UFZ HELMHOLTZ Centre for Environmental Research

DIVERSITY MONITORING - KEY INDICATOR REPORT 2021

REPORT ON THE SITUATION OF DIVERSITY AND EQUAL OPPORTUNITIES AT THE UFZ

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Foreword

With the Key Indicator Report 2021, the most important diversity indicators for the UFZ are recorded for the second time and continue the diversity monitoring introduced in 2020. The main indicators are again included, although last year's extensive consideration of the results of the employee survey is omitted, as this survey is conducted on a multi-year cycle. This report thus offers the opportunity to systematically observe internal UFZ developments.

In 2021, the focus is again on data and facts, while there is no presentation of hypotheses on possible causes or proposed solutions. The Key Indicator Report 2021 is available on the intranet, it is intended to present the current status transparently to all UFZ bodies and persons concerned with the topic.

Even if changes are only slowly becoming apparent in our system and therefore no fundamental changes can be expected within a year, some first gentle changes can be observed. It is particularly pleasing to note that in terms of the proportion of women and men in science, the proportion of women at level R2: Recognized Researcher has improved by 4 percentage points. At the same career level, the proportion of international scientists without German citizenship has increased by 7 percentage points.

The management is aware of the importance of the topic of diversity and is therefore particularly pleased that a project on diversity-sensitive recruitment will be funded at the UFZ for the next 4 years by the Innovation and Networking Fund of the Helmholtz Association, thus enabling a more intensive approach to the topic. Furthermore, the staff unit Change was founded on 01.09.2022, which deals, among others, with our corporate culture and paths to a more diverse research institution. Furthermore, two action plans with concrete measures, namely the "UFZ Gender Equality Plan" and the "Action Plan Inclusion for People with Disabilities at the UFZ" were adopted last year. All UFZ employees are invited to participate, whether in the implementation of measures or by contributing further ideas.

The management

Prof. Dr. Rolf Altenburger and Dr. Sabine König

Acknowledgements

A big thank you to:

- all scientific and administrative departments and people who facilitated data provision, often with extra efforts
- all members of the equal opportunities working group for their valuable and helpful suggestions and comments
- all commissioners, representatives and experts who accompanied the interpretation of the data with their expertise

Summary

The Diversity Monitoring is a compilation of various common indicators and provides a first impression of how diverse and inclusive the UFZ is. Using quantitative indicators, it depicts the current status quo for four areas and highlights where there is a need for action. Due to the currently available data, the diversity dimension of gender is predominantly considered; continuous further development of the monitoring is intended.

In the following, important statements and indicators are summarised for the respective areas:

- **Positioning and perception of the UFZ:** Within the Helmholtz Association, the UFZ ranges at a midfield position. In hypothetical comparison with universities in Germany, the UFZ ranges among the last positions.
- **Recruitment and career development:** Across various indicators, distortions to the disadvantage of women continue to be visible, especially in the area of scientific career development. At the same time, many indicators are developing positively: at early career stages, the proportions of women and people with non-German citizenship are increasing, personnel selection procedures show no discrimination against women, and the pursuit of cascade targets for filling vacant positions is largely on target.
- **Visibility and participation:** Across various indicators, a significant increase in women's visibility and participation in public communication and media representation as well as in decision-making bodies, councils and advisory boards is clear; for a number of indicators, parity has been achieved or nearly achieved.
- **Reconcilableness:** The distribution of parental leave and part-time employment suggests that women take on a disproportionate high share of care work. At the same time, men took fewer short and slightly longer parental leaves than in the previous year. Parental leaves of more than one year is taken exclusively by women, most of them with permanent employment contracts.

In particular, the increased visibility of female scientists and the equal representation in committees and councils show the efforts for equal opportunities and the successful development in these areas. The challenge remains to ensure equal opportunities in developing along the scientific career path, both for women and for people with non-German citizenship. Here, in particular, the career level of working group leadership as well as tenure represent starting points with a great need for action and potential for improvement.

UFZ HELMHOLTZ Centre for Environmental Research

Content

Introduction

Purpose of monitoring

The diversity of people and their perspectives is a resource and a strength; their inclusion and the securing of equal opportunities for all are aspiration and obligation of our research center. Our goal is to further develop the UFZ into an outstanding example of an inclusive and diversity-sensitive institution in its structures, its lived culture, and in the perception of its employees and partners.

Those who want to improve need feedback. The diversity monitoring provides a data basis to recognize changes, identify needs for action, develope measures and, above all, facilitate transparent communication.

Quantitative data in form of measurements, frequencies, proportions, descriptive statistics, etc. form part of the overall picture. They help to provide orientation and guide efforts to make improvements. At the same time, they provide little information about causes and contexts, and often ignore aspects that are difficult to quantify, such as discourses, objectives, and backgrounds. Quantitative monitoring data thus provides only one, but central contribution to reflect on diversity and inclusion at the UFZ.

Methodological aspects of monitoring

Data basis

Unless otherwise stated, the reported data refer to the cut-off date 31.12.2021 or the period of the calendar year 2021. The population consists of all UFZ employees excluding guests and student assistants; staff are counted in "heads", not in "full-time equivalents".

Gender as a binary variable

The variable gender is binary due to the data basis, i.e. women and men are considered. The diversity monitoring will develop further in this respect and integrate non-binary gender identities into the monitoring while preserving anonymity in small samples.

Gender versus other dimensions of diversity

The aim of the monitoring is to depict various dimensions of diversity. However, for many dimensions the data basis is sparse or non-existent, e.g. for ideology, sexual orientation, family constellation, or lifestyle. On the other hand, many dimensions of diversity are private aspects that should not be recorded statistically by the employer. Against this background, the indicators of this monitoring predominantly map (binary) gender relations. At the same time, the diversity monitoring will continue to develop, and indicators will be added or adapted depending on the availablibility of data, the issues of interest, and possible areas of action.

Description of current state

The indicators show the current state for various facets of the topic of diversity and equal opportunities at the UFZ. It is not clear from the indicators themselves how this state has come about. In other words, the reasons for what the indicator shows cannot be derived from the figures. Where an indicator shows an imbalance, causes and contexts must be investigated.

Structure of the monitoring

Diversity and inclusive environments manifest themselves in many facets. The monitoring addresses four areas that include various indicators, each. The areas and indicators reflect current topics and dynamics. The indicators themselves may also change over time in a dynamic and needs-oriented manner (also depending on the respective data situation).

The area *positioning and perception* comprises indicators that rank the efforts of the UFZ in comparison to other institutions. This summarizing impression can be examined in more detail by the four other areas of the monitoring. The area *recruitment and career development* comprises indicators that measure efforts towards diversity-sensitive personnel development, as well as show current gender ratios and the degree of internationalisation for various staff groups and career levels. The area *visibility and participation* comprises indicators that allow statements on the representation of women. This concerns both democratic participation as well as public representation of women scientists. The area *reconcilableness* comprises indicators that are meaningful for the gendered distribution of care work and paid work.

AREA	INDICATORS
Positioning and perception of the UFZ	• CEWS University ranking according to gender equality • Glass Ceiling Index (GCI) • Applications to the Humboldt Foundation "Philipp Schwartz Initiative" • Employment rate of severely disabled people
Recruitment and career development	• Application-Interview-Hiring • Language of job postings • Career development • Target agreement: cascade model and target corridors in science • Career ambition of Doctoral Researchers • Project management in science • PoF IV: Chair of the Integration Platforms • Salary structure • Funding in science • Tenure in science
Visibility and participation	• Supervision boards of the PhD colleges • Boards, councils, and commissions • UFZ Awards • Helmholtz Environmental Lecture (HEL) • UFZ Telegraf • UFZ Annual reception • UFZ YouTube channel
Reconcilableness of care work and paid work	• Part-time employment • Parental leave

Area: Positioning and perception of the UFZ

The UFZ is committed to the goal of promoting and living diversity and equal opportunities as a fundamental attitude and strength of the centre, and thus to act as a role model. This requires continuous improvement and adaptation of internal processes in order to achieve measurable results. Reflection and feedback are necessary to continuously review the achievement of goals as well as the effectiveness and fit of measures. Orientation is provided, among other things, by rankings and indices that compare the efforts and successes of the gender equality work of different research institutions, e.g. the CEWS University ranking according to gender equality or the Glass-Ceiling-Index of the European Union.

Indicator: CEWS University ranking according to gender equality

The ranking of the Center of Excellence Women and Science (CEWS) of the Leibniz Institute for the Social Sciences compares all universities in Germany on the basis of six criteria that reflect gender equality in science and research:

- *Proportion of women* in doctoral studies
- *Proportion of women* in scientific qualification after doctorate
- *Proportion of women* among academic staff below tenured professorship level
- *Proportion of women* professors
- *Change in* the proportion of women among scientific staff
- *Change in the* proportion of women among professors

For each criterion, the universities are ranked from the most successful to the least successful. The first 25% are assigned to the top group and receive 2 points, the last 25% are assigned to the bottom group and receive 0 points, all others are assigned to the middle group and receive 1 point. Based on the total number of points achieved across the six criteria (i.e. max. 12, min. 0 points), the universities fall into one of the ranking groups 1-13 (ranking group 1 if 12 out of 12 possible points are achieved, ranking group 13 if 0 out of 12 possible points are achieved). (For information on the gender-specific selection of subjects, see Appendix A).

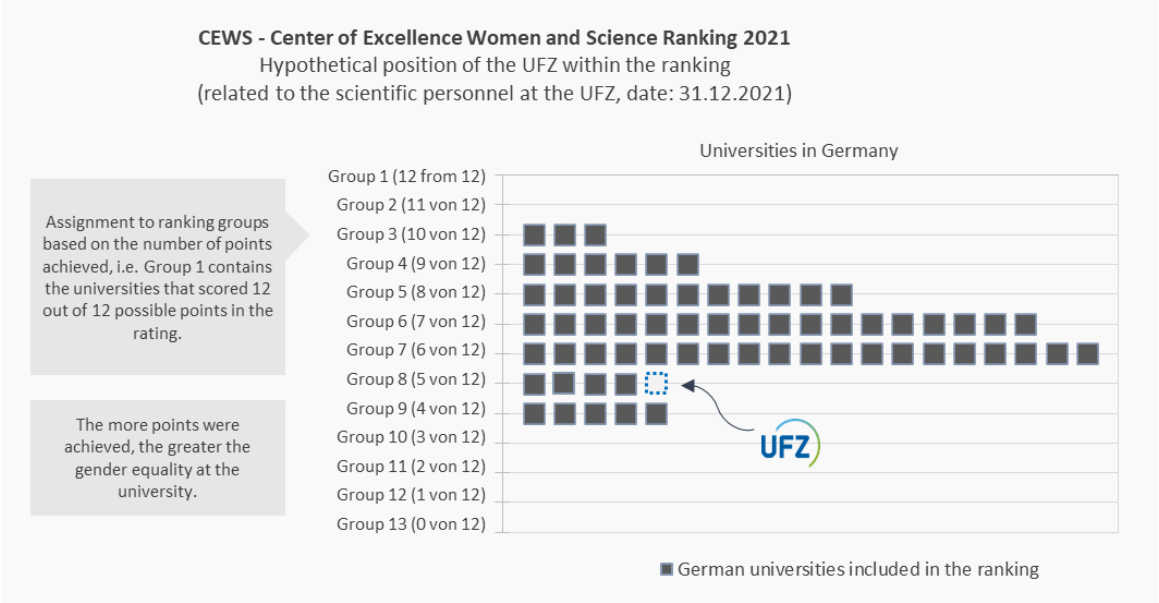

Figure 1 - Distribution of the 63 German universities among the 13 ranking groups in the CEWS University ranking according to gender equality in 2021 and hypothetical position of the UFZ in 2021 (in terms of scientific staff) within the ranking.

The UFZ is a non-university research institution, not a university. However, five of the six criteria can be applied very well to the UFZ. As an approximation to the criterion of scientific qualification after the doctorate, which is less suitable for the UFZ, the criterion of working group leadership could be used. If the UFZ were to be included in the ranking of universities on the basis of the partially adapted criteria, it would receive points as follows and score a total of five out of twelve points, thus being assigned to ranking group 8 (Annex A). Although this means that the UFZ achieved the same score and position as in the previous year, many other institutions have improved in comparison and moved into higher ranking groups

CRITERION FROM THE CEWS UNIVERSITY RANKING	HYPOTHETICAL POSITION OF THE UFZ
→ ***Proportion of women*** **in doctoral studies**	Top group: 2 points
→ ***Proportion of women*** **among working group leaders (adjusted criterion)**	Final group: 0 points
→ ***Proportion of women*** **among academic staff below tenured professorship level**	Final group: 0 points
→ ***Proportion of women*** **professors**	Medium group: 1 point
→ ***Change in the*** **proportion of women among scientific staff**	Medium group: 1 point
→ ***Change in the*** **proportion of women professors**	Medium group: 1 point
Overall score:	5 points (out of 12 possible)

Indicator: Glass Ceiling Index (GCI)

The Glass Ceiling Index (GCI) represents the advancement opportunities of women compared to those of men in an organization. It is calculated from the ratio of the proportion of women in the organisation to the proportion of women in the top management positions in that organisation (She Figures Handbook 2021).

$$\text{GCI} = \frac{\text{Proportion of women among all scientists at the Centre (excluding doctoral researchers)}}{\text{Proportion of women in W2 and W3 professorships at the Center}}$$

If the proportions are equal, the GCI has a value of 1 which means women and men have equal opportunities for promotion in the organisation. If the proportion of women in the organisation is greater than the proportion of women in top management positions, the GCI value is greater than 1 and indicates a "glass ceiling", i.e. poorer promotion opportunities in the organisation for women than for men. The opposite applies for a GCI value below 1. The higher the GCI is above 1, the more important it is to reduce the GCI with targeted measures - e.g. standardised application procedures, anti-bias training, individual reconciliation solutions, and targeted personnel development. A GCI smaller than 1 indicates a bias in the chances of promotion in favour of women, whereas the glaring under-representation of women in scientific leadership positions makes GCI values below 1 appear temporarily acceptable.

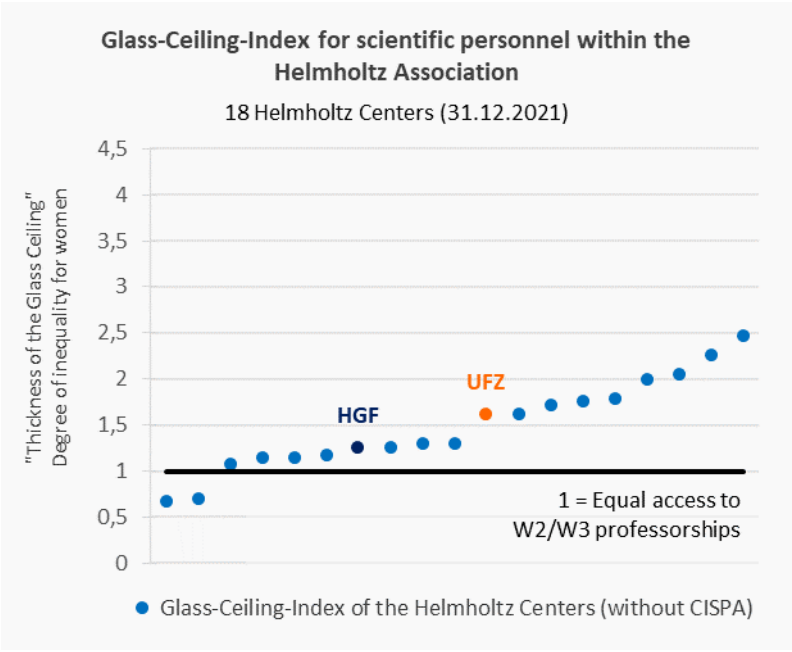

Figure 2 - Glass-Ceiling-Index for the scientific staff of the 18 Helmholtz Centres (31.12.2021), data basis: PAKT reports.

Figure 2 shows the Glass-Ceiling-Index for W2 and W3 professorships at the 18 research centres of the Helmholtz Association. The dark blue dot shows the GCI for the entire Helmholtz Association. In comparison, the UFZ ranks 10th in 2021 with a GCI of 1.6 (Appendix B).

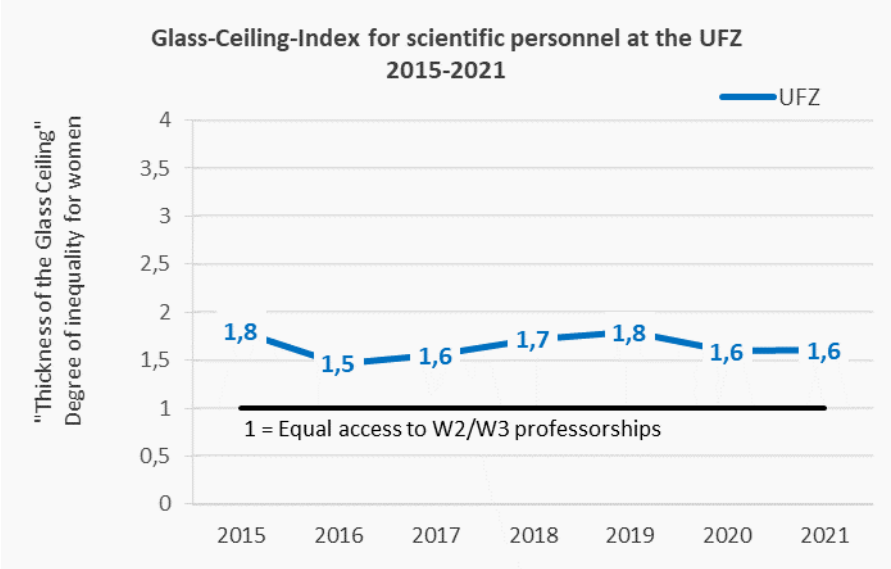

Figure 3 - Glass-Ceiling-Index for the scientific staff of the UFZ 2015-2021

Figure 3 shows the Glass-Ceiling-Index for the UFZ over time (2015-2021). At the beginning of the 6-year period, the GCI improved from 1.8 to 1.5, and since then it has shown only minor fluctuations, i.e. male scientists have consistently had one and a half times better chances of obtaining professorship at the UFZ compared to female scientists in recent years.

Indicator: Applications to the Alexander von Humboldt Foundation "Philipp Schwartz Initiative"

The Alexander von Humboldt Foundation's "Philipp Schwartz Initiative" supports researchers who are no longer able to pursue their scientific activities in their country of origin, e.g. due to persecution and threats. Scientific research institutes can apply for funding through the Philipp Schwartz Initiative to enable these researchers to find employment. In addition, the program is also an instrument that institutes such as the UFZ can actively use to strengthen the diversity of perspectives and internationalization of their research.

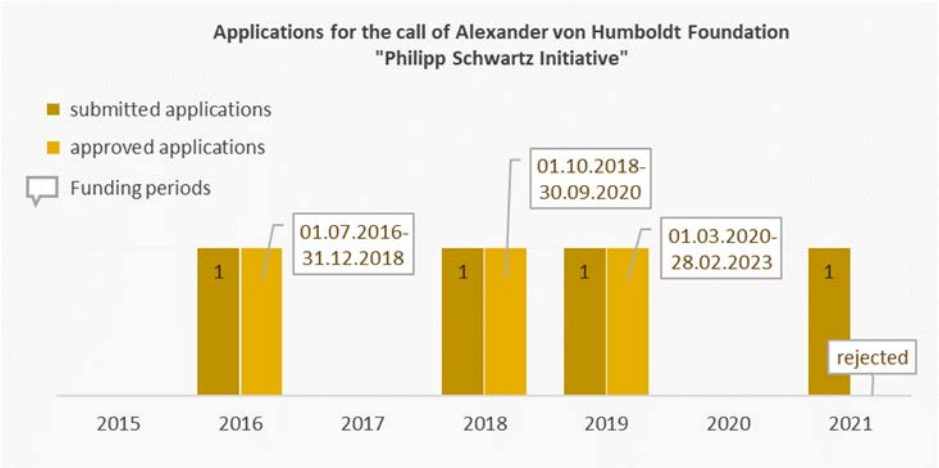

Figure 4 - Applications to and funding by the Alexander von Humboldt Foundation "Philipp Schwartz Initiative" (period 2015-2021)

Figure 4 shows the applications submitted by the UFZ to the "Philipp Schwartz Initiative" in the period from 2015 to 2021. In each of the years 2016, 2018 and 2019, one application was submitted and received a positive decision. In 2021, an application submitted and rejected.

Indicator: Employment rate of severely disabled people

Diversity of perspectives and skills is proven to be a source of creativity and innovation (Hofstra et al. 2020; Coscieme et al. 2020; Hunt and Layton, Dennis, Prince, Sara 2015; AlShebli et al. 2018; Powell 2018; Adams 2013; Woolley et al. 2010). It contributes to making smart decisions in the work context. However, there are often various barriers that prevent people with different perspectives and skills from collaborating and contributing. Accessibility means that the work environment in digital and physical space is accessible to all and that impairments, chronic illnesses, or other personal backgrounds do not determine where and to what extent people with different abilities can collaborate at the UFZ.

