$ | $21 \%$ | $63 \%$ |
| Puts too much burden on the management to <br> regulate employees. | $49 \%$ | $32 \%$ | $19 \%$ |
| I only a conditionality for some EU research <br> funding without any importance. | $48 \%$ | $33 \%$ | $19 \%$ |
| Gender equality is an ideology enforced by <br> liberals. | $60 \%$ | $23 \%$ | $17 \%$ |

Q10: Please tell me to what extent you agree or disagree with the following statements? Gender equality in my organisation... The 5-grade scale was: Strongly disagree, disagree, neither disagree nor agree, agree and strongly disagree. The table presents merged categories: Disagree = (strongly disagree + disagree) and agree = (agree + strongly agree).

Only a minority of respondents revealed any gender stereotypes regarding women's suitability for science careers or performance. More than $80 \%$ agree that women are as capable of thinking logically as men, and 88\% disagree that women are not suited for specific research fields. Additionally, two-thirds of respondents disagree that men are better in technologies; $21 \%$ neither agree nor disagree. There are no significant differences between women's and men's views.

Table 63. Gender stereotypes in research ( $\mathrm{N}=289$ ) (SAS)

|  | Disagre <br> e | Neither <br> disagree | Agree |
| :--- | :---: | :---: | :---: |

[^29]|  |  | nor <br> agree |  |
| :--- | ---: | ---: | ---: |
| It is more important to encourage boys than <br> encourage girls to pursue a science career. | $79 \%$ | $15 \%$ | $6 \%$ |
| Women are not suited for specific research fields. | $88 \%$ | $6 \%$ | $6 \%$ |
| Men have higher chances in the research, as they <br> have more innovative and creative thinking. | $83 \%$ | $9 \%$ | $8 \%$ |
| Women are just as capable of thinking logically as <br> men. | $6 \%$ | $9 \%$ | $85 \%$ |
| Men scientists are better at information <br> technologies and using technical equipment than <br> women scientists. | $64 \%$ | $21 \%$ | $16 \%$ |

Q11 Please indicate the degree to which you agree or disagree with the statements using the scale below. The 5-grade scale was: Strongly disagree, disagree, neither disagree nor agree, agree and strongly disagree. The table presents merged categories: Disagree $=$ (strongly disagree + disagree $)$ and agree $=$ (agree + strongly agree $)$.

Zooming, however, to more specific issues of gender equality, the awareness of its importance decreases. For example, $40 \%$ of respondents ( $34 \%$ women and $54 \%$ men) do not consider the proportional distribution of men and women in the workplace important. On the other hand, $27 \%$ of respondents ( $37 \%$ women and $12 \%$ men) perceive that there are more women in their workplace and the number of men should increase.

Table 64. Views on the gender balance in the working teams ( $\mathrm{N}=293$ ) (SAS)

|  | All | Women | Men |
| :--- | ---: | ---: | ---: |
| More women than men, and it should remain as it <br> is. | $7 \%$ | $8 \%$ | $6 \%$ |
| More women than men and the number of men <br> should increase. | $27 \%$ | $37 \%$ | $12 \%$ |
| About the same number of men and women. | $12 \%$ | $12 \%$ | $10 \%$ |
| More men than women, and it should remain as it <br> is. | $1 \%$ | $0 \%$ | $3 \%$ |
| More men than women and the number of <br> women should increase. | $8 \%$ | $5 \%$ | $11 \%$ |
| That is not the point; it is not important. | $42 \%$ | $34 \%$ | $54 \%$ |
| Don't know. | $5 \%$ | $5 \%$ | $5 \%$ |

Q12 Are there more men or more women in your department? Choose one of the following answers

As to the perceived equal opportunities for women and men in recruitment, career progress or grants decisions, most respondents consider that neither men nor women are preferred, and the chances are equal for both genders. Nevertheless, around $16 \%$ of respondents perceive that men are slightly preferred in all situations. The advantage of men is perceived the most in appointing to managerial positions (28\%) and in the pursuit of a better working position (18\%). A gender pay imbalance, or in terms of other situations, are not reflected.
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Table 65. Views on gender fairness in opportunities ( $\mathrm{N}=290$ ) (SAS)

|  | Women <br> preferre <br> d | Women <br> and men <br> equal | Men <br> preferr <br> ed |
| :--- | ---: | ---: | ---: |
| When a decision is made about hiring <br> someone. | $6 \%$ | $65 \%$ | $14 \%$ |
| When appointing people to top managerial <br> positions. | $3 \%$ | $59 \%$ | $28 \%$ |
| When employees are striving for a better <br> position. | $2 \%$ | $65 \%$ | $18 \%$ |
| When the issue is salary or bonuses. | $2 \%$ | $63 \%$ | $15 \%$ |
| When decisions about grants for submitted <br> projects are made at the national level. | $4 \%$ | $59 \%$ | $12 \%$ |
| When decisions about grants for submitted <br> projects are made at the international level. | $6 \%$ | $56 \%$ | $9 \%$ |

Q13 Below is an outline of several situations. Please, give your opinion on how the respective situation reflects your workplace in your organisation. Do women and men have the same chances or are women disadvantaged or - to the contrary - are they at an advantage? Rate each situation on the scale below.

We look into the gender-equal distribution of tasks and resources. Most of the items surveyed have been perceived as equally distributed. However, assignment of important tasks and roles, access to informal circles of influence and recognition of intellectual contributions were recognised as an advantage towards men by a quarter of the respondents. On the other side, administrative tasks and service roles are perceived as disproportionally distributed towards women.

Figure 26. Perceived unequal gender advantages in distribution of tasks and resources (in \%, N=230) (SAS)

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Notes: Advantage towards women was calculated as the sum of answers from 1 to 3 , neutral $=4$, advantage towards men $=$ sum of answers from 5 to 7 . Only applicable items are included
Q14 How do you perceive the distribution of tasks and recourses in your department? Do you perceive an advantage towards women or an advantage towards men in the following items? Rate each of the following items on a scale where 1 means advantage towards women and 7 means an advantage towards men.

Among the private life aspects impacting the career, the most negative impact is caused by taking any parental leave (59\%), Having a supportive family and/or partner (83\%) and not having children or other caring responsibilities (61) were revealed as the most rated positive aspects impacting the career. Considering the work and performance aspects having a positive impact on the career in SAS, the results are unambiguous. The most rated positive elements are relevant research outputs, flexible working hours, being involved in projects, and successfully applying for grants. One of the most rated positive aspects was also "being lucky" This indicates that $81 \%$ of the respondents also rely on coincidence and not on their efforts. On the other side, having a heavy administrative load is perceived as the most relevant aspect having a negative impact.

Figure 27. Perceived private life aspects and characteristics having a positive or negative impact on career ( $N=195$, \%) (SAS)


Note: Negative impact calculated as the sum of answers from 1 to 3, neutral $=4$, positive impact $=$ sum of answers from 5 to 7; only applicable items included.
Q15 Which of the following aspects related to your private life and characteristics had a positive and which negative impact on your career? Rate each of the following items on a scale from 1 to 7 , where 1 is strong negative impact and 7 strong positive impact.

## \# Gender balance in recruitment and career development

Most of the respondents obtained their current post in the SAS by following three ways of recruitment: Application for an advertised post (26\%), by invitation or nomination without examination (21\%), and competitive examination (21\%).
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For career development, having opportunities for training is an advantage. We inspected the employees' options in training and if there were any differences by gender. The training most often received was devoted to grant and funding applications skills (39\%) and professional development (36\%). Training on biases and diversity was provided to only $3 \%$ of the respondents. Zooming to disaggregation by gender, we see that men have generally received more training of all kinds except language courses, funding, HR, and biases. More women than men have not received any training in the last three years.

Figure 28. Training received in the last three years by gender ( $\mathrm{N}=285$, multiple choices, \%) (SAS)


Q18 We are interested in the training opportunities available to you in the last 3 years at your institution. Please indicate which, if any, of the following you have received. Tick all that apply to you.

Based on the gender equality audit, we revealed a gender imbalance in higher positions. Therefore, we surveyed if women and men have applied for promotion in the last 3 years. It is evident that there are few opportunities for both men and women for promotion in general. Either they are not eligible ( $23 \%$ ), or there is no position above (15\%). This is more often the case for women. Also, fewer women than men applied and were successful ( $14 \%$ to $16 \%$ ), and fewer women were satisfied with their current position ( $22 \%$ to $27 \%$ ).

Law regulates the wages in SAS as a public research organisation. Nevertheless, some parts of the salaries are based on other than transparent remuneration criteria. Without adjustment to the working contract of occupation or position in the academy, we found out that $60 \%$ of the respondents' annual gross salary fell in the range from $€ 10000$ to $€ 20000$. Higher income is rare hence
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more men than women receive wages higher than $€ 20000$ annually. We asked if the respondents applied for a salary increase in the last 3 years. No additional increases were available (39\%), or the respondents were not eligible for an increase (17\%). Out of those who applied and have been successful ( $9 \%$ ), $7 \%$ of women and $10 \%$ of men have experienced salary increases.

## \# Gender balance in striving for scientific degree

Obtaining the highest scientific degree is considered equally easy or difficult for women and men by $47 \%$ of respondents. The opinion of women, however, differs from the men's. For example, $36 \%$ of women to $63 \%$ of men see no gender imbalances for the highest scientific degree. On the contrary, $43 \%$ of women to $\mathbf{2 6 \%}$ of men perceived that men have it slightly or easier than women to gain the highest degree. And the gender differences continue. For example, $30 \%$ of women and $14 \%$ of men agree that some requirements for the highest qualification degree are more difficult to meet for women or men. The rest of the respondents do not see any inequality in the conditions.

Table 66. Perception of equal opportunities in obtaining the highest scientific degree (\%) (SAS)

|  | Women (N=155) | Men N=111) |
| :--- | ---: | ---: |
| Slightly easier for a woman. | $0,6 \%$ | $3,6 \%$ |
| The same for women and men. | $36,1 \%$ | $63,1 \%$ |
| Slightly easier for a man. | $23,2 \%$ | $16,2 \%$ |
| Easier for a man. | $19,4 \%$ | $10 \%$ |
| Much easier for a man. | $15,5 \%$ | $0 \%$ |

Q20 Do you feel it is easier for a man or a woman to obtain the highest scientific/academic degree? Choose one option.

The most rated obstacles to gain the highest scientific degree are the time constrains related to family and work reconciliation (56\%). Further barriers identified are time constraints to reconcile with other work and low financial coverage. Except for the financial constraints, all the obstacles are perceived by women more intensively than by men.

Table 67. Obstacles to obtaining the highest scientific degree in SAS (\%) (SAS)

|  | No <br> obstacle | Neither <br> yes nor <br> no | Obstacle |
| :--- | ---: | ---: | ---: |
| Low financial coverage. | $23 \%$ | $26 \%$ | $50 \%$ |
| Time constraints to reconcile with other work. | $19 \%$ | $30 \%$ | $51 \%$ |
| Time constraints to reconcile with family <br> responsibilities. | $17 \%$ | $27 \%$ | $56 \%$ |
| Wasted time in developing projects that are <br> rejected. | $24 \%$ | $30 \%$ | $46 \%$ |
| Low space for research. | $36 \%$ | $31 \%$ | $34 \%$ |
| Limited internship and study visits abroad. | $38 \%$ | $35 \%$ | $28 \%$ |

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Q26 What are the obstacles to obtaining the highest scientific/academic degree, according to you? Please rate each item on the scale.

In terms of satisfaction with the distribution of working capacity (divided usually to administration, research activities and teaching), women and men are equally satisfied or dissatisfied. Nevertheless, more men are very satisfied and more. Despite that family and caring responsibilities are perceived as the main obstacles in women's careers, $66 \%$ of respondents ( $61 \%$ of women and $71 \%$ of men) disagree that only single women without children can achieve excellence in science. On the other side, $75 \%$ of respondents ( $85 \%$ of women and $64 \%$ of men) agree that men usually get much ahead in research while women have minor children. Also, more than $51 \%$ of respondents disagree that women are less ambitious to achieve the highest scientific degree. Paradoxically, more men (58\%) than women (47\%) disagree with this statement.

Figure 29. Degree of agreement with the statements related to the equal opportunities in a scientific career ( $\mathrm{N}=270$, \%) (SAS)


Q29 Please indicate the degree to which you agree or disagree with each statement related to the scientific/academic career. Use the scale 5-grade scale from strongly disagree to disagree strongly. The 5-grade scale was: Strongly disagree, disagree, neither disagree nor agree, agree and strongly disagree. The table presents merged categories: Disagree = (strongly disagree + disagree) and agree= (agree + strongly agree).

## \# Gender balance in decision-making

SAS is scoring low in gender balance in decision-making. Based on the gender equality audit, $20 \%$ were women in SAS Presidium. Therefore, we looked at some contextual information on the low women's participation in top decision posts. The survey sample was relatively skewed regarding respondents being in any decision-making position in SAS. More than $80 \%$ out of 262 respondents refer to
any of the managerial position. However, most of them have been a leader in scientific projects. Without this position, the share of respondents in leadership positon would drop to 49\%. Additionally, respondents in a decision-making position at the highest level of SAS comprised $20 \%$.
The most frequent reason for not being in any decision-making position was that women ( $28 \%$ ) felt too young for the post. However, this might be caused by the sample structure, where $21 \%$ have been PhD candidates, and $\mathbf{2 8 \%}$ are younger than 30 years. Men's most frequent reason is no interest ( $36 \%$ ). Both genders per $15 \%$ consider the time contains and little practice ( $13 \%$ of women and $17 \%$ of men) as additional reasons for not being in any leadership position.

Table 68. Reasons for not being currently in any decision-making position by gender (\%) (SAS)

|  | Women (N=89) | Men (N=69) |
| :--- | ---: | ---: |
| Too young for the position | $40 \%$ | $28 \%$ |
| Not interested | $27 \%$ | $36 \%$ |
| Time constrains | $15 \%$ | $15 \%$ |
| Too little practice | $13 \%$ | $17 \%$ |
| Applied but not successful | $6 \%$ | $4 \%$ |

Q31 If you are currently in no decision-making position, what reasons do you have for this? Choose one option that most applies to you.

We asked about the mechanisms and ways of being elected in any managerial position. Working experiences ( $76 \%$ of respondents agreed) is the base. However, social contacts (70\% agreed) and informal networks (67\% agreed) are critical. Warring is that only $46 \%$ of respondents agree that being in a managerial position is exclusively based on competencies. This is also seen in the average agreement rating with the particular ways. The lower the average, the lower the agreement. The competencies are rated considerable lower in general, especially by men. Women agree more than men with other ways, especially working experience and social contact are essential for women being elected into a decision-making position. This might indicate that women might feel at a disadvantage as their social contact within the organisation might be less intensive than men due to time and caring responsibilities constraints.

Figure 30. Rate of agreement with the current ways and mechanisms in the election into the decision-making (Average rating, the higher the number - the higher the agreement, $\mathrm{N}=257$ ) (SAS)


Q32 What do you think, what are the current ways and mechanisms in the election into the decisionmaking position in your organisation? Scale: Strongly disagree, disagree, neither agree not disagree, agree, strongly agree, don't know

When asking about an experience with awarding the decision-making position to a man instead of a woman or a woman instead of a man despite the expert and educational requirements having been the same, $76 \%$ respondents presented no such experience. 3\% of women and $1 \%$ of men experience such unfairness personally, $3 \%$ of men know a case when women were denied, and $2 \%$ of men know cases when a man was denied. More than $21 \%$ did not know.

The gender biases and simplified generalisation on the attributes of women and men in terms of their leadership competencies can hold women back in striving for a managerial position, or men can ascribe false expectations when proposing or voting for a woman. We investigate the gender biases via a degree of agreement with selected assumptions about women and men related to their leadership. Positive findings are that more respondents disagreed than agreed with all the stereotypes except those related to competitiveness and assertiveness. For example, 37\% agree that men are more competitive than men, and $28 \%$ agree that women are less assertive than men. Worth mentioning that about one-fifth of the respondents are ambiguous in the assessment. That means that these people might be biased towards women in leadership positions of SAS.

Table 69. The degree of agreement with gender biases related to leadership by gender ( $\mathrm{N}=264, \%$ ) (SAS)

|  |  | Disagre <br> e | Neither <br> agree <br> nor <br> disagre <br> e | Agre <br> e |
| :--- | :--- | :--- | :---: | :---: |
|  | Women | $66 \%$ | $21 \%$ | $7 \%$ |


| Women in the academy/research are not interested in decision-making positions. | Men | 63\% | 23\% | 8\% |
| :---: | :---: | :---: | :---: | :---: |
| Men are more competitive than women. | Women | 34\% | 25\% | 42\% |
|  | Men | 47\% | 22\% | 31\% |
| Women are less assertive than men. | Women | 36\% | 35\% | 37\% |
|  | Men | 49\% | 32\% | 15\% |
| Men are naturally more suited for leadership. | Women | 60\% | 27\% | 12\% |
|  | Men | 63\% | 26\% | 10\% |
| Women are too emotional to be in a leading position. | Women | 71\% | 19\% | 9\% |
|  | Men | 66\% | 26\% | 7\% |
| It is natural that men are in leading positions and women do service/supporting work. | Women | 83\% | 11\% | 5\% |
|  | Men | 73\% | 20\% | 7\% |

Q34 Please indicate the degree to which you agree or disagree with each statement related to the decision-making positions. Use the scale below. The 5-grade scale was: Strongly disagree, disagree, neither disagree nor agree, agree and strongly disagree. The table presents merged categories: Disagree= (strongly disagree + disagree) and agree $=$ (agree + strongly agree).

## \# Gender balance in working conditions

More men than women work part-time in SAS. Part-time is not used primarily as a flexible work arrangement to reconcile work and family. Instead, it is used more due to men's higher age and pre-retirement period.
The workload in SAS is high. First, we surveyed how often women and men work outside their regular working hours. Only around $17 \%$ of the respondents never worked on weekends, more than 10 hours per day or during holidays. The rest needed to accomplish their tasks outside the regular hours. Women more than men work very often during the weekend and holidays. Men, on the other side, they work more often in comparison to women more than 10 hours per day. This might be caused by the fact that it is usually the woman who cares for children every day and needs to follow the closing hours of kindergartens or children clubs.

Table 70. Working outside the regular working hours in a month by gender (\%) (SAS)

|  |  | Never | Rarely | Sometimes | Very often |
| :--- | :--- | :--- | :--- | :--- | :--- |
| On weekends | Women | $25 \%$ | $30 \%$ | $25 \%$ | $22 \%$ |
|  | Men | $21 \%$ | $28 \%$ | $34 \%$ | $18 \%$ |
| More than 10 hours per day | Women | $11 \%$ | $30 \%$ | $40 \%$ | $19 \%$ |
|  | Men | $9 \%$ | $33 \%$ | $36 \%$ | $22 \%$ |
| During holidays | Women | $20 \%$ | $26 \%$ | $30 \%$ | $23 \%$ |
|  | Men | $21 \%$ | $29 \%$ | $34 \%$ | $17 \%$ |

Q37 Normally, how often a month do you work in your organisation...?
$6 \%$ of respondents are primary carers or assistants for an adult (4\% of women and $8 \%$ of men), and $34 \%$ of respondents ( $39 \%$ of women and $29 \%$ of men) are parents or guardians of a child younger than 17 years. $49 \%$ of women and $5 \%$
of men took at least one type of leave dedicated to caring. Despite the increasing number of men taking maternity leave (they are as eligible as women since 2011), only $1 \%$ of men in the sample use these opportunities. Specific paternity leave does not exist in Slovakia, but 3\% of men and 3\% of women marked this kind of leave in the survey.

Women have more problems than men to reconcile personal and working duties. One-third of women (34\%) experience coming home from work and being too tired doing chores several times a week (to $13 \%$ of men), and $17 \%$ of women (to $8 \%$ of men) have difficulties in fulfilling personal commitment because of time spent at work several times per a week. More men than women have never experienced problems reconciling personal and work commitments.

The hardship to fulfil all the work and personal/family commitments might contribute to overall dissatisfaction with the career prospects or insecurity in job maintenance. More women than men disagree that their job offers good prospects for career advancement, and fewer women feel motivated to best job performance. On the other side, $10 \%$ of men and $8 \%$ of women thigh that they might lose their job in the next 6 months. These might, however, be related to the frequent short-term working contract that the researchers are allowed to be offered more times in a row. This kind of contract contributes to the job insecurity in the research in general.

Table 71. Views on the job prospects and maintenance (N=255, \%) (SAS)

|  |  | Disag <br> ree | Neith <br> er <br> agre <br> enor <br> disag <br> ree | Agr <br> ee |
| :--- | :--- | :--- | :--- | :--- |
| My job offers good prospects for career <br> advancement. | Wo <br> men | $19 \%$ | $26 \%$ | 53 <br> $\%$ |
|  | Men | $14 \%$ | $23 \%$ | 62 <br> $\%$ |
| The organisation I work for motivates me to give <br> my best job performance. | Wo <br> men | $21 \%$ | $33 \%$ | 45 <br> $\%$ |
|  | Men | $26 \%$ | $18 \%$ | 56 <br> $\%$ |
| I might lose my job in the next 6 months. | Wo <br> men | $64 \%$ | $10 \%$ | $8 \%$ |
|  | Men | $59 \%$ | $15 \%$ | 10 <br> $\%$ |

Q43 To what extent do you agree or disagree with the following statements about your job? The 5-grade scale was:
Strongly disagree, disagree, neither disagree nor agree, agree and strongly disagree. The table presents merged categories: Disagree $=$ (strongly disagree + disagree) and agree $=$ (agree + strongly agree).
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## \# Bulling and harassment at workplace

Despite highly qualified women and men working in the academy, bullying or harassment micro-attacks occur at the workplace. Overall, $46 \%$ of respondents experienced at least rarely inadequate and unfair critics, $34 \%$ inappropriate remarks about their skill and competencies. In addition, $24 \%$ came across at least rarely with inappropriate comments about appearance or clothes.
Except for emails with sexual context and verbal and nonverbal abuse threats, all the other micro-attacks have been experienced by women more often (at least "rarely") than by men. However, the difference in experience with the adverse workplace behaviour is not high, and both women and men faced such an inappropriate encounter.