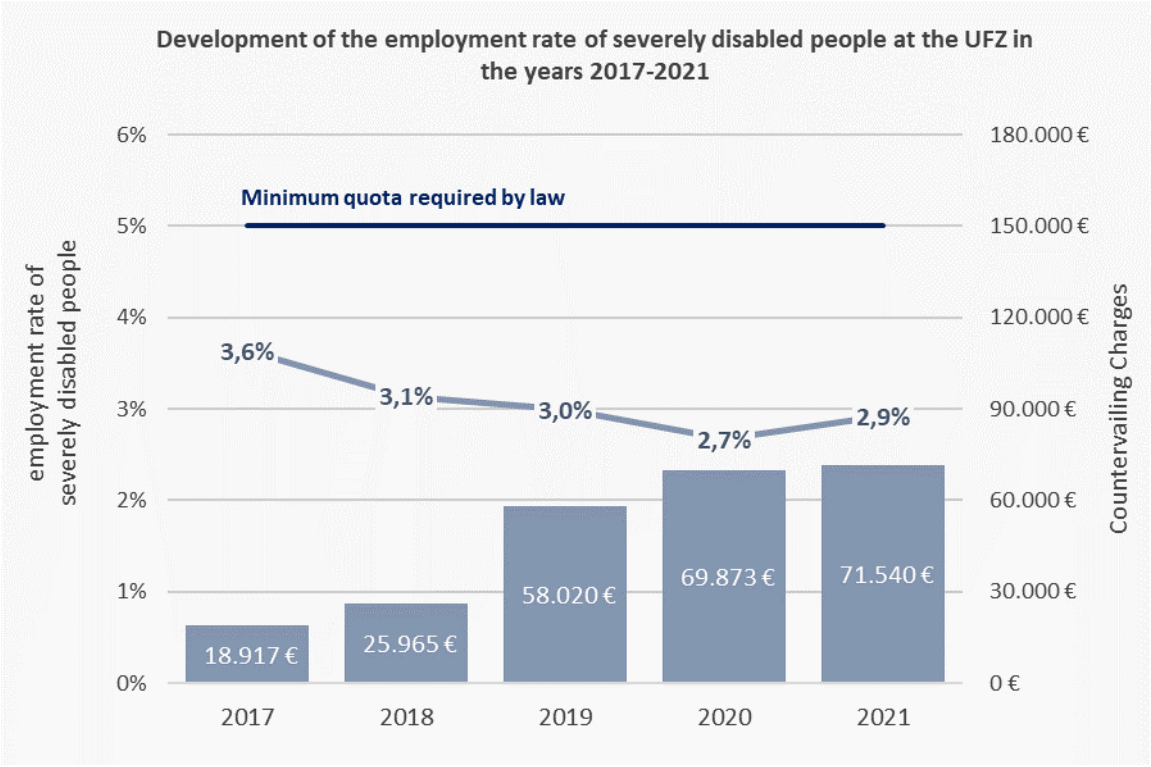

Figure 5 - Development of the employment rate of severely disabled persons at the UFZ (2017-2021) and the respective compensation payments by the UFZ

Figure 5 shows the development of the employment rate of severely disabled people at the UFZ and the respective compensation payments by the UFZ. The reason for the decrease in recent years is the retirement of many severely disabled employees combined with a below-average number of corresponding applications. Public and private employers with an annual average of at least 20 jobs per month must employ severely disabled people in at least 5% of these jobs (SGB IX). As long as employers do not employ the prescribed number of severely disabled people, they pay a compensatory levy for each unfilled compulsory job for severely disabled people. The compensatory levy amounts to € 0 per month and unfilled compulsory job for an annual average employment rate of 5% and more, € 125 for 3% to less than 5%, € 220 for 2% to less than 3% and € 320 for 0% to less than 2%. In the company agreement "Agreement on the Integration of Severely Disabled Persons", the UFZ has committed itself to promoting severely disabled persons and persons of equal status in employment and training.

Area: Recruitment and career development

Personnel selection and career development are areas in which inequalities become eminently apparent. Personal characteristics such as gender, nationality, or social origin play a particularly important role in selection procedures and are often the starting point for structural discrimination and exclusion mechanisms. The reason for this is that decisions are influenced by a multitude of factors and processes, most of which we are not even aware of. For example, we prefer people who are similar to us and with whom we can identify well. With criteria-based selection and evaluation forms, the influence of distorting factors can be minimized and, thus, unconscious exclusion mechanisms and discrimination can be counteracted.

Indicator: Application-Interview-Hiring

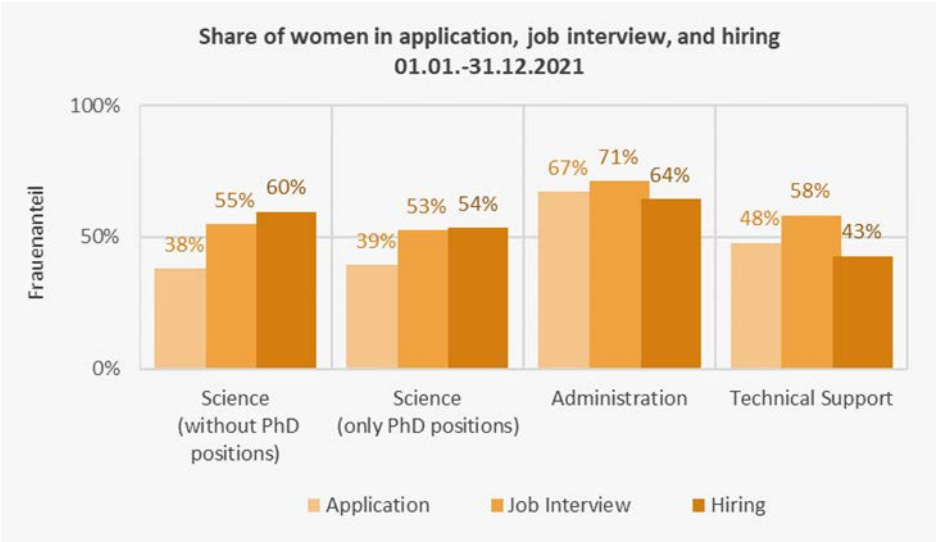

Figure 6 - Proportions of women in applications, interviews and hiring for vacant positions in science, administration, and technical support (1.1.-31.01.2021)

Personnel selection is an area where unintended bias is particularly evident. The indicator shows the respective proportion of women over the three-stage process of application, interview, and hiring for positions in science, administration, and technical support. In the area of science (excluding PhD positions), the share of women increased from 38% in applications, to 55% in interviews, to 60% in hiring. It was similar for the percentage of women for PhD positions: 39% in applications, 53% in interviews, and 54% in hiring. For administrative positions, the percentage of women is similar among applications at 67% and among hires at 64%. Concerning positions in the area of technical support, to which assistant and secretarial positions are partly assigned, the situation is similar; the proportion of women among applications (48%) is similar to the proportion of women among hires (43%). The data suggest that there has been no systematic discrimination against women in the selection process.

Indicator: Language of job postings

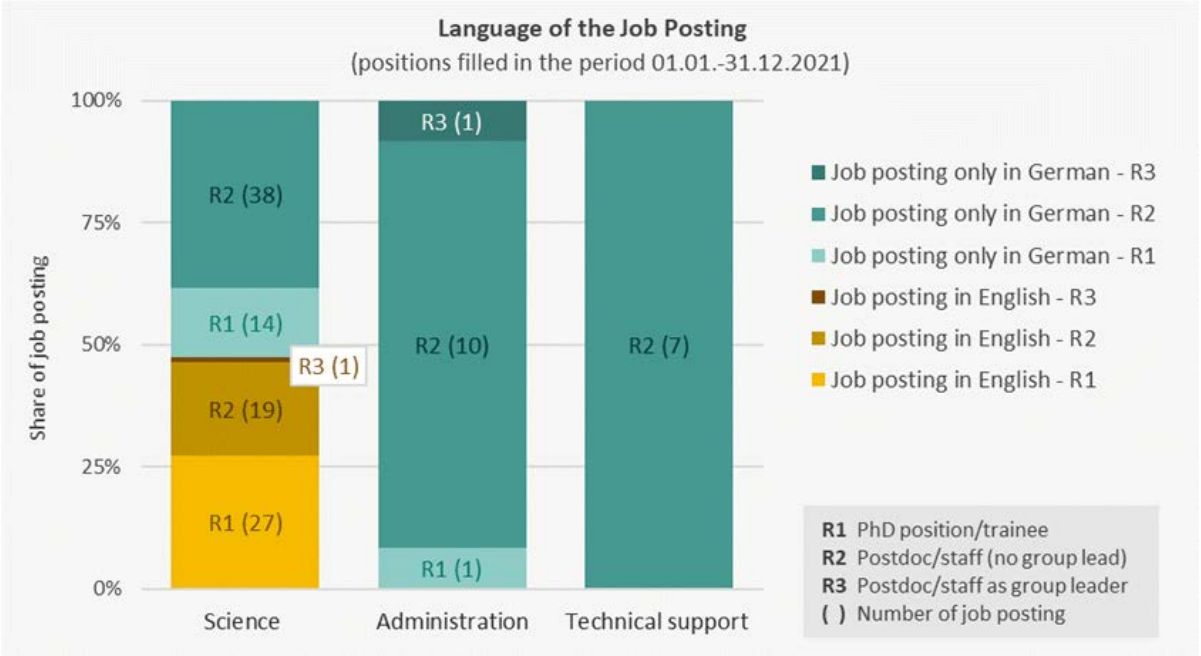

Figure 7 - Language of job postings for positions that were filled between 01.01.-31.12.2021

Figure 7 shows how many of the vacant positions advertised in 2021 were published only in German or (also) in English. Vacant positions in the areas of administration and technical support were advertised exclusively in German. Concerning science, almost 50% of the positions were advertised only or also in English, but more than half were advertised exclusively in German. With the UFZ decision of October 2021 to advertise scientific positions in English, the proportion of only German-language advertisements should decrease. Such advertisements limit the pool of applicants and contribute less to the diversity of perspectives at the UFZ (see Figures 8 + 9).

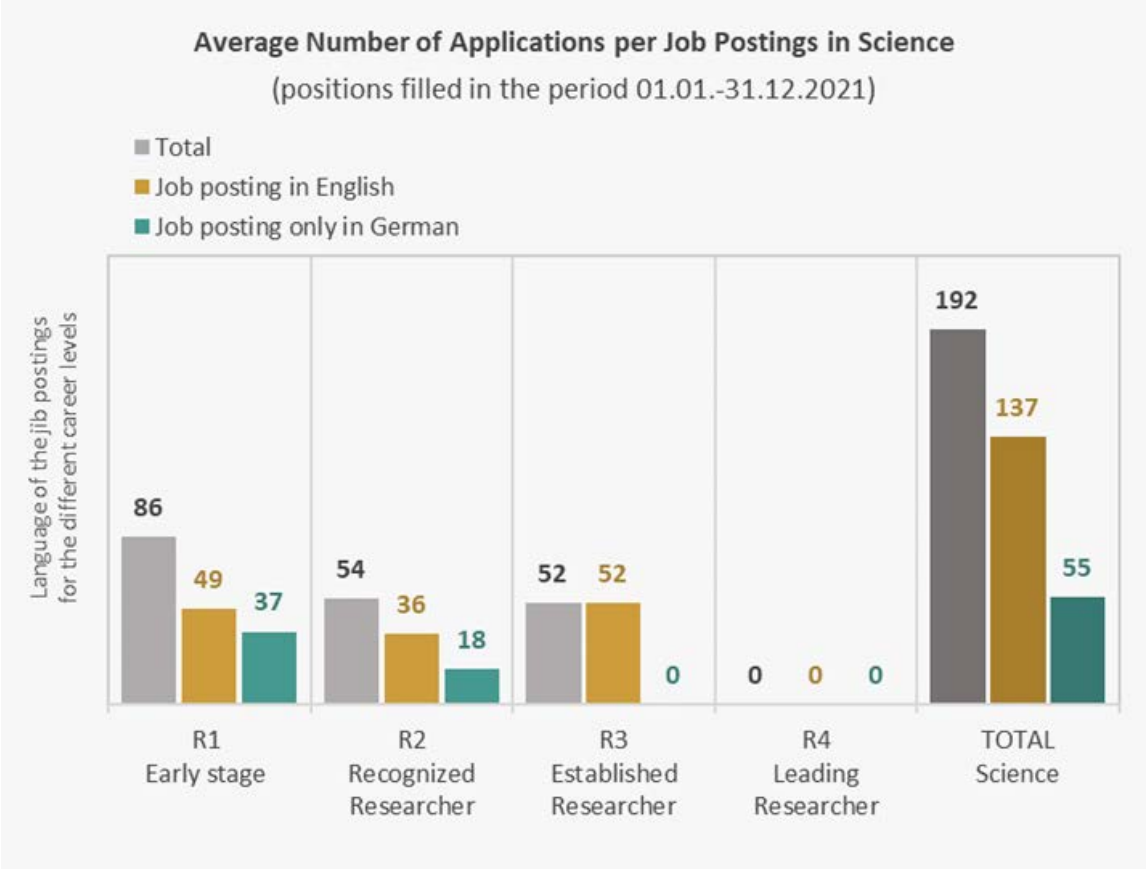

Figure 8 - Average number of applications per vacancy in science for filled posts 01.01.-31.12.2021)

Figure 8 shows the average number of applications for advertised positions in the field of science, separated for job advertisements only or also in English and exclusively in German. For the career levels R1 (Early Stage/Doctorate) and R2 (Recognized Researcher/Postdoc), significantly more applications were received from advertisements only or also in English than for advertisements only in German.

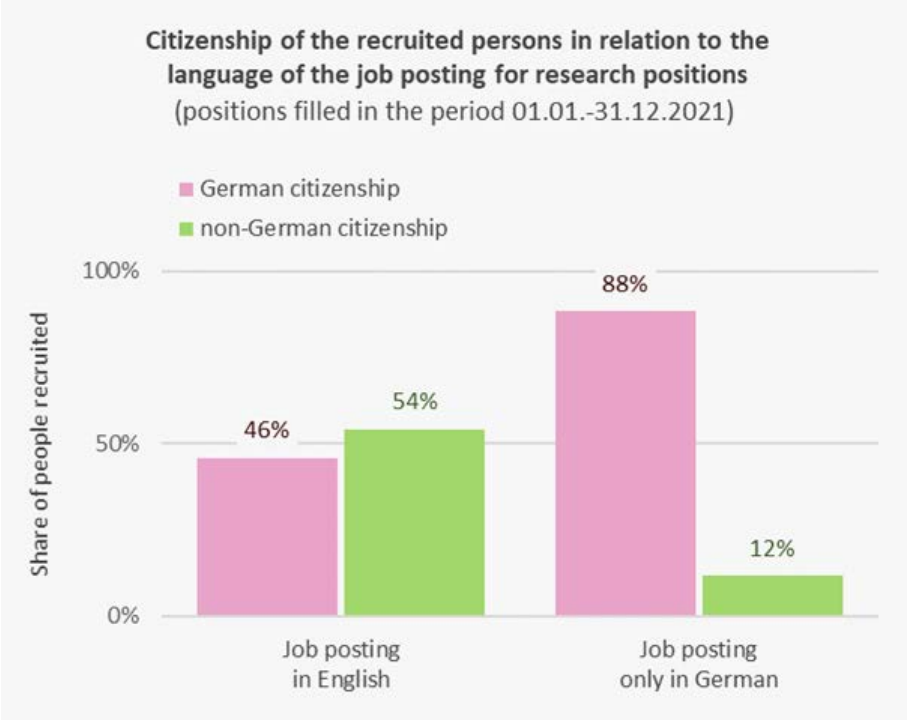

Figure 9 - Citizenship of recruits for research positions separated by language of job postings (for posts advertised and filled in the period 01.01.-31.12.2021).

Figure 9 shows for the field of science the proportion of recruited persons with German and non-German citizenship according to the language of the job advertisement. 54% of the positions advertised only or also in English were filled by persons with non-German citizenship. If the position was advertised exclusively in German, only 12% of the positions were filled by persons with non-German citizenship. Figures 8 and 9 illustrate the importance of the language of the job advertisements for the internationalization of the UFZ and the recruitment of international specialists.

Indicator: Career development

Unequal career developments are both a consequence and a cause of unequal opportunities. The following five figures show the development of the shares of women and of people with non-German citizenship along the career stages in science and administration for the years 2015-2021.

Proportion of men and women in science

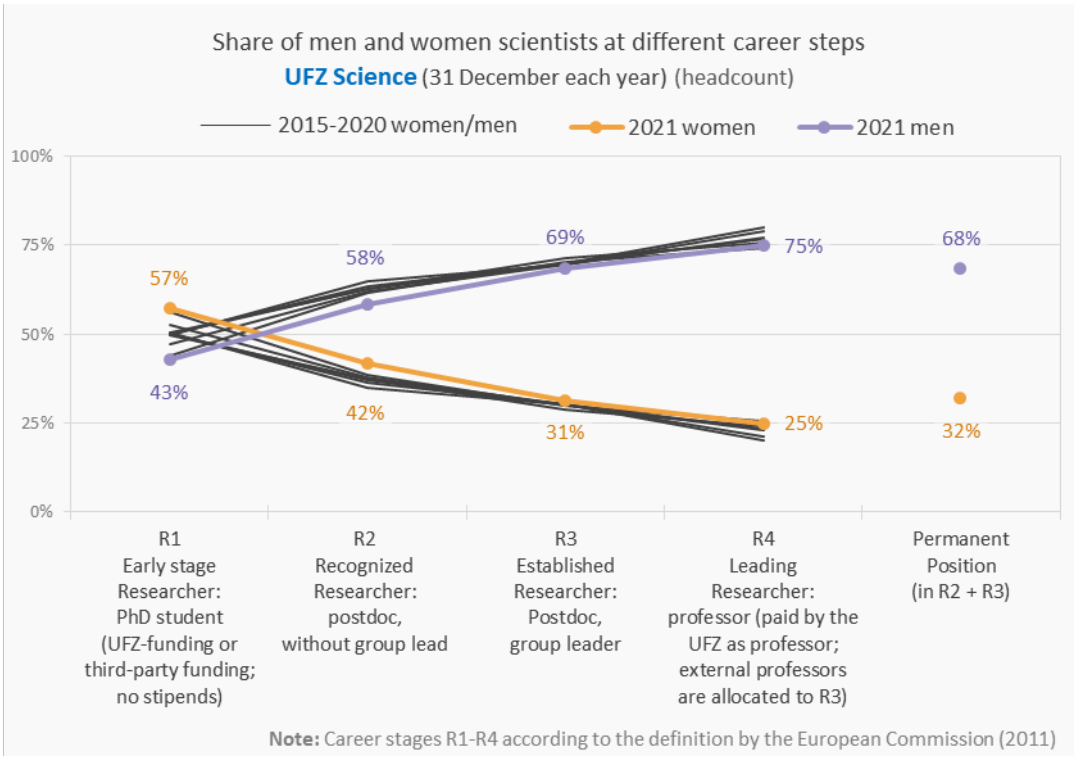

Figure 10 - Proportion of men and women along the career stages in science (2015-2021)

Figure 10 shows the proportion of women and men in science across four career stages (doctoral researcher, postdoc without group leadership, postdoc with group leadership, professorship) as well as among tenured positions below the professorship. The phenomenon that the proportion of women decreases with each further career stage is in gender research referred to as the "leaky pipeline," the "gender scissors," or the cascade ("waterfall" model).

What is remarkable is not only the extent, but especially the stability of the leaky pipeline in recent years: since 2015, there has been no significant change in the evolution of gender shares. However, the proportion of women has increased noticeably in the last two years for the PhD career stage and in 2021 for the postdoc career stage.

Figure 11 shows that the leaky pipeline can be influenced and thus shaped by decisions and conditions at the UFZ: In the six research units of the UFZ, the development of the proportions of women and men along the career stages as well as the gender distribution among tenured positions is very different.

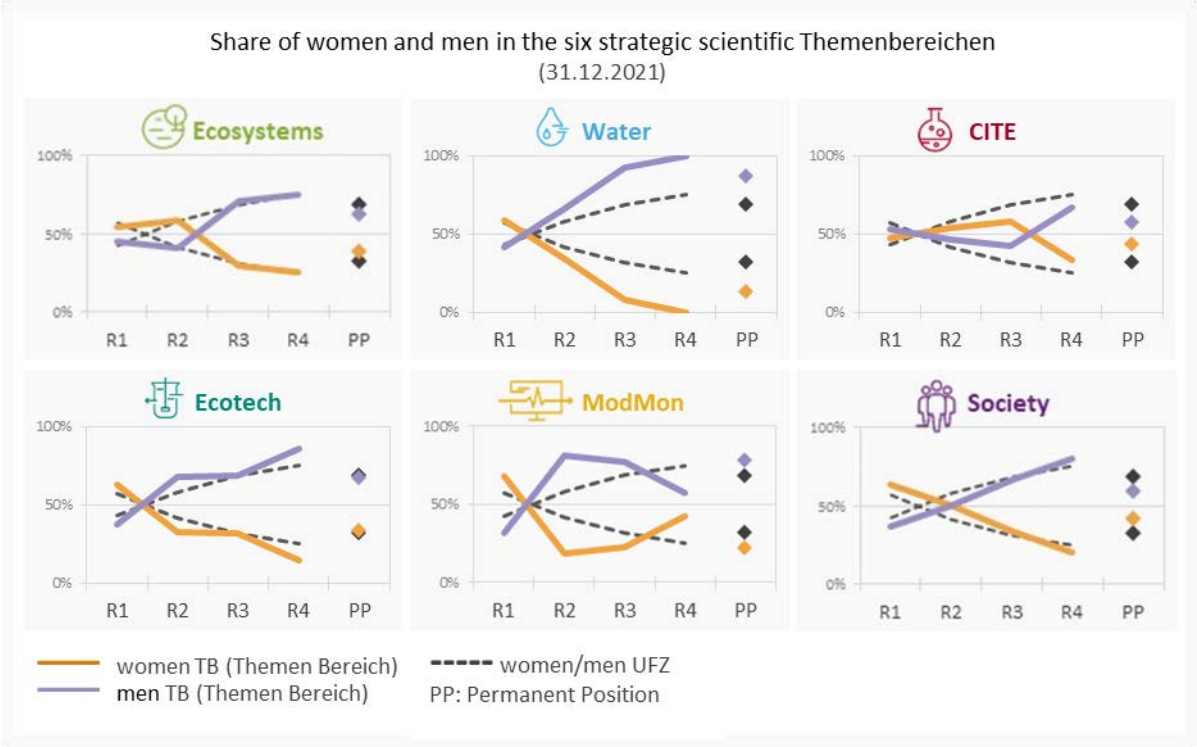

Figure 11 - Proportion of men and women along the career stages in the six research units in UFZ science (31.12.2021)

In the light of a steadily increasing number of outstandingly qualified women at all levels in the overall scientific landscape (GWK 2021) and a multitude of equality policy measures, the persistent and largely stable phenomenon of the leaky pipeline points to persisting structural inequalities for men and women. These structural inequalities cannot be attributed exclusively to the challenge of reconciling pad work and care work, since (1) the leaky pipeline also applies to women without care responsibilities, (2) role models of younger people in particular are changing measurably, and (3) at least at the UFZ, the reconciliation of gainful employment and care work is viewed positively by employees.

Proportion of men and women in administration

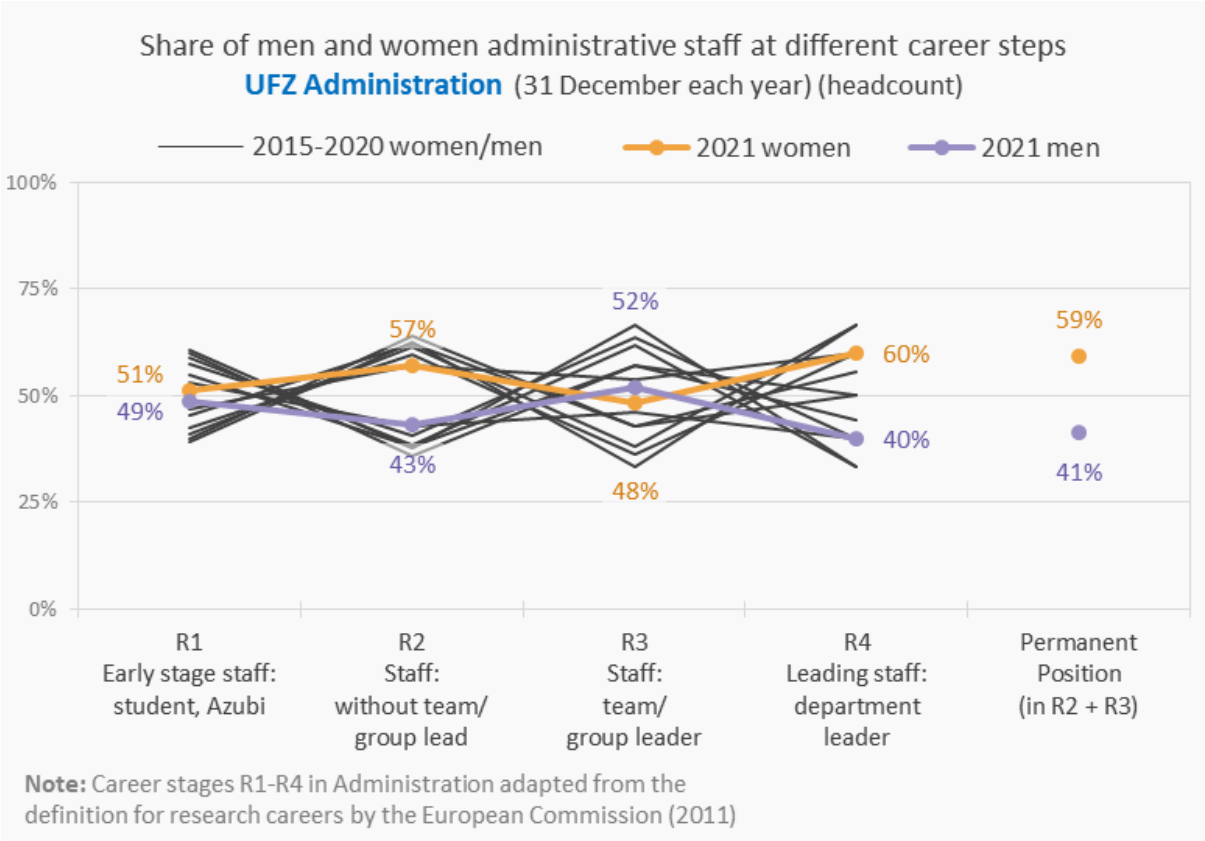

Figure 12 - Proportion of men and women along the career stages in the administration (2015-2021)

Figure 12 shows the proportion of women and men in the area of administration across four career levels (trainees/students, employees without group leadership, employees with group leadership, department leadership) and in tenured positions below department head. The data show changing gender ratios across career levels since 2015, each between about 40% and 60%. For 2021, the gender ratios for the top three career levels have converged significantly. For career level R1 (trainees/students) and for career level R3 (group leadership) quasi-gender parity has been achieved. However, the proportions of women and men differ considerably in the various occupational groups within the administration; for example, the IT department has a high proportion of men and the Human Resources and Corporate Culture department has a high proportion of women.

Nevertheless, the gender proportions in administration illustrate that the leaky pipeline is not a universal problem of upward mobility, but that scientific career paths are marked by specific exclusion mechanisms and discrimination (Lerchenmueller and Sorenson 2018; Abramo et al. 2016; Avolio et al. 2020; Begeny et al. 2020; Brock 2018; Hruby 2019; Mengel et al. 2019; Nature Editorials 2018; National Academies of Sciences, Engineering, and Medicine 2018; Roper 2019; Zhou et al. 2018; Begeny et al. 2020; Bian et al. 2018; Borsuk et al. 2009; Obertreis 2021; Régner et al. 2019) and in this they differ markedly from career paths in administration. It remains a key task for the UFZ in terms of equal opportunities to ensure a transparent and systematic - and thus equal and gender-equitable - career development in science.

Proportions of persons with and without German citizenship in science

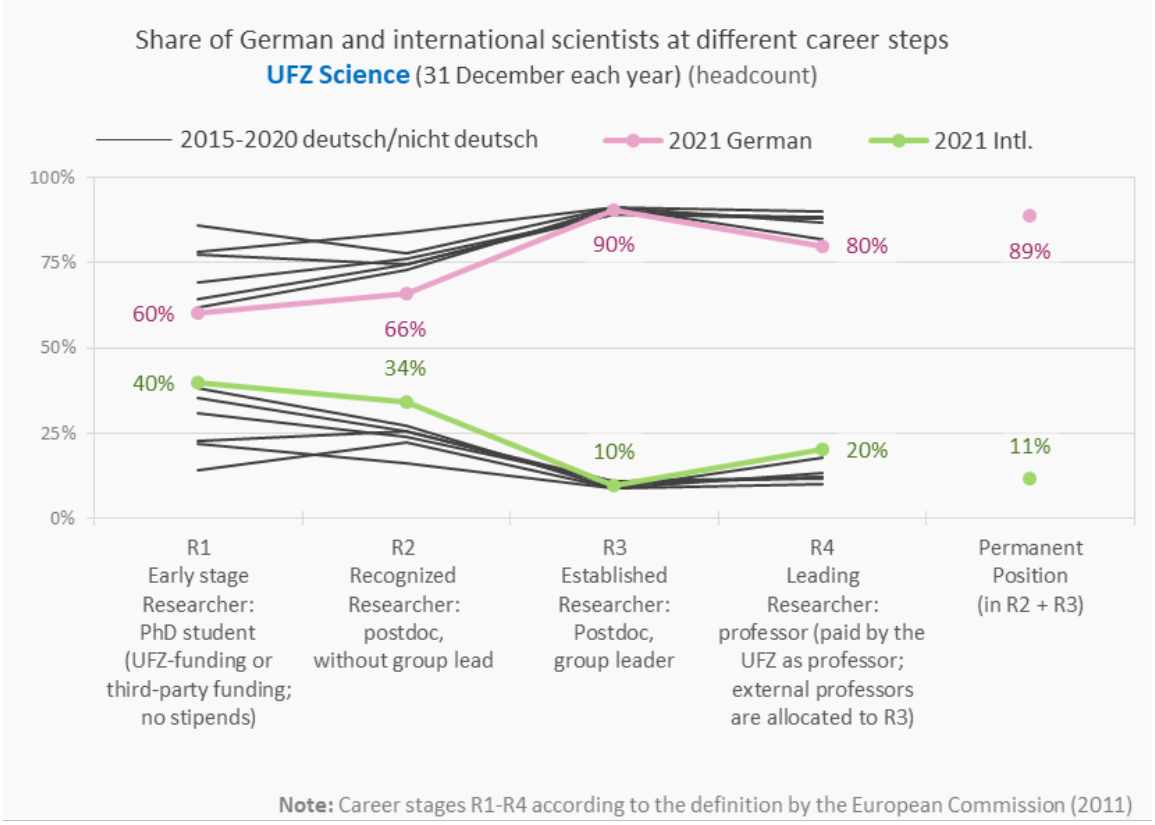

Figure 13 - Proportion of persons with German and non-German citizenship along the career stages in science (2015-2021)

Figure 13 shows the proportion of researchers with German and non-German citizenship across four career stages (doctoral researcher, postdoc without group leadership, postdoc with group leadership, professorship) as well as among tenured positions below the professorship. The proportion of international researchers has grown significantly since 2015 in the early career stages (PhD position, postdoc); in 2021 it was 40% for doctoral researchers and 34% for postdocs. However, this share, which has increased in comparison to previous years, drops significantly with the career step of group leadership to 10% and thus to the constantly low level of previous years. In the case of professorships, there has been a slow but constant increase in the proportion of professors with non-German citizenship over the last few years, reaching 20% in 2021.

Proportions of persons with and without German citizenship in administration

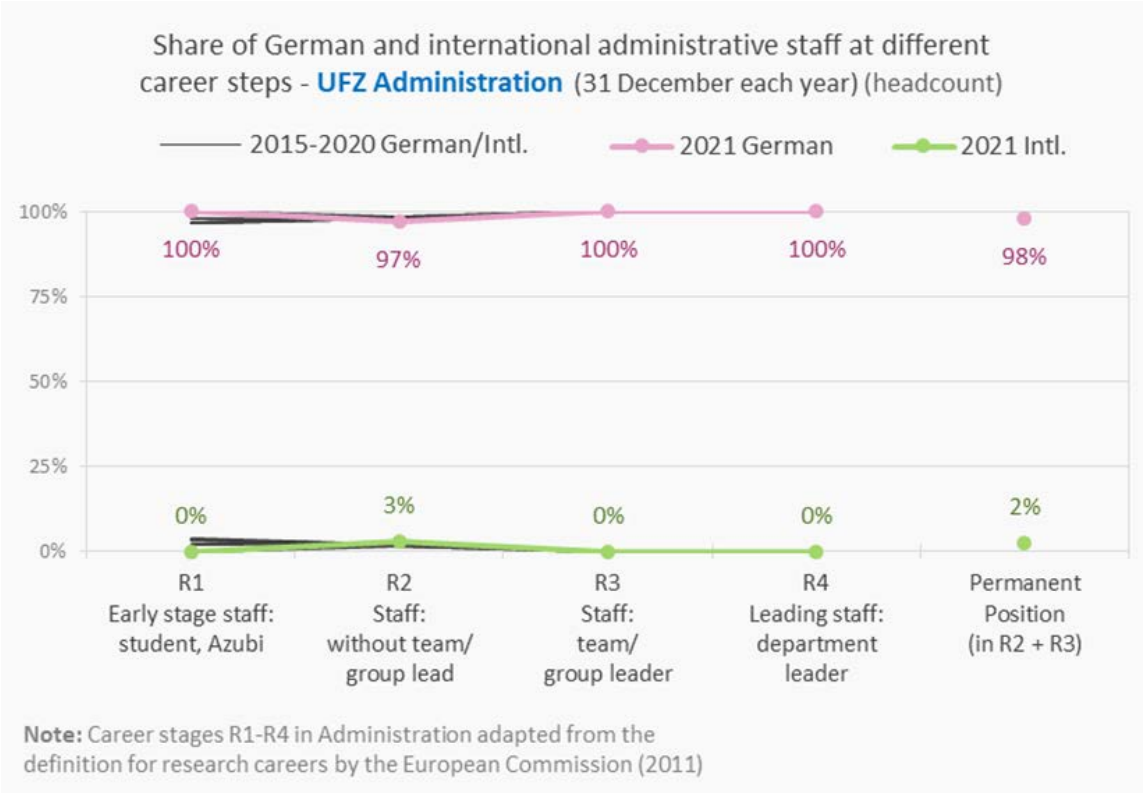

Figure 14 - Proportion of persons with German and non-German citizenship along the career stages in the administration (2015-2021)

Figure 14 shows the proportion of employees with German and non-German citizenship in the field of administration across four career levels (trainees/students, employees without group leadership, employees with group leadership, department leadership) and in tenured positions below department head. The proportion of employees with non-German citizenship is extremely low in administration (max. 3% for employees without group leadership). There are no persons with non-German citizenship in leadership positions. There is much to suggest that the internationality of the UFZ should be reflected in both science and administration, e.g. through the implementation of multilingualism, the consideration of different perspectives for administrative processes, the cooperation with international scientists and research institutions, and increased awareness of the challenges of working in international teams.

Indicator: Target agreement: cascade model and target corridors in science

Those who want to change need clear, ambitious, and realistic goals. For the field of science, the Joint Science Conference (GWK) has agreed that the non-university research institutions should formulate targets for the proportion of women at different leadership levels and for different pay groups (“cascade goals”).

The target formulation is based on the cascade model: since the proportion of women decreases with each leadership level, the target for the proportion of women at a leadership level should at least correspond to the proportion of women at the leadership level below. At the same time, the achievement of this target is limited by the number of positions that are to be filled during the target period. Whether a target is ambitious is therefore measured less by the formulated target quota at a certain leadership level, but rather by the **target corridor**, i.e. the targeted proportion of women to fill vacant positions at that leadership level.

- → The **upper limit of the target corridor** corresponds to the proportion of women that would result if all vacant positions were filled with women.
- → The **lower limit of the target corridor** corresponds to the proportion of women that would result if all vacant positions were filled with men.
- → The target for the proportion of women at a leadership level can be set within this corridor.

The Helmholtz Association's Equal Opportunities Officers criticise the fact that failure to achieve the agreed targets does not entail any significant consequences, and - even more importantly - that the actual achievement of the targets is not rewarded. So far, the cascade targets, as important as they are in terms of content, remain ineffective because they remain largely non-binding.

Cascade: leadership level

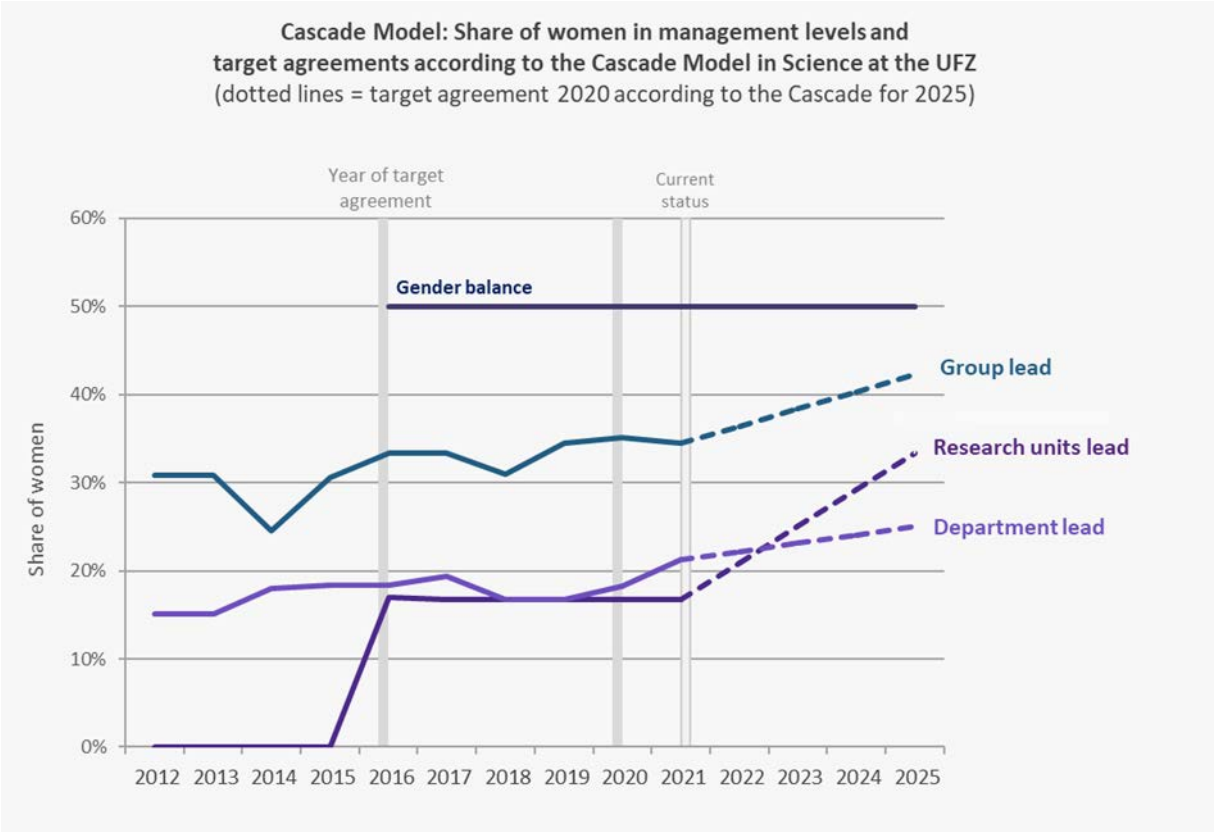

Figure 15 - Cascade: Target and actual share of women in leadership levels according to the cascade model 2020-2025 in science at the UFZ

According to the cascade model, the UFZ targets for the proportion of women as leader of research units, departments, and working groups by 2025 are shown in Figure 15.

Since the first target was formulated in 2016, there have been no significant changes in the proportions of women at all three management levels. Since the cascade targets formulate a significant increase in the proportions of women by 2025, considerable efforts must be made in filling leadership positions and any conflicts of objectives that arise must be addressed.

Cascade: Pay group

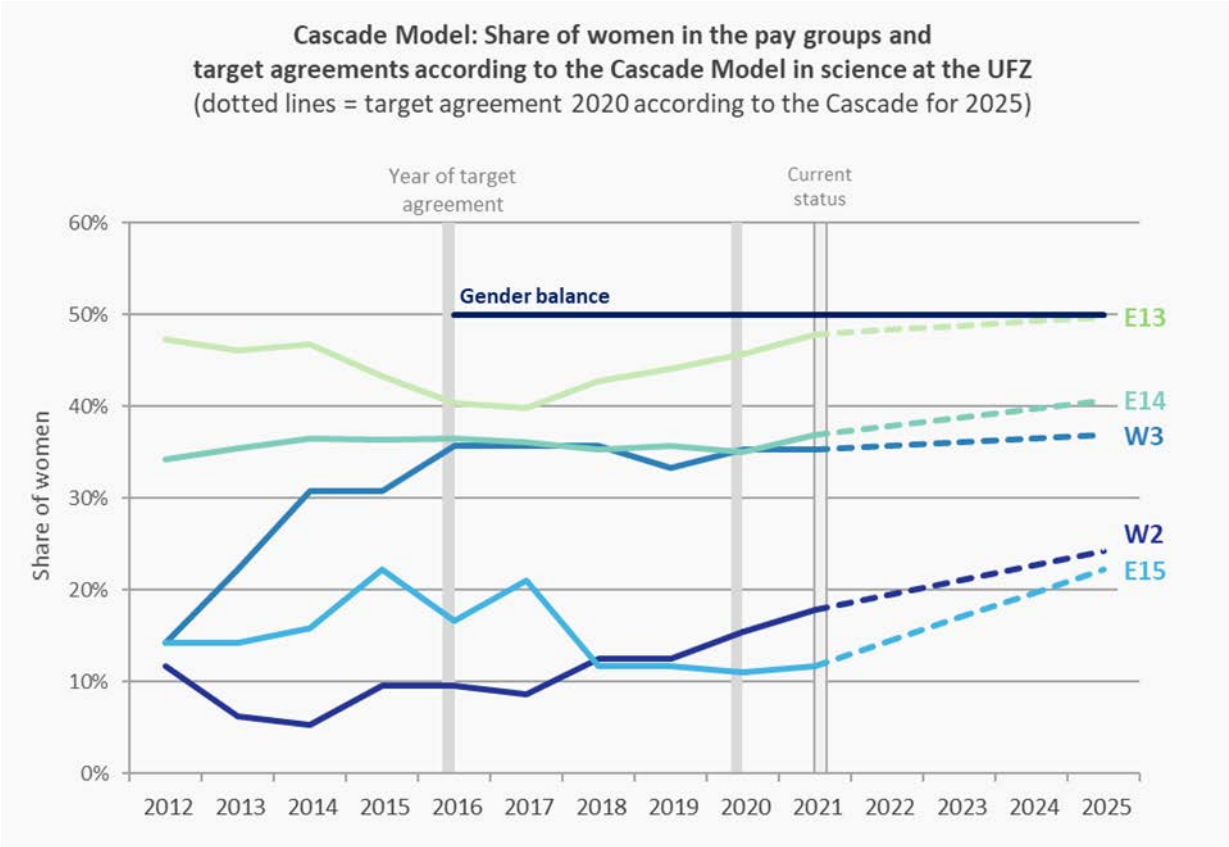

Figure 16 - Cascade: Target and actual share of women in pay groups according to the cascade model 2020-2025 in science at the UFZ

According to the cascade model, the UFZ targets for the share of women at various pay and grade levels by 2025 shown in Figure 16 result.