Table 72. Experience with bullying or harassment at the workplace by gender ( $\mathrm{N}=262$, \%) (SAS)

|  |  | Nev er | Rar ely | Someti mes | Very often |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inappropriate comments about my appearance or clothes. | Women | 72\% | 20\% | 5\% | 3\% |
|  | Men | 82\% | 13\% | 4\% | 1\% |
| Inappropriate remarks about my skills and competencies. | Women | 64\% | 27\% | 6\% | 3\% |
|  | Men | 67\% | 21\% | 11\% | 1\% |
| Inadequate and unfair critics. | Women | 54\% | 30\% | 14\% | 3\% |
|  | Men | 55\% | 28\% | 15\% | 2\% |
| Humiliation and degrading. | Women | 80\% | 7\% | 11\% | 2\% |
|  | Men | 82\% | 10\% | 6\% | 2\% |
| Unwanted physical or sexual contact. | Women | 91\% | 6\% | 3\% | 0\% |
|  | Men | 98\% | 2\% | 0\% | 0\% |
| Unwanted phone calls, emails, voice/text messages, pictures or videos with sexual subtext | Women | 97\% | 1\% | 1\% | 0\% |
|  | Men | 90\% | 8\% | 2\% | 0\% |
| Threats of verbal, nonverbal, psychological or physical abuse. | Women | 88\% | 7\% | 4\% | 1\% |
|  | Men | 89\% | 9\% | 3\% | 0\% |

How often have you experienced the following behaviour at your workplace?
The experience of adverse social micro-attacks, gender unfairness, and overall working conditions might impact the employees' job satisfaction. Most women and men in the academy are satisfied with their current job. Nevertheless, more men than women are very satisfied and more women than men are neither satisfied nor dissatisfied or dissatisfied.

Figure 31. Degree of satisfaction with current job in the SAS ( $\mathrm{N}=256$, \%) (SAS)


Q46 How satisfied are you with your current job in the organisation?

### 4.2. Outcomes of the interviews and focus groups analysis

We are providing the summary of the outcomes from the interviews and focus groups in the merged chapter for several reasons. The identified themes and recommendations in both data collection methods regarding gender awareness, gender equality and a position of women were overlapping. Often, some themes have emerged in a focus group within some structural context, but deeper understanding of that issue were articulated in the interviews. Therefore, we prepared a merged analysis which allows us to show both the width and the depth of the identified issues.

Table 734. Overview of the identified themes in interviews and focus groups (SAS)

| Num | Main themes | Sub-themes and categories |
| :---: | :---: | :---: |
| \#1 | Gender awareness and attitudes | Ambivalence and discrepancies in: <br> - What gender is and what is the role of gender <br> - Support for GE <br> - Motherhood and work <br> - Female leadership <br> - Gendered work performance <br> - Gendered expectations <br> - Femininity paradox <br> Role of the SAS in GE |


|  |  | - GE as an institutional and social value <br> - Need for coordination <br> - Challenges of existing organisational culture ("Boys club") |
| :---: | :---: | :---: |
| \#2 | Bumps in the road for women in science | Working conditions in science <br> - Performance focus <br> - Gender workload <br> - Work-life balance <br> - Compensation of women when taking care of a child/children and continue working <br> Role of women <br> - Self-criticism and self-esteem <br> - Confusions in expectations (see also \#1) <br> - Prejudices and sexism <br> - Structural obstacles |
| \#3 | Gender equality as a part of a bigger cultural change | Human resources <br> - Salaries <br> - Fixed-term contracts <br> - Transparency in recruitment and career progression <br> Intersectionality <br> - Age <br> - Culture |

## \#1 Gender awareness and attitudes

Overall, ambiguity about gender issues was prevalent. Participants frequently articulated gender issues through terms as: (different) status of men and women in society, gender socialisation, equal opportunities, and links to the LGBT+ community (especially in the link to the trans community, where biological sex and perceived gender may not meet). Gender awareness is characterised by ambivalence. First of all, it is a question what is a gender, even though gender is seen as a social construct, but there are tendencies towards essentialism and biological determinism in the narratives. It is also connected to the role of gender in the narratives. Its direct impact on a participant` life is rarely articulated, yet its presence is emerging in the narratives.
"Men sometimes have such a tendency to ride alongside that woman on the fact that she'll do that little job however we know it."

Female researcher and leader
Also, the issue of gender equality brings confusion. Although generally supported, there is a fear of "radical" promotions of GE. Often, gender equality is articulated as a qualitative aspect, rejecting the quantitative indicators
(gender balance) as less important or arbitrary, or as those which can be reached when applying qualitative approaches.

> It's kind of humiliating for me, because they don't care about the qualifications, but my gender and my age is what they need in order to have a good evaluation again from some committee, commission, or something...
> Female researcher and leader
> "Do women see the SAS as a workplace where their professional and scientific ambitions can be fulfilled? What are the conditions for them when they have a family, when they drop out - if they have the conditions? That to me is the practice of gender equality, not just the numbers of men-women (...) Gender policy has to be something that is actively done, regardless of gender balance in the numbers."
> Male administrative staff

Other ambivalent issues exclusively related to women emerged like motherhood and work, female leadership, gendered work performance, gendered expectations and femininity paradox. Motherhood brings a delay in career, but delaying motherhood is judged. Working during childcare is underpaid, expected as a necessity, but it is a subject of critique. Female leaders are seen as progressive, but too soft. Women are expected to be perfect in performance, appearance, but they should not be ambitious or provocative. They are seen as physically weaker, but also they are seen as those who can adjust to any type of hard working conditions. And last but not least, feminine characteristics are not seen as useful in science, but they are expected and respected in women. These issues highlight the difficult positions for women and absence of ideal position which would not be a subject of critique.

Another topic discussed was the SAS` position in the promotion of GE. Gender inequalities are often rooted in the broader context, but a great agreement was on the important position of the SAS as a promoter of GE not only for the institution but also as a role model of social change. SAS should articulate GE as a value. It can only be reached through careful coordination (together with raising awareness) with the work of other projects (HRS4R) and commissions. Gender equality efforts should challenge the existing institutional culture, often referring as a "boys club."
"The problem - fundamental decisions are made in informal groups of men.
(...) It's like a "boys club."

## \#2 Bumps in the road for women in science

It was repeatedly emphasised that women in research face multiple burdens in working conditions. It is not just caring for the family (children, possibly their own elderly parents) and the household. Gender workload is also present in the division of labour at the institutes, which consists mainly of tasks beyond the job description or in the project administration.

> "But paradoxically, women are taken as more capable, so they have more work to do, including administrative work that someone has to do. This gives men more room for scientific activity."
> "More burden on women in administration - their scientific potential is not used. They don't have enough time for reading, networking Men are brought up to be thinkers and women are brought up to be the bees that do the administration for them."

Women also report to put a greater effort in their work in order to catch up with their male colleagues. It is often interconnected with the boys' club phenomenon mentioned above.

> "My feeling based on the experience I have is that in order to be where I am, I had to expend more energy than my male colleagues (...) Men very often ask for cooperation other men because they have access to them, as informal group..."

The nature of science is perceived as strongly masculinist and performanceoriented. The conditions in the evaluation of science are set a priori in a way that disadvantages women in the current social setting.

> "The fact that evaluation in science in Slovakia is generally poorly set is the another thing. It's just that there we have to publish like on a treadmill and just have amazing results to be able to publish in carentered journals and I don't know what. Really, these are terribly exaggerated demands, and certainly not ones that could be met by most women in Slovakia, for example."

Researcher and mother
Work-life balance is extremely challenging despite of existing welcomed working conditions in the SAS (e.g. home office, flexible working hours). Work in research is seen as passion and mission, therefore it took time during the weekends, free time and often young childless women articulate worries about the possibilities of balance the future family and work. During the COVID-19 pandemic, this balancing was even more challenging.

> "...actually the border between work and personal life was non-existent, so I functioned in the style that during the day with the child, some minimal work for two hours or for an hour if you could let her go out somewhere and then in the evening just into the night one does some work things."

There is also a need to focus increased attention on supporting the inclusion of women after returning from maternity/parental leave. There is a lack of grant support specifically to support this target group or other strategies for inclusion. Being on maternity/parental leave should not be a disadvantage when applying for grants, for example, in terms of a 'publication gap'.
A major challenge is to compensate women scientists while they are on maternity/parental leave. Many of them naturally keep in touch with science, work on the articles and continue to work alongside childcare. Often, they work as an act of loyalty because there is no one else who would substitute. Often this is unpaid work. In some cases, women are employed part-time on a project while on parental leave. However, in this case too, women are at a disadvantage and face structural obstacles; this part-time work is negatively reflected in their
social security (amount of pension, calculation of future maternity pay, etc.), current legislation does not allow women to work during maternal leave under the previous contract, etc.
This atmosphere often forces women to hide their pregnancy or family plans in the workplace.
Another group of challenges lies in the gendered role of a woman. For example, women articulate a higher role of self-criticism and lower self-esteem when reaching for a career in research.
"...a colleague has sent in an article and I look at it and say, for God's sake, I wouldn't send in an article like that. So other types of expectations. Selfevaluation. And in... I mean, I took more work that wasn't directly going towards that scientific process."
"Women have been meeting those criteria for many years, but they don't go for habilitation like men do. It is that psychological setup, that l'm just not going to habilitate although I could, couldn't I?"

Women also face a confusing expectation on their work, although performance is expected, they are not supported by their boss or they are not invited to participate in projects or discussions.

> "But I perceive that men are taken more as breadwinners, and that's why they are given these extra projects, and this extra money, so that they can earn extra on top of those salaries... whereas women are treated as if they don't need it. And I also feel that those men are arguing when those women are not being brought into it... I don't know if... I don't know, well... like there are different things... like, colleagues agree, professors agree with each other who's going to work with who and where they're going to go. I'll just find out about it"

This confusion may be even increased, when formal and transparent processes are missing.
"I was told that these are unwritten rules, but it seemed to me that since they are unwritten, they don't apply to everyone, or they only apply to me"

Although sexism is rarely reported, it occurs. The absence of effective procedures on sexual harassment is seen as highly problematic. Young female researcher and students may be in an especially vulnerable position. Women in general have to face different comments, prejudices and often, they see it as a natural part of life, even though it is disturbing, they have to live with that.

A woman to have to care about her look - but she must make sure not be to provocative, and all the time she must face some the flattery. (...) Especially the older generation were just men, and these men don't know how to behave when suddenly there's a woman in the workplace. I'm sure they act like they're very polite - as gentlemen - to her, but they never take them... as an equal. (...) they can act very considerate and so. It's such a double-edged sword, because they don't even understand the concept that it's actually not appropriate to constantly talk about a colleague's appearance or her figure, what her new dress is and so on.

Gender equality is often identified with relevance to other issues. First one can be related to the broader issue of human resources. Often, existing gender balance in Academia is pessimistically explained by the poor funding condition in Slovak science. It was repeatedly mentioned in the focus groups that the relatively strong representation of women in scientific positions in the SAS may be related to low salaries (e.g. a woman stays in science, her partner, classmates leave to the private sector).
"Why is SAS doing well (in gender balance)? We should ask this, it is also because of the nature of the salaries, how research work is valued in Slovakia. Isn't it?"

Low salaries in Slovak science are an obstacle for young people, putting women into a greater vulnerability, when planning to start a family or live independently.
"We lost two post-docs, now they're doing something else because their salary just covered a private day care centre for a child."

The salary issue is highlighted for the dual science career couples.

> "SAS is not competitive in terms of earnings, so SAS should think about other benefits that SAS can offer. For example, accommodation, nursery, that would be a big plus. To create a vision of a campus that would be accessible, that we wouldn't have to be ashamed of."

Another problem is the chain of fixed-term contracts for young people. On the one hand, it is seen as a powerful management tool, but it is partly abused and creates an atmosphere of constant uncertainty for young employees.
"SAS is a progressive environment, but the contracts are only for a year, in the case of maternity leave when a woman can lose her job... there is constant uncertainty."
Also, the importance, but the absence of transparent recruitment and career
progression policies was highlighted.
Several participants pointed out to the issue of intersectionality. The mostly articulated is the intersection gender and age. There is a dynamic between the young and senior researchers, often resulting in the absence of a succession possibilities, lack of opportunities for young people, but also the lack of interest and engagement from young people, also with the gendered nature in this debate. Also, possible cultural collision was identified, although only in a hypothetical scenario.

## 5. Recommendations for development of gender equality plan at the Slovak Academy of Sciences

### 5.1. Recommendation \# 1

Based on the results of GEA and the staff survey, maternal/parental or nursery leaves have the most negative impact on scientific career prospects. Therefore, support for employees in the context of maternity/parental leave (before, during and after maternity/parental leave) is necessary. We recommend to develop a maternity/parenting comprehensive plan with specific measures that would facilitate the reconciliation the parenthood, caring responsibilities and scientific careers. The measures could exceed the national legislation in terms of leaves and benefits.

### 5.2. Recommendation \# 2

To improve the work-life balance, working conditions and career prospects, establish facilities supporting caring responsivities of the SAS employees. Establish a nursery /children club and kindergarten in the SAS campus.

### 5.3. Recommendation \# 3

As only few men in SAV take maternity or parental leave, the promoting fathers' involvement in childcare through maternity and parental leave. Present the positive fathers' and caring men's role via SAS communication channels to encourage male employees to higher involvement in caring responsibilities and fairer distribution of care work.

### 5.4. Recommendation \# 4

The representation of women in managerial position is low. Increase the proportion of women in the SAS Presidency, in the SAS House Committee and in the leadership of organisations in the 1st and 3rd Divisions of the SAS Sciences (in synergy with HRS4R). Explore the barriers of women's candidacy in deep. Survey how the SAS organisations prepare the female candidates for relevant positions.

### 5.5. Recommendation \# 5

As the awareness of the role of gender equality in research and SAS particular is relatively low, plan activities to sensitise the employees on gender equality in management, in research teams, and the working environment in general. Set a comprehensive plan with trainings, workshops and communication campaigns on specific aspects of gender equality in SAS.

### 5.6. Recommendation \# 6

To boost the women's representation in the decision-making position, prepare gender equality training for male and female managers and staff. Integrate the gender equality module into the existing training platform.

### 5.7. Recommendation \# 7

Support for career development with an emphasis on young women scientists. Introduce a mentoring programme with an emphasis on young female scientists, pilot training of mentors/mentee.

### 5.8. Recommendation \# 8

Promote gender equality in the recruitment process (in synergy with activity HRS4R), including recommendations to avoid conflicts of interest in the selection process from a gender equality perspective.

### 5.9. Recommendation \# 9

Ensure the use of gender-sensitive language in advertisements and welcome packs in line with HRS4R activities by preparing guideline on the gender-inclusive language in SAS.

### 5.10. Recommendation \# 10

Evaluate the recruitment mechanism and promotion opportunities within the SAS in terms of transparency and emphasize the gender equality issues. Prevent the informal decision-making to avoid "the boys' club."

### 5.11. Recommendation \# 11

Strengthen gender equality in senior research degrees and among postdoctoral fellows. Explore the conditions and requirements for the progression to higher scientific degrees.

### 5.12. Recommendation \# 12

Tackle the remuneration fairness and make the pay system transparent. Prepare the methodology on gender pay report and incorporate the report into regular monitoring documents at the level of SAS.

### 5.13. Recommendation \# 13

Support the integration of the gender perspectives into the research. Implement an analytical focus on gender equality in research project applications (VEGA and international projects).

### 5.14. Recommendation \# 14

Create an expert platform of male and female staff who integrate a gender perspective into their research.

### 5.15. Recommendation \# 15

Set regular monitoring of gender in SAS research. Add an item on gender mainstreaming in research and teaching to the structure of the annual report.

### 5.16. Recommendation \# 16

Promote work environment free from gender-based violence and sexual harassment. Provide gender equality training for SAS staff in the framework of the ATHENA project (including training of trainers).

### 5.17. Recommendation \# 17

Organise training on gender-based violence for directors of SAS organisations and trade union representatives (possibly for other target groups).

### 5.18. Recommendation \# 18

Adopt an internal regulation against gender-based violence and sexual harassment (in synergy with HRS4R).

## References (Slovak Academy of Sciences)

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## Annexes (Slovak Academy of Sciences)

## List of relevant national legislation and policies in terms of gender equality in society

- Act No. 460/1992 Coll. Constitution of the Slovak Republic (Zákon č. 460/1992 Z.z. Ústava Slovenskej republiky);
- Act No. 365/2004 Coll. on Equal Treatment in Certain Areas and on Protection against Discrimination and on Amendment of Certain Acts (Anti-discrimination Act), (Zákon č. 365/2004 Z.z. o rovnakom zaobchádzaní v niektorých oblastiach a o ochrane pred diskrimináciou a o zmene a doplnení niektorých zákonov (antidiskriminačný zákon));
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- Act No. 311/2001 Coll. on the Labour Code (Zákon č. 311/2001 Z.z. Zákonník práce);
- Act No. 552/2003 Coll. on Works Performed in the Public Interest (Zákon č. 552 /2003 Z.z. o výkone práce vo verejnom záujme);
- Act No. 461/2003 Coll. on Social Insurance (Zákon č. 461/2003 Z.z. o sociálnom poistení)
- Act No. 124/2006 Coll. on Work Safety and Health (Zákon č. 124/2006 Z.z. o bezpečnosti a ochrane zdravia pri práci);
- Act No. 125/2006 Coll. on Labour Inspection (Zákon č. 125/2006 Z.z. o inšpekcii práce);
- National Strategy for Equality between Women and Men and Equal Opportunities in the Slovak Republic for 2021-2027 and Action Plan for Equality between Women and Men and Equal Opportunities for 2021-2027


## List of relevant national legislation and policies in terms of gender equality in research, innovation and higher education

- The Law on Public Research Institutions, No 243/2017, available at http://www.zakonypreludi.sk/zz/2017-243
- Act No. 131/2002 Coll. on Higher Education (Zákon č. 131/2002 Z.z. o vysokých školách);
- Act No. 245/2008 on Education (Schools Act) (Zákon č. 245/2009 Z.z. o výchove a
- vzdelávaní (školský zákon)
- National Programme for Education Development ("Learning Slovakia"). https://www.minedu.sk/data/files/6987 uciace sa slovensko.pdf
- The task for Audit of the research and innovation system, https://www.vedatechnika.sk/SK/VedaATechnikaVSR/Rada\ vldy/9.\ Rokovanie\% 20163 2017/6\%20Audit\%20syst\%C3\%A9mu\%20v\%C3\%BDskumu\%20a\%20inov\%C 3\%A1ci\%C3\%AD\%20v\%20SR/Material AuditSystemuValvSR.pdf
- Roadmap of research infrastructures - SK VI Roadmap 2020-2030
- Slovak Recovery and Resilience Plan


## Samples

Table 745. Sample of the staff survey (SAS)

| VARIABLE | NUMBER | PERCENTAGE |
| :--- | ---: | ---: |
| Total respondents | 396 |  |
| Total respondents included in the analysis (approximately) ${ }^{58}$ | 290 | $73,2 \%$ out of the total |
| Gender |  |  |

${ }^{58}$ The number of respondents included in the analysis might variate based on the number of responses to the particular questions. The exact number is always presented by the questions are questions in the analysis.

| - | Women | 230 | 59,28\% |
| :---: | :---: | :---: | :---: |
| - | Men | 148 | 38,14\% |
| - | Other/prefer not to say | 10 | 2,58\% |
| Occupation |  |  |  |
| - | Academic/Researcher | 361 | 91,16\% |
| - | Technical staff | 20 | 5,05\% |
| - | Administrative staff | 15 | 3,79\% |
| Scientific degree |  |  |  |
| - | Senior researcher | 129 | 33,1\% |
| - | Junior researcher | 156 | 40\% |
| - | PhD candidate (student of PhD. study programme) | 81 | 20,7\% |
| - | Other/none of these | 24 | 6,2\% |
| Scientific field |  |  |  |
| - | Natural sciences | 193 | 49,49\% |
| - | Engineering and technology | 33 | 8,46\% |
| - | Bio-Medical sciences | 49 | 12,56\% |
| - | Agricultural and veterinary sciences | 15 | 3,85\% |
| - | Social Sciences | 46 | 11,79\% |
| - | Humanities and arts | 38 | 9,74\% |
| - | Other | 16 | 4,10\% |
| Age |  |  |  |
| - | Less than 30 years | 109 | 28,17\% |
| - | 31-40 years | 96 | 24,81\% |
| - | 41-50 years | 91 | 23,51\% |
| - | 51-60 years | 48 | 12,40\% |
| - | 61-65 years | 21 | 5,43\% |
| - | 66 years and over | 22 | 5,68\% |
| Majority/minority/ethnic group |  |  |  |
| - | Majority | 318 | 83,68\% |
| - | Minority | 28 | 7,37\% |
| - | Unsure | 25 | 6,58\% |
| - | Prefer not to say | 9 | 2,37\% |
| In decision-making position |  |  |  |
| - | Yes | 214 | 81,6\% |
| - | No | 143 | 18,3\% |
| Type of working contract |  |  |  |
| - | Part-time (contract of 80\% or less than a full-time contract) | 28 | 10,61\% |
| - | Full-time | 220 | 83,33\% |
| - | Other | 16 | 6,06\% |
| Relationship status |  |  |  |
| - | Single and never married or never in a civil partnership | 49 | 18,70\% |
| - | Married or in a civil partnership | 141 | 53,82\% |
| - | Cohabiting | 36 | 13,74\% |
| - | Separated | 2 | 0,76\% |
| - | Divorced | 6 | 2,29\% |
| - | Widowed | 6 | 2,29\% |
| - | Other | 8 | 3,05\% |
| - | Prefer not to say | 14 | 5,34\% |
| Parent or legal guardian of any children aged 17 years or younger |  |  |  |
| - | Yes | 33,84\% | 89 |
| - | No | 62,74\% | 165 |
| - | Prefer not to say | 3,42\% | 9 |
| Primary carer or assistant for an adult requiring care |  |  |  |
| - | Yes | 6,23\% | 16 |
| - | No | 87,16\% | 224 |
| - | Prefer not to say | 6,61\% | 17 |

## Sample of the interviews and focus groups

## Interviews 'participants

Overall, 15 participants were involved in the interviews ( 10 women, 5 men). The average age was 39 , and the average work experience in the SAS was 11 years. We are providing detailed information in the table below.