E13: Between the time of the first target agreement in 2016 and the current status, the proportion of women in pay group 13 has increased significantly to just under 50%.

E14: In contrast, the proportion of women in pay group 14 has remained unchanged compared with 2016, although it has increased slightly since the low level in the previous year. The cascade target requires a further increase.

E15: The development of the proportion of women in pay group 15 was initially very dynamic; stagnated at a low level of just under 10% for four years and is expected to rise to over 20% by 2025 according to the cascade target.

W2: The proportion of women in W2 grades has experienced a steady increase since 2016, from 10% in 2016 to just under 20% in 2021. The cascade target is 24% in 2025.

W3: The proportion of women in W3 grades has remained virtually unchanged since 2016 at around 35%, and this corresponds also with the cascade target for 2025.

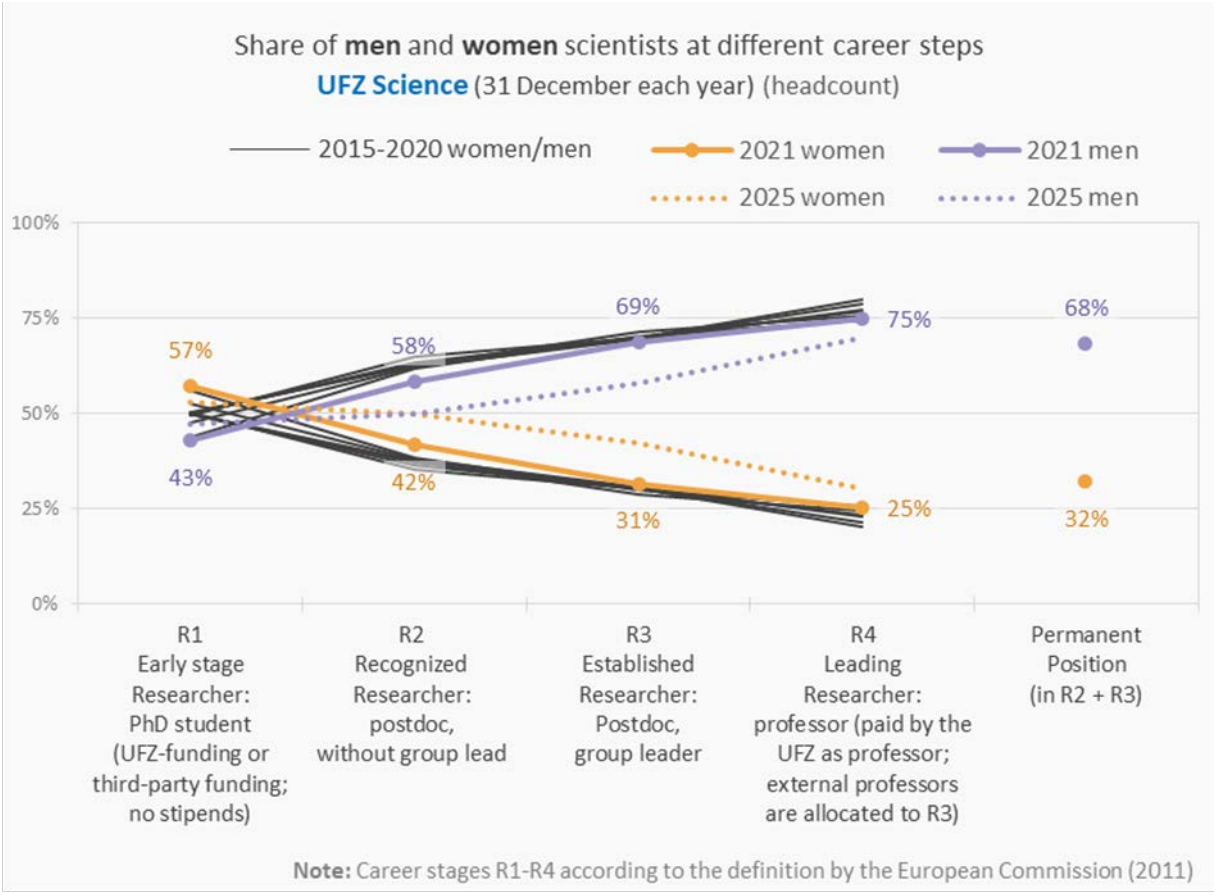

Figure 17 - Assumed development of the gender ratios by 2025 if the targets according to the cascade model are achieved

Figure 17 shows the assumed development of the proportions of women and men along the career stages in science until 2025 (dotted lines) if the UFZ targets according to the cascade model are achieved. For comparison, the current gender ratios (solid lines in color) and those for 2015-2020 (solid lines in black) are shown. If the cascade targets were achieved, gender parity would be realized for the doctoral (R1) and postdoc (R2) career stages, and the proportions of men and women would be significantly approximated for working group leaders (R3). For professorships (R4), the gender ratio would still be about one-third women to two-thirds men. The assumed development shows above all the inertia of the change processes due to the long-term effect of decisions made.

Target corridor for grade W3

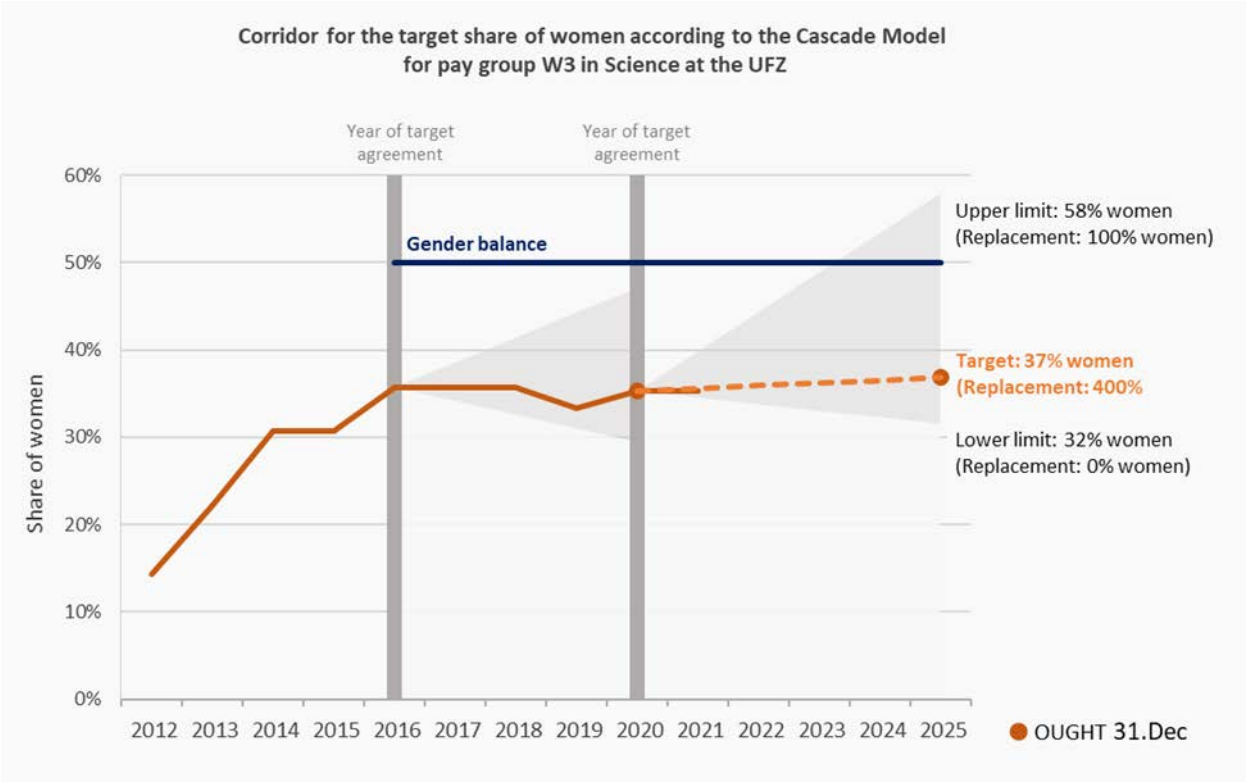

Figure 18 - Target corridor for the proportion of women according to the cascade target for grade W3

Figure 18 shows the development of the proportion of women in grade W3 (orange, solid line) together with the cascade targets agreed in 2016 for 2020 and in 2020 for 2025 (OUGHT, red dot) and the respective target corridor (gray area, for explanation see above).

The target corridor for 2020 was very narrow, as there were few positions to be filled; the target was achieved with the appointment of two female scientists.

The agreed target for 2025 envisages a 40% share of women in new faculty appointments, which would result in a 37% share of women in W3 professorships in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) corresponded to the target development (dashed line).

Target corridor for grade W2

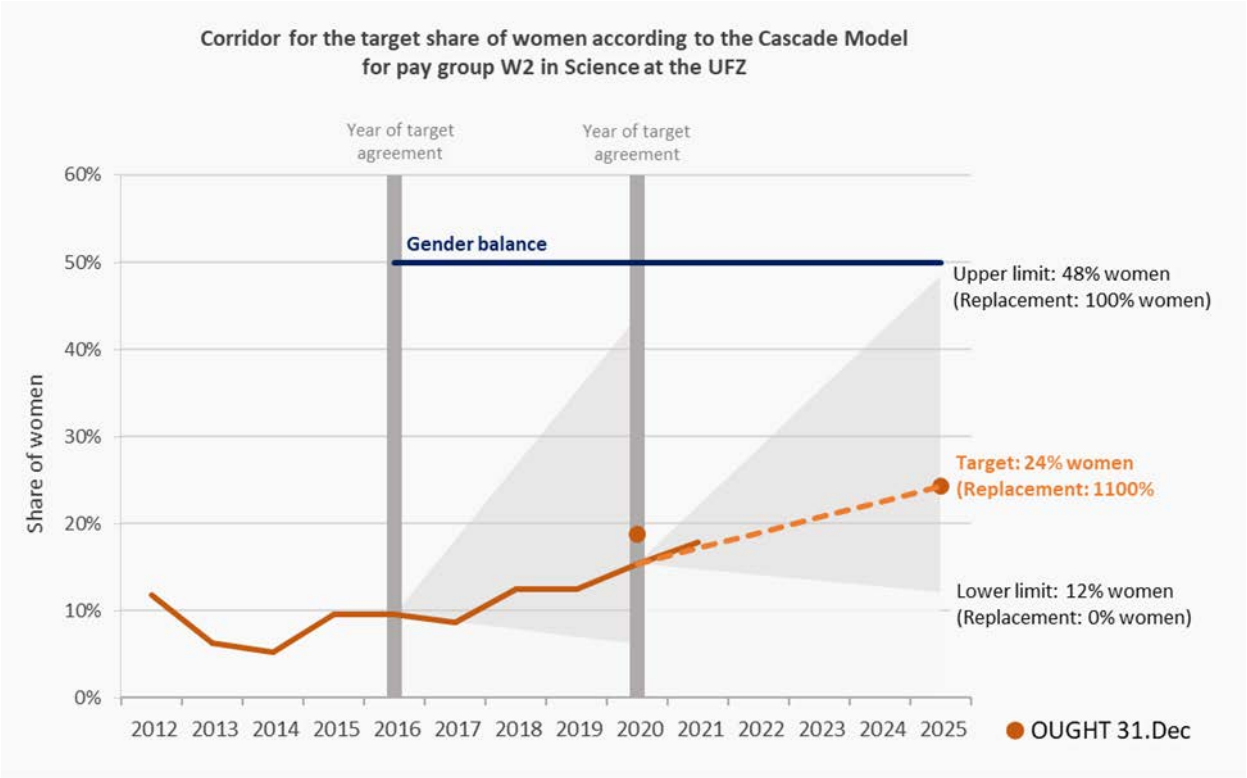

Figure 19 - Target corridor for the proportion of women according to the cascade target for grade W2

Figure 19 shows the development of the proportion of women in grade W2 (orange, solid line) together with the cascade targets agreed in 2016 for 2020 and in 2020 for 2025 (OUGHT, red dot) as well as the respective target corridor (gray area, for explanation see above).

The target corridor for 2020 was very broad, i.e. there were a relatively large number of new positions to be filled in the period 2016-2020. Of these, only 30% were to be filled by women. Thus, this target was not ambitious, especially for W2 professorships and at such a low starting level. Despite the conservative formulation of the target, it has not been achieved to date.

The agreed target for 2025 envisages a 42% share of women in new faculty appointments, which would result in a 26% share of women in W2 professorships in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) corresponded to the target development (dashed line).

Target corridor for the 1st leadership level (research unit lead)

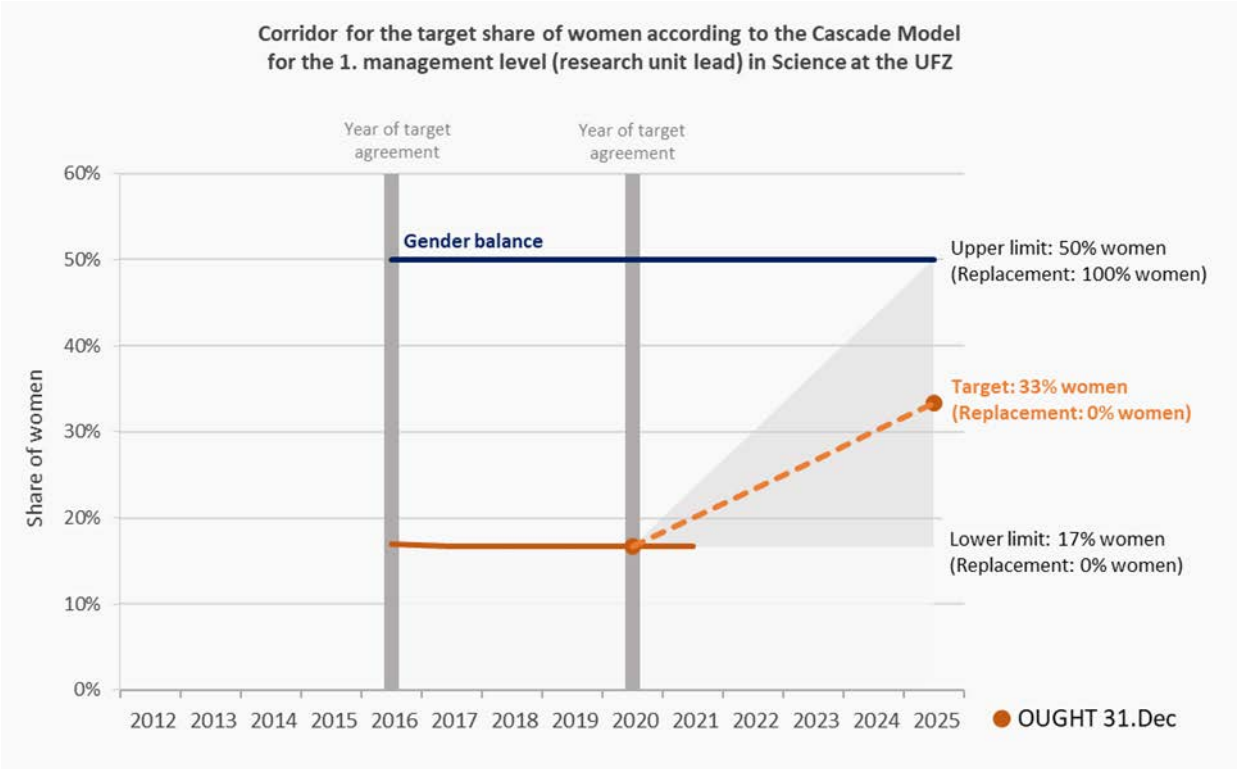

Figure 20 - Target corridor for the proportion of women according to the cascade target for the 1st leadership level (research unit lead)

Figure 20 shows the development of the proportion of women for the 1st leadership level (research unit lead; orange, solid line) together with the cascade targets agreed in 2016 for 2020 and in 2020 for 2025 (OUGHT, red dot) as well as the respective target corridor (gray area, for explanation see above).

The target for 2020 did not envisage any change in the proportion of women, as no new positions were expected to be filled.

The agreed target for 2025 envisages a 50% share of women in new positions to be filled, i.e. at least one in two new posts to be filled by a woman. That would result in a 33% share of women at the level of research unit lead in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) still corresponded to the baseline level and does not follow the target development (dashed line). Rather, it runs along the lower limit of the target corridor.

Target corridor for the 2nd leadership level (department lead)

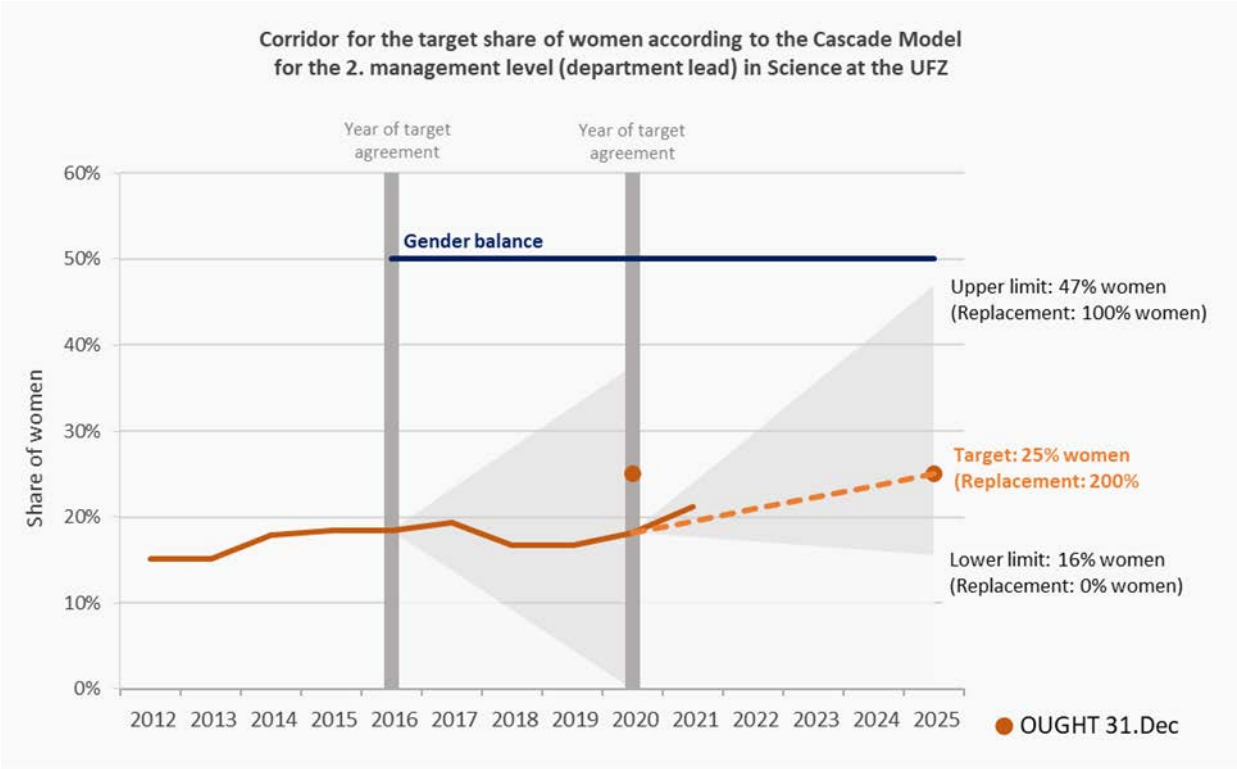

Figure 21 - Target corridor for the share of women according to the cascade target for the 2nd leadership level (department lead)

Figure 21 shows the development of the proportion of women for the 2nd leadership level (department lead; orange, solid line) together with the cascade targets agreed in 2016 for 2020 and in 2020 for 2025 (OUGHT, red dot) as well as the respective target corridor (gray area, for explanation see above). Unlike appointments, where the appointing universities have a great deal of co-determination, the appointment of department heads, with advice from the Scientific Advisory Board, is the exclusive responsibility of the UFZ executive management.

In 2016, the very ambitious goal was formulated to appoint four women to five vacant positions by 2020. This goal was clearly not achieved, and the proportion of women at the level of department lead remained even unchanged.

The agreed target for 2025 envisages a 40% share of women in new positions to be filled, which would result in a 25% share of women in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) exceeded the target development (dashed line).

Target corridor for the 3rd leadership level (group lead)

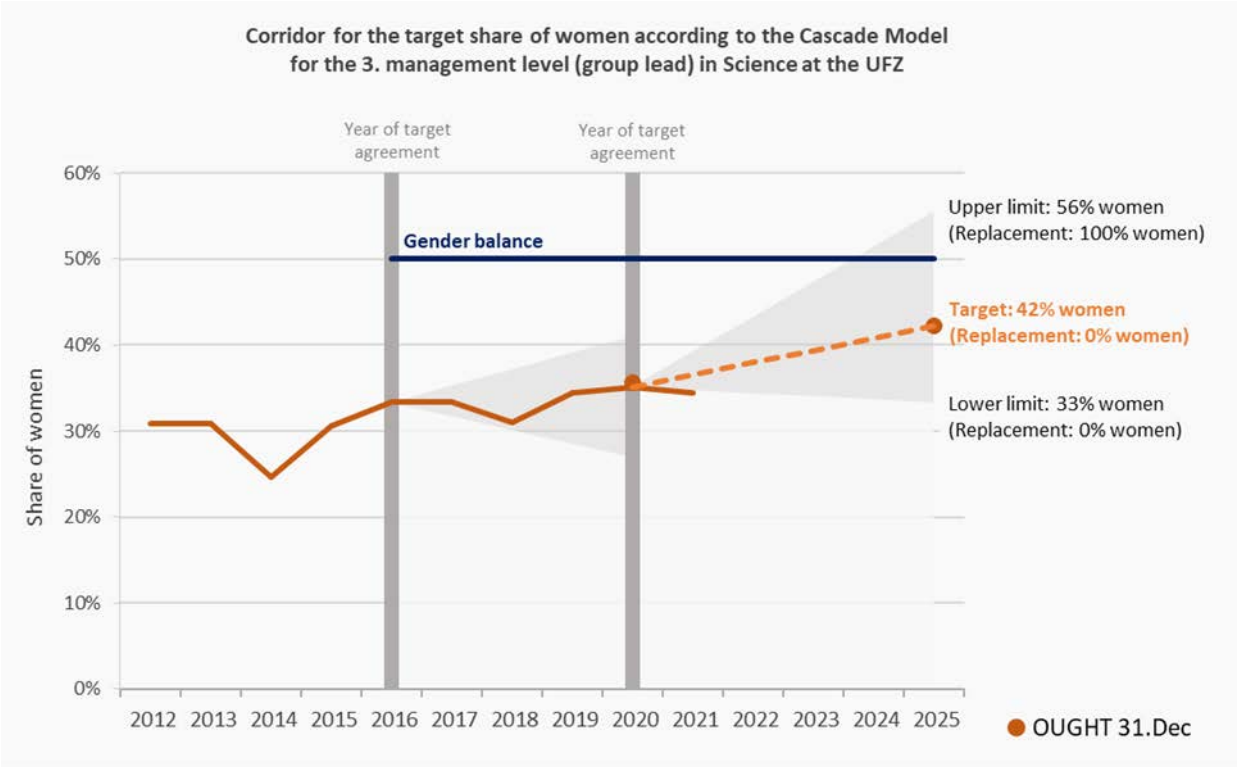

Figure 22 - Target corridor for the proportion of women according to the cascade target for the 3rd leadership level (group lead)

Figure 22 shows the development of the proportion of women for the 3rd leadership level (workgroup lead; orange, solid line) together with the cascade targets agreed in 2016 for 2020 and in 2020 for 2025 (OUGHT, red dot) as well as the respective target corridor (gray area, for explanation see above).

Despite a very narrow target corridor for the 2020, it was possible to achieve the goal and increase the proportion of women among workgroup leaders.

The agreed target for 2025 envisages a 50% share of women in new positions to be filled, which would mean a 42% share of women in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) was significantly below the target development (dashed line) and runs along the lower limit of the target corridor.

Target corridors for pay groups E13-15

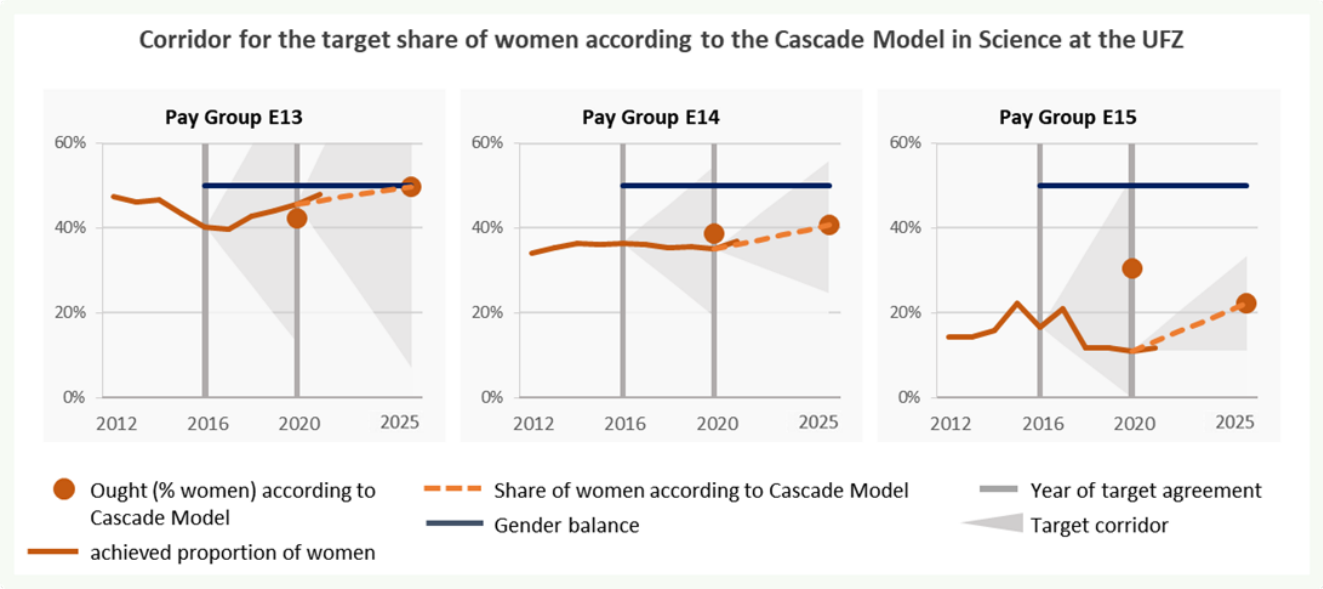

Figure 23 - Target corridor for the proportion of women according to the cascade model for the pay groups E13, E14, E15

Figure 23 shows the development of the proportion of women for the pay groups E13, E14, E15 (orange, solid line) together with the cascade targets agreed in 2016 for 2020 and in 2020 for 2025 (OUGHT, red dot) as well as the respective target corridors (gray area, for explanation see above).

For E13, the target for 2020 was achieved. The agreed target for 2025 envisages at least 50% of new positions in pay group E13 to be filled by women, which would result in a 50% share of women in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) exceeded the target development (dashed line).

For E 14, the 2020 target was not achieved, and the proportion of women remained constant compared to 2016. The agreed target for 2025 envisages at least 51% of new positions in pay group E14 to be filled by women, which would result in a 41% share of women in 2025 (orange dashed line). In 2021, the actual proportion of women (solid line) corresponded to the target development (dashed line).

For E15, the 2020 target was clearly not achieved, and the proportion of women decreased sharply compared to 2016. However, there has been a significant decrease in positions in this pay group with very few, probably only two, new appointments. The agreed target for 2025 therefore envisages at least one of the two new positions to be filled by a woman in order to reach the cascade target of 22% (orange dashed line). In 2021, the actual proportion of women (solid line) was still in line with the baseline level and does not follow the target development (dashed line), but runs along the lower limit of the target corridor.

Indicator: Career ambition of Doctoral Researchers

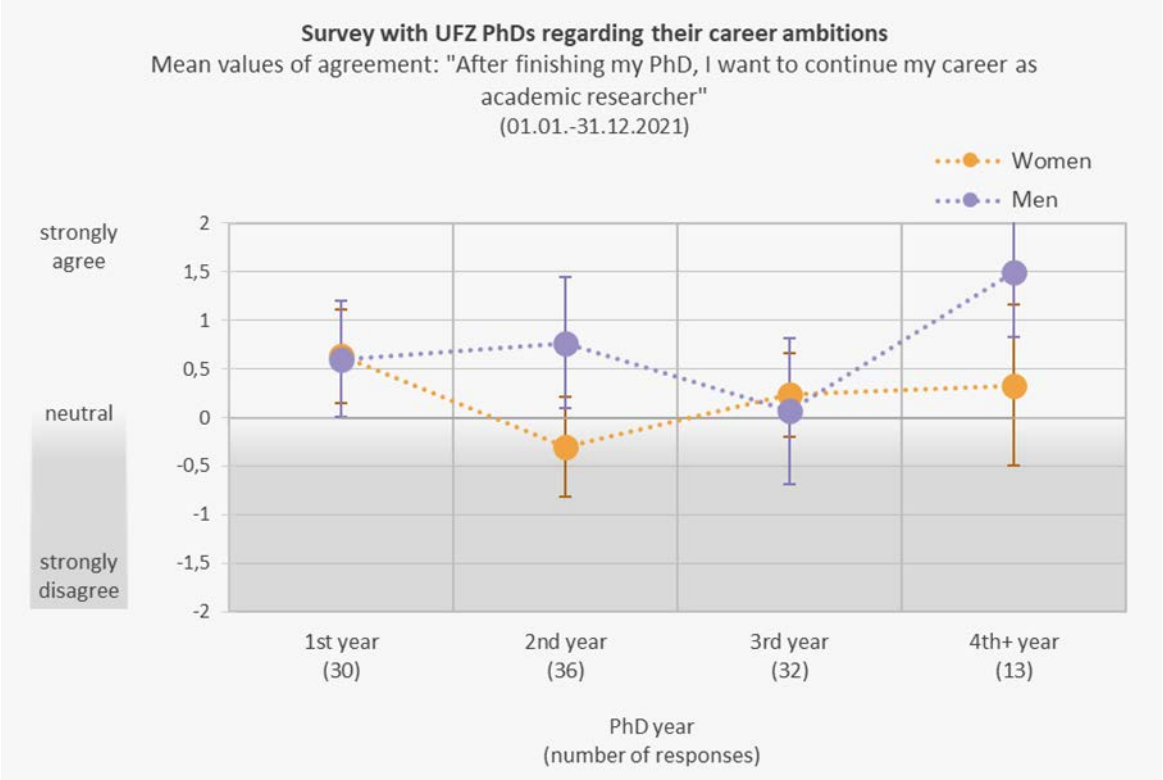

Figure 24 – Ambition for a scientific career among doctoral researchers at UFZ, disaggregated in terms of gender (1.1.-31.12.2021)

Figure 24 shows for doctoral researchers in the first, second, third and subsequent years of their PhD how much they aspire to a career in science, separately for women and men. The statement "After finishing my PhD, I want to continue my career as an academic researcher." is agreed with by the doctoral researchers on a 5-point scale from -2 ("strongly disagree") to +2 ("strongly agree") as follows:

In the 1st year of their doctorate, men and women agree consistently by about 0.6 points.

In the 2nd year of their doctorate, men do not change their agreement, while women tend to diagree with the statement.

In the 3rd year of their doctorate, men and women are likewise neutral toward the statement.

In the 4th and later years of their doctorate, women continue to be rather neutral, while men clearly agree with 1.5 points.

Noticeably, the aspiration toward a scientific career is relatively restrained overall, and it tends to be lower for women than for men, especially in the second and from the fourth year of the doctorate. For men, it increases substantially in the fourth and later years of their doctorate. The reasons and implications for this should be investigated, because the subsequent career stage postdoc (R2) shows a disproportionate loss of female scientists (see indicator career development).

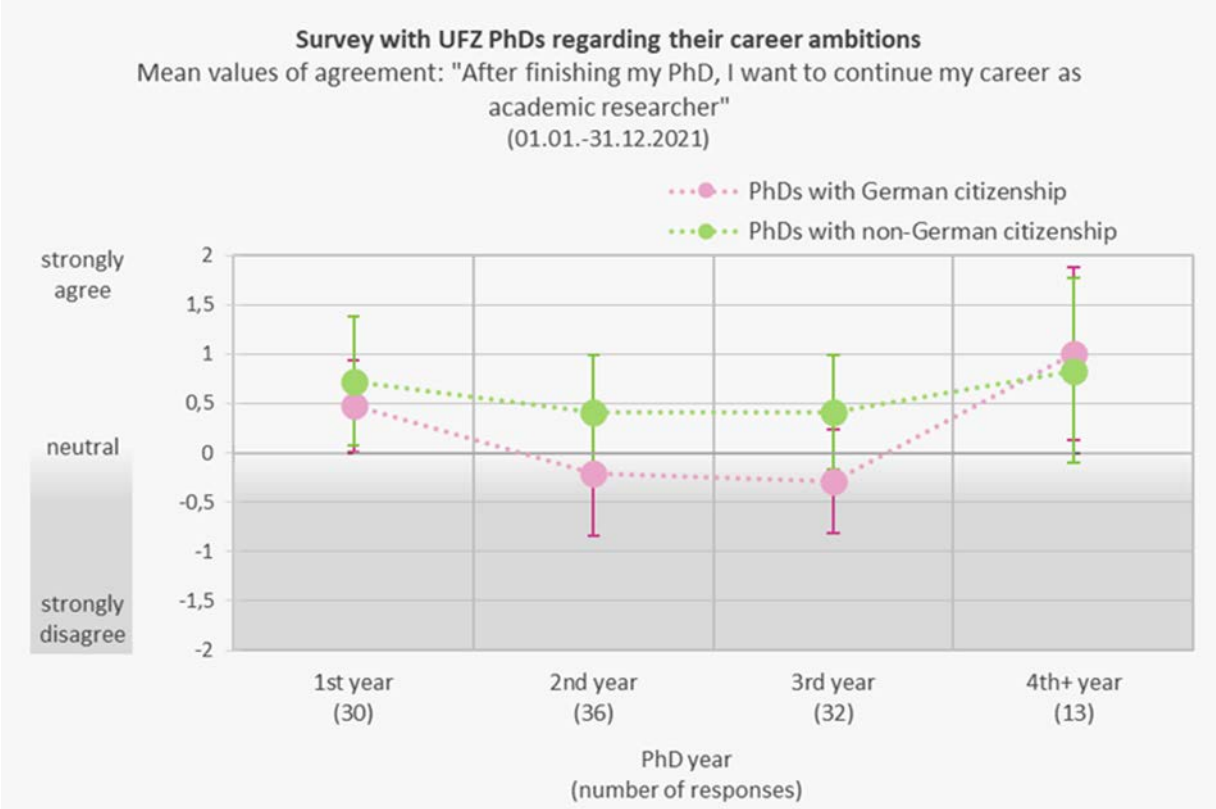

Figure 25 – Ambition for a scientific career among doctoral researchers at UFZ, disaggregated in terms of citizenship (1.1.-31.12.2021)

Figure 25 shows for doctoral researchers in the first, second, third and subsequent years of their PhD how much they aspire to a career in science, separately for doctoral researchers with German and non-German citizenship. The statement "After finishing my PhD, I want to continue my career as an academic researcher." is agreed with by the doctoral researchers on a 5-point scale from -2 ("strongly disagree") to +2 ("strongly agree") as follows:

In the 1st year of their doctorate, researcher with German and non-German citizenship agree consistently by about 0.6 points.

In the 2nd year of their doctorate, agreement for both groups decreased, particularly for doctoral researchers with German citizenship, who tend to even disagree with the statement.

In the 3rd year of their doctorate, ambitions remain constant: doctoral researcher with non-German citizenship tend ot agree, those with German citizenship tend to disagree with the statement.

In the 4th and later years of their doctorate, both groups agree to the statement.

Doctoral researchers with non-German citizenship are more likely to indicate that they aspire to a career in science over the course of their doctorate than those with with German citizenship; both groups show the highest agreement in the fourth and later years of the doctorate.

Indicator: Project management in science

Not only are women underrepresented in the scientific staff of many departments, but in addition, the available women are often underrepresented in the project management of research projects. In other words, women are less often represented in project management than the proportion of women in the department would suggest. While there may be good reasons for the departments and individuals, the overall indicator for the UFZ shows a systematic disadvantage of female scientists with regard to project leadership. Project leadership is a good opportunity to present and develop expertise and competence. It is an important step in a scientific career and should be made accessible on an equal basis.

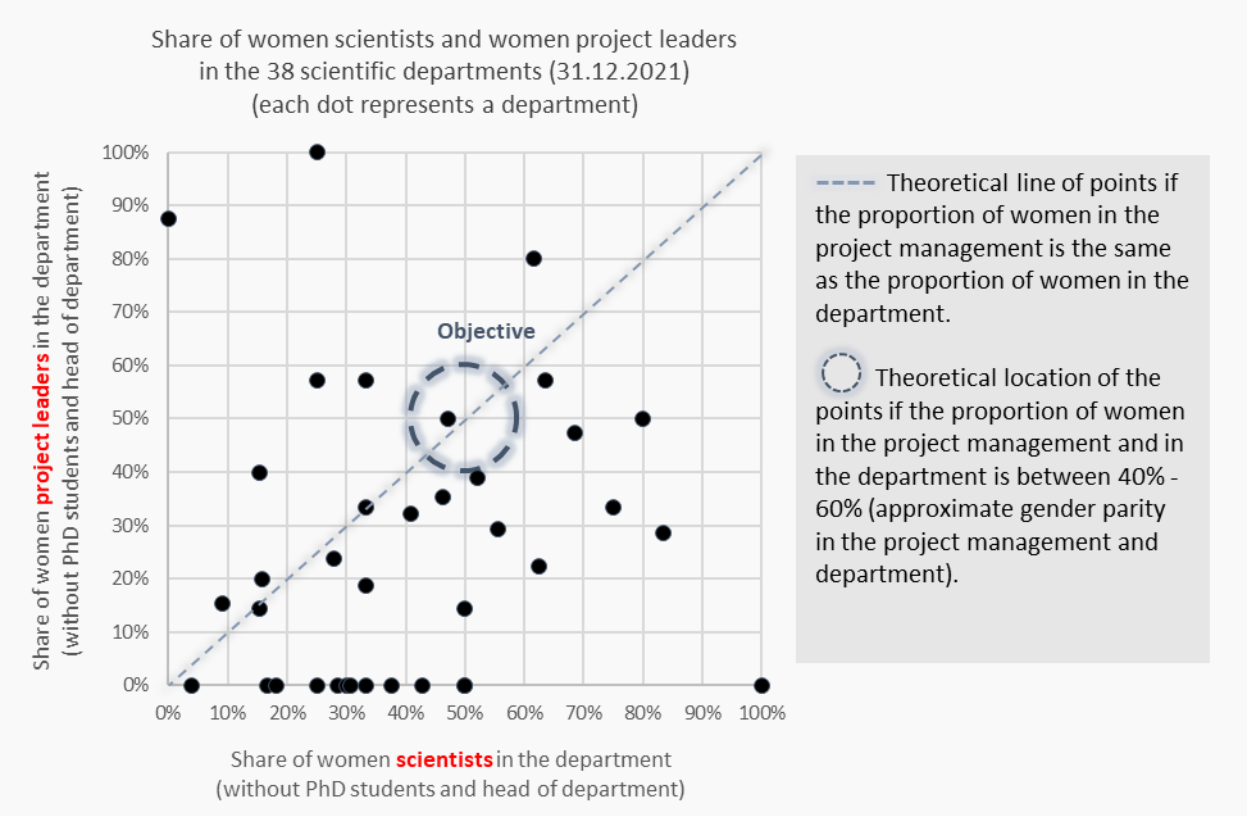

Figure 26 - Proportion of women in scientific staff and project management in the scientific departments at UFZ (excluding doctoral researchers and departmental lead) (31.12.2021)

Figure 26 shows the proportion of women in scientific staff and project management for each department (black dots), as registered in the UFZ project database. A point lying at the 1:1 line indicates that the proportion of women in project management in a department is as high as the proportion of female scientists in the department. A point below this line means that the proportion of women in project management is lower than the proportion of female scientists in the department; a point above the line means the proportion of women in project management is higher than the proportion of female scientists in the department. The circle marks the area in which the points (would) lie if both project management and the research positions in the department were staffed with approximately gender parity.

A large number of the points are below the 1:1 line and a considerable number are on the 0% line for project management (y-axis). In these departments, there are no women in project management positions despite varying shares of female scientists in these departments.