Table 756. Sample of the interviews (SAS)

|  | Women | Men | N |
| :---: | :---: | :---: | :---: |
| N | 10 | 5 | 15 |
| Age |  |  |  |
| - < 35 | 4 | 2 | 6 |
| - 36-54 | 3 | 3 | 5 |
| - $>55$ | 3 | 0 | 3 |
| Position |  |  |  |
| - Student | 0 | 2 | 2 |
| - Researcher | 10 | 3 | 13 |
| - Leadership | 3 | 1 | 4 |
| - Administrative staff | 1 | 0 | 1 |
| Sections |  |  |  |
| $1^{\text {st }}$ Section | 2 | 3 | 5 |
| Physical, Space, Earth, and Engineering Sciences |  |  |  |
| $2^{\text {nd }}$ Section | 2 | 1 | 3 |
| Life, Chemical, Medical, and Environmental Sciences |  |  |  |
| $33^{\text {dr }}$ Section <br> Social Sciences, Humanities, Arts, and Culture | 6 | 1 | 7 |
| Working experience in the SAS (years) |  |  |  |
| - < 3 | 1 | 2 | 3 |
| - 3-5 | 2 | 0 | 2 |
| - 5-10 | 3 | 2 | 5 |
| - more than 10 | 4 | 1 | 5 |
| Family status |  |  |  |
| - Married | 6 | 3 | 9 |
| - Widowed | 1 | 0 | 1 |
| - In relationship | 1 | 2 | 3 |
| - Single | 2 | 0 | 2 |
| - Responsible for Childcare | 3 | 2 | 5 |

## Focus groups 'participants

We invited a total of 49 potential participants to the focus group, of whom 26 accepted the invitation. The invitation to 1 focus group was open (SAS website announcements); anyone could apply ( 1 interested participant responded to the open call but did not attend).
Table 767. Sample of the focus groups (SAS)

|  | Women | Men | N |
| :---: | :---: | :---: | :---: |
| N | 19 | 7 | 26 |
| $1^{\text {st }}$ Section | 4 | 0 | 4 |
| Physical, Space, Earth, and Engineering Sciences |  |  |  |
| $2^{\text {nd }}$ Section | 6 | 1 | 7 |
| Life, Chemical, Medical, and Environmental Sciences |  |  |  |
| $3{ }^{\text {dr }}$ Section | 7 | 5 | 12 |
| Social Sciences, Humanities, Arts, and Culture |  |  |  |
| Other (SAS Office, Centre for joint activities) | 4 | 2 | 6 |
| Age |  |  |  |
| - < 35 | 7 | 1 | 8 |
| - 36-54 | 4 | 4 | 8 |
| - $>55$ | 7 | 2 | 9 |
| Position |  |  |  |
| - Student | 1 | 0 | 1 |
| - Researcher | 17 | 5 | 22 |
| - Leadership | 7 | 4 | 11 |
| - Administrative staff | 2 | 1 | 3 |
| - Other | 1 | 1 | 2 |
| Family status |  |  |  |
| - Married/ in relationship | 9 | 4 | 13 |
| - Widowed | 2 | 0 | 2 |

gender equality to unlock
research potential

- Single
- N/A 5


# Gender Equality Report for University of Ruse, Bulgaria <br> Project Acronym: ATHENA <br> Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE 

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## Executive summary (University of Ruse)

The current report presents the work of the ATHENA team at the University of Ruse, Bulgaria dedicated to finding out the potential gender inequalities in the research and innovation activities at the university and to generating a Gender Equality Plan (GEP) of the academic institution on the basis of the conclusions and recommendations stemming from the conducted quantitative and qualitative studies.

Based on a detailed exploration of theoretical sources and topical statistical data, the report firstly presents the status of the gender equality in the Bulgarian society drawing the main conclusion that in Bulgaria some gender imbalances are typical only for some professions stereotyped as masculine (e.g. machine engineering, software engineering, etc.) or feminine (e.g. nurse, social worker, teacher). Bulgaria is not among the so called masculinist societies where the men are considered as a stronger sex. In the Bulgarian society, in the prevailing number of cases, the family roles are equally divided between women and men and no discrimination exists on gender basis. The Bulgarian legislation provides the necessary normative base for keeping the gender equality and protection against discrimination.

Secondly, the report outlines the status of the gender equality in the research and higher education in Bulgaria. As very democratized areas thanks to the academic traditions and practices and the established legislation in the field, here no significant gender imbalances are observed. The system of higher education and science provides an equal access of both sexes to research funds, opportunities for career development, decision-making positions and other resources and incentives.

The report's part about the gender equality audit at the University of Ruse presents a concrete information about the gender balances in different spheres of the academic life, like: education, research, research outputs, career advancement, decision making and working conditions. The only areas of identified gender inequalities are in the so called feminized and masculinised university degrees and respectively university departments where, according to the profession's profile (engineering, social work, etc.), predominate men or women. One more area of gender inequality is connected with the achievement of the highest academic position (professor) where the proportion of women is lower because of the previous engineering profile of the University of Ruse and the current regulatory restrictions (the professors must be $10 \%$ of the whole research staff).

The last section of the report is focused on the identified gender biases at the University of Ruse. This section highlights in the best way the excellent gender balance achieved at the university thanks to its long-term gender equality policy and the established good practices.

The recommendations for the university GEP present an important part of the report. They are divided into 3 groups according to the level of the institutions that should be addressed: national, regional and local (University of Ruse and its branches).

## Introduction

The objective of the report is to provide a description of the departure situation in terms of gender basis for the development of appropriate gender equality plans (GEP).

Two recent documents underline the necessity of GEPs introduction and implementation not only in the academic institutions, but also in the organizations from other sectors of the economy and public life.

The first document "Progress on the sustainable development goals. The gender snapshot 2021"59 presents a snapshot of gender equality across the UN sustainable development goals. The conclusions in it are based on data collection in 95 countries in 2020. There are many unfavourable signals in this document, such as:
-Nearly 6 in 10 NEET (Not in Employment, Education and Training) youth in the last quarter of 2020 are women ( 57.4 per cent).
-435 million women and girls are living in extreme poverty in 2021.
-More than half countries lack quotas for women in national parliaments.
-Almost half countries continue to restrict women from working in certain jobs or industries.
-245 million women and girls aged 15 years and older were subjected to sexual and/or physical violence by an intimate partner in the previous year.
-Women in 2019 held only $28 \%$ of managerial positions in the workplace.
-Women spent 3.2 X as many hours as men on unpaid care work.
-Women represent only a third of the world's researchers, but have been at the forefront of COVID-19 innovations.

The presented data can serve as a clear evidence of the existing gender inequality in many parts of the globalized world.

For the purposes of this report, more important are the published results in the second document titled "U-Multirank Gender Monitor. An analysis of the female to male ratio within the higher education ladder" ${ }^{60}$ (U-Multirank is a noncommercial, multi-dimensional global transparency tool, presenting more than 30 indicators on university performance across five dimensions: teaching and learning, research, knowledge transfer, international orientation and regional engagement. The 2021 release covers 1,948 institutions from 96 countries). The document defines the gender balance as having a minimum of $40 \%$ of 'both' sexes and introduces the category 'nonbinary/diverse' into the student survey.

The data from the 2021 U-Multirank edition are focused on the following gender imbalances in the higher education systems:
-The women in total count for half or more of bachelor's (BA) and master's (MA) students, but their share is smaller among PhD students (48\%), academic staff ( $44 \%$ ) and professors ( $28 \%$ ) and this pattern is very much the same among EU and non-EU institutions.

[^32]-The women are particularly underrepresented in research intense universities. Only $23 \%$ of professors are women in institutions with high or very high percentages of expenditures on research - compared to $38 \%$ in institutions with a low share of research expenditures.
-At institutions with a majority of graduates in STEM fields, women are underrepresented both at the student level and among academic staff.
-The women are still a minority in most of the science and engineering subjects, both among students and academic staff but subjects like nursing, social work, education and psychology are still strongly dominated by women.
-The subjects with the most balanced gender ratio are business studies, economics, political science, agriculture, history and the only science subjectchemistry. Here the percentage of males and females among both students and academic staff is between $40 \%$ and $60 \%$.

The most indicative data about the gender inequalities in the science and research can be found out in the She Figures data (2018) of the European Commission. Here it is stated that "in the recent decades the women in the EU have made significant advances in raising their level of educational qualification, now making up a majority of all tertiary education graduates. Despite this, the EU's researcher population has continued to be dominated by men" (She Figures Handbook, 2018).

Although the women are more likely than men to have a higher education degree, they remain over-represented in fields of study that are linked to traditional female roles such as care-related fields and are under-represented in science, mathematics, IT, engineering and related careers (She Figures Handbook, 2018).

In the EU member states, the women are still under-represented at the higher levels of academic career path as only $22 \%$ of full professors, $20 \%$ of heads of higher education institutions and $28 \%$ of board members in research decision-making are women (DG Research and Innovation, 2016).

All She Figures data are indicative for the existence of two types of segregation - a vertical one, i.e. insufficient opportunity for the women's academic growth, participation in decision-making and resource access, and horizontal one - the performance of the women mostly in the areas as humanities, education, nursing, social work and others.

The data in the presented above very topical documents indicate that nowadays the gender imbalances persist both in the global societies and in the higher education institutions and research. That's why the projects like ATHENA are of utmost importance with their findings and recommendations for the improvement of the gender situation. Through the intended GEPs of the higher education institutions the project ATHENA will contribute to the minimization of gender segregation (horizontal and vertical) in the education and research.

## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection technics implemented throughout the years 2020 and 2021. The particular methodologies have been prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences.

The national provisions in terms of gender equality in research and higher education were assessed based on a desk-research and policy analysis related to gender equality in society, research and higher education. Our team utilised extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of our organisation.

The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardised data collection on women in science She Figures. ${ }^{61}$ Our team collected the data through examination of the respective departments at the university having and collecting reliable information on GEA indicators, e.g. HR department, R\&D department, etc. Another source of information was the Annual report of the university about R\&D activities. The qualitative GEA indicators present unquantified aspects and measures to assess the situation in terms of gender equality. The measures were evaluated via an online data collection system using a simple online assessment tool.

To identify gender biases in the University of Ruse, Bulgaria, we used three data collection methods: online survey, story-telling interviews and focus groups. An online staff survey implemented by a standardised questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, 56 filled in surveys were included in the analysis.

The objective of the story-telling interviews was to search for the diversity of typical facilitators and inhibitors of gender awareness in the life-course of scholars. Based on a scenario, our team implemented 20 interviews with researchers in the following structure: 10 of them with senior researchers (professors and associated professors) and other 10 - with junior researchers (principal assistant professors and PhD students. The proportion of the women and men among the interviewees is 50:50. The interviews have been recorded, transcribed and analysed by the: structural content analysis and interpretative analysis. Thirdly, our team organised 4 focus groups in the following composition: 1 including GEPI committee members, 1 including professors and associated professors (senior research staff), 1 including principal assistant professors and PhD students (junior research staff) and 1 consisting of representatives of the administrative staff. Then, using the standardised script, we transcript the

[^33]recoded discussions and analysed the data by using structural content analysis and interpretative analysis.

## 2. Outcomes of the assessment of the national provisions in Bulgaria

### 2.1. Status of gender equality in society

Bulgaria officially supports the implementation of the Gender Equality Strategy adopted by the EU and synchronizes its legislation with the policy objectives and key actions for the period 2020-25. In Bulgaria, 2017 was a key year for equality policy, as it was also a year of preparation and planning of goals and priorities, in view of the Presidency of the Council of the EU. The results achieved, reported by the EIGE Index for Equality between Women and Men, according to which in two years Bulgaria has moved 10 places forward, are a real manifestation of the consistent and purposeful state policy in the field of gender equality.

A significant part of the national legislation in the Republic of Bulgaria related to equal opportunities for women and men has been adopted in the process of its harmonization with the acquis communautaire. In this process, national norms have been aligned with EU primary and secondary legislation, notably in the areas of equal treatment for women and men, equal opportunities for all and the fight against all forms of gender-based violence.

At national level, the equality policy of Bulgaria is coordinated by the Ministry of Labor and Social Policy. Since 2004 it has established a specialized unit - the Department of Equal Opportunities, Anti-Discrimination and Social Assistance in the Disability Policy, Equal Opportunities and Social Assistance Policy Directorate. Since the same year a national institutional mechanism for cooperation between the institutions, as well as with the civil society has been functioning in Bulgaria, namely through their participation in the National Council for Equality of Women and Men at the Council of Ministers, which is a body for consultations, cooperation and coordination between the central and territorial bodies of the executive power and the structures of the civil society.

An important aspect of the implementation of the country's international commitments in the field of gender equality is the reporting on the implementation of international legal acts. The Republic of Bulgaria is obliged to report to the following specialized bodies in the UN system: The UN Committee on the Elimination of All Forms of Discrimination against Women; The UN Committee on Economic, Social and Cultural Rights under the International Covenant on Economic, Social and Cultural Rights, etc. Within the framework of the United Nations, Bulgaria actively cooperates with the UN-Women - a UN structure to achieve gender equality and empower women. The country's commitments and achievements in the field of gender equality are presented annually to the international community during the sessions of the Commission on the Status of

Women - the main intergovernmental body at the global level dedicated entirely to promoting equality and women's empowerment.

The statistical data for Bulgaria for 2020 show a number of achievements in the field of gender equality compared to the data for 2015. The country ranks 49th among 153 countries according to the Global Index on Gender Differences. According to the World Bank's report "Women, Business and Legislation 2019: A Decade of Reforms," Bulgaria occupies one of the leading positions (among the top 30 countries) in the world in terms of equality between women and men with an index of 93.75 out of 100. In the latest edition for 2019 The European Institute for Gender Equality Index also reports progress for Bulgaria, with an increasing result of 58.8 \% compared to 56 \% in 2005, which ranks Bulgaria 19th in the EU.

The following national laws and strategies serve as a legislative basis of the gender equality policy of the Republic of Bulgaria:
-Gender Equality Law (2016);
-National Strategy for Encouraging Gender Equality 2021-2030;
-Annual National Plans for Encouraging Gender Equality.

### 2.2. Status of gender equality in research and higher education

The contextual situation in Bulgaria related to gender equality in research and the implementation of gender equality policies in general is reflected in the developed National Strategy for Encouraging Gender Equality - fully harmonized with the Horizon Europe program as well as with the basic principles of the Erasmus + program, which supports women social entrepreneurs and helps to open up new areas of research in the field of gender equality, sustainability and women's empowerment. A positive assessment of the achievements of the Bulgarian women in science, research, innovation, education, culture and sports was pointed out by the Bulgarian EU Commissioner Maria Gabriel, who launched a campaign on social media, \# EUwomen4future.

According to the data of the National Statistical Institute among the scientists in Bulgaria has been achieved a gender equality balance, with $53 \%$ women and $47 \%$ men in the total number of researchers in the public sector and in the higher education sector. In this respect, Bulgaria is among the leading countries in the EU. For this reason, the current strategy does not include special measures to increase the relative share of women researchers, but will ensure the even distribution of the various academic positions and management positions in the scientific organizations. The distribution of scientists by age groups is almost even, with the lowest percentage - $21 \%$, are researchers under the age of 34 , and the highest $-27 \%$, is the percentage of scientists between 35 and 44. In the state research organizations and in the higher education sector there are also scientists over the age of 65 , who are $5 \%$ of the total number of scientists. These data show that in terms of age distribution no collapse is expected if the country manage to keep both young and experienced scientists in Bulgaria. But if Bulgaria wants to reach the average European level in the
number of scientists, it is imperative to make significant efforts to attract young people to a scientific career. For this purpose, the National Strategy envisages measures both for retaining scientists in Bulgaria and for attracting and retaining talented scientists, mainly up to 35 years of age.

Nearly 200,000 people in Bulgaria are employed in the field of science and technology in 2019. The country is one of the three in the EU, along with Lithuania and Latvia, in which the women employed in the sector predominate. On average, only $40 \%$ of those employed in scientific and technical activities in the European Union are women, while for Bulgaria this share is $54 \%$. Luxembourg, Finland, Hungary, Austria and Germany, where the proportion of men is more than twothirds, have the highest gender equality in the sector.

At present, Bulgaria does not have a clearly developed national strategy and action plan related to gender equality in the science. Separate indicators and policies can be found in the National Strategy for Encouraging Gender Equality 2021-2030, as well as in the Roadmap for Research and Innovation.

The first document contains indicators for monitoring the implementation of the Strategy in five priority areas:

- Increasing women's participation in the labor market and equal degree of economic independence;
- Reducing the gender pay and income gap;
- Promoting equality between women and men in decision-making processes;
- Combating gender-based violence and protecting and supporting victims;
- Changing the existing gender stereotypes in society in various spheres of public life.

At the beginning of the third decade of the 21st century in Bulgaria women and men have equal political and legal rights, but gender inequality, incl. in research, is still a very topical issue because the society continues to operate with persistent social stereotypes about the role of men and women in the family and works with prejudices about women's career development. Despite the centuries-old struggle of women for gender equality, horizontal and vertical gender segregation (the so-called "glass ceiling") still exists.

The Bulgarian Commission for Protection against Discrimination controls and monitors violations against gender equality in research. It is a national independent specialized state quasi-judicial body for prevention of discrimination, protection against discrimination and implementation of the state policy in the field of equal opportunities and equal treatment of all citizens on the territory of the Republic of Bulgaria.

## 3. Outcomes of the gender equality audit at the University of Ruse

The main goal of the Strategy for Promotion of Equality between women and men for the period 2021-2025 at the University of Ruse is the creation and the implementation of a long-term and sustainable university policy to achieve gender equality, which includes guarantees of equal treatment and equal obligations, after overcoming gender stereotypes, equal access to resources of the university and equal participation in decision-making of women and men in the General Assembly, the Academic Council and other collective governing bodies and in view of their successful personal, social and professional realization as researchers and lecturers and stimulating the equality of women and men in the three areas of university work - educational, scientific and social.

### 3.1. The pool of graduate talents

The academic leadership of the University of Ruse in cooperation with the student community and the staff express a clear and unequivocal will for the full exercise of the human, political, economic and social rights of women and men, equal treatment and equal participation in the academic life for social justice and prosperity of the whole society.

As all universities in Bulgaria, the University of Ruse is autonomous in building its curricula. Only for the regulated professions Law and Medicine there are state regulations and obligatory basic disciplines. For the other areas of study the share of the basic disciplines is $25 \%$ of the total number of hours and credits in the curriculum. The other disciplines (subject units) fall into the categories of compulsory (specialized) - 50\% and compulsory-elective and optional - $25 \%$. The role of the Ministry of Education and Science in Bulgaria is to carry out periodic national accreditation of universities (5 years) through its National Agency for Evaluation and Accreditation (NAEA) and to give a 10 -point grading system to universities (respectively general and professional areas). For the received grades between 9 and 10 the universities receive the right to continue its basic educational activities for a period of 6 year until the next accreditation. All curricula at the University of Ruse are subject of annual internal control and certification by the Directorates "Quality of Higher Education" and "Continuing Education."

Gender as a subject of research is popularized as a topic of dissertations and diploma theses as well as a topic of research projects with participation of students and PhD students.

Some courses dedicated to or related to gender studies are included in the curricula of the 8 faculties and the three branches of the University, and are offered at different levels of study (bachelor, master, doctoral programs and in forms of continuous education).

A scholarship, specially offered to female students / researchers, is available (alternative: specific scholarship for the under-represented sex in the field of research / research) (less than 30-40\%).

There is a relative gender balance in graduation based on the subject área of the university program. As a conclusión can be stated that at the University of Ruse more female students graduate in the áreas of education, and health care and more male students - in the área of engineering. The audit data confirm this. For 2020, the percent of women graduated across Education is 14,3 against 0 \% graduated men. The percent of men graduated across Engineering studies is 42,9 against 28,6 \% graduated women. Despite the indicated differences, a gender balance in graduation is achieved at the university thanks to the right distribution of the programs offered - these programs are allocated in 4 engineering and 4 non-engineering faculties at the University of Ruse.

Further steps that could be undertaken through the implementation of the future GEP of the University of Ruse are, as follows:
-To preserve the balance between the study programs offered at the university and their subject areas.
-To work with and to stimulate talented children of both sexes from the state and municipal schools in order to provide a pool of graduate talents for the university. -To achieve a better implementation of the legislation in the field of maternity/paternity leave and flexible working time (through part-time, distance and hybrid training) in order to ensure a better work-life balance.
-To achieve the Barcelona targets for childcare by setting up kindergartens and crèches for the children of students and lecturers.
-To create part-time jobs for student's internships in nurseries and schools for students with an interest in social activities.
-To introduce social or career development scholarships for young women researchers and female students in the form of specific social assistance in the periods of child raising.

### 3.2. Gender balance in research

An excellent gender balance in research is achieved at the University of Ruse due to the almost equal representation of men and women in the research activities and project implementation. Within the existing 8 faculties and 3 branches of the university the subject area and the sphere of competences of the researchers determine their career development in one or another university unit. There are some feminized work places for researchers in the Faculty of Public Health and Health Care and in the Faculty of Education because of the specificity of the specificity of the study programs offered there (nurse, midwife, teacher). In the same way there are masculinized work places in the engineering faculties of the university. Thanks to the reasonable university policy for gender equality, a balance is achieved during the years which should be preserved through the measures and activities in the future GEP of the university.

There are some very indicative quantitative data from the university audit which categorically prove the achieved gender balance in the research.

The proportion of the women among the total employment is $54,3 \%$ and the proportion of women among the total number of employed researchers is 47,6 \%.

The number of women applicants - principal investigators of research funding for a given year (2020) in national funds is 22 and the number of men is 21. The number of women beneficiaries - principal investigators of research funding for a given year (2020) in national funds is 15 and the number of men is 16. The number of women applicants - principal investigators of research funding for a given year (2020) in international funds is 50 and the number of men - 65 . Respectively, the number of beneficiaries of such funds at the University of Ruse is 6 women and 8 men.

The proportion of women applicants among the total number of applicants for PhD study program at the university is $41,1 \%$.

All these audit data present a well-balanced gender situation at the University of Ruse in relation to the research activities.

In order to preserve the achieved gender balance in research, the following measures can be envisaged in the future GEP of the university:
-Activities to raise the public awareness and to avoid stereotypes about some professions perceived as typically feminine or masculine.
-Joint efforts with the social partners, the NGOs and the media at national and local level aiming at attraction of young people to research career.
-Providing information security, expert assistance and training to increase the capacity of current and potential beneficiaries - women and men under the measures of the operational programs 2021-2027.
-Promoting gender equality at all levels and forms of education, using existing cooperation and funding policy instruments.

### 3.3. Gender balanced career advancement

According to the Bulgarian legislation in the área of research and higher education the career advancement at the University of Ruse is guaranteed. The staff growth is carried out through quotas by positions: 50\% habilitated lecturers - associate professors and professors and $50 \%$ non-habilitated - assistants and principal assistants. In the managerial bodies - Faculty Council, Academic Council, General Assembly - the ratio is: $25 \%$ non-habilitated and $75 \%$ habilitated lecturers.

At the beginning of each calendar year, the Policy Directorate for People with Disabilities, Equal Opportunities and Social Assistance together with the University Commission for Social Activities prepares a Report on Equality, which includes a report on the implementation of the activities set out in the annual National Action Plan to promote equality between women and men (NAP). For this purpose, the Directorate collects, summarizes and analyzes the information received from all stakeholders, on basis of which it prepares the Annual Report on Equality. The annual reports are accepted by the Academic Council of the University of Ruse and the Municipal Council of the Municipality of Ruse, according to their Rules of Procedure.

The recruitment procedure is clearly defined, the evaluation criteria are standardized and quantified to the highest possible degree. The gender of the candidates is not disclosed, if possible (guaranteed by anonymizing the tests and other parts of the recruitment). The evaluation criteria are not discriminatory for either sex; e.g. maternity or paternity leave is recognized as length of service, etc.

The audit data present the following situation in the area of career advancement at the University of Ruse:
-Proportion of women of grade A (professors) among academic staff grade A 18,9 \%;
-Proportion of women of grade B (associated professors) among academic staff grade B-42,5 \%;
-Proportion of women of grade C (Post-docs, principal assistant professors) among academic staff grade C-43,4\%;
-Proportion of women of grade D (assistant professors) among academic staff grade D - 42,9 \%.

The numbers everywhere, except those for the professors, show a good gender balance in the career advancement. The reasons for the relatively low women's representation in the category of the professors can be found in the previous engineering profile of the University of Ruse before 1994. The number of A grade women in engineering and technology is $11,1 \%$, while the womenprofessors in the medical sciences are $40 \%$.

A lot of financial instrument for preserving the gender balance in the career advancement at the University of Ruse are identified, such as:
-Multiannual Financial Framework (MFF 2021-2025) and the "Rights, Equality and Citizenship" program;
-Horizon 2020 Research and Innovation Framework Program and Horizon Europe programme;
-Erasmus+ programme;
-The Employment and Social Innovation Program;
-The Community Program for Employment and Social Solidarity "PROGRESS", the European Job Mobility Portal (EURES) and the European Mechanism for Mobility Progress microfinance;
-European Structural and Investment Funds (ESIF) 2020-2025, in particular the European Social Fund and the European Regional Development Fund that are key financial instruments to promote the equality between women and men.

### 3.4. Gender balance in decision making

The decision making is one of the areas at the University of Ruse where the best gender balance is achieved. The quantitative data from the audit present the following numbers:
-Women as head of the institution (rector) - 1 (2016-2018)
-Proportion of women among vice-rectors - $50 \%$
-Proportion of women among the members of the highest executive body (Academic council) - 46,7 \%
-Proportion of women among the heads of faculties -54,5 \%
-Proportion of women among the vice-deans - 50 \%
The snapshot of the gender balance in the decision making at the University of Ruse highlights the results of a long-term democratic academic tradition in the Bulgarian system of higher education. According to the Law for Higher Education all decision making positions at the universities are elective for a mandate of 4 years. The collective bodies at the university elect the persons for concrete positions on the basis of an Election rules and competition between the candidates.

Just one measure could be taken into account in the future GEP of the university - to include a text regarding the gender equality in the Election rules of the university.

### 3.5. Gender balanced working conditions

The percent of difference in incomes between the women and men in Bulgaria, incl. in the research and academic career, is 22.8. One of the main reasons for this is that the women tend to take responsibility for important unpaid tasks, such as housework and caring for children and / or relatives, to a much greater extent than the men. In Bulgaria, the working men spend an average of 9 hours per week on unpaid care and household activities, while the working women spend 22 hours - on average this is almost 4 hours per day. This data indicate the fact that the men are less inclined to work unpaid, but prefer to use their time by focusing on the development of their scientific career. This also affects the labor market. Eurostat data for Bulgaria report that more than $1 / 3$ of women reduce their paid hours from full-time to part-time, while only $1 / 10$ of men are willing to do the same.

A number of initiatives have successfully promoted the inclusion of women in male-dominated sectors, such as science and technology. In almost all sectors, the men are promoted much more often to supervisory or managerial positions, while the women who have reached the highest position of CEO are less than $5 \%$. "Vertical" segregation accounts for a significant share of the gender pay gap.

The investments in formal care and appropriate family leave for both women and men contribute to reducing the pay gap between women and men, as it leads to fewer career breaks and employment for women. Flexible work schemes (including flexible working hours, reduced working hours and teleworking) are well used by both women and men and should not be seen as a cost for employers, who often tend to penalize their employees in the form of a reduction in pay.

The described situation with gender inequality in incomes existing in the Bugarian society is not valid for the University of Ruse. Here the salaries are determined by the academic or administrative position and there are no gender differences. The results from the audit show that the gender pay gap at the university is $0 \%$.

The negotiation of the remuneration of the researchers at the University of Ruse is agreed according to the following normative documents:

- Law on Higher Education - Art. 20; Art. 21 (1) - item 8; Art. 70 (1) - item 4; Art. 91 (1) - item 2;
- Ordinance on the terms and conditions for the evaluation, planning, distribution and spending of funds from the state budget for financing the inherent scientific or artistic activity of the Ministry of Education and Science;
- Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at the University;
- Regulations for the structure and activity of the University;
- The collective labor agreement with the Trade Unions of the Higher School.

The University should prepare a system document (Standard) with specific clear rules that will facilitate the practical implementation of the obligations to ensure healthy and safe working conditions. It should address issues such as making the most of mandatory risk assessments, preventive and precautionary measures and training. It will provide examples and illustrations, as well as useful electronic links, such as the European Agency for Safety and Health at Work's interactive online risk assessment tool (OiRA) based in Bilbao, Spain. In many cases, a risk assessment obtained through OiRA or equivalent digital instruments may be sufficient to comply with the risk assessment obligation.

### 3.6. Gender balance in research outputs

The main indicators for the research outputs which were an object of observation in the university audit were the annual number of the research publications and the innovation pattering. In relation to this a conclusion can be drawn about a good gender balance. For example, the distribution of the publications at the University of Ruse for the year 2020 is 393 authored by women and 381 authored by men. The calculation is made on the basis of the lead author per publication. In the innovation pattering the men's achievements are better the gained patents by men for 2020 are 203 and by women - only 18.

There are many incentives and requirements at the University of Ruse aiming at increase of the research outputs. A special Systems of Stimuli is functioning and an obligatory condition for a number of annual publications is introduced in the annual work plan of the research staff.

In order to preserve the sustainability of the reserch outputs, the objectives and measures included in the future GEP of the university should be SMART:
a) Specific - the tasks and measures must answer basic questions: what, why, how, who, when and where;
b) Measurable - there must be clear quantitative and / or qualitative indicators and appropriate targets;
c) Attainable - the tasks and measures must be achievable and can be performed (even if they require more efforts);
d) Realistic - the tasks and measures must be appropriate to the organization and be feasible within a certain period and the available resources;
e) Time-related - must be indicative when the tasks and measures are fulfilled.

## 4. Identified gender biases at University of Ruse

### 4.1. Outcomes of the staff survey

The number of the participants in the staff survey conducted at the University of Ruse is $56-34$ women and 22 men. Most of them are representatives of the ethnic majority (Bulgarians) - 42 persons and 8 persons have chosen the option "prefer not to say". By age the respondents are divided, as follows: less than 30 years $-6 ; 31-40$ years $-14 ; 41-50$ years $-25 ; 51-60$ years $-7 ; 61-65$ years -2 . $80,39 \%$ of the respondents describe their selves as heterosexual. 62,79 \% of the participants in the survey are married or in a civil partnership.

The occupation of the respondents in the organization is the following: 73,21 $\%$ - researchers, 19,64 \% - administrative staff, 7,14 \% - technical staff. According to their academic degree most of the respondents are associated professors $23,64 \%$ or PhD candidates - 36,36 \%. The dominating part of the researchers belong to the academic field of engineering and technology - $44,44 \%$ and to the area of social sciences $-25,93 \%$. 80,95 \% of the respondents have full-time contract with the university.

Almost all representatives of the University of Ruse are firmly convinced that the gender equality (GE) in the organization increases the fairness of the working environment and improves the quality of scientific performance (average indexes 4,29 and 4,18 ). They also consider GE as important for them personally (average index 3,93 ). The respondents don't accept the division between men and women in connection with the chances for a better performance in the scientific career. In contrast, they think that the women are just as capable of thinking logically as the men (average index 4,32). The respondents' opinion about the achieved excellent state of the GE in their organization is confirmed by their answers to Question 12 Are there more men or more women in your department. Here the dominating reaction is That is not the point; it is not important $-44,44 \%$ of the respondents.

The participants in the survey argue that women and men at the University of Ruse are in equal situation in relation to the process of hiring, access to managerial positions, salaries, distribution of project funds, etc. (Question 13). This statement is proved by the average indexes which are concentrated in the middle of the scale. Almost the same reactions of the respondents are identified in the received answers on Question 14 about the distribution of tasks and resources at the University of Ruse. The most spread opinion here is that neither men nor women are in a privileged position. The average values in the middle of the scale prove this.

Interesting results are accumulated on Questions 15 and 16 where the respondents give opinions about the factors having positive or negative impact on their careers. According to the participants in the survey the most important aspect of their personal life influencing positively their career is having a supportive family and/or partner (average index 5,72). In relation to the performance at work the factors with a positive impact are many - flexible working hours $(5,71)$, having visible role models $(5,56)$, having relevant research output $(5,43)$.

The survey questions 17, 18 and 19 reveal the policy of the University of Ruse for the development of the human resources. From the answers it becomes evident that posts can be obtained mostly through a competitive examination (59,52 \% from the respondents). The organization provides various training opportunities, like: courses for professional development (72,73 \%), IT courses (34,09 \%), language courses (31,82 \%), training for leadership development ( $20,45 \%$ ). Due to the fair organizational HR policy a significant part of the respondents declares a successful promotion (30,23 \%) and only 3 persons inform about an unsuccessful one. In close connection with the above mentioned questions are the questions 20 and 21 about the salary. The first one is not properly understood by the respondents and most of them have indicated their salaries per month. The equal distribution of answers on the second question indicates the specificity of national legislation in determining the monthly payment for different jobs and professions.

The content of the next questions - 23,2425 and 26 - is connected with the way of obtaining the highest scientific/academic degree by the men/women at the university. The vast majority of the respondents ( $74,42 \%$ ) argues that there are no gender differences in relation to this situation - the same for women and men. But also about $16 \%$ of the respondents think that it is easier for men to obtain such degree. The possible explanation of this opinion is the previous engineering profile of the University of Ruse in the past with a prevailing number of men with highest scientific degrees in the engineering faculties. The situation now is changing. In the recent years the younger non-engineering faculties at the university also demonstrate many examples of women with highest scientific degrees. Although there are no different requirements for men and women to obtain the highest academic/scientific degree ( $93,02 \%$ from the respondents have chosen this option), there are some obstacles to achieve this - time constraints to reconcile with family responsibilities, limited internship and study visits abroad, time constraints to reconciled with other work, wasted time in developing projects that are rejected and some others. These answers about the obstacles are very indicative and could be useful in the generation of GEP of the University of Ruse.

In close connection with the previous questions are the questions 27 and 28 about the distribution of the working load and capacity. For the University of Ruse is valid the following average distribution: $75 \%$ - for teaching activities, 23,80 \% for research activities and $1,20 \%$ for administrative and organizational activities. $54,76 \%$ from the respondents are satisfied with this situation but other 23,81 \% don't declare categorically their satisfaction and this could be one more area of intervention in the future GEP.

In addition to the information collected on the above mentioned question, interesting results about the motivation of the respondents to work for their organization is accumulated through the answers on questions 37, 42, 43, 44 and 45. Most of the respondents work more than 10 hours per day and also complete some working activities on weekends and during the holidays. This means that they have a strong internal motivation for excellent performance. Unfortunately, their personal life suffers from this - the respondents claim that It has been difficult for them to fulfil their commitments in their personal life because of the
amount of time they spent on their job (average index 2,85 ). The balance between the working engagements and the personal life also could be an area of intervention in the university GEP. Despite of the work load and the long hours spent at work, the respondents are satisfied by their job. They are strongly convinced that Their job offers good prospects for career advancement (average index 3,88 ) and that The organisation they work for motivates them to give the best job performance (average index 3,85 ). This means that the University of Ruse provides equal working conditions for all representatives of the academic community and manages to motivate them for excellent performance. With very high percent of agreement the respondents declare that they have never experienced in the organization any kind of stereotypes, prejudices or discrimination expressed in Unwanted physical or sexual contact (95,24 \%), Humiliation and degrading (92,86 \%), Threats of verbal, nonverbal, psychological or physical abuse $(90,48)$. These results are very indicative for the fact that at the University of Ruse is created an atmosphere of tolerance and equal treatment of every individual.

The respondents' answers given to question 29 demonstrate their negative attitude to gender inequality. The participants in the survey express strong disagreement with the statements, like: Only single women without children can achieve excellence in science (average index 1,81), Women are less ambitious to achieve the highest scientific/academic degree (average index 2) and others. The respondents demonstrate their awareness about the fact that Men usually get much ahead in research while women have little children. The latter also could be area of intervention in the future GEP of the university.

The next 6 questions in the survey $(30,31,32,33,34,35)$ are connected with different aspects of the decision-making process at the University of Ruse and following the principles of gender equality in it. 37,21 \% of the respondents are not members of decision-making bodies at the university, but the rest, which are the dominating part of the sample, have information about the decision-making activities. This means that their data are very reliable. The persons who are not on managerial positions explain this with different reasons - time constrains (31, $03 \%$ ), little practice (27,59 \%), lack of interest (24,14 \%). Only 6,9 \% have applied for such positions but without success. All respondents have opinion about the mechanism of elections and taking managerial positions at the university but the answers are located in the middle of the scale (neither agree nor disagree). This means that there is no single criterion but a set of indicators which should be covered for taking a managerial position - working experience, competences, etc. $65,85 \%$ of the respondents haven't experienced any preferences towards men or women in the process of awarding the decision-making positions. The categorical conviction of the respondents in the fairness and transparency of taking managerial positions at the university is confirmed by their answers that the women are equally treated in this process and their disagreement with the statements in question 34, such as: It is natural that men are in leading positions and women do service/supporting work (average index 1,71), Women are less assertive than men $(1,98)$, etc.

On the basis of the survey results can be drawn the following conclusions:
-The University of Ruse strictly follows the principle of gender equality in all its activities: education, research, decision-making, career advancement, etc.
-The academic community doesn't accept gender inequality and any gender based privileges.
-There are some aspects of the academic life which could be considered as areas of intervention in the future GEP of the University: the balance between the activities at work and in the family, some compensations for the periods of maternity leave and children growing, overcoming the obstacles in obtaining highest scientific degrees and others.

### 4.2. Outcomes of the interviews analysis

At the University of Ruse were conducted 20 interviews - 10 with professors and associated professors and 10 with principal assistant professors with PhD degrees. The distribution of men and women among them is 50:50.

All respondents expressed their desire to talk on the topic about the gender equality in the science and research. The observation of the interviewers is that the reasons for such interest are personal ones or value based.

Expressing their personal positions about the gender equality situation at the University of Ruse, the respondents used frequently the following statements: The sexes are aligned; The gender equality is determined by the Constitution; There is no tolerance of either sex; Women and men are placed on an equal footing, equal start; The sexes are treated equally; There are no barriers for equal participation of men and women in the work and management; There is no gender inequality or discrimination at UR; There is no dominating sex, etc. Some interviewees commented on the dominance of men in the engineering faculties of the university (mechanical and transport faculties) which is natural in connection with the profile of the engineering profession. Other interviewees drew attention to the feminization of some professions (teacher, nurse) and a larger share of women in the faculties offering education in such degree programs. In general, it can be stated that a gender balance has been established in the University of Ruse and the sexes are equally treated.

Some interesting results were received about the conceptualization of the term gender. For 6 persons the meaning of the term is connected with the biological sex. 3 persons are focused on the social meaning of gender - Equality in the social roles of men and women; The social role of the individual in relation to the classical understanding of sex. The majority of the respondents (8 persons) interpret the meaning of gender as an opportunity, freedom of self-identification: Opportunity for self-determination and choice of gender; An opportunity to talk about people without identifying their gender; Personal self-determination; The sex with which an individual can determine his/her self, in some cases this sex can be different from the biological one. In 5 cases gender is understood as an individual with different sexual orientation (gay, lesbian) - A person who is mentally unaware of his own orientation; Something connected with the third sex.

In connection with the conceptualization of the term gender we should outline the fact that there is no adequate translation of the concept in the Bulgarian language. For example, in the Bulgarian text of the Istanbul Convention it is
translated once as "sex" and for the second time as "social sex". Because of the bi-directionality in the translation of gender, in the Bulgarian society is spread the opinion that the Convention introduces a third or social sex, different from the biological one, and this fact, according to the public audience, creates prerequisites for the introduction of "gender ideology". In order to resolve the wrong understanding, the Bulgarian linguists recommend to not translate the concept gender, as in many other languages. The existence of gender as a separate category will avoid the contradiction between the biological sex and the sex as social construct.

On the question when and where the talks about gender equality have been started some of the interviewees indicate the family as such place - talks with their parents or observation of the role model demonstrated by their parents (in 7 cases): I was brought up in such a way - no division of the work; In 4 cases the first talks about the gender equality have been happened in the primary school during the lessons in history and other subject units or in the comparisons between the children - who is more successful. One of the respondents indicates the university as a place of gender equality awareness - In my degree program the men were the dominating part. Another respondent claims that the selfeducation has been the way of forming the gender awareness - From the books in my mother's library about the nature of boys and girls. In 3 cases the topic has been discussed in informal talks with colleagues connected with Istanbul Convention. Another 4 interviewees indicate different occasions of forming their awareness - in the study process with the students in Social Work, in the exploration of the roots of the International women's day and unequal payment of the women and men, in the work on projects with European funding and their obligatory requirements for gender equality, When I was informed that Freddy Mercury is gay - we have never focused our attention on this type of difference.