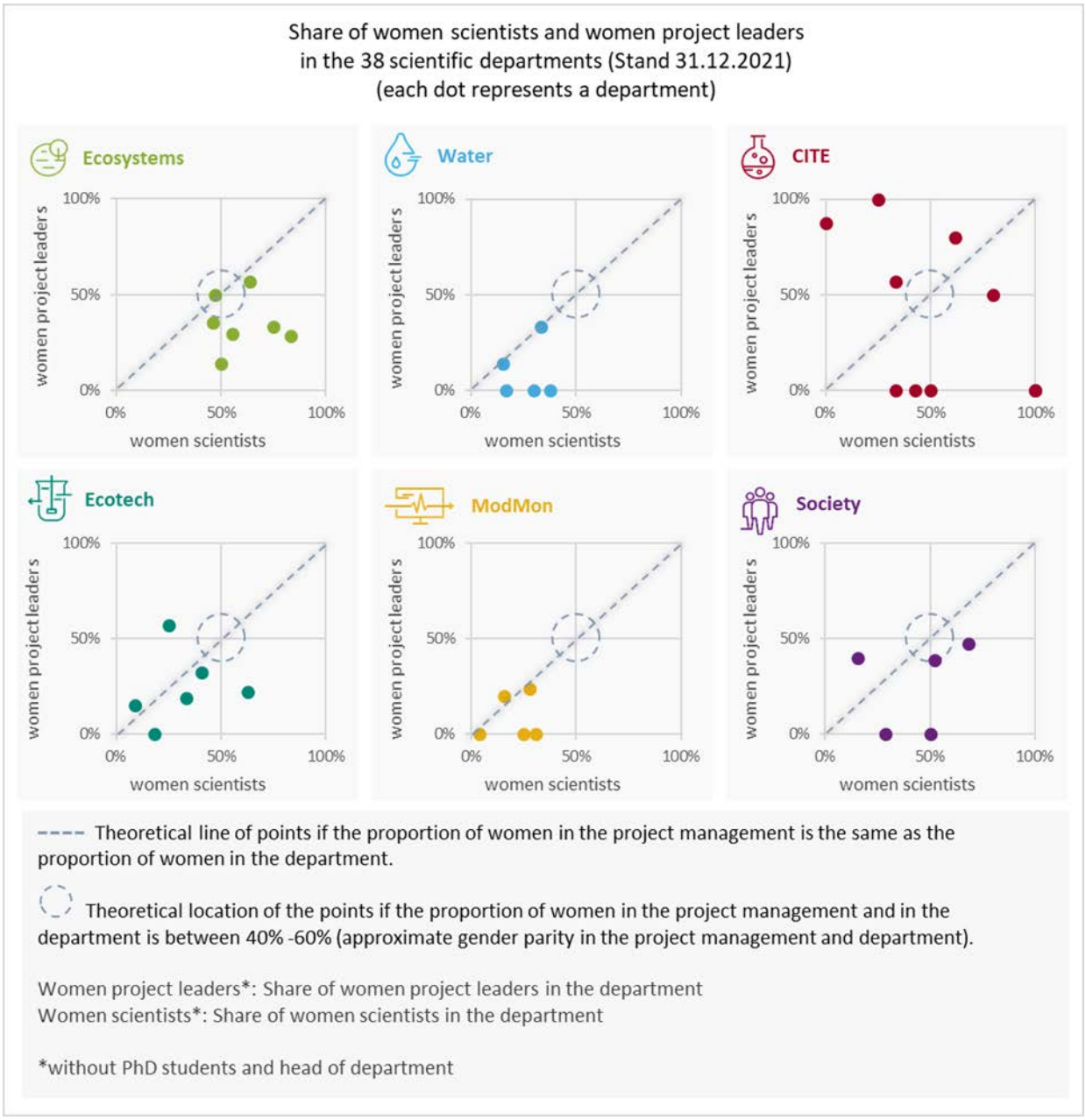

Figure 27 - Proportion of women in scientific staff and project management in the scientific departments for each research unit at UFZ (excluding doctoral researchers and departmental lead) (31.12.2021)

Figure 27 shows that the underrepresentation of female scientists in project management can be influenced and thus shaped by decisions and conditions at the UFZ: In the six research units of the UFZ, the departments are distributed very differently above and below the 1:1 line and along the x-axis.

Indicator: PoF IV: Chair of the Integration Platforms

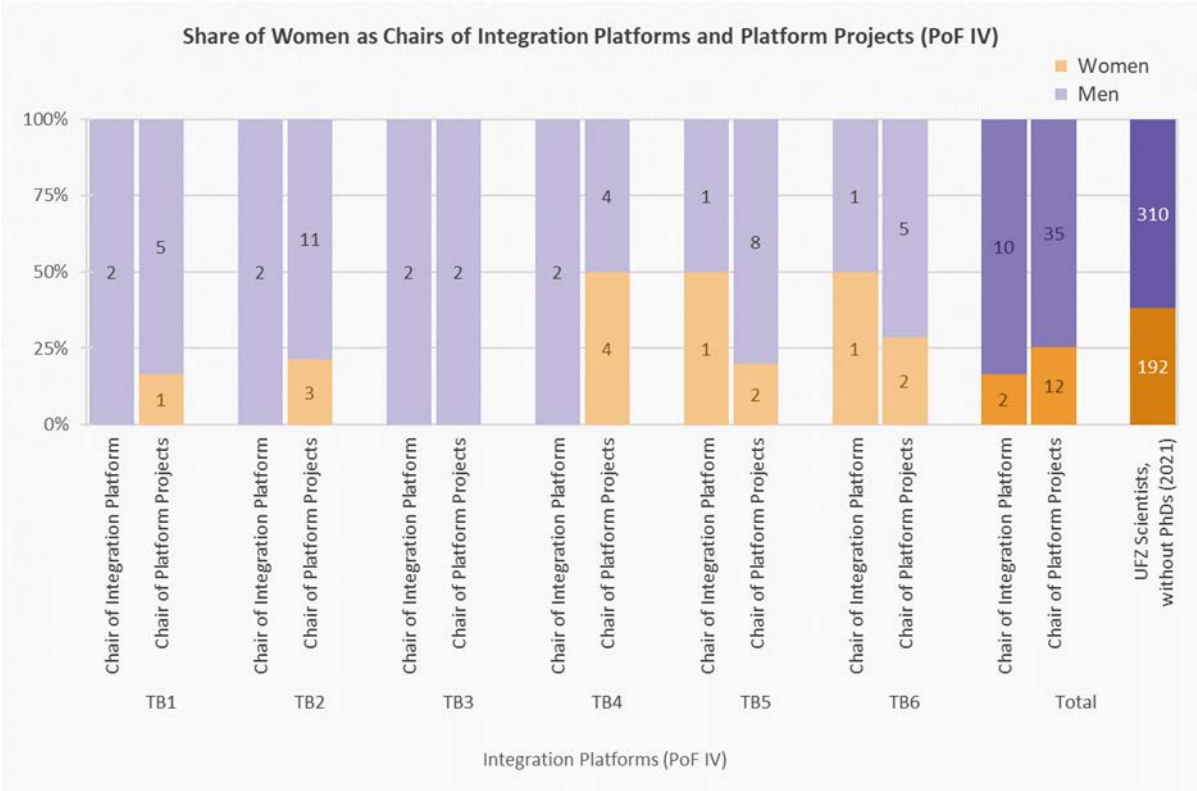

Figure 28 - Number of men and women chairing the integration platforms and the platform projects of the PoF IV period at the UFZ (as of spring 2022), TB = research unit

For the fourth period of programme-oriented research (PoF IV) starting in 2021, research at the UFZ is organized into six integration platforms, each chaired by two members of the scientific staff. All integration platforms contain different platform projects. Only 2 women, but 10 men chair an integration platform. Also, female scientists make up only 26% of the management of the platform projects while they make up 38% of researcher holding a PhD at the UFZ. Thus, they are underrepresented both as chair of platforms as well as chair of platform projects.

Indicator: Payment structure

The amount of one's income affects the extent of social and personal approval, independence, and power. Therefore, income is an important indicator of gender equality. Women in Germany still earn less than men (gender pay gap). This is not only due to the fact that women are less frequently employed in well-paid (managerial) positions, more frequently work part-time, more frequently have interruptions in their professional biographies, and more frequently work in lower-paid sectors and occupations (the resulting difference of 18% is referred to as "unadjusted gender pay gap"). In general, jobs that are mainly chosen by women are valued and appreciated less, which is reflected in the wage level (Hausmann et al. 2015). However, even in comparable jobs and with the same qualifications, women in Germany earn on average 6% less than men (that still existing difference is referred to as "adjusted gender pay gap") (source: e.g. Federal Statistical Office). Payment for almost all UFZ staff, except professorships, conform to the German civil service pay scale TVöD.

Payment Structure UFZ total

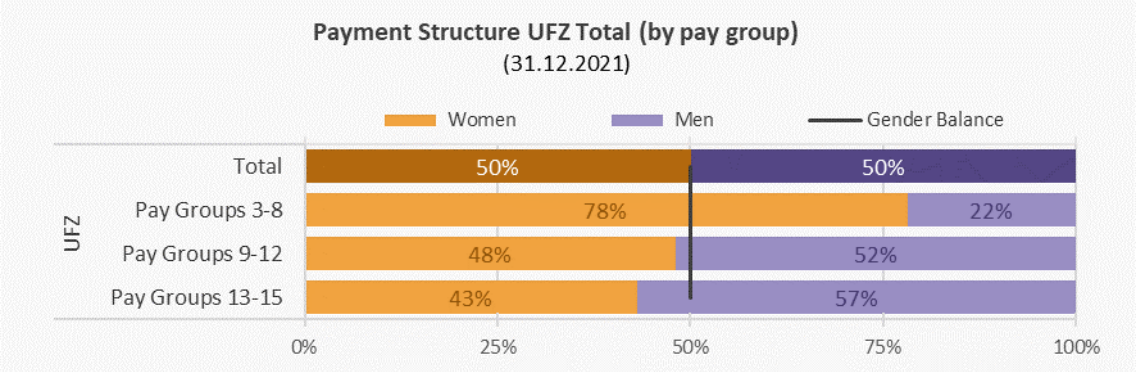

Figure 29 - Share of women and men in different pay groups at the UFZ (31.12.2021)

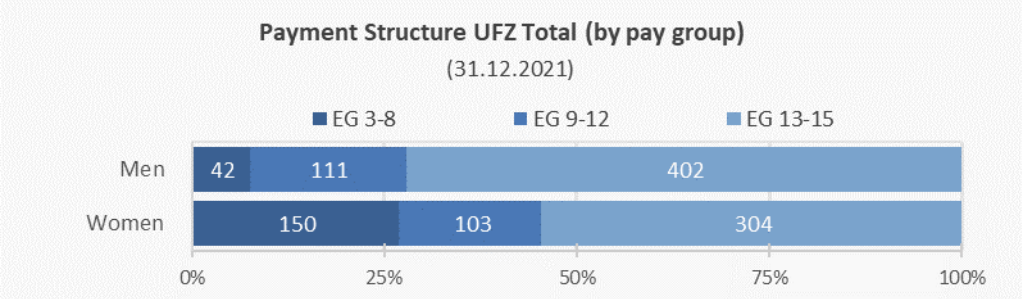

Figure 30 - Distribution of pay groups by gender at the UFZ (31.12.2021)

Figure 29 shows the shares of women and men at the UFZ in total and in various pay groups. As many women (50%) as men (50%) work at the UFZ. In pay groups 3-8, women are clearly overrepresented (78%), in pay groups 9-12 they are represented according to their overall share (48%), and in pay groups 13-15 they tend to be underrepresented (43%).

Figure 30 shows, with an alternative representation of the same data, how the pay groups are unequally distributed within the groups of men and women. In absolute numbers, in pay groups 5-12 there are about 100 female employees more than male ones, while in higher pay groups, there are about 100 female employees less than male ones.

Payment structure UFZ Science

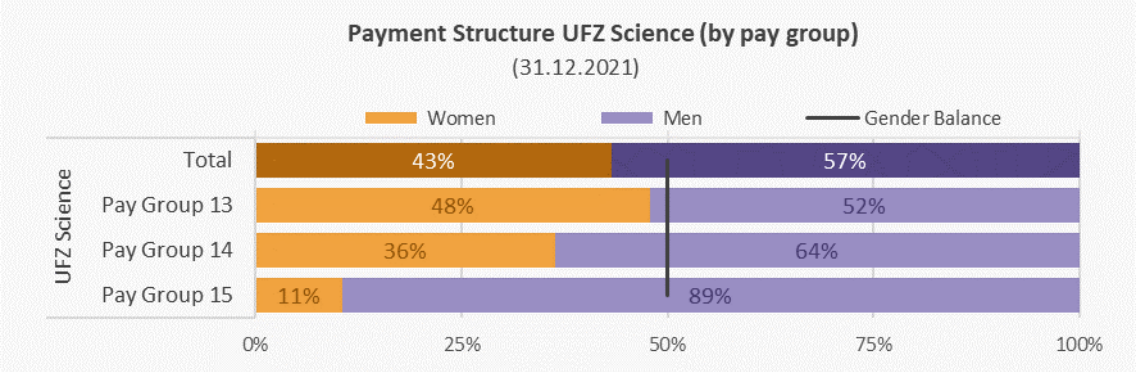

Figure 31 - Share of women and men in the field of science at the UFZ in pay groups E13-E15 (31.12.2021)

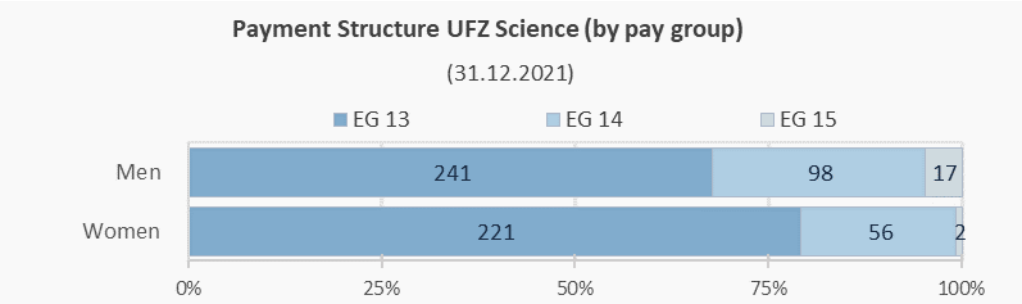

Figure 32 - Distribution of pay groups by gender in the field of science at the UFZ (31.12.2021)

Figure 31 shows the shares of women and men in different pay groups in the field of science at the UFZ. Slightly fewer female scientists (43%) than male scientists (57%) work at the UFZ. While female scientists tend to be overrepresented in pay group E13, they are underrepresented in pay group E14. Female scientists account for 11% of scientific employees in pay group E15. However, this pay group is currently characterized by large fluctuations and small numbers due to the sharp decline in the amount of positions and only few new appointments. Thus, the datea is difficult to interpret.

Figure 32 shows, with an alternative representation of the same data, how the pay groups are unequally distributed within the group of male scientists and within the group of female scientists.

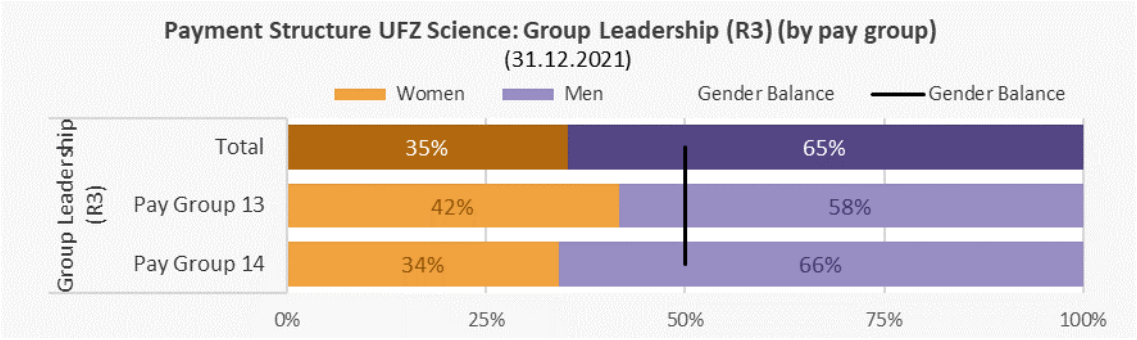

Figure 33 - Share of women and men as group leaders in the field of science at the UFZ pay groups E13-E14 (31.12.2021)

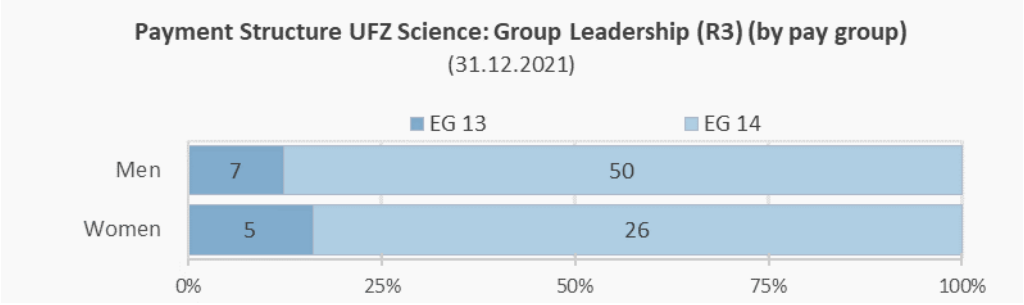

Figure 34 - Distribution of pay groups by gender of group leaders in the field of science at the UFZ (31.12.2020)

Figure 33 shows the shares of women and men as group leaders in the field of sciene at the UFZ in pay groups E13 and E14. At the UFZ, significantly fewer female scientists head a working group (35%) than male scientists (65%). Measured against this, female group leaders are overrepresented in pay group E13 (42%).

Figure 34 shows, with an alternative representation of the same data, how the pay groups within the group of male group leaders and within the group of female group leaders are unequally distributed to the disadvantage of female scientists.

Payment structure UFZ Administration

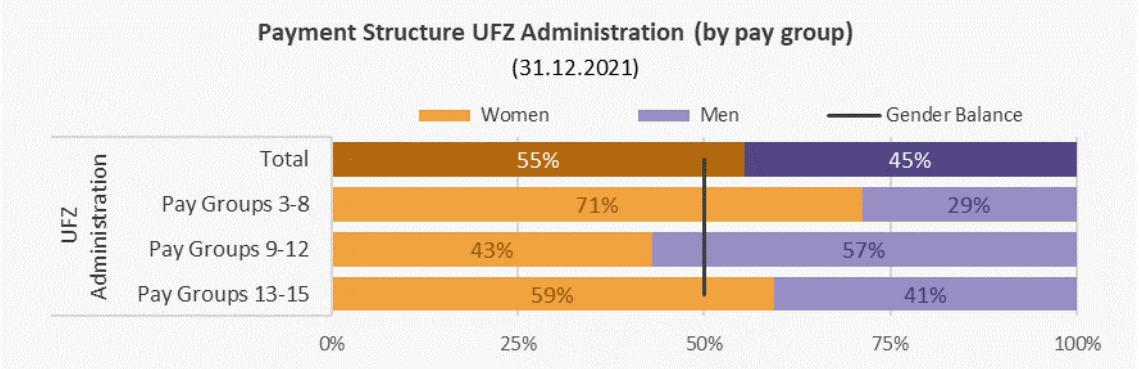

Figure 35 - Share of women and men in the field of administration at the UFZ in various pay groups (31.12.2021)

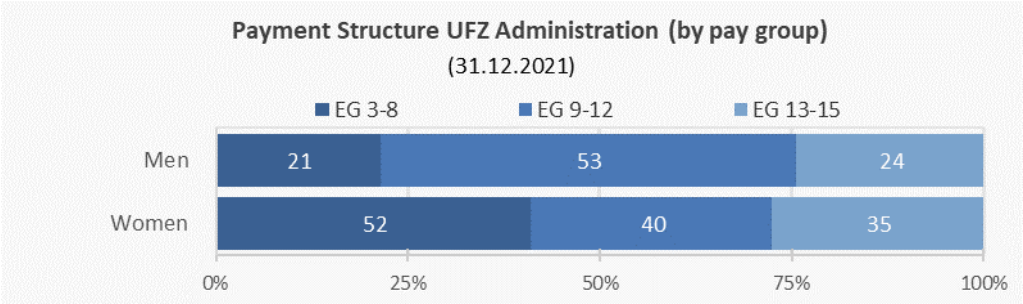

Figure 36 - Distribution of pay groups by gender in the field of administration at the UFZ (31.12.2021)

Figure 35 shows the shares of women and men in different pay groups in the field of administration at the UFZ. At the UFZ, slightly more women work in administration (55%) than men (45%). Measured against this, women are significantly overrepresented in pay groups 3-8 (71%), significantly underrepresented in pay groups 9-12 (43%); and pay groups 13-15 their share (59%) corresponds to their overall share in the field of administration (55%). According to the TVöD, secretarial and assistant positions are frequently remunerated in pay groups 5-8 and often occupied by women, while IT positions are frequently remunerated in pay groups 9-12 according to the TVöD and often occupied by men.

Figure 36 shows, with an alternative representation of the same data, how in particular pay groups 3-8 and 9-12 are distributed considerably unequally within the group of men and within the group of women.