There is a variety of interviewees' opinions about the key persons having impact on the establishment of their gender awareness. In 3 cases the parents are such key persons, in 4 cases the respondents' opinion is based on personal observations, personal development and experience. In other 4 cases some concrete personalities play such a role - Indira Gandi, Kristalina Georgieva and others. In 3 cases the respondents report about key events - women's movements for human rights, gay parades, UN goals for sustainable development. One respondent says - In my life we have a child with special needs who taught me to look at the world differently, to accept the Others. In 1 case the environment has been such influencing factor - Since the times of socialism it is set to be this way, everyone to work. There is no profession housewife. One respondent declares that the management body of the University of Ruse has been the influencing factor with its policy to not distinguish between the sexes.

Regarding the changes and transformations in their positions most of the interviewees don't declare such changes (9 cases) - the academic environment has confirmed their strong conviction that it is not gender that matters, but the abilities. In 1 case it is observed upgrading of the position in connection with the learning process (the subject unit Intercultural communication). 3 respondents report about an evolution in their position connected with the acceptance of

Others (different people) - people with different sexual orientation, children with special needs, some requirements of the European surveys, in which there are 4 options for sex - male, female, non-binary and I do not want to specify. One respondent says - I won the right of a person to function in a community without tolerance. Another respondent reports about some changes in the position - At the beginning of my career in the academic institution there was an unwritten rule that a certain order of academic development should be followed - by seniority. After our accession to the EU things have changed and the rules became more democratic and liberal.

On the basis of the dominating answers in this section of the interview we can conclude that at the University of Ruse there is a striving to assess the abilities, but not gender.

The next section in the interviews explores the impact of gender on the academic career. 12 respondents argue that there is no such impact - The professional and personal abilities have such impact; There is an objective metrics which determines the growth; It has never been an influential factor, especially in such democratized profession as the academic one. 4 respondents claim that at an earlier stage of the development of the academic institution this was the case, but at present the prejudices have been overcome and everyone has an equal chance. In 3 cases the respondents report about the feminization of some professions - teacher and nurse.

As a conclusion we can say that in the past, in the engineering programs of the University of Ruse, a priority has been given to the men, but now the existing regulatory requirements in the system of higher education provide equal chances for both sexes.

Very important results were received about the level of reconciling the work and family commitments in the academic career. Only 5 respondents report a good level of compatibility thanks to the help of relatives - spouse, grandparents of the children. In 10 cases the interviewees inform about difficulties in reconciling the work and family - I was obsessed by the work, I didn't pay attention to my wife and we divorced. My son stayed with me and now I have rethought the things; The professional life prevails and this is called workaholism. I miss important moments in my life; My work harms my loved ones; I'm becoming a family parasite. My wife takes care of everything; Ever since I took COVID-19 out, I've being paying more attention to my family; It is difficult for me to succeed $100 \%$. If I succeed at work, something is lame at home. In 3 cases the respondents achieve a balance thanks to the flexible working schedule. 2 respondents implement both roles in the family due to death or long-term absence of the spouse. On the basis of the data a conclusion can be drawn that the work at the university has a priority and harms the respondents' families.

The dominating number of the respondents argue that the gender has not affected their plans for academic career. The evidences for this are concentrated in the following statements: The desire to develop is guiding; The academic environment does not give any advantages for career development to the one or another sex; In the academic environment everything is based on objective criteria; In such type of organization as the university it is known that the growth is after meeting the necessary requirements; If we make a comparison
with a company from the industry, the gender is more important there; Internal motivation for work is important, not gender. In 2 cases the respondents inform about lagging behind in the academic career due to family commitments in child raising or obligatory service in the army.

As a conclusion in this section we can say that the gender has no impact on the plans for academic career as objective and measurable indicators determine the academic growth at the University of Ruse.

Interesting data is collected about the personal activity of the respondents on gender issues. In 8 cases the interviewees are convinced that they have an influence on the others through their personal positions, behavior, attitude, managerial status, discussions with the students, modules taught. But in other 7 cases it is not clear for the respondents whether they may affect the behavior of the others. That's why they do not seek to impose their opinion and to persuade. In other 2 cases the respondents feel the potential for influence. It is very important to use the potential of the persons from the identified 3 groups. The people from the first group are well prepared opinion leaders and they can play a significant role in the establishment of the gender policies and strategic plans of the institution. More important is the work with the second and third group of people. They have a potential to become opinion leaders through special training and this could be one of the tasks in the future GEP of the university.

A variety of positive examples of gender equality is given by the participants in the interviews. 4 respondents share examples of such equality observed in their families or circles of friends; other 4 respondents inform about cases of gender equality in academic or business environment; in 2 cases the respondents report about breaking stereotypes based on masculine values (a profession only for males or domination of the stronger sex in some societies); 2 respondents share positive examples from the societal life - the performance of the Bulgarian women at the Olympics in Japan and the wording used in the media "male girls", successful women in the politics - Merkel, women in the European institutions, women in the leadership of the university in the recent years. 1 respondent reports about a successful cohabitation of persons from one and the same sex.

The cases presenting negative examples of gender inequality, reported by the respondents, are not so many and all of them are out of the academic institution. 4 interviewees give information about the families from their circle of friends where the women are treated unequally. In 3 cases the respondents indicate some stereotypes and prejudices about the women as bad drivers or the woman as housewife only. 2 respondents share examples from the societal life the negative practice to divide the refugees' families and to accept only the women and the children; cases of discrimination in some neighbor countries tolerated by the official authorities.

The next section in the interviews is focused on increasing the gender awareness. Here all interviewees share the view about the power of the information and communication campaigns but out of the academic institution because in it there is no problem with gender inequality. This statement is proved by the respondents' words: The problem is in the small closed communities, in the smaller settlements; The people do not know their rights, if there is
discrimination, the people don't know how to protect their rights; If we want to change something, it must be done in the early childhood. Later, no matter what brochures you give, it doesn't make sense; An information campaign is useful as long as it is not manipulative; It is necessary to give positive examples for people who break the stereotypes. E. g. some influential persons can make comments on the topic; Some stereotypes are slightly outdated having in mind the new roles of the women and men in the society. They can be modernized through policies and programs; At the work place we have more rules and regulations and the person is more consistent with their actions. At home the things are more conservative and there the people manifest themselves in their true nature. Explanatory campaigns are needed for the good and bad examples.

In connection with the symptomatic attributes of an undesirable interaction most of the interviewees indicate such actions, as labeling, stereotypes, prejudices, verbal outlining of the inequality, using irony when mentioning the other sex. Other respondents mention the discriminative behavior and violence as forms of undesirable interaction - The violence in some marginalized communities; Organization of campaign for women's protection before identification of gender inequality; Avoiding issues in relation to the other sex. It has to be pointed out that the respondents presented the above assumptions not having in mind the academic institution.

All interviewees declare that their awareness and sensitivity towards gender equality issues have been developed and increased because of different reasons - the Istanbul Convention, accumulation of experience, avoidance of stereotypes in relation to some professions labeled as masculine or feminine, the democratic changes in the Bulgarian society, taking parental functions, different publication, e.g. in the social media, etc.

All respondents don't need any support for the improvement of their gender status because, according to their declarations, they have never been an object of unequal treatment or discrimination in their academic environment.

Very indicative results are received on the last question in the interview Individuals or groups who potentially can be treated unequally on the basis of their sex. Here the respondents' reactions can be divided into 2 groups examples from the academic environment and examples from the societal life. According to the interviewees, in the academic institution such individuals potentially could be: Junior researchers, PhD students nevertheless of their sex; I have never experienced such an attitude, but I have heard that the assistant professors are not perceived as equal; As lecturers in the engineering faculties mostly men are assigned and it is hard for women to be accepted; Potentially, the non-academic staff and concrete human activities could be an object of unequal treatment; People, whose profession is associated with gender - at the university this is the social category of the cleaners, mostly women, and the men from the maintenance service.

According to the respondents, the examples for potential unequal treatment in the society are more - The women over 50 - for access to work places; Some ethnic groups; People in a disadvantaged position; In the Bulgarian Parliament the men form the majority; The lack of the social experience from an educational institution could be a reason for such problems; In the industry the hiring of non-
educated people creates an environment of unequal treatment; People with less incomes, people without education; People with non-traditional sexual orientation; Single parents - they could be stigmatized.

On the basis of the data from the interviews the following conclusions can be drawn:
-A gender balance is established at the University of Ruse and both sexes are equally treated.
-Thanks to the university policy and the established rules, at the University of Ruse there is a constant aspiration to assess the abilities, but not gender.
-At an earlier stage of the development of the academic institution a priority has been given to the men in the engineering programs but now the multidisciplinary profile of the university and the existing regulatory requirements in the system of higher education provide equal chances for both sexes. This statement is proved by the statistical data about the University of Ruse - the percent of the women in the overall academic staff is 54,3 and the women-lecturers and researchers are 47,6 \%.
-The dominating part of the interviewees experience difficulties in reconciling the work and family commitments because of their internal motivation to spent much time at the university. This problem could be an object of special attention in the future GEP of the University of Ruse.
-The gender has no impact on the plans for academic career as objective and measurable indicators determine the academic growth at the University of Ruse. -In connection with the personal activity on gender issues 3 groups of people were identified. The people from the first group are well prepared opinion leaders and they can play a significant role in the establishment of the gender policies and strategic plans of the institution. The people from the second and third groups have a potential to become opinion leaders which has to be developed through special trainings. This could be another task in the future GEP of the university.
-According to respondents' declarations, they have never been an object of unequal treatment or discrimination at the University of Ruse. They only assume that such potential objects in the academic environment could be the junior researchers and PhD students (nevertheless of their sex), young assistant professors, some representatives of the non-academic staff, e.g. the social category of cleaners. The future GEP of the university should take into account these assumptions and undertake the preventive measures.
-There are some potential objects of unequal treatment in the society as a whole but most of them are not gender based.

### 4.3. Outcomes of the analysis of the focus groups

At the University of Ruse were formed 4 focus groups, each of them consisting of 10 persons -1 including GEPI committee members, 1 including professors and associated professors (senior research staff), 1 including principal assistant professors and PhD students (junior research staff) and 1 consisting of representatives of the administrative staff.

According to the proposed structure of the focus group discussion firstly the participants expressed their overall position about the gender equality in the research at the University of Ruse. The persons in the four focus groups argue that at the University of Ruse is established a full gender equality in education and research. Their statements prove the formulated conclusion: The rules at the university are the same for everybody, there is no distinction between men and women; There are no gender quotas in the science; The equality is a natural thing at the university. We can observe such an equality in all positions either for the research staff or the administrative staff. The participants are convinced that a gender balance is achieved at the university and there are no double standards. An important observation of the respondents has been pointed out that there are some feminized work places at the university like in the university library and in the accountancy office. In a contrast direction can be qualified the situation with the system administrators at the university who are mostly men. In connection with the stereotyped character of some professions and respectively work places, the participants in the focus groups conclude that: The gender balance depends on the sphere of the job and the analysis of the necessary work competences; It is normal that mostly men are employed in the engineering faculties, but at the University of Ruse there are 4 engineering and 4 non-engineering faculties and this way a balance is achieved; In the group of the cleaning ladies there is a need of gender diversity - no conflicts in a gender diverse team. When there is a female presence in a team, the environment is balanced.

The next group of questions in the focus group discussion is connected with the experience of the participants in their academic institution and their impressions about the gender equality. All respondents share the strong conviction that there are no evidences at the University of Ruse about putting someone in advantaged or disadvantages position on the basis on gender criterion: No one is preferred because of being man or woman, the abilities are important. Like in the interviews, the respondents point out the existing stereotypes about some professions and the practice to enroll more boys in the engineering university programs and more girls in the programs focused on nursing and education despite the fact that since 1976 in Bulgaria the programs Nurse and Midwife are open for men. One more fact from the past was outlined about the quotas for men and women in the students' admission. Now this is not the case - all students are selected by their admission scores.

The next section in the focus group discussions at the University of Ruse was dedicated to the barriers for the women in the academic institution to achieve the highest scientific degree and to become professors. In the audit held at the University of Ruse was found out that the percent of the womenprofessors is 18,9 and $42,5 \%$ is the proportion of the women-associated professors. According to the participants in the focus group discussion this imbalance in the highest academic position is due to several reasons: Before 2011, in Bulgaria there was a High Attestation Commission to the Council of Ministers and this was the body awarding the scientific degrees and positions on the basis of very strong criteria. These are the so called national professors. After 2011 in connection with legislative changes the universities received the right to
award degrees and positions but every university has quotas for such positions on the basis of financial criteria. For example, the quota for professors at the University of Ruse is 10 \%; It may be a matter of self-censorship. There is one man-professor in my department but the head of the department is a woman who is chosen by men. In my opinion she would not become a professor. Somewhere in the past she has set a limit in front of herself; In March 2021 there are 30 professors in the General Assembly of the University of Ruse. 8 of them are women, mostly from non-engineering faculties. To achieve the highest academic position depends on the sphere of professional realization and personal ambition; There are some factors delaying the women's professional development - family, pregnancy, children; There are bio-social reasons for this situation - biological reasons as pregnancy, childbirth, the female body is more resilient, the women live longer and social reasons as the earlier retirement of the women according to the Social code (the women have the right to retire 5 years earlier than the men).

The next section in the focus group discussion is not characterized by significant diversity in the opinions. All participants are strongly convinced that the University of Ruse guarantees an equal access to managerial positions. There are many examples for this statement: a woman-rector (2016-2018), a lot of women - vice rectors or deans of faculties (2 women vice rectors out of 4 vice rectors of the university, 5 women deans of faculties or directors of university branches - the university has 8 faculties and 3 branches), many women acting as heads of university departments. The statistical data from the audit also confirm the gender balance in the leadership positions: the women in the highest executive body of the university (the Academic Council) are $46,7 \%$, the deans, the directors of branches, centers, etc. are $54,5 \%$. More interesting is the participants' opinion about how to achieve a sustainability of this gender balance. In relation to this we have the following ideas: An early growth, an earlier attraction to leadership roles, e.g. during the study period at the university; Achieving sustainability through the normative, legislative base. It has to affirm the equal rights; It is important to train the academic staff and to support its representatives through research and development; Anyone who is ambitious and can take responsibility, can achieve this (leadership position).

The participants in the focus group discussion confirm the conclusions from the interviews that the women at the university have more difficulties in finding a balance between the work and family commitments because of their specific engagements with children raising. But such difficulties are also valid for the men at the university because of their internal motivation to spent much time at the university. The respondents' proposals to resolve these problems are in the following directions: This is a societal and cultural problem. It is not a matter of university level. This is a cultural core that is difficult to change. Something could be done at the university to keep lecturers' children here while they work. We have a huge sports complex. We can make a center for working with children to support workers, as well as the female students-mothers. This center can support the whole community. Many students from the university programs can be included in the work of this center. It would be good to make a kindergarten for the lecturers' children and the students from the pedagogical
specialties to practice there; To appoint a psychologist at the University of Ruse to whom the people could turn on such issues.

In the final part of the focus group discussion the participants gave their recommendations to the future GEP of the university, which are, as follows: Financial provision of the science, subsidies on project and competitive basis. Additional incentives for the women. Otherwise there would be more insecurity for them due to family commitments; At the entrance of the scientific career there should be no discrimination when evaluating a person. He/she should be evaluated because of the research development and not because of gender, not to refuse incentives or financial relief; Now, if a PhD student goes into maternity leaves, her (his) doctoral studies are extended without receiving a scholarship. (Note: In Bulgaria the legislation allows for men to take the maternity leave.) That is why there are cases of giving up motherhood in order to receive the scholarship. The doctoral studies are not recognized as working load that should be considered in the retirement of a concrete individual (according to the Bulgarian Social code). The issue with the PhD students in maternity leaves should be resolved on national level; It is expected that GEP will be a strategic document. That's why it should follow the structure of such documents - priorities, objectives, measures and actions; It is necessary for people at the university to be informed about everything in the beginning of their academic career; The large audience should be informed about the good things that happen at the university; The things at the university are well balanced and it is very important to preserve them. There is a culture of equality at the university, the people who value the equality predominate. In spite of the fact that there is a Gender equality law in Bulgaria, in the university GEP we have to formulate the principle of nondiscrimination on the grounds of sex; We can envisage some initiatives in the GEP, like: Day of the man and Day of the woman in the research, Day of the young mothers in the science and others.

On the basis of the results from the focus group discussions held at the University of Ruse, the following conclusions can be drawn:
-The data collected from the focus group discussion fully coincide with those collected through the usage of the other two methods - survey and narrative interview.
-At the university of Ruse a good gender balance is established. It is visible at all organizational levels and activities and no one is put in a disadvantaged position on the grounds of sex.
-There are existing stereotypes about some professions and respectively about some degree programs, like Nurse and Education. More women are admitted in such programs but the situation is constantly changing.
-The percent of the women-professors at the university is relatively low but there are some reasons for this: the previous engineering profile of the university, current legislative changes and financials requirements.
-The women's access to the leadership positions at the University of Ruse is more than balanced. We can observe a prevailing number of women implementing such positions.
-The establishment of a balance between the work and family commitments is difficult for the university as a whole. Some steps can be undertaken to support
the academic staff and the students - kindergarten for the staff children, day centers, including the students-volunteers as personnel.
-The participants in the focus group discussions perceive the future GEP of the university as an instrument which is capable to preserve the established gender equality at the university and to provide its sustainability in various aspects and directions. This GEP can serve as a positive model for other institutions from different sectors in Bulgaria.

## 5. Recommendations for development of gender equality plan at University of Ruse

The recommendations below are excerpted from the empirical data in the report - university audit, staff survey, interviews and focus groups. They are divided into 3 groups according to the level of the institutions that should be addressed: national, regional and local (University of Ruse and its branches).

## Activities and measures which should be realized in cooperation with national institutions:

### 5.1. Recommendation \# 1

To address the Ministry of Labor and Social Work and the Ministry of Education and Science to resolve in a legislative way the problem with the PhD students not receiving a scholarship within the period of maternity leave or whose period of maternity leave within the PhD studies is not considered as an active period of work in their retirement in the future. This problem was outlined in one of the focus group discussions.

### 5.2 Recommendation \# 2

To address the Ministry of Labor and Social Work with a request to introduce a social or career development scholarships for young women researchers and female students in the form of specific social assistance in the periods of child raising. This proposal was generated on the basis of the university audit and the identified necessity of special support for women researchers.

### 5.3 Recommendation \# 3

In cooperation with the Ministry of Education and Science and other ministries to provide information security, expert assistance and training to increase the capacity of current and potential beneficiaries - women and men under the measures of the operational programs 2021-2027. This proposal was generated on the basis of the university audit and the identified necessity of national information days and specialized trainings on project management and entrepreneurship.

### 5.4 Recommendation \# 4

In cooperation with the Ministry of Education and Science and other social partners to initiate projects and to organize national information and communication campaigns dedicated to avoiding stereotypes about some professions qualified and masculine or feminine. This problem was identified in the interviews and focus groups as a main reason for horizontal segregation.

### 5.5 Recommendation \# 5

In cooperation with the social partners, the NGOs and the media to initiate events and information campaign aiming at attraction of young people to research and academic career. This proposal was generated on the basis of the university audit as is considered as a main tool of the smooth generations' change in the academic field.

## Recommendations linked with addressing regional institutions and guaranteeing their support

### 5.6 Recommendation \# 6

In cooperation with the Municipality and some regional institution (e.g. Regional Governance of Education) to achieve the Barcelona targets for childcare by setting up kindergartens and crèches for the children of students and lecturers. The recommendation is stemming from the identified work-life imbalances in the surveys, interviews and focus groups.

### 5.7 Recommendation \# 7

In cooperation with the regional and municipality schools to work with and to stimulate talented children of both sexes in order to provide a pool of graduate talents for the university. This proposal was generated on the basis of the university audit.

### 5.8 Recommendation \# 8

In cooperation with the regional business and social institutions to create parttime jobs for student's internships in nurseries and schools for students with an interest in social activities. This proposal was generated on the basis of the university audit.

Recommendations linked with addressing local institutions and guaranteeing their support - recommendations for the GEP of University of Ruse and its branches

### 5.9 Recommendation \# 9

To make changes in the main internal university documents through inclusion in them of special texts focused on gender equality principles in accordance with the European and national legislation. (Rules of the University of Ruse, Election rules, etc.). This recommendation is stemming from the university audit and the necessity to provide full information and transparency on gender equality issues.

### 5.10 Recommendation \# 10

To prepare some new documents in relation to gender equality, e.g. a System document (Standard) with specific clear rules that will facilitate the practical implementation of the obligations to ensure healthy and safe working conditions and risk assessment. This recommendation is stemming from the university audit and the necessity to provide gender balanced working conditions.

### 5.11 Recommendation \# 11

To preserve the balance between the study programs offered by the university and their subject areas (engineering - non-engineering programs) in order to avoid the gender imbalances in some professions stereotyped as masculine or feminine. This recommendation is stemming from some opinions expressed in the interviews and focus groups about the prevailing number of men or women in certain university programs due to the existing stereotypes about some professions.

### 5.12 Recommendation \# 12

To minimize the obstacles to achieve the highest academic position, e.g. time constraints to reconcile with family responsibilities, limited internship and study visits abroad, etc. This recommendation is stemming from some opinions expressed in the interviews and focus groups about the reasons for the relatively low percent of the women achieved the highest academic position.

### 5.13 Recommendation \# 13

To minimize the imbalances in the distribution of the working load and capacity lecturing, research, family commitments - through special social facilities opening of kindergarten for the staff children, day centers, including the studentsvolunteers as personnel and others. This recommendation is stemming from some opinions expressed in the interviews and focus groups, as well as from the survey results.

### 5.14 Recommendation \# 14

To introduce some compensations for the women who are lagging behind in the research in the periods of raising little children - such period to be considered in their attestation. This recommendation is stemming from some opinions expressed in the interviews and focus groups.

### 5.15 Recommendation \# 15

To pay a special attention to the groups of young assistant professors and some social categories in the administrative staff who potentially could be an object of unequal treatment. This recommendation is stemming from some opinions expressed in the interviews and focus groups.

### 5.16 Recommendation \# 16

Through special trainings to increase the capacity of those people at the university who can serve as opinion leader on gender equality issues. This recommendation is stemming from some opinions expressed in the interviews.

### 5.17 Recommendation \# 17

To inform the public audience about the culture of gender equality established at the university and about all good things (events, initiatives) happening here in relation to gender equality. This recommendation is stemming from some opinions expressed in the interviews.

### 5.18 Recommendation \# 18

To envisage some concrete initiatives in the GEP, like: Day of the man and Day of the woman in the research, Day of the young mothers in the science and others. This recommendation is stemming from some opinions expressed in the focus groups.

## References (University of Ruse)

1. ATHENA_D 2.2 Report. Legislative and policy backgrounds to promote gender equality in research (Bulgaria)
2. EC (2019). She Figure 2018; Luxembourg: Publications Office of the European Union, 2019; Available at: https://op.europa.eu/en/publication-detail/-/publication/9540ffa1-4478-11e9-a8ed-01aa75ed71a1 ; EC (2019). She Figures Handbook 2018; Luxembourg: Publications Office of the European Union, 2019; Available at: https://publications.europa.eu/en/publication-detail/-/publication/09d777dc-447c-11e9-a8ed-01aa75ed71a1/language-en
3. Progress on the sustainable development goals. The gender snapshot 2021. United Nations. Department of Economic and Social Affairs. 2021. Available at: https://www.un.org/en/delegate/progress-sdgs-gender-snapshot-2021
4. U-Multirank Gender Monitor. An analysis of the female to male ratio within the higher education ladder. November 2021. Available at: https://www.umultirank.org/export/sites/default/.galleries/generic-images/Gender-Monitor-2021/u-multirank-gender-monitor-2021.pdf

## Annexes (University of Ruse)

Annex 1 List of interviews held at the University of Ruse

| Interview number | Date and hour of the interviews | Research position of the respondents Senior research staff (SRS) Junior research staff (JRS) | Sex of the respondents M/F |
| :---: | :---: | :---: | :---: |
| 1 | 08.10.2021-2 pm | SRS | M |
| 2 | 08.10.2021-3 pm | SRS | M |
| 3 | 14.10.2021-10 am | JRS | F |
| 4 | 14.10.2021-2 pm | SRS | M |
| 5 | 18.10.2021-10 am | SRS | F |
| 6 | 18.10.2021-11 am | SRS | F |
| 7 | 18.10.2021-2 pm | JRS | F |
| 8 | 18.10.2021-3 pm | SRS | M |
| 9 | 19.10.2021-2 pm | JRS | F |
| 10 | 19.10.2021-3 pm | JRS | M |
| 11 | 19.10.2021-4 pm | SRS | F |
| 12 | 20.10.2021-2 pm | SRS | M |
| 13 | 20.10.2021-3 pm | SRS | F |
| 14 | 20.10.2021-4 pm | JRS | M |
| 15 | 21.10.2021-10 am | JRS | F |
| 16 | 21.10.2021-1 pm | JRS | M |
| 17 | 21.10.2021-2 pm | JRS | M |
| 18 | 21.10.2021-3 pm | SRS | F |
| 19 | 25.10.2021-10 am | JRS | M |
| 20 | 26.10.2021-10 am | JRS | F |

10 men - 10 women
10 representatives of the SRS - 10 representatives of the JRS

Annex 2 List of focus groups held at the University of Ruse

| Number of <br> the focus <br> group | Date and hour of the <br> focus groups | Focus groups' <br> composition | Number and <br> sex of the <br> participants |
| :---: | :---: | :---: | :---: |
| 1 | $09.11 .2021-2 \mathrm{pm}$ | GEPI committee <br> members | 14 participants <br> -10 women <br> and 4 men |
| 2 | $16.11 .2021-2 \mathrm{pm}$ | Principal assistant <br> professors and <br> PhD students <br> (junior research <br> staff) | 10 participants <br> -5 women <br> and 5 men |
| 3 | $17.11 .2021-2 \mathrm{pm}$ | Representatives <br> of the <br> administrative <br> staff | 10 participants <br> -5 women <br> and 5 men |
| 4 | $19.11 .2021-2 \mathrm{pm}$ | Professors and <br> associated <br> professors (senior <br> research staff) | 10 participants <br> -5 women <br> and 5 men |

## Annex 3 List of National documents relevant to gender equality issues

1. Gender Equality Law (2016) - in Bulgarian. Available at:
https://www.lex.bg/bg/laws//doc/2136803101;
2. National Strategy for Encouraging Gender Equality 2021-2030 - in Bulgarian. Available at: https://www.mod.bg/bg/doc/ ravnopostavenost/20210119_National_strategy_2021-2030.pdf ;
3. National Action Plan for Encouraging Gender Equality 2019-2020 - in Bulgarian. Available at:
https://www.strategy.bg/StrategicDocuments/View.aspx?lang=bgBG\&Id=1272

# Gender Equality Report for Agencia Canaria de Investigación, Innovación y Sociedad de la Información (ACIISI), Spain 

Project Acronym: ATHENA
Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

Grant Agreement nº: 101006416

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## Introduction

The objective of the report is to provide a description of the departure situation in terms of gender basis for the development of appropriate gender equality plans in the ACIISI.

To obtain the key information and to make progress in the institutionalisation and gender mainstreaming in the ACIISI through the Athena project, the following actions were organised:

- several online meetings with the Coordinator and GEPI committee members.
- a questionnaire to obtain personal data from the participants was distributed and filled in.
- a focus group was organised online on the $12^{\text {th }}$ of November for 2 hours.
- training materials for Sessions 1 and 2 were translated and were placed in the online platform to Spanish so all the staff can access and do the trainings.
- an specific online training was organised in Spanish for all the ACIISI staff with the participation of 16 people on the $1^{\text {st }}$ and $2^{\text {nd }}$ of December during a total of 2 sessions, 2 hours per session a total of 4 hours.
- The questionnaire was translated to Spanish and distributed among all the staff and 26 people participated out of 44 .


## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection technics implemented throughout the year 2021. The methodologies have been prepared and guided by the Athena partner, the Institute for Research in Social Communication at the Slovak Academy of Sciences.

The national provisions in terms of gender equality in research and higher education were assessed based on a desk-research and policy analysis related to gender equality in society, research, and higher education. Our team utilised extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of our organisation.

The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardised data collection on women in science She Figures. ${ }^{62}$ Our team collected the data through a focus group with the GP Committee, two online questionnaires and a participatory training session. The qualitative GEA indicators present unquantified aspects and measures to assess the situation in terms of gender equality. The measures were evaluated via an online data collection system using a simple online assessment tool.

To identify gender biases in the ACIISI, we used three data collection methods: online surveys, focus group and participative trainings.

The first online survey was directed towards getting personal and professional context information of the focus group participants and was translated to Spanish: https://docs.google.com/forms/d/1SZyrbjdVVgN9XB61GOkVVxWcxp8R3eAvViji 5fj wdA/edit

The online staff survey implemented by a standardised questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, 44 personas were included in the analysis and 26 people participated. ${ }^{63}$

Secondly, our team organised 1 focus group and two participatory training sessions that were recorded. Then, we listened to the recorded discussions, took notes of the main issues approached by the participants and analysed the data. The main ideas and conclusions are included in the present report.

## 2. Outcomes of the assessment of the national provisions in Spain

### 2.1. Status of gender equality in society

Following the Gender Equality Index (GEI), the scores in 2020 rank from the lowest 54.4 score in Romania to the highest 72 -point score in Spain out of the maximum 100-point score. Although most countries recorded improvements in the last decade, none of the countries reached the maximum score of 100 points.

Spain is above the EU-27 average (67.4) at the 72- point score. (EIGE, 2020) Source: EIGE Statistics Database, Gender Equality Index scores, domain scores and sub-domain scores [index_data__index scores].

[^34]The GEl's score consists of six domains scores work: money, knowledge, time, power, and health reflecting the EU gender equality framework.

- The domain of work compares the position of women and men in the European Union's labour market. It measures gender gaps in participation in the labour market, duration of working life, sectoral segregation patterns and quality of work (such as flexibility of working time and career prospects).
- The domain of money examines inequalities in financial resources and the economic situation of women and men. It measures gaps in earnings and income, as well as the risk of poverty and income distribution.
- The domain of knowledge shows differences between women and men in terms of education and training. This domain measures gaps in participation in tertiary education, segregation in educational fields and lifelong education.
- The domain of time measures inequalities in the allocation of time that women and men spend for different activities. It measures gender gaps in the involvement of women and men in caring for their children or grandchildren, older people, and people with disabilities, as well as their involvement in cooking and housework in comparison to time spent on social activities.
- The domain of power measures gender equality in decision-making positions across the political, economic, and social spheres. The domain of health measures gender equality in three health-related aspects: health status, healthy/unhealthy behaviour, and access to health services.

The domain scores reveal which areas pull the gender equality in the countries down. While the work participation and health domains scores are often above the EU-27 average, the score of time, power and knowledge domains indicate series of drawbacks in the gender-fair environment.

Table 1.

| COUNTRY | Work | Money | Knowledge | Time | Power | Health |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spain | 73,2 | 77,8 | 67,6 | 64 | 69,4 | 90,1 |

Source: EIGE Statistics Database, Gender Equality Index scores, domain scores and sub-domain scores [index_data__index_scores]

Despite relatively high scores in the GEI money domain, based among others on mean monthly earnings (PPS) and equalised net income (PPS), the latest available data on gender overall earnings gaps present persistent gaps to the detriment of women. This synthetic indicator considers three types of disadvantages for women in the labour market: lower hourly earnings,
lower hours worked in paid work, and lower employment rates due to interruptions in childcare or other dependent family members.
EIGE, Gender Equality Index. https://eige.europa.eu/gender-equality-index/2020
Table 2. Report on national status in gender equality in research for Gender overall earnings gap (\%, 2018): Spain 33,0
Source: Eurostat, Gender overall earnings gap [TEQGES01]
Even countries such as Spain, Italy, Slovenia, all scoring high in GEI in comparison to other countries, report that despite a solid basis for gender equality, full recognition of GE is insufficient.

### 2.2. Status of gender equality in research and higher education

The share of women PhD graduates is more than $50 \%$ in all the partners' countries. In engineering, the share ranges from 22 \% in Spain to $42 \%$ in Poland. The proportions of PhD women's graduates in information and communications technologies are even more diverse among the countries. While in Poland the percentage of women is 10\%, in Spain 22\%. Source: Eurostat, Education statistics and OECD (Graduates by field)

The share of women researchers (FTE) is under $50 \%$ in all the partners' countries. In recent years the share dropped slightly down even in Bulgarian and Slovenia. However, the gender pay gap in science and development (NACE rev. 2, division 72, 2014) is not high in some countries. For example, in Bulgaria, it is even -1,4 \%, Romania -6,4\%, Slovenia 3,5\%., Italy 6,4\%. But in Spain 16,6\% and Slovakia 20,6\%.

Table 4 Share of women researchers out of total number of researchers (FTE, \%, all sectors) in Spain 39\% Note: The values are rounded Source: Eurostat, Share of women researchers, all sectors [ta_resdig_sctech_rdperes_perf__tsc00006

## 3. Outcomes of the gender equality audit at the ACIISI

The contents of this chapter are partly commented in chapter 4 and they will be further analysed in future actions in 2022 to define the equality plan of the ACIISI.

## 4. Identified gender biases at the ACIISI

### 4.1. Outcomes of the staff survey

The staff in the ACIISI are 44 people. 26 people answered the staff survey 59,09 \% of the staff. The participants

- 16 women 61,54\%
- 8 men

30,77\%

- 2 preferred not to say

7,69\%
The main results were the following:

### 4.2. Perception of Gender Equality in the organisation:

- $58 \%$ of the participants agree that gender equality increases the fairness of the working environment and $15,79 \%$ disagree.
- $42 \%$ of the participants agree that gender equality improves the quality of scientific performance and 15,79\% disagree.
- $51 \%$ of the participants consider that gender equality makes it easier to balance work and family and about 21\% disagree.
- It is important personally for more than $84 \%$ of the participants and only $6 \%$ express that it is not important for them.

Participants do not consider gender equality as a burden nor only an EU conditionality without any importance or an ideology enforced by liberals. Therefore, according to these results there is a good attitude towards further analysis from the gender perspective. More training and raising awareness participative sessions with practical examples sessions might be necessary to analyse the importance and relevant factors of gender equality both in the institutional culture, work, and family balance and in the science context and increase the number of people that believe that gender equality is very important in the organisation.

### 4.3. Perception of men and women in science

- $10 \%$ consider that it is more important to encourage boys than to encourage girls to pursue a science career.
- All disagree on that women are not suited for specific research fields
- $95 \%$ disagree on that men have higher chances in the research as they have more innovative and creative thinking and 5\% neither disagree nor agree.
- All agree that women are just as capable of thinking logically as men.
- $95 \%$ agree that men scientists are not better at information technologies and using technical equipment than women scientist and $5 \%$ neither disagree nor agree.

This issue should be discussed further in training sessions as to analyse why there might be differences for men and women in the science field if they do not think that there are biological differences among them that can influence this result.

### 4.4. Number of men and women in their departments.

According to the answers obtained it seemed important for most of the participants that there is a balance in the number of men and women in their department, however 31\% consider that it is not important whether there are men or women among the staff.

### 4.5. Men and women chances and advantages or disadvantages at the organisation.

There is a high number of participants that do not seem to know. It is important to validate the perceptions with real numbers regarding hiring and promotion.

- $5 \%$ Consider that women are slightly preferred when hiring someone and $74 \%$ that women and men are in equal situation and $21 \%$ do not know.
- Regarding appointing people to top managerial positions: 63,16\% consider that women and men are in equal situation, $10,53 \%$ that men are preferred, $10,53 \%$ than women are preferred and $16 \%$ do not know.
- When employees are striving for a better position: $5 \%$ consider than men are certainly preferred, $68 \%$ that women and men are in equal position and 26\% do not know.
- Regarding salary and bonuses 10\% show that men are preferred, 58\% men and women equally and $31 \%$ do not know.
- Regarding grants at national level $5 \%$ consider that women are preferred and $42 \%$ do not know, and at international level again $5 \%$ consider women are preferred and $52 \%$ that do not know.


### 4.6. Distribution of tasks and resources among men and women in the departments.

- The aspects in which the participants perceive gender inequalities are the following:

Advantage towards men:

- Assignment of important tasks and roles (11\% of participants)
- Distribution of office space (11\% of participants)
- Attention from senior management ( $23 \%$ of participants)
- Access to informal circles of influence (22\% of participants)
- Receive positive feedback from management (11\% of participants)
- Invitations to conferences (11\% of participants)
- Recognition of intellectual contributions (11\% of participants)
- Allocation of teaching (5\% of participants)
- Advantage towards women
- Allocation of administrative tasks (28\% of participants)
- Allocation of service roles (17\% of participants)


### 4.7. Private life and Impact on career

The aspects of private life that participants consider had more impact on their career are:

- Positively:
- Being married
- Having a supportive family and/or partner
- Being older than average
- Being younger than average
- Not having children or other caring responsibilities
- Negatively:
- Taking maternity/paternity/adoption leave

84\% consider not applicable having disclosed a disability.

### 4.8. Work and performance and impact on career

The factors that the participants consider influence more on the career development are the following in order of importance:

- Having relevant research output
- Involved in well regarded projects
- Flexible working hours
- Having visible role models
- Successfully applying for grants
- Being able to work more hours
- Receiving formal and informal mentoring

It is necessary to analyse all these factors according to gender to establish necessary compensatory measures if there are gender gaps to guarantee equity and equality for men and women in their career development.

### 4.9. Scientific / Academic degrees and careers

$35 \%$ consider that to obtain the highest scientific degree is easier for a man and $12 \%$ do not know. It is important to analyse the reasons behind this belief. There is a comment on how being a mother can influence the difficulty to achieve certain goals in the Scientific field.
$29.41 \%$ consider that time constraints related to reconcile with family responsibilities is one of the obstacles to obtain the highest scientific/academic degree.
$40 \%$ answered that men usually get much ahead in research while women have little children
$50 \%$ of participants believe that women use more skills in teaching than in research activities.

All the results of the survey should be analysed further crossing analysis variables and doing a more profound gender analysis. We suggest this to be done in the process of developing the gender equality plan of the institution in 2022.

### 4.10. Gender discrimination and harassment

2 people answered that the decision- making position was given to a man instead of a woman or to a woman instead of a man despite the expert and educational requirements having been the same, there is not information regarding which sex was privileged in these answers. One participant said that knows such a case in which a man was denied.
Regarding harassment: 15 people responded and the results show that the following have happened in the organisation:

- Inappropriate comments about my appearance or clothes (2 people rarely and 1 person sometimes)
- Inappropriate remarks about my skills and competencies ( 3 people rarely and 2 sometimes)
- Inadequate and unfair critics (4 people rarely and 4 sometimes)
- Humiliation and degrading (3 people rarely and 3 sometimes)
- Unwanted phone calls, emails, voice/text messages, pictures, or videos with sexual subtext (1 person rarely)
- Threats of verbal, nonverbal, psychological, or physical abuse (1 person rarely)
It is necessary to do a further analysis on whether the following were related to the sex of the person affected and if these behaviours came from men or women.


### 4.11. Outcomes of the interviews analysis

No interviews were done at the ACIISI.

### 4.12. Outcomes of the analysis of the focus groups

The focus group was organised including participants from different positions and decision-making levels in the organisation. 3 women and 3 men were invited, 2 women and 2 men participated. GEPI committee members were included. One woman had previous training on gender equality, one woman did not have any experience or training on gender and the 2 men that participated had some experience working on gender.

- Sinda María Hernández González (invited but could not participate)
- Antonio Elias Lopez Gulias (invited but could not participate)
- Patricia Oramas Gallard, Head of Grants Coordination Section
- Javier Roo Filgueira, Researcher, responsible for Athena
- Ángeles Varona Cabrera, administrative assistant
- Guzmán, head of R\&D Plans Section

Results of the personal data questionnaire (only four people filled it in):

| Participants $^{64}$ | Number | \% |
| :--- | :--- | :--- |

[^35]| Total |  |  |
| :---: | :---: | :---: |
| Women | 3 | 75\% |
| Men | 1 | 25\% |
| Age categories (included categories) $\begin{array}{ll}  & 20-30 \\ - & 40-50 \\ - & +50 \\ \hline \end{array}$ | 12 | $\begin{aligned} & 25 \% \\ & 50 \% \\ & 25 \% \\ & \hline \end{aligned}$ |
| Occupations |  |  |
| - Researcher |  |  |
| - Student |  |  |
| - Teacher |  |  |
| - Technicians | 1 | 25\% |
| - Administrative staff | 3 | 75\% |
| - Other |  |  |
| Academic/scientific degree |  |  |
| Scientific/study field <br> Agricultural and veterinary sciences | 1 | 25\% |

The questions that were raised to be discussed in the focus groups were the following:
$\checkmark$ What imbalances exist between women and men in the organization?
$\checkmark$ What are the causes of these inequalities?
$\checkmark$ What measures do they suggest to improve the promotion of gender equality and equity?
$\checkmark$ What obstacles exist?
$\checkmark$ What topics, lines of action and measures do you think should be included in an equality plan for your institution?

| Topic/questions ${ }^{65}$ | Summary of responses |
| :--- | :--- |
| 1. General <br> opinion on GE <br> in the <br> organisation | It is considered highly necessary to keep working on <br> gender equality and motivating all the staff so the <br> equality plan is developed to be implemented and not <br> only a theoretical document. |

[^36]|  | They consider that the ACIISI is very gender balanced. The topic of stereotypes and conscious and unconscious biases is addressed, as well as the social evaluation criteria and the reasons why there has always been a man in the management team when there are most women among the personnel. |
| :---: | :---: |
| 2. Individual experiences | - The situation has improved along the years and now there are not discrimination against women in the organizational culture. <br> It is mentioned that, especially in the past, micro sexisms were carried out alluding to women's physique or calling them "the girls", undervaluing professional women, stating that they are "for whatever is offered to the bosses" and sexist comments of this nature. |
| 3. Items with full agreement of participants | There have always be a man in the managerial position. <br> There is a woman in the highest decision-making political level now. <br> - There are most women in the staff. <br> - More data is needed: statistics, budgets from the gender perspective, disaggregated by sex... <br> In the subsidies, affirmative action measures could be established with respect to hiring, participation and beneficiaries. <br> - An analysis has been made of the staff that they can send to be able to analyse this in more depth. <br> Inclusive language is used in communication. <br> - Protocol on sexual harassment and harassment based on sex: they are unaware of its existence in the Department or in the Government of the Canary Islands. It will be consulted; it is considered necessary. <br> **They mention as an opportunity that the current Councillor was the Director of the Canary Islands Institute for Equality. <br> Budgetary gender impact analysis: It is mandatory in Europe, it is not yet being carried out, they are beginning to see how to disaggregate data by sex, they consider it complicated. <br> Infrastructures: they are not being analysed from a gender perspective. |


|  | - Statistics: It is necessary to know the number of men and women working in companies with publicly financed projects to verify if there are gaps. |
| :---: | :---: |
| 4. Items with disagreement of participants | Specific measures to increase the number of women in higher positions, doubts regarding how it could affect to guarantee that the best person is hired. <br> Debate on the evaluation and tie-breaking criteria and the law of contracts when it comes to promoting a greater hiring of women and reducing the existing gaps by sex: the number of female researchers in the Canary Islands does not reach $40 \%$. The concepts of positive action and equity versus gender equality are explained since there are discrepancies on this point related to how to carry it out in practice and related to whether establishing positive action criteria in favour of women would be detrimental to quality. The staff has recently been increased with 5 new women. |
| 5. Nex | - Diagnosis Barbora online questionnaire: adapt and translate for all ACIISI staff, it is very oriented to RDOs rather than RFOs, launched already in English to all colleagues, more participation may be obtained with the adaptation to ACIISI objectives as RFO as with the Spanish translation, concerns a how to integrate afterwards the answers from one questionnaire to another, for which we would like to discuss it with you and in your case with Barbora. <br> Didactic material for Modules 1 and 2: Translate and send to all ACIISI staff so that they can complete the two modules through the ATHENA platform. <br> Module 3: Theoretical-practical introduction to gender equality and gender mainstreaming, to be carried out in December. <br> ACIISI will find out whether the Canary Islands government or the Regional Ministry is implementing a new strategy or equality plan that may affect them and/or guide their specific plan and whether they have a protocol against sexual and gender-based harassment. <br> The ACIISI can be a good model to advance more in the promotion of gender equality in the Government of the Canary Islands through the equality plan and in the context of I+D. |


|  |  |
| :--- | :--- |
| 6. Meta- <br> discussion |  |


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## 5. Recommendations for development of gender equality plan at the ACIISI

Among the main recommendations for the development of the gender equality plan are the following:

## Recommendation \# 1 General Recommendations

- Consider the work that is already in place and include it in the plan so they can be maintained independently of the staff that is in the institution.
- Include in the external audits of the institutions that receive funds that they must comply with equality legislation: voluntary or compulsory equality plan, pay register disaggregated by sex, protocol against sexual and gender-based harassment.