Payment structure UFZ Technical Staff

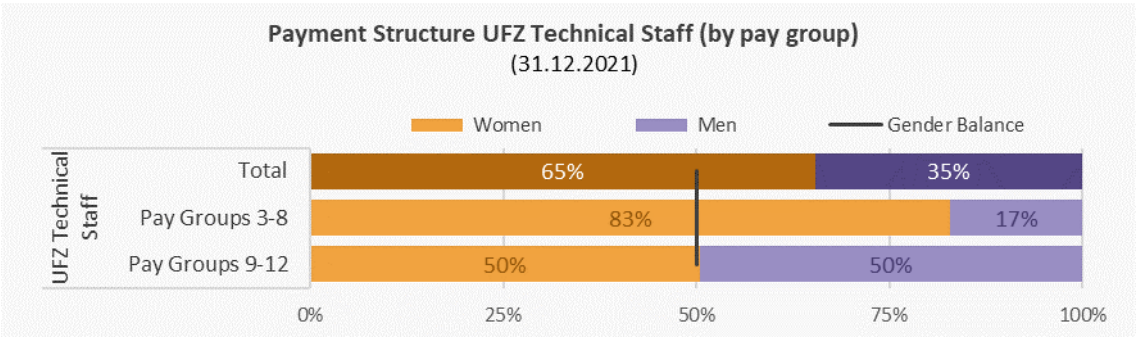

Figure 37 - Share of women and men in the field of technical support at the UFZ in various pay groups (31.12.2021)

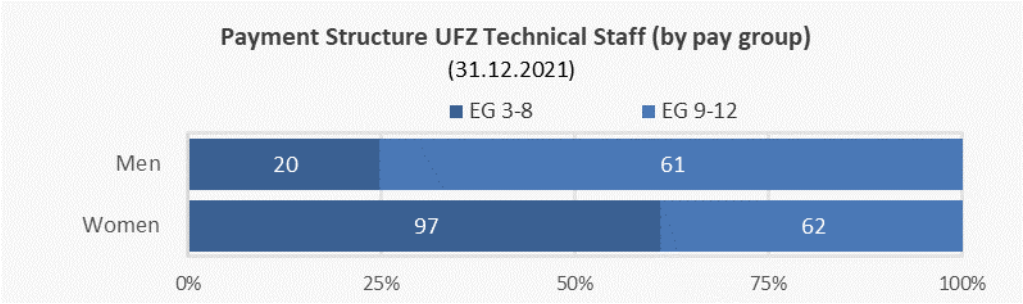

Figure 38 - Distribution of pay groups by gender in the field of technical support at the UFZ (31.12.2021)

Figure 37 shows the shares of women and men in the field of technical support at the UFZ in various pay groups. At the UFZ, significantly more women work in the field of technical support (65%) than men (35%). In addition to positions in information technology, the field of technical support also includes science-assisting staff such as laboratory assistants as well as some secretarial and management assistant positions. Women are clearly overrepresented in pay groups 3-8 and underrepresented in pay groups 9-12 according their overall share in the field of technical support.

Figure 38 shows, with an alternative representation of the same data, how the pay groups are unequally distributed within the groups of men and women. In absolute numbers, about 5 times as many women as men work in pay grades 3-8 and about the same number of women as men work in pay grades 9-12.

A consideration of the causes and conditions for the unequal payment structure must take into account the very different occupational profiles that lie in the field of technical support, as they are preferred differently by men and women and are valued differently by the TVöD: Professions that are predominantly chosen by men are classified into higher pay groups than professions that are predominantly chosen by women.

This is also reflected in the pay groups for employment after training: despite having the same qualification according to the Chamber of Industry and Commerce and the same or even longer training period, trainees in the occupations of biology laboratory assistant, office management assistant and industrial mechanics assistant are taken on in pay group 5 after their training, while trainees in the occupation of IT specialist are taken on in pay group 6. Also, graduates from the University of Cooperative Education are taken on as merchants and biology laboratory assistants in pay group 9b, while graduates of IT occupations are taken on in pay group 10. The structure of the TVöD reveals the in its causal direction certain evidence that activities which are primarily chosen by women are valued and appreciated less, which in turn is reflected in payment levels. The UFZ cannot directly change the structurally unequal valuation of work inscribed into the TVöD, but it should be aware of the unequal valuation and its consequences.

Indicator: Funding in science

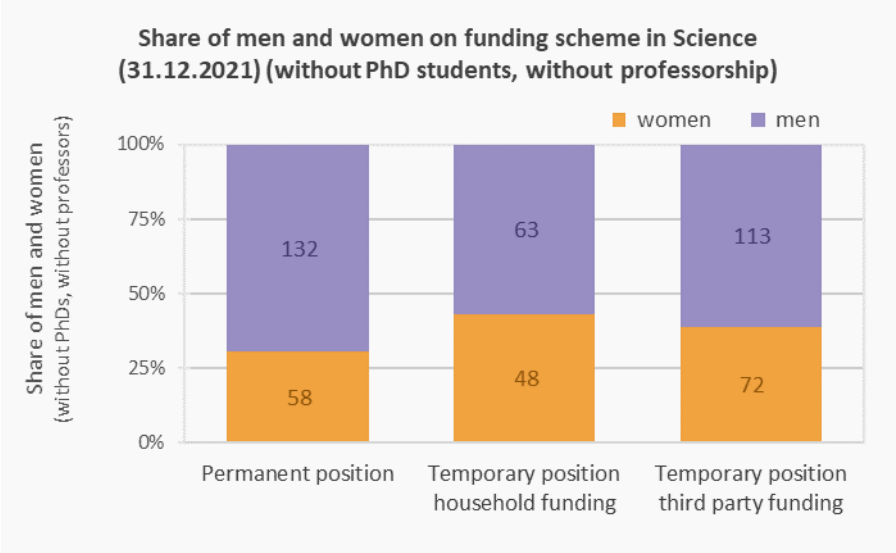

Figure 39 - Share of men and women in the field of science at the UFZ financed by (a) permanent employment contracts, (b) fixed-term employment contracts on budget, and (c) fixed-term employment contracts on third-party funding (in the case of mixed funding, the one with the greater allocation of work time is counted).

Figure 39 shows the share of women and men in the field of science at the UFZ by type of funding: (a) permanent employment contracts, (b) fixed-term employment contracts on budget, and (c) fixed-term employment contracts on third-party funding. For male scientists, the most common form of funding is permanent employment (132 employees). For female scientists, the most common form of funding is fixed-term employment on third-party funding (72 persons). If only fixed-term appointments are considered, the share of women on budget and on third-party funding is comparable.

Regarding the fixed-term nature of working contracts, secure and insecure employment conditions are unequally distributed between the sexes, to the disadvantage of women: Of the female scientists at the UFZ, 33% have a permanent employment contract; of the male scientists at the UFZ, 43% have a permanent employment contract.

Indicator: Tenure in science

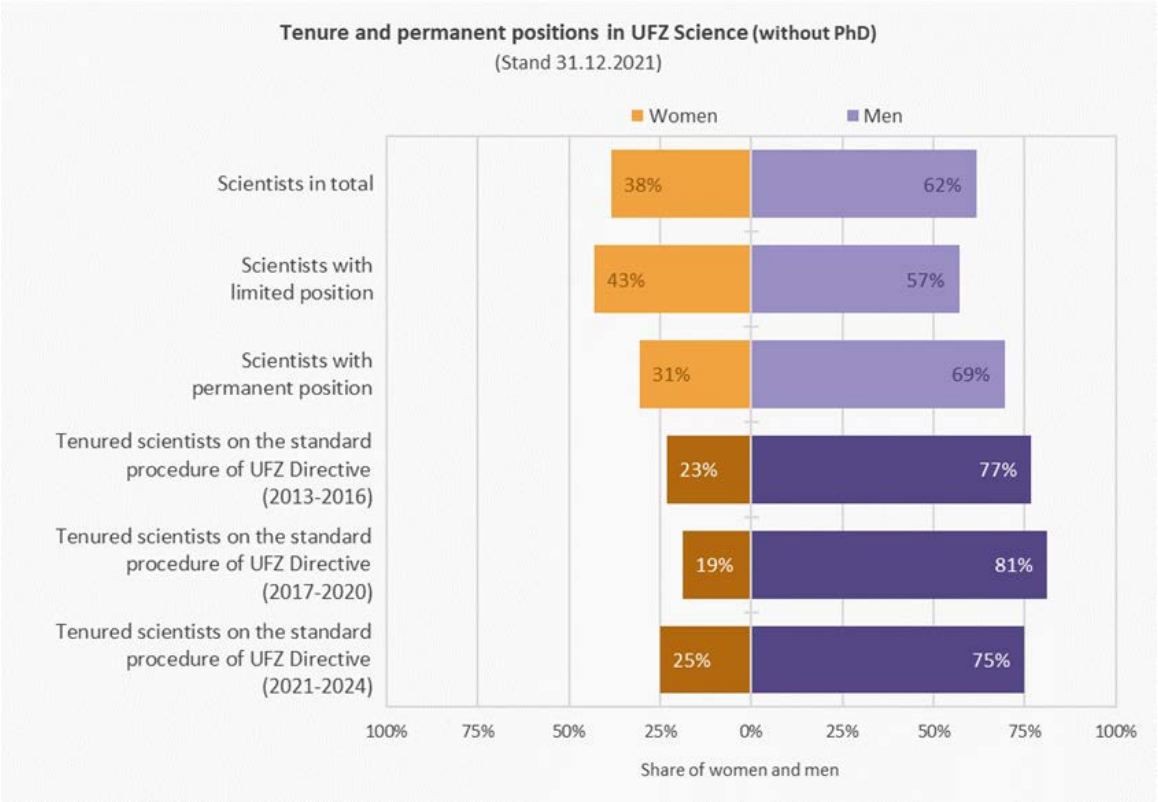

Figure 40 - Share of male and female scientists holding a PhD at the UFZ (31.12.2021) and among those being tenured as researchers (2013-2016, 2017-2020, 2021-2024) [1]

Figure 40 shows the gender ratio among UFZ scientists holding a PhD, both for fixed-term and permanent positions. Further, the gender ratio is shown for the scientists who received a tenure via the UFZ tenure procedure in the periods 2013-2016, 2017-2020, and 2021-2024

At the UFZ, the permanent appointment as an active researcher is regarded as a possible career step in the overall picture of an individual's academic career. For years, the proportion of women who are granted tenure for active research via the standard procedure of the UFZ Directive has been significantly lower than the proportion of female postdocs with a fixed-term contract, i.e. men are granted tenure disproportionately more often compared to the total number of scientists with a fixed-term contract. In addition to the standard procedure, there may also be accelerated procedures, e.g. in the context of being offered a chair or the acquisition of highly competitive funding.

[1] Figure 40 referes to tenure procedures following the UFZ tenure directive. In addition, there may also be accelerated procedures, e.g. in the context of being offered a chair or the acquisition of highly competitive funding.

Area: Visibility and participation

There is no reason to assume that the performance of female scientists is worse than that of their male colleagues. Nevertheless, the genders are represented very differently with increasing career stage. The reasons for this vary. Rarely, the reason is active exclusion, but often it is the force of habit and the impact of (missing) role models. What we know influences the way we judge and make decisions. Therefore, improving gender ratios also means sustainably creating role models, i.e. recognising achievements, increasing visibility, enabling participation. The following figures show the gender ratios for different areas of visibility and participation of female scientists at the UFZ.

Indicator: Supervision boards of the PhD colleges

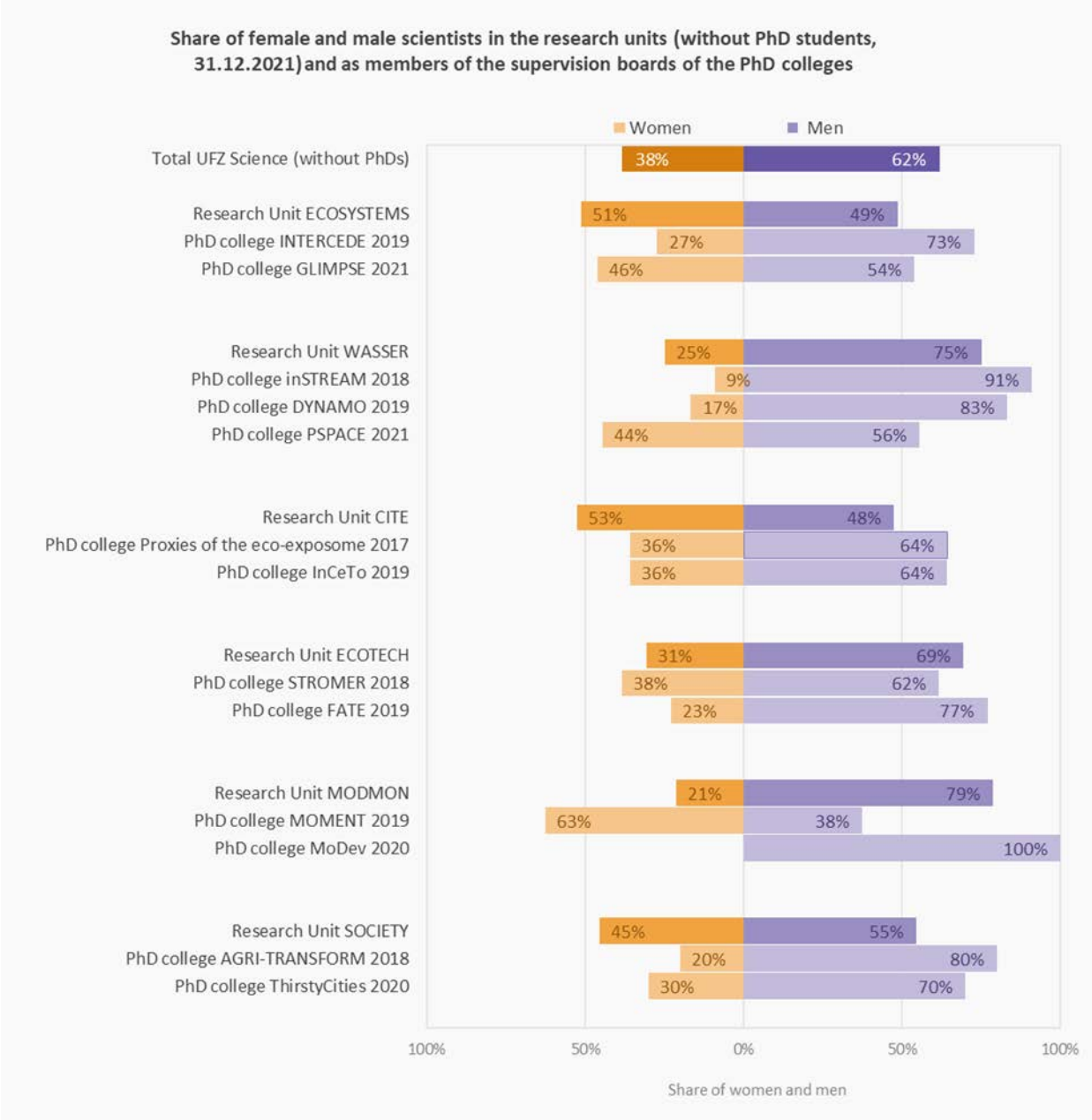

Figure 41 - Share of female and male scientists in the research units (excluding doctoral researchers, 31.12.2021) and in the supervisory committees of the PhD colleges.

Figure 41 shows the gender ratios in the six research units of the UFZ and in the supervisory committees of the respective PhD colleges. While in some PhD colleges, the share of women in the commissions corresponds to or exceeds the share of women in the research units, the share of women in other commissions is significantly smaller than the share of women in the associated research unit. Parity in the supervisory committees should be a goal and a requirement - and thus an application criterion for a PhD college.

Indicator: Boards, councils, and commissions

The participation of women in decision-making processes and thus in (professional) political influence is an essential element of gender equality. Furthermore, balanced representation of interests is best achieved when interests are also represented in persona. Diversity of boards and committees not only leads to more creative processes and solutions, but also sustainably improves the opportunities of those who are underrepresented in everyday work.

Councils and advisory boards

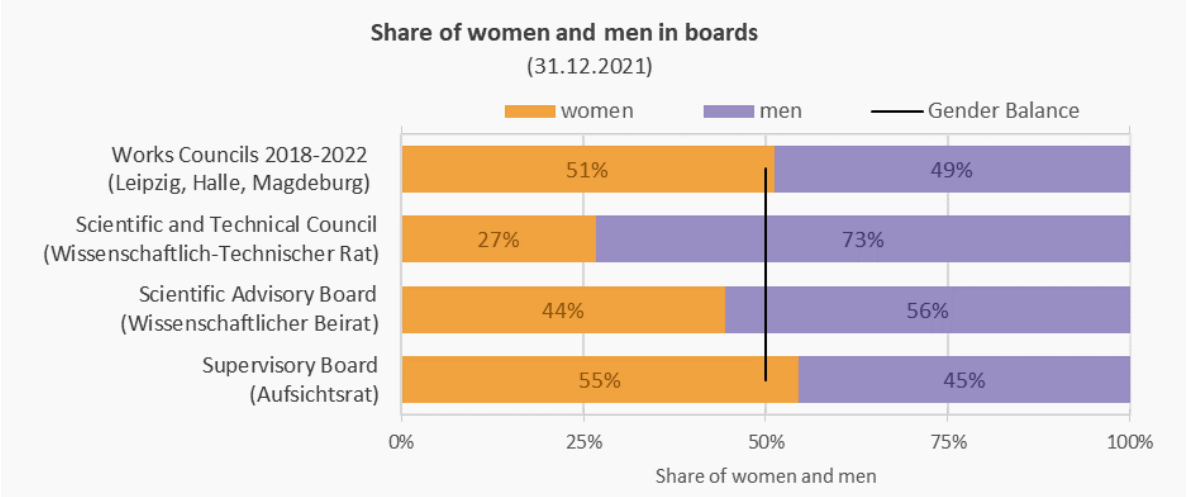

Figure 42 - Share of women and men in councils and advisory boards of the UFZ (31.12.2021)

Figure 42 shows the gender ratio within various councils that accompany the work of the UFZ.
The works councils (Halle, Magdeburg, Leipzig) have gender parity among their members and substitute members. In the Supervisory Board, the gender ratio is balanced with 5 female and 5 male members as well as a female chairperson. To represent the employees of the UFZ, one female scientist and one male scientist were elected to the Supervisory Board by the staff.
The large under-representation of women on the Scientific and Technical Council (27%) can be traced back to the appointed members, the department heads, where women are underrepresented. The gender ratio of the elected members of the Scientific and Technical Council corresponds to the (unbalanced) gender ratio of the scientific staff at the UFZ.
The Scientific Advisory Board of the UFZ, which is composed of persons external to the UFZ, shows a clear convergence of gender shares and almost parity. The UFZ can influence the composition of the advisory board by making proposals to the supervisory board for filling positions that become vacant.

Personnel Selection Commissions

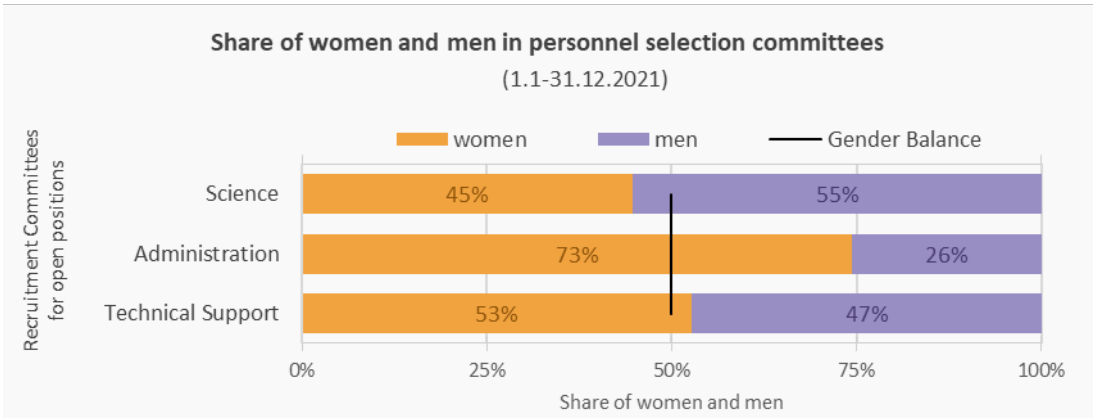

Figure 43 - Share of women and men in personnel selection committees for vacant positions in the fields of science, administration and technology at the UFZ (1.1.-31.12.2021)

Figure 43 shows the gender ratios in personnel selection committees for the fields of science, administration and technical support. Due to the far-reaching consequences of (unconscious) biases in personnel selection, the composition of personnel selection commissions is of structural importance. Cumulatively across all personnel selection procedures in 2021, there was about gender parity in the commissions for vacant positions in science and technical support. In the area of administration, on the other hand, women are overrepresented in the commissions at 73%, especially since overall, only few more women (55%) than men (45%) work in administration. However, the proportion of men in the personnel selection commissions for positions in administration, while not much, has increased by 3 percentage points compared to the previous year (KIR2020, fig. 46).

Professorship Appointment Committees and Tenure Committees

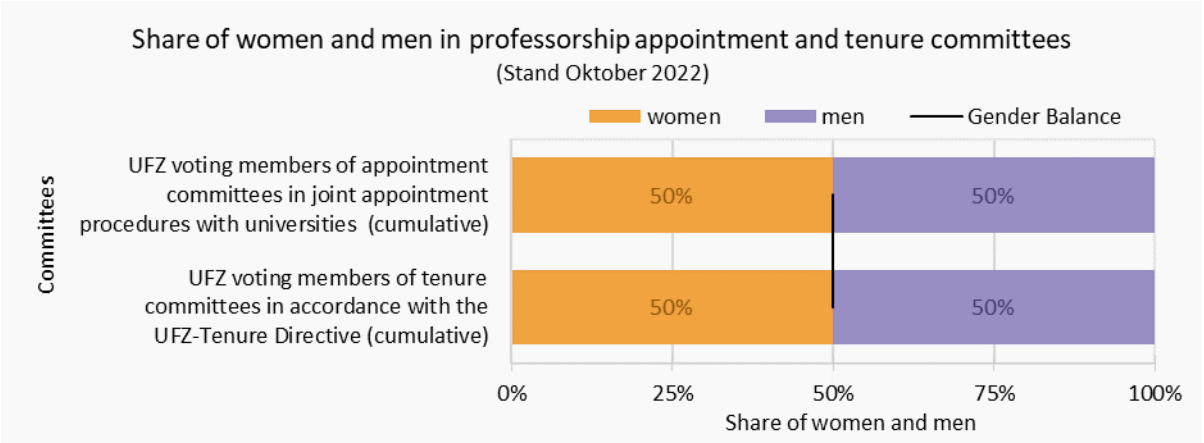

Figure 444 - Share of women and men among the voting members of the UFZ, cumulated across professorship appointment committees and tenure committees, respectively (1.1.-31.12.2021)

Figure 44 shows the gender ratio of voting UFZ members in professorship appointment committees and tenure committees, respectively, cummulated across all committees in 2021. In both areas, the proportion of women increased compared with the previous year and gender parity was achieved.