## Recommendation \# 2 Gender segregation in research and science.

- Obtain data on the calls for proposals, how many are men and how many are women in the staff that will work on the proposal, and how many women there are when the data is not available.
- Get data on how many funded companies have an equality plan, salary registry disaggregated by sex, data on how many men and women are working in the different positions and functions, etc and assess the results.
- Implement a measure: check whether the companies that are obliged to do so are complying with the Laws related to gender equality and ask them to send all the necessary documents as a mean for verification and design an incentive for the companies that are not obliged to do so (those with less than 50 employees).


## Recommendation \# 3 Gender-related career challenges.

- In the recruitment of PhDs through public calls for applications, the results on how many men and women there are, are known and there does not seem to be a significant bias. However, it varies from year to year, it is important to analyse whether there are parameters, factors that have an influence on the gender results and how to approach them.


## Recommendation \# 4 Gender imbalance in senior positions.

- It is important to analyse whether there are parameters related to gender/others (conscious or unconscious) that have an influence on the results for men and women and analyse how to approach them to guarantee gender balance in senior positions and/or to eliminate any form of direct or indirect discrimination by sex.

Recommendation \# 5 Gender bias in access to research funding.

- Obtain data on the calls for proposals, how many are men and how many are women and how many women there are, when the data is not available.
- How many funded companies have an equality plan, salary registry and protocol against sexual and sexist harassment or not and assess it
- Implement a measure: check whether the companies that are obliged to do so are complying with it and prove it, and those that are not obliged to do so can be given an incentive.
- Analyse the possible influential factors over an unequal access between men and women to research funding if so and establish the necessary corrective measures.


## Recommendation \# 6

## Blind and gender-biased research.

- Review that the contents of the research funded do not include gender biased, gender stereotypes or any form of discrimination.
- Keep a record of examples in which gender biased is shown.


## Recommendation \# 7 Gender-blind and gender-biased organizational culture and institutional process.

- There are no neutral actions gender related, it is important to analyse whether there are parameters that have an influence on the institutional processes, working relationships and results and opportunities for men and women.


## References (ACIISI)

All Athena documents and reports

# Gender Equality Report for Regional Fund of Science and Technology (FRCT), Portugal 

Project Acronym: ATHENA

Title: IMPLEMENTING GENDER EQUALITY PLANS TO UNLOCK RESEARCH POTENTIAL OF RPOS AND RFOS IN EUROPE

Grant Agreement n o : 101006416
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## Executive summary (FRCT)

Portugal has been implementing public policies for gender equality (GE) for more than 20 years, which have been guided by National Plans for Equality and from March 2018 until 2030 by the National Strategy for Equality and NonDiscrimination - Portugal + Equal (ENIND). The Autonomous Regions of the Azores and Madeira have legal-political autonomy in this field and develop their public policies through their institutions and instruments.

However, we find major obstacles and corresponding challenges in Portugal, and specifically in the Autonomous Region of the Azores, for the implementation of GE. One of the major challenges, both at the national and regional level, is the integration of the gender perspective in all areas of political action, both at the internal and territorial level, based on mechanisms for diagnosis, monitoring and evaluation of the various actions and the gender equality plans (GEP).

The Regional Fund of Science and Technology (FRCT) is an entity for promoting R\&D+l of the scientific and technological system of the Autonomous Region of the Azores with specific characteristics, which affects the process of data collection regarding GE, among which three stand out: first, its size, with only 21 people ( 18 of whom participated in the focus groups and 15 of whom responded to the staff survey); second, the biggest number of women regarding men, in a proportion of two thirds to one; third, the inexistence of middle decisionmaking positions, since the FRCT organizational structure has only two levels: the Board, composed of a President and two other members, and employees, with different functions in the organization.

In this regard, the ATHENA project has a big importance for the comprehension of the factors that contribute to identifying, preventing and fighting the possible gender inequalities in the FRCT. In a short term, the ATHENA project will enable a set of recommendations that will ensure a systemic institutional change. This transformation is already being built through the knowledge of some aspects of the social reality.

## Introduction

In the context of Portuguese social policy, plans and measures to promote equality have been implemented over the last decades, in a perspective that is transversal to the various sectors of society. The five National Plans for Equality and the current National Strategy for Equality and Non-Discrimination - Portugal + Equal (ENIND) ${ }^{66}$ stand out. The Autonomous Regions of the Azores and Madeira have legal and political autonomy in this area and develop their public policies through their institutions and instruments.

The challenges and obstacles to the implementation of gender equality in Portugal, and specifically in the Azores, are numerous. They include the task of integrating the gender perspective in all domains of political action, both at the internal and territorial level, based on mechanisms of diagnosis, monitoring and evaluation of the various actions and GEP.

In this sense, It should be observed that the objectives outlined by the ATHENA project reinforce the need to develop a perspective that values the promotion of citizenship, the defense of human rights and GE, especially through the fight against the various discriminations that are based on the social underrepresentation of women. For all these reasons, the ATHENA project promotes in-depth analysis of the GE issues, concerning higher career positions, lifelong training and research.

The main objective of this report is to provide a general description of the departure situation of the organization (FRCT) in terms of gender basis for the development of an appropriate gender equality plan (GEP). To identify gender biases our team used two major data collection qualitative methods: the online staff survey and focus groups (outcomes in part 3). The report also offers countryspecific information on legislative and policy backgrounds, as well as measures to promote GE in research and higher education in Portugal (part 2). In the final part (4) of the report, our team presents five recommendations for the development of GEP, based on the guidelines of the Portuguese Government and institutions.

[^37]
## 1. Methodology

The findings in this report are the results of a mixed methodology design within several research activities and diverse data collection technics implemented throughout the year 2021. The methodologies have been prepared and guided by the Institute for Research in Social Communication at the Slovak Academy of Sciences, ATHENA partner.

The national provisions in terms of GE in research and higher education were assessed based on a desk-research and policy analysis related to gender equality in society, research and higher education. Our team utilised extensive desk research focusing mainly on the national legislation and policy documents, such as laws, regulations, strategies, action plans, monitoring and evaluation reports relevant for the current and future policies and measures supporting gender equality at the level of our organisation.

The gender equality audit (GEA) comprises the collection of quantitative and qualitative indicators. The foundation of the quantitative GEA indicators was the European standardised data collection on women in science She Figures. ${ }^{67}$ Our team collected the data. The qualitative GEA indicators present unquantified aspects and measures to assess the situation in terms of gender equality. The measures were evaluated via an online data collection system using a simple online assessment tool.

To identify gender biases in FRCT, our team used mainly two data collection methods: an online survey and focus groups. An online staff survey implemented by a standardised questionnaire comprising 47 closed and open questions was distributed via an online data collection system (Survey Monkey). In total, fifteen FRCT staff members were included in the analysis.

Secondly, our team organised three focus groups in the following composition: in the first one, seven FRCT staff members were present, including one member of the Board ( 03 men and 04 women); in the second, five FRCT staff members were present, including one member of the Board ( 02 men and 03 women); and, finally, in the third focus group, six FRCT staff members were present, including the FRCT President ( 03 men and 03 women). Then, using the standardised script, we transcripted the recoded discussions and analysed the data by a qualitative and comparative approach.

[^38]
## 2. Outcomes of the assessment of the national provisions in Portugal

### 2.1. Status of gender equality in society

In Portugal, GE is inscribed in the Portuguese legal system as a fundamental principle since the last Constitution of the Portuguese Republic (CRP) of 1976, through Article 13 et follows, establishes that (1.) all citizens have the same social dignity and are equal before the law and (2.) no one can be privileged, benefited, discriminated, deprived of any right or exempt from any duty on grounds of ancestry, sex, race, language, territory of origin, religion, political or ideological convictions, education, economic situation, social condition or sexual orientation.

Portugal has been implementing public policies for equality in the last decades (after the democratic revolution of 1974), which have been under the guidelines of National Equality Plans (a total of five) and from March 2018 by the ENIND program. Recognising equality and non-discrimination as a condition for building a sustainable future for Portugal, this key document defined strategic axes and objectives. The long-term vision of ENIND is structured in the following three action plans that defined concrete measures and targets for the four years: Action Plan for Equality between Women and Men; Action Plan for the Prevention and Combating of Violence Against Women and Domestic Violence; Action Plan to Combat Discrimination on Grounds of Sexual Orientation, Gender Identity and Expression, and Sexual Characteristics. These plans are monitored and evaluated, and this information is crucial for the formulation of new pluriannual plans.

Also, since January 2018, in Portugal, it must be respected the balanced representation of women and men in decision-making and supervisory bodies in the public sector, corporate administrations and listed companies. Parity is established by a minimum representation of $33.3 \%$ women in the decisionmaking bodies of state and business sector, and $20 \%$ in listed companies. Law 26/2019 approved the regime of balanced representation between women and men in decision-making positions of the State, direct and indirect administration bodies, public higher education institutions (HEI) and public associations, such as professional associations. The appointment of such officeholders and bodies shall be subject to a minimum threshold of $40 \%$ balanced representation between women and men. Regarding senior decision-making positions subject to the scrutiny of a public administration recruitment and selection committee, the 40\% parity is taken in the composition of the candidates' lists.

Additionally, Law 60/2018, of August 21, creates mechanisms to promote equal pay between women and men for equal work and work of equal value. This law creates a duty for companies to have transparent pay policies based on the application of gender-neutral job evaluations; improves national data on gender
pay gap; strengthens the role of the Labour Inspectorate (through a specific mechanism to notify companies to produce a plan to evaluate pay gap) and the Commission for Equality in Labour and Employment (CITE).

### 2.2. Status of gender equality in research and higher education

Concerning education and science, the CRP enshrines the full right of everyone to education, culture and teaching, with equal opportunities, and "scientific creation and research, as well as technological innovation, are encouraged and supported by the State" (article 73). Equal opportunities and the democratization of the Education System are also the principles that govern access to higher education, enshrining, in the same way, the "statutory, scientific, pedagogical autonomy..." (article 76) of HEl, without prejudice to the assessment of the quality of education.

Also, the Basic Law of the Educational System (Law no. 46/86) is based on the effective equality of opportunities in school access and success (article 2), establishing as a fundamental organizational principle "to ensure equal opportunities for both the sexes, namely through the practices of co-education and school and professional guidance", and "sensitize, for this purpose, all those involved in the educational process" (article 3). Regarding Higher Education, Law No. 46/86 ensures "democraticity, equity and equal opportunities" (article 12), considering among its objectives: "to stimulate cultural creation and the development of the scientific and entrepreneurial spirit ( ...)"; "encourage the work of research and scientific investigation, aiming at the development of science and technology, the humanities and the arts, and the creation and dissemination of culture and, in this way, develop the understanding of man and the environment in which he belongs" (article 11). About scientific research, the same Law states that the "State must ensure the material and cultural conditions for scientific creation and Research" (article 18).

Regarding the field of research and higher education in Portugal, the main strategic goal of ENIND is "to promote GE in HEI and the scientific and technologic development". This main goal is divided into two specific objectives: "to integrate the GE perspective in scientific and technologic productivity" (4.1.) and "to integrate the GE perspective in higher education" (4.2.).

Among the measures to be developed, the following stand out: "development of actions to promote digital skills for women and girls within the scope of Portugal INCoDE.2030"; "renewal of the protocol between the Commission for Citizenship and Gender Equality (CIG) and the Foundation for Science and Technology (FCT) to promote calls addressing the national scientific community for R\&l projects in Gender, Social Relations and Policies for GE"; "support for the creation and implementation of GEP, and advanced training in the field of discrimination, namely inter-sectoral, in HEI".
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Two key indicators of ENIND in higher education are the conduct of a study with recommendations for the integration of the gender perspective in governance and decision-making practices, in educational content, and organic units with curricula and extracurricular curricula of HEI and the definition of criteria, from the perspective of GE to be integrated into the evaluation and accreditation of Portuguese HEI.

At this level of research and higher education, CIG (with other entities) currently helps to promote projects to support gender balance under the ENIND, for example, the GE-HEI project "Gender Equality in Higher Education Institutions", which aims to understand why, in the context of the growing number of female students, professors and researchers, women are still underrepresented in leading research centres and higher education in Portugal. The GE-HEI project has been implemented thanks to EEA grants, aiming also to build concrete tools to analyse current practices in HEI, to promote women's representation and to create recommendations that facilitate the inclusion of equality criteria into the Portuguese evaluation and accreditation system of HEI (Torres, 2019).

In Portugal, we can highlight some other initiatives and projects that aim to place GE on the agenda of research bodies and HEI:

- FCT - GENDER RESEARCH 4 COVID-19 - June 2020: Special support for research projects on the impact of health emergency caused by COVID-19 on gender inequalities and violence against women and domestic violence;
- University Nova de Lisboa: SPEAR Project - Supporting and Implementing Plans for Gender Equality in Academia and Research (H2020);
- University of Coimbra: GendER@UC - working together for an inclusive Europe; SUPERA Project: aims to combat inequalities between women and men in academia by implementing GEP in six entities of the European scientific system (including the University of Coimbra);
- Minho University - Gender Equality Plans for Information Sciences and Technology Research Institutions (EQUAL UNIVERSITY);
- University of Lisboa - IGOT + EQUAL;
- University of Aveiro, in partnership with six other institutions from Germany, Cyprus, Spain, Greece, Poland and Portugal, leads the project O'bias - Overcoming gender Bias in Career Opportunities;
- University of Beira Interior - UBIGUAL. It should be noted that UBI pioneered the implementation of GEP in HEI.


## 3. Identified gender biases at FRCT

### 3.1. Outcomes of the staff survey

Fifteen staff members of FRCT responded to the survey, conducted there in November 2021, representing 57\% of the FRCT staff. Even though it is a small sample with some limitations, the qualitative analysis makes it possible to identify some gender equality problems and clearly shows, on the one hand, the different perceptions that men and women have of the multiple dimensions of the problem and, on the other hand, the difference in attitude in women's appreciation of the subject and the search for truly fairness answers. In this regard, it must be highlighted that all men "neither disagree nor agree" with the statement that GE "improves the quality of scientific performance" (question 10).

The fact that there is a higher number of female employees at the FRCT is confirmed in the total number of inquiries, answered by 9 women, 5 men, and 1 person who "prefer not to say" to question 6 (identification, or not, of their gender), i.e., in relative terms, we have a proportion of $60 \%$ women to $33 \%$ men. However, and curiously, this quantitative prevalence of women is not highlighted in the answers to: "are there more men or more women in your organization?"(question 12). Most women answer that there is the same number ( $43 \%$ ), and in equal proportion ( $14 \%$ each) appear the answers "more women than men, and it should remain as it is" and "more women than men and the number of men should increase". The remaining women (29\%) consider "that is not the point; it is not important". In turn, this last option, of quantitative irrelevance in terms of gender, is chosen by most men.

The traditional pattern of most women performing administrative functions to the detriment of technical ones continues at the FRCT even though the gap is not significant ( $57 \%$ vs. $43 \%$, respectively), and men, in turn, performing mostly technical functions to the detriment of administrative ones ( $60 \% \mathrm{vs} .40 \%$, respectively). Interestingly, $67 \%$ of the women who work at the FRCT have a background in natural sciences and $33 \%$ in social sciences. Regarding the men, the traditional pattern of training in engineering (2), natural sciences (1), and computer science (1) still holds, whereas only 1 man has training in social sciences (question 5).

Regarding the traditional correlation between scientific activity and men (that excludes women from science), the differences between the assertive answers of women and the ones of men, more restrained or assuming a more neutral position are very evident. Thus:

- to the statement that "it is more important to encourage boys than to encourage girls to pursue a science career," all women answer: "strongly disagree", while 3 men "disagree" and 2 "neither agree nor disagree";
- the statements that women do not fit in some research areas and that "men have higher chances in the research, as they have more innovative and creative thinking" are contested by all women, who answer: "strongly disagree", while only 1 man "strongly disagree" 3 "disagree" and 1 "neither disagree nor agree";
- the statement that "men scientists are better at information technologies and using technical equipment than women scientists" is also contested by all women, while 1 man "strongly disagrees" 1 "disagrees" and 3 "neither disagree nor agree";
- finally, the statement that "women are just as capable of thinking logically as men" has the full agreement of 6 women and only 1 man, while the remaining male responses split between 3 "agree" and 1 "neither disagree nor agree."

Following and regarding the importance of research and scientific careers in the lives of women and men, it is worth stressing the total divergence of perspectives between women and men demonstrated in the assessment of the statements listed in question 29. The following points stand out:

- the fact that men do not define a clear position vis-à-vis all the statements presented, with $100 \%$ of answers "neither disagree nor agree";
- the total disagreement of women with the statement that "women are less ambitious to achieve the highest scientific/academic degree" ( $83 \%$ "strongly disagree" and 17\% "disagree");
- the expressive disagreement of women with the statement that "men generally identify more strongly with their profession than women" (50\% "strongly disagree" and 17\% "disagree"), with only 17\% agreeing;
- the fact that 1 woman totally agrees with the statement that "only single women without children can achieve excellence in science", while $50 \%$ of the remaining women "disagree" and $33 \%$ "strongly disagree" with the same statement;
- the perception by women that men advance more quickly in research while women have young children (17\% "agree" and 83\% "strongly agree");
- finally, the division of opinion by women when faced with the statement that "women prefer caring for family before their scientific career" (33\% "strongly disagree", 17\% "disagree", $33 \%$ "neither agree nor disagree" and 17\% "agree").

As for the questions regarding career advancement (questions 23 to 26), the disparities between women's and men's responses are also evident. Namely:

- most men (60\%) consider "equal" the level of requirements for men and women to reach the top of their career, with all men considering that there are no requirements that make it difficult for men or women to reach the top of their career. On the contrary, most women believe that it is easier for men to reach the top of their careers ( $50 \%$ respond "slightly easier" and $17 \%$ "much easier"). Only $17 \%$ consider the level of demand to be "equal," and $50 \%$ of the women believe that there are requirements that can make it difficult to reach the top of the career;
- regarding the identification of possible obstacles to reach the top of the scientific career: among the six presented, women highlight "time constraints to reconcile with family responsibilities", "time constraints to reconcile with other work", and "low financial coverage", while men identify "low financial coverage".

In question 16, the workers must identify work and performance-related factors that affect, negatively or positively, their careers. Despite several "not applicable" answers, there is a balanced distribution of opinions without a contrasting pattern between men's and women's answers. However, women indicate the option extremely positive impact for several items; men, in turn, fall into the middle options. In this regard, women underline the importance to be "involved in a well-regarded project"; "successfully applying for grants"; "flexible working hours"; and "having visible role models".

In what concerns the issues related to decision-making positions (questions 30 to 35 ), one should consider the specificity of the FRCT in which there are no middle decision-making positions since its organizational structure has only two levels: the Board of Directors, composed by a President and two other members, and employees. However, the analysis of the answers to these questions reveals significant data:

- first and despite the irrelevance of the sample with only 4 answers, women identify age (too young) as the main reason for not occupying management positions, while men answer: "not interested" (67\%) or "to little practice" (33\%);
- second, regarding the form and mechanisms for election to decisionmaking positions, the perception of women diverges altogether from that of men and is more assertive since, in all items (5 in total) submitted to the respondents, a high percentage of men answer: "do not know" (40\%) and "neither agree nor disagree" (40\%). As for women, they highlight the importance of informal networks (33\% "agree" and 67\% "strongly agree") and social contacts ( $67 \%$ "strongly agree," although $33 \%$ "neither agree nor disagree"). Experience is equally highlighted ( $50 \%$ "strongly agree" and $17 \%$ "agree"). Both competence and merit are also positively evaluated and in equal percentages (33\% "agree" and 33\% "strongly agree");
- third, regarding experiences of gender discrimination for access to decision-making positions, most men answer: "do not know" (60\%) or confess not to have experienced situations of this nature ( $40 \%$ ), while one woman assumes to have personally experienced a situation of discrimination, with the others answering not to have experienced situations of this nature;
- fourth, regarding interest and capacities for holding decision-making positions, the divergence between women's and men's perceptions is absolutely clear. In this context, the total disagreement of the women with the statements in question 34 stands out. On the men's side, there is one
common pattern in all items (6 in total): 1 "does not agree" with the content of the statements, while 4 "neither agree nor disagree."

Although the sample is small and generalizations are not legitimate, the data concerning question 34 (above) should be underlined negatively towards men's answers, as the statements in question imply a distinct depreciation of women's interests and capabilities for holding decision-making positions.

Concerning the gender equality assessment and its possible impact on the organization's functioning, we can see:

- greater assertiveness of women, on the positive side, highlighting the importance of gender equality "for me personally", in the improvement of the "fairness of the working environment", in the "quality of scientific performance" and the balance with family life, on the negative side, contesting the fact that it brings more bureaucracy and burdens for managers, that it is also a liberal ideological maneuver and a mere condition for funding from the European Union;
- some vagueness on the men's side using "neither disagree nor agree" in all the answers but with different values. For example and as underlined above, the statement that gender equality "improves the quality of scientific performance" has $100 \%$ of male responses "neither disagree nor agree". Also, the statement that gender equality "increases the fairness of the working environment" has 2 men who "neither disagree nor agree", with 2 "agreeing" and 1 "strongly agreeing." In addition, the statement that gender equality "is important to me personally" has 4 men agreeing, with 1 neither agreeing nor disagreeing;
- regarding the evaluation of equal opportunities, both in hiring and within the organization (question 13), the great majority of women, and for all items (6 in total), emphasize the perception that "women and men are in the same situation". The same happens with men, with 2 answering "do not know" to all the affirmations;
- concerning the distribution of tasks and resources (question 14), the idea of balance predominates, with no advantages for men or women. Nevertheless, in question 28, regarding the distribution of individual work capacity within the organization, the predominant answer is "neither satisfied nor dissatisfied" ( $43 \%$ of the women and $80 \%$ of the men).

Among the set of questions aimed at assessing the relationship between private life and work/career (questions 15, 37, and 42), as well as the degree of satisfaction with work and prospects (questions 43 and 46), one can identify the following relevant points:

- the importance of family support is rated very positively by women and particularly by men;
- the impact on the career of caring for children and other people is given an average assessment by men, with 2 men indicating "not applicable", while for women, this situation reveals a total division of opinions. Apart
from 1 woman answering: "not applicable," the other answers range from "extremely negative" to "extremely positive" impact;
- regarding work outside regular working hours, the majority of men reveal that they work on weekends, holidays, and vacations, while the only indicator specified by women is that they "sometimes" work on vacations;
- regarding work fatigue and its interference in the personal sphere, women report the situation more clearly. As for the interference of the private sphere in work performance, women assume this interference, while men divide their opinions between "once or twice" "never" and "do not know";
- concerning future progression perspectives, the perception of women is distinctly negative, while the evaluation of the degree of motivation by the organization for a better performance reveals on the women's side a total division of opinions: from the most negative to the most positive;
- interestingly enough, it is the men who reveal greater dissatisfaction with their current job in the organization (2 "dissatisfied," 1 "neither satisfied nor dissatisfied," and just 1 "satisfied").

Two final notes concerning income (question 20) and workplace behavior (question 45): As for income, the disparity is striking for the lowest salaries (less than $5,000 €$ per year), indicated only by women (in this case, 2 ). Most men (around $80 \%$ ) earn between $€ 10,000$ and $€ 20,000$ per year, as do approximately $43 \%$ of women. The figures are similar for income between 5,000 and 10,000 euros, with about $20 \%$ for men and $14 \%$ for women. When it comes to behavior, it is of note that all responses, from both men and women, indicate that there is no sexual harassment, but there are indications of unfair criticism.

Two final remarks to emphasize the outcomes of the staff survey. Before, one should remember that this is a small sample and that it has some limitations. First, the women's answers show greater assertiveness about the importance of GE and in the identification of discrimination problems, concerning the importance of a scientific career and facing obstacles to access the decision-making positions. Second, men's answers reveal, in a large majority, a lack of commitment to the GE theme.

### 3.2. Outcomes of the analysis of the focus groups

The FRCT has its characteristics, which have echoed in the focus groups' work, among which three stand out: first, its size, with only 21 people (18 of whom participated in the focus groups); second, the predominance of women, in a proportion of two thirds; third, the inexistence of middle decision-making positions, since the FRCT organizational structure has only two levels: the Board, composed of a President and two other members, and employees, with different functions in the organization.

Regarding the warm-up question, on a first approach, all groups share the same position: there is no gender discrimination in the organization. The key sentences were: "there is no inequality in terms of salary and workload"; "the treatment is equal between men and women". There was also a prevailing opinion
that more women are working at the FRCT than men since women presented the necessary skills during the public hiring process that had "merit" as the main criterion. However, on a second approach, a few 'external' problems arose, which, in a way, are also reflected in the FRCT, namely the context of a society where there is still gender inequality and the perception of higher pressure on women, who must work harder to demonstrate their capacity and competence.

The topic of inequalities and discrimination, which may exist about LGBTI+ people, was also included in the debate, but without much depth, with the FRCT characterized as a "very open" organization.

Regarding the set of questions about any experience of discrimination and barriers in terms of GE in the workplace and career progression, almost all participants reported not having experienced any discrimination for being a man or a woman. They also generally stated there is no gender inequality in the distribution of projects, although there is still a prevalence of women in social projects and men in natural sciences and engineering projects.

One of the male participants thinks that women of the past generation have grown to believe they did not need to have ambition about career advancement. The same participant also states that, nowadays, the mentality of many men has changed. However, as far as the women in this group (the third) are concerned, the statistics clearly show the disparities between men's and women's achievements.

Another problem highlighted by the women (particularly in the second group) stems from the increased effort women and mothers must make to demonstrate their efficiency, under constant pressure to "prove oneself". A male member of the group expressed some surprise at these "daily personal struggles" experienced by female colleagues. Several members of the groups stressed that changes in culture and mentality are necessary. They believe that the solution is to educate and create awareness among the new generations.

Furthermore, it was worth noting that the FRCT has a three-member Board appointed on three-year terms. The remaining members are divided into coordination or project management functions, split into three categories: postdoc fellows, university staff fellows, and permanent staff. The FRCT payment of $80 \%$ of the grant when the grantees are pregnant was mentioned as a good policy, which they were not obliged to do, and then receive no reimbursement for these expenses. Pregnant women could only receive a Social Security subsidy, which is much lower.

Afterward and in reference to the presence of women in decision-making positions, considering the specificity of the organizational structure of the FRCT, whose Board has two women members, nominated by the political power from among the employees of the organization, and a man president, of political nomination, from outside the organization, some comments addressed the fact
that the president of the organization has always been a man and nominated by another man, the president of the Regional Government. Also, one person stated that there is discrimination in the leadership in terms of exposure for being a woman, i.e., a woman is criticized more than a man and must work twice as hard to be given the proper value. When a woman reaches a decision-making position it is considered a "great success".

Another theme discussed had to do with the necessary change in the concept and style of leadership, that still very much characterized by patriarchal models, with the FRCT referred to as a fine example of sensitivity towards gender issues in leadership.

As for the topic of reconciling work and family life, in the first group, the subject was not considered a problem. Yet, in the second and third focus groups, the issue was seen as relevant, and the difficulties of reconciling work and family life were highlighted, especially for mothers. The women participants in the third group stated that it is impossible to reconcile work and motherhood in a job insecurity situation. For two of the male participants in this same group, the issue of reconciling work and family is an outdated question since the role of the professional who is a father is the same as the one played by the professional who is a mother.

In terms of contributions to the development of the GEP, one head member mentioned that it is fundamental to implement the inclusive language and the goals of the ATHENA project in all FRCT projects and, in a second phase, to extend it to the entire regional scientific system, with the possibility of requiring equality plans in the entities that are members and beneficiaries of the FRCT. The importance of flexible schedules and adjustment of deadlines/outcomes was also highlighted, along with expanding the participation of women in decisionmaking positions. The future equality plan must also be efficient and reach the "more tenuous" inequalities that are more difficult to identify, as it was stressed.

Finally, a set of questions not listed in the established script emerged, both of general and specific scope. In the latter case, the question arose about whether the FRCT would hire a pregnant woman, with all participants stating that women are disadvantaged when they reveal in a job interview that they plan to have children. Then, the concern of whether there is an FRCT program with a bonus for women and if this is not discrimination that creates inequality became apparent. Another aspect discussed in the debate was the "gender equality distortion" by giving this benefit and that women are no longer behaving like women but are instead reproducing the male model.

The broader issue of quotas for women's political participation came up for discussion, as did the balanced representation of men and women in decisionmaking and public administration bodies raising the question: isn't "inequality" necessary to achieve greater equality? One male participant repeatedly disagreed with the quota policy, claiming that: "there are women who succeed in
moving up the ladder on their merit". Others from the various groups agreed with the existence of quotas, considering that, in a short-term perspective, it is an effective and necessary tool.

## 4. Recommendations for development of gender equality plan at FRCT

(Based on the Legislative Order n. ${ }^{\circ} 18 / 2019$ of the Presidency of the Council of Ministers of the Portuguese Republic, with the guidelines for the GEP)

### 4.1 Recommendation \# 1

## Equality in access to employment:

- The criteria of selection and recruitment should follow the fundamental principle of equality and non-discrimination between men and women.


### 4.2 Recommendation \# 2

## Equality in working conditions and performance evaluation:

- Guarantee equality in the access of certified professional qualification and definition of objective criteria, common to women and men, to eliminate any discrimination (direct or indirect) based on gender and/or any penalisation arising from the exercise of familiar responsibilities.


### 4.3 Recommendation \# 3

## Parental protection:

- Ensure the GE and non-discrimination regarding parental leave, dismissals and absences, flexibility, and reduction of working hours, as well as protection of the safety and health of the pregnant worker, puerperal or lactating.


### 4.4 Recommendation \# 4

Conciliation between career, familiar and private life:

- Ensure GE and non-discrimination in the organization of the working schedules (flexible working hours or part-time job), in the dismissals and the possibility of telecommuting.


### 4.5 Recommendation \# 5

Prevention of the practice of sexual and moral harassment in the working environment:

- Implementing concrete policies and measures to prevent language abuses and physical abuses.


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## Annexes (FRCT)

Annex 1: List of focus groups held at the FRCT

| Number of the focus group Version | Date and hour of the focus groups | Focus groups' composition | Number and sex of the participants |
| :---: | :---: | :---: | :---: |
| 1 | $\begin{aligned} & \text { 10/11/2021 } \\ & \text { 2:00 pm - } \\ & \text { 4:00 pm } \\ & \text { (AZOT) } \\ & \hline \end{aligned}$ | High and middle management and administrative staff | 7 participants - 4 women and 3 men |
| 2 | $\begin{aligned} & 12 / 11 / 2021 \\ & 2: 00 \mathrm{pm}- \\ & 4: 00 \mathrm{pm} \\ & \text { (AZOT) } \end{aligned}$ | High and middle management and administrative staff | 5 participants - 3 women and 2 men |
| 3 | $\begin{aligned} & \text { 19/11/2021 } \\ & \text { 2:00 pm - } \\ & \text { 4:00 pm } \\ & \text { (AZOT) } \end{aligned}$ | High and middle management and administrative staff | 6 participants - 3 women and 3 men |


[^0]:    ${ }^{1} \mathrm{PU}=$ Public, $\mathrm{CO}=$ Confidential, only for members of the Consortium (including the Commission Services), CL=Classified, as referred in Commission Decision 2001/844/EC

[^1]:    ${ }^{2}$ Available at: https://ec.europa.eu/international-partnerships/system/files/join 202017 en final.pdf
    ${ }^{3}$ Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX\%3A52020DC0152

[^2]:    ${ }^{4}$ EC (2019). She Figure 2018; Luxembourg: Publications Office of the European Union, 2019; Available at: https://op.europa.eu/en/publication-detail/-/publication/9540ffa1-4478-11e9-a8ed-01aa75ed71a1 ; EC (2019). She Figures Handbook 2018; Luxembourg: Publications Office of the European Union, 2019; Available at: https://publications.europa.eu/en/publication-detail/-/publication/09d777dc-447c-11e9-a8ed-01aa75ed71a1/language-en
    ${ }^{5}$ For the sample structure see the annex.
    ${ }^{6}$ For the sample structure see the annex.
    ${ }^{7}$ For the sample structure see the annex.

[^3]:    8 EIGE, "Gender Equality in Academia and Research. National backgrounds: Poland", 2020. Retrieved from: https://eige.europa.eu/gender- mainstreaming/countries/poland?fbclid=IwAROvvMOjoT2FJpha_EnTQN_BBrKkKcKXkRnUFj0EOljCzvGfySd6L6Xbmo [01.05.2021]
    ${ }^{9}$ Available at: https://eige.europa.eu/gender-equality-index/2020

[^4]:    ${ }^{10}$ Eurostat, Gender overall earnings gap [TEQGES01]
    ${ }^{11}$ EC 2021, She figures 2021. Gender in research and innovation: statistics and indicators, DirectorateGeneral for Research and Innovation (European Commission), https://op.europa.eu/en/publication-detail/-/publication/67d5a207-4da1-11ec-91ac-01aa75ed71a1/language-en [access 9.01.2022]

[^5]:    ${ }^{12}$ Ustawa z dnia 20 lipca 018 r. Prawo o szkolnictwie wyższym i nauce, Dz.U. Nr 2018 poz. 1668.
    Retrieved from: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20180001668/U/D20181668Li.pdf

[^6]:    ${ }^{13}$ The following issues were included in the question: Assignment of important tasks and roles; Distribution of office space; Receipt of mentoring; Attention from senior management; Access to informal circles of influence; Receiving positive feedback from management; Allocation of career development opportunities (such as training); Distribution of laboratory space or equipment;

[^7]:    Invitations to conferences; Recognition of intellectual contributions; Allocation of administrative tasks; Allocation of service roles; Allocation of teaching.

[^8]:    ${ }^{14}$ Available at: https://eige.europa.eu/gender-equality-index/2020/RO.
    ${ }^{15}$ Available at: https://www.equalmeasures2030.org/2019-sdg-gender-index-report/.

[^9]:    ${ }^{17}$ EC (2019). She Figure 2018; Luxembourg: Publications Office of the European Union, 2019; Available at: https://op.europa.eu/en/publication-detail/-/publication/9540ffa1-4478-11e9-a8ed-01aa75ed71a1; EC (2019). She Figures Handbook 2018; Luxembourg: Publications Office of the European Union, 2019. Available at: https://publications.europa.eu/en/publication-detail/-/publication/09d777dc-447c-11e9-a8ed-01aa75ed71a1/language-en

[^10]:    ${ }^{18}$ For the sample structure, see the Annex 2 on Survey results.

[^11]:    19 The structure of the interviews and focus groups samples are in the annexes 3 and 4 .

[^12]:    20 "Constituţia României", The Constitution of Romania, 29 October 2003 [Revised]. Available at http://www.cdep.ro/pls/dic/site.page?id=371 (In English at https://www.presidency.ro/en/the-constitution-of-romania).
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[^14]:    ${ }^{25}$ Journal of Gender and Feminist Studies, "Analize Journal". Available at: www.analizeiournal.ro

[^15]:    26 Romanian Parliament, "Legea națională a educației" (National Education Law), 1/2011, published 10 January 2011, applicable since 9 February 2011. Available at: https://lege5.ro/gratuit/geztsobvgi/legea-educatiei-nationale-nr-1-2011
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    ${ }^{28}$ Department of Sustainable Development (2018), Strategia Naționlă pentru Dezvoltare Durabilă a României 2030 (Romanian National Strategy for Sustainable Development 2030). Retrieved

[^16]:    ${ }^{34}$ Oana Cosman, "L'Oréal și UNESCO au desemnat câștigătoarele burselor L'Oréal - UNESCO Pentru Femeile din Știință" (L'Oréal and UNESCO have announced the winners of the L'Oréal UNESCO Scholarships for Women in Science), 2020. Available at: https://start-up.ro/bursele-l-oreal-unesco-pentru-femeile-din-stiinta-castigatoarele-din-romania/
    35 TARGET, Training Augmented Reality Generalised Environment Toolkit. https://cordis.europa.eu/project/id/653350; also http://www.gendertarget.eu/about/
    ${ }^{36}$ CALIPER, The CALIPER project: Linking research and innovation for gender equality. https://cordis.europa.eu/project/id/873134; also https://caliper-project.eu/
    ${ }^{37}$ For more information on UEFISCDI's GEP, visit www.gep.uefiscdi.ro
    38 GENERA, Gender Equality Network in the European Research Area. https://cordis.europa.eu/project/id/665637; also https://genera-project.com/

[^17]:    39 The ANS platform can be accessed at http://www.date.invatamant-superior.ro
    40 "Politici, gen și minorități" ("Politics, gender and minorities") from SNSPA and "Politicile egalității de șanse în context românesc și European" ("The politics of equal opportunities in the Romanian and European context") from UB, Faculty of Political Sciences.

[^18]:    ${ }^{41}$ University of Bucharest. 2020. "International Affiliations." https://unibuc.ro/international/colaborari-internationale/afilieri-institutionale/
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[^21]:    ${ }^{47}$ University of Bucharest. 2020. "Development Strategy." https://unibuc.ro/wp-content/uploads/2020/11/Strategia-de-dezvoltare-a-UB.pdf.

[^22]:    ${ }^{48}$ CEREFREA. 2019. "Campagnes « anti-Genre »En Europe : Enjeux de Savoir, Enjeux de Pouvoir." 2019. http://www.villanoel.ro/cage.

[^23]:    ${ }^{49}$ The purpose of the early version of the GEP was, among others, the need of the GEP for the purpose of the HORIZON financial scheme.

[^24]:    ${ }^{50}$ For the sample structure see the annex.
    ${ }^{51}$ The structure of the interviews and focus groups samples are in the annex.

[^25]:    ${ }^{52}$ The best Slovak HEIs ranked no. 688 (the Comenius University in Bratislava), no. 1210 (the Slovak University of Technology), no. 1286 (the Technical University of Košice in the January 2021 edition of the Webometric Ranking of Universities
    ${ }^{53}$ Several RPO, besides the Slovak Academy of Sciences, are preparing involved in the Horizon 2020 projects, which aims to adopt GEP: Comenius University in Bratislava, Matej Bel University in Banská Bystrica, Slovak University of Technology in Bratislava, The University of Žilina.

[^26]:    ${ }^{54}$ Labour Act No. 311/2001 Call., §48 (6).

[^27]:    ${ }^{55}$ SAS does not provide study programmes. The indicators cannot be assessed. In the future the PhD graduates can be disaggregated by the fields of R\&D.

[^28]:    ${ }^{56}$ SAS specific indicator reflects the ratio of F/M first authorship to F/M authorship of the most rated scientific publications. The indicator was developed in cooperation of the Central Library of SAS.

[^29]:    ${ }^{57}$ For the detailed sample structure and results see the annexe.

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[^34]:    ${ }^{62}$ EC (2019). She Figure 2018; Luxembourg: Publications Office of the European Union, 2019; Available at: https://op.europa.eu/en/publication-detail/-/publication/9540ffa1-4478-11e9-a8ed-01aa75ed71a1 ; EC (2019). She Figures Handbook 2018; Luxembourg: Publications Office of the European Union, 2019; Available at:
    https://publications.europa.eu/en/publication-detail/-/publication/09d777dc-447c-11e9-a8ed-01aa75ed71a1/language-en

[^35]:    ${ }^{64}$ Include all categories and subcategories relevant for your FGs.

[^36]:    ${ }^{65}$ Describe the topic being discussed; include specific questions and sub-questions if needed.

[^37]:    ${ }^{66}$ Approved by the XXI Constitutional Government on 8 March 2018, it is published in the Official Gazette (Resolution of the Council of Ministers No. 61/2018, of 21 May). See:
    https://dre.pt/application/conteudo/115360036

[^38]:    ${ }^{67}$ EC (2019). She Figure 2018; Luxembourg: Publications Office of the European Union, 2019; Available at:
    https://op.europa.eu/en/publication-detail/-/publication/9540ffa1-4478-11e9-a8ed-01aa75ed71a1; EC (2019). She
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