Indicator: UFZ Awards

The public invisibility of women and their achievements is a consequence - and above all a cause - of women's disadvantage in the distribution of power, money, influence, independence, recognition, and participation. An award is good publicity, has an important role model function, and is also often associated with (financial) support. The more women are awarded for their professional achievements, the more likely the image of the successful woman becomes familiar. This is particularly true for prizes that honour research, e.g. doctoral, publication or research awards. *More generally,* the same distorting mechanisms operate in nominations and jury decisions as in other personnel decisions, e.g. personnel selection: Learned beliefs of competence shape our all judgements and make it difficult to evaluate performance objectively.

Proposals and winners in 2021

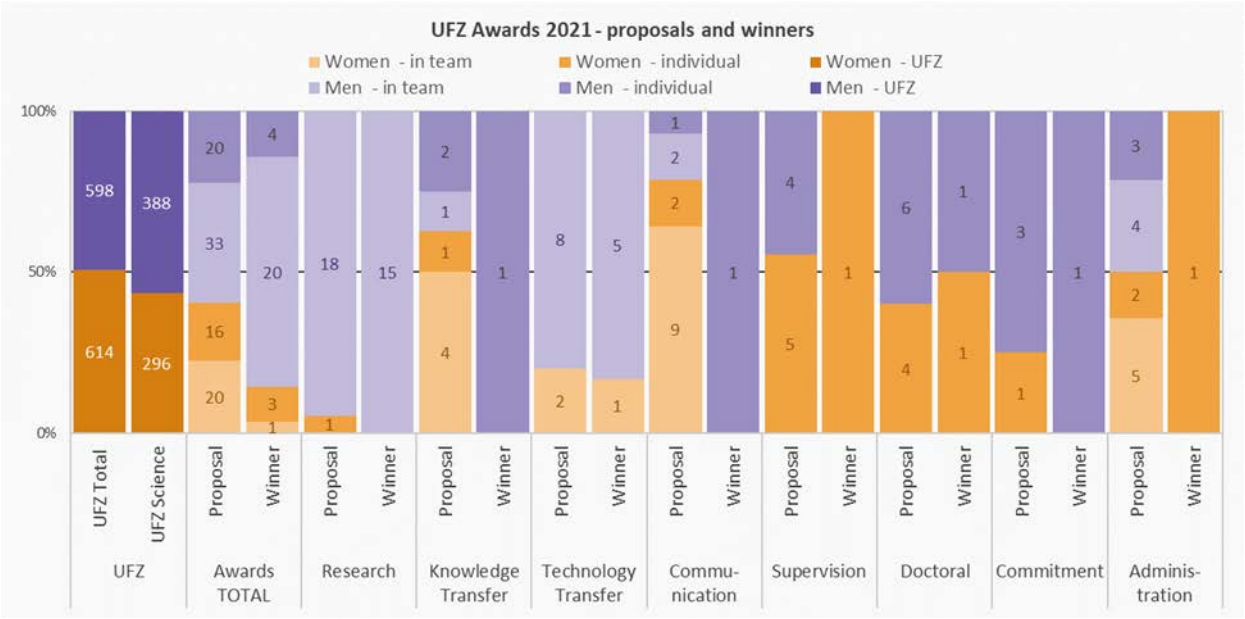

Figure 45 - Share of women and men among the proposals and winners of the UFZ Awards 2021, indicated for individuals and for members of a team

Figure 45 shows the share of women and men among the proposals and winners of the UFZ awards in 2021, indicated for individuals and for members of a team. The gender ratio of nominated staff roughly corresponds to the gender ratio of the UFZ in total. Among the winners, women are clearly underrepresented, which is due to a 15-member all-male team that was honored with the research award. It is noteworthy that only one woman was nominated for the research award at all. Nominations can be made by all employees of the UFZ.

Proposals and winners in the period 2014-2021

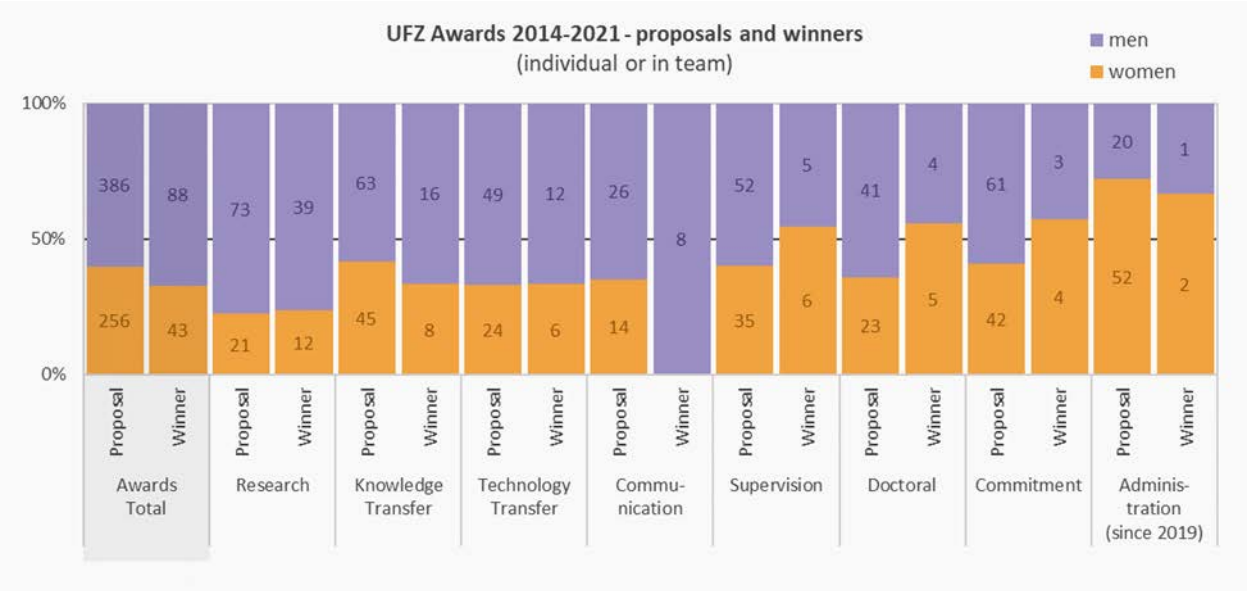

Figure 466 - Share of women and men among the nominees and winners of the UFZ Awards (2014-2021)

Figure 46 shows the proportion of women and men among the proposals and winners of the UFZ Awards overall and in the eight award categories cumulated for the years 2014 to 2021. Each person is counted here, regardless of whether they were nominated or honored as an individual or as part of a team. For all awards taken together, the share of women among the winners is lower than the share of women among the proposals. Although different ratios emerge for the various award categories, the differences are minor and case numbers are small. One exception is the category communication, where 14 women were proposed and not one was honored with a prize.

Indicator: Helmholtz Environmental Lecture (HEL)

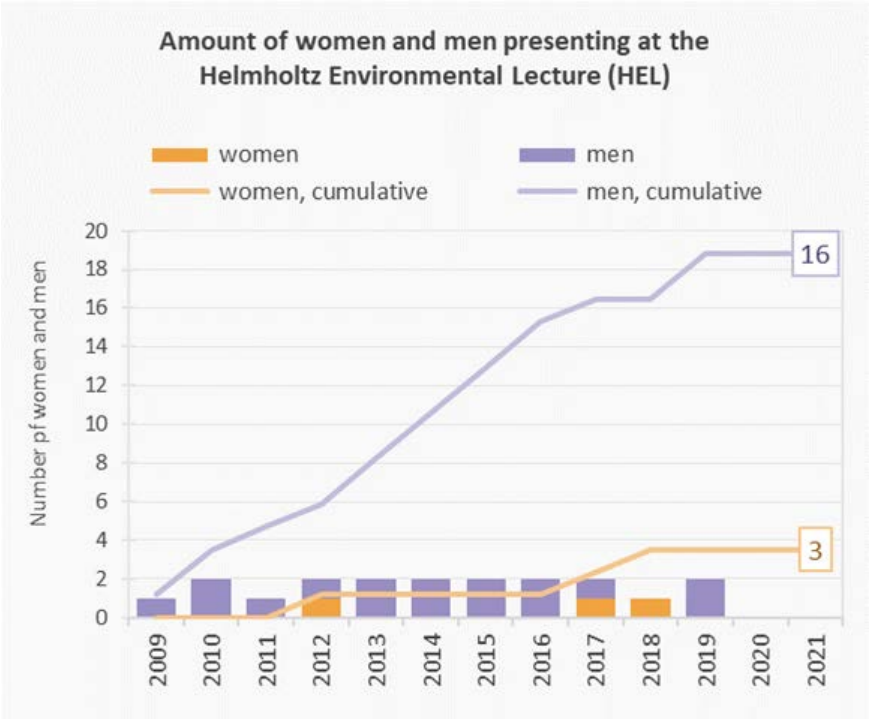

Figure 47 – Amount of women and men presenting at the Helmholtz Environmental Lecture - HEL (2009-2021)

Figure 47 shows the gender ratio among the speakers at the Helmholtz Environmental Lecture (HEL) between 2009 and 2021. In the last 13 years, a total of 16 men and three women had been speaker. In 2020 and 2021, the event was cancelled due to the Corona pandemic. In 2022, Maja Göpel was the fourth woman to give a lecture at the HEL.

The HEL is a format in which persons of social relevance give a lecture that is related to environmental science research. In this setting, and given the public nature of the event, it is appropriate to take advantage of the opportunity to increase the visibility of women and their scientific, social, and political achievements.

Indicator: UFZ Telegraf

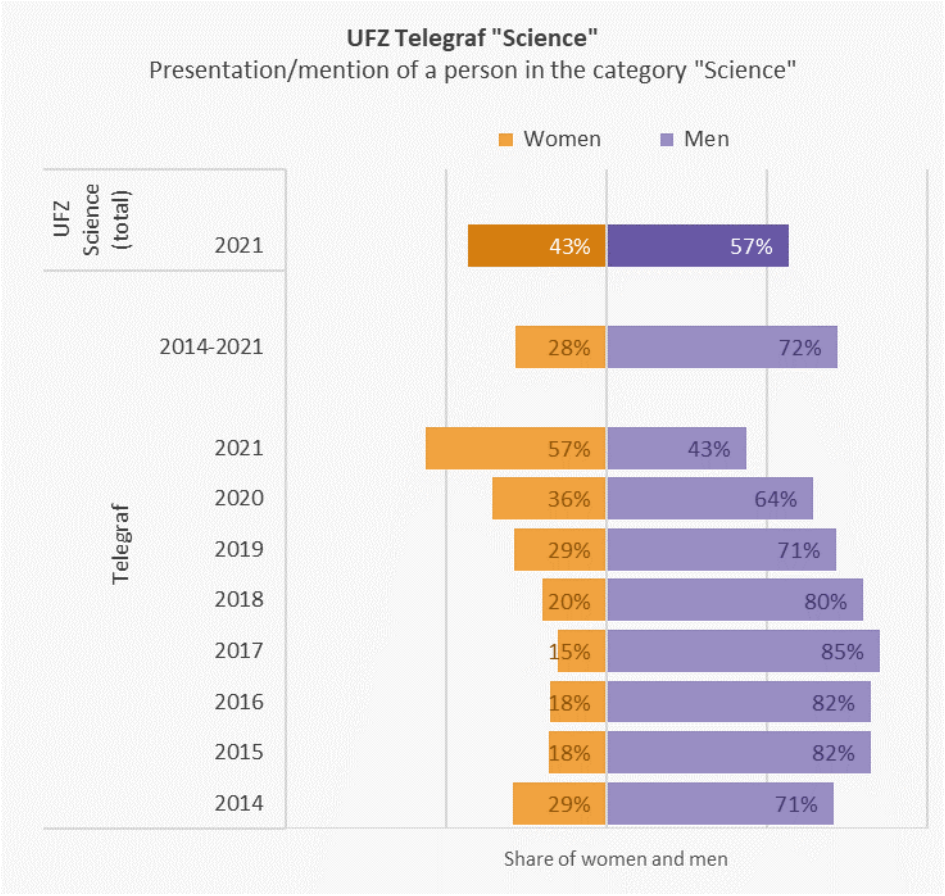

Figure 48 - Share of women and men being presented in the UFZ Telegraf category "Science" (2014-2021)

Figure 48 shows the share of women and men among the portraits or mentions in the UFZ Telegraf articles in the category "Science" compared to their share of the UFZ's scientific staff. The share of female scientists mentioned or portrayed fluctuated considerably in the years from 2014 to 2021, totaling about 28%. In the last four years, the share in the reporting has risen continuously and significantly to the highest value to date (57%), which is even higher than the share of female scientists at the UFZ (43%).

Indicator: UFZ Annual reception

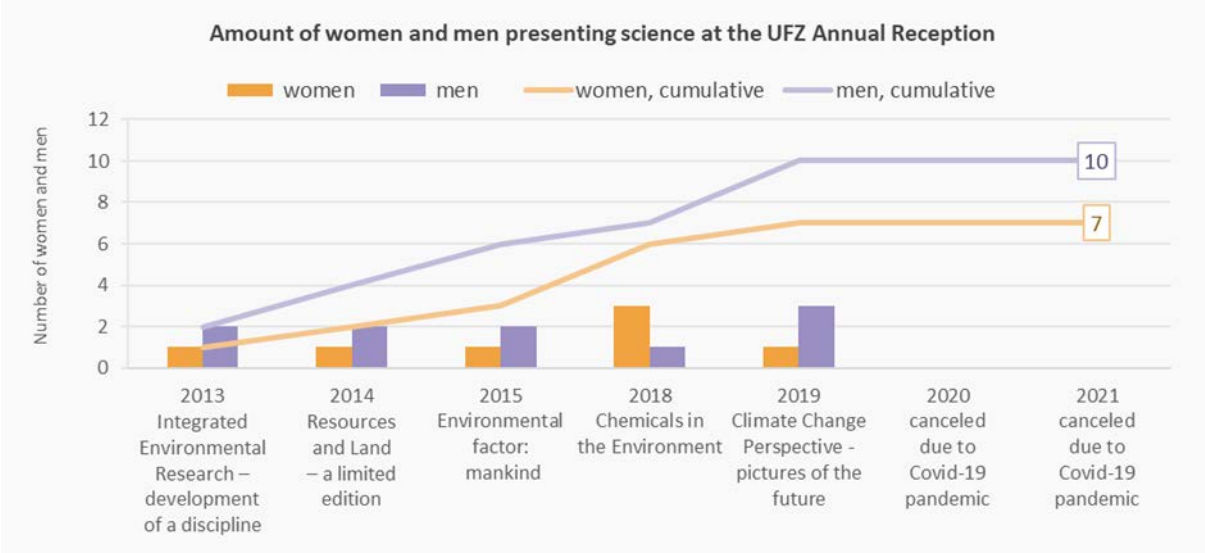

Figure 49 - Amount of women and men presenting science at the UFZ Annual Reception (2013-2021)

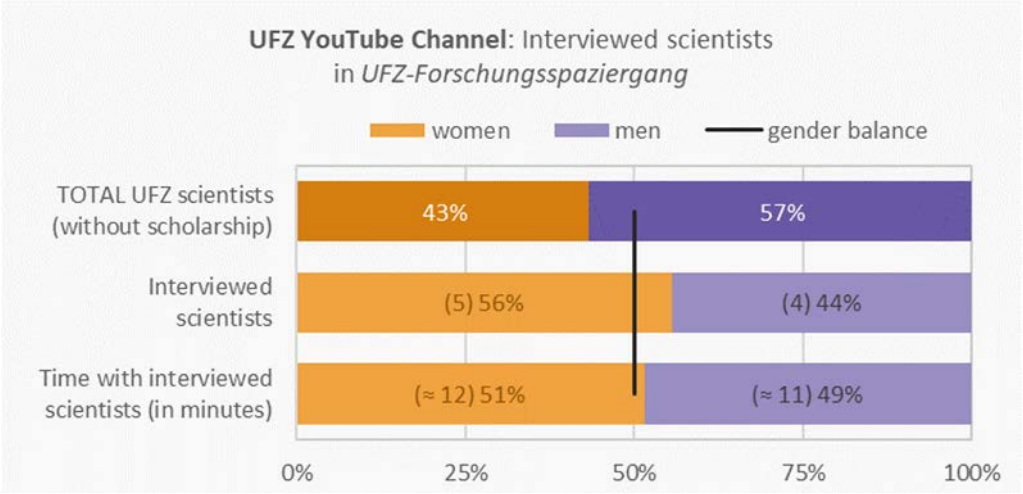

Figure 50 - UFZ research walk (UFZ-Forschungsspaziergang): Share of women and men interviewed and total length of interview time by gender (UFZ YouTube channel)

Figures 49 and 50 show the gender ratios in the presentation of scientific topics at the Annual Receptions 2013-2019 and the Science Walk in 2020 and 2021 as a replacement format due to the Corona pandemic.

With one exception in 2018 ("Chemicals in the Environment"), male scientists have outnumbered female scientists presenting science at the Annual Reception. A total of ten men and seven women have given talks there so far. For the science walk 2021, interviews were conducted with 5 female scientists and 4 male scientists. This means that the share of women is not only higher than the share of women among scientists at the UFZ, but also that it is above 50%, which is positively remarkable and an important signal. The amount of time researchers and their scientific activities are presented is distributed equally.

A strong presence of women on the one hand does justice to the contribution they make to science, and on the other hand it encourages other women to become active in science and to pursue

ambitious goals. With the annual reception and the science walk, the UFZ achieves an external impact that is not limited to scientific content, but also communicates the organizational culture and the values of the research center.

Indicator: UFZ YouTube channel

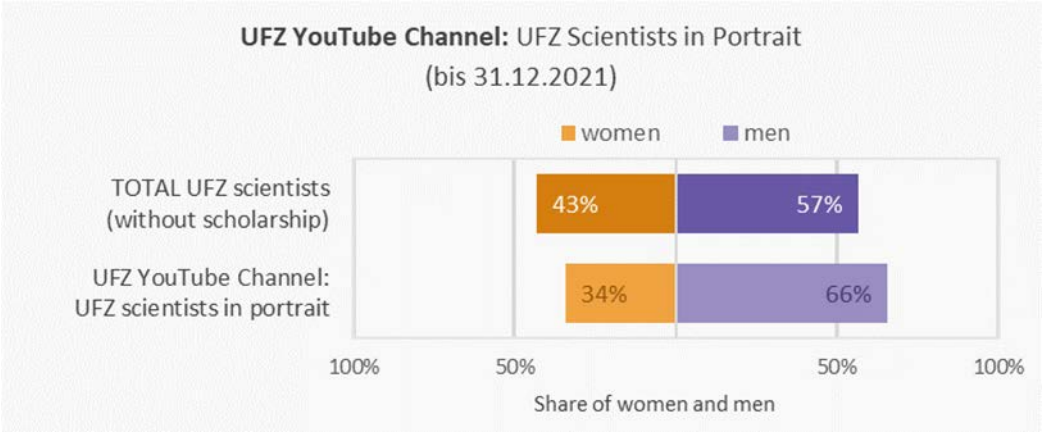

Figure 51 - Share of women and men portrayed as scientists in the UFZ YouTube channel (31.12.2021)

The UFZ uses a YouTube channel to present individual scientists* in video portraits. The format serves to give the public an easily accessible impression of the research work and the people working at the UFZ. Figure 51 shows the share of women and men portrayed on the UFZ YouTube channel. 34% of portrayed scientists are women, 66% are men. While this does not yet reflect the gender ratio of scientists working at the UFZ (43% women, 57% men), the proportion of women portrayed has clearly improved by 10 percentage points compared to the previous year (2020: 24%). Considering the role model function of science and research in society, it is advisable to continue this development and to at least adjust the gender ratio in the public presentation of the UFZ to the gender ratio of the (scientific) employees.

Area: Reconcilableness of care work and paid work

The simultaneity of care work (e.g. family or care responsibilities) and paid work is always associated with a double burden and often with a reduction in working hours in order to meet the demands. In families, this double burden very often leads to traditional role patterns in the division of work regarding care, nursing, child-rearing, household and relationship tasks, i.e. to an unequal distribution of unpaid care work to the disadvantage of women. This has long-term consequences for individuals, our society, and research.

The unequal distribution of care work means that women are less likely to be represented at higher career levels and in academia. As a result, a great potential for professional excellence and creativity is lost, and women's opportunities to have a say and participate are limited. The individual financial disadvantages resulting from the disproportionate acceptance of unpaid care work (e.g. lower wage levels, part-time work, flatter career paths) increase dependency, limit options for action and increase the risk of poverty in old age.

For the UFZ, this cannot and should not be about interfering with the private division of responsibilities of employees. Rather, the framework conditions should enable an equal distribution of care work and support the compatibility with paid work in order to reduce disadvantages and fully use the potential for professional excellence and creativity.

Indicator: Part-time employment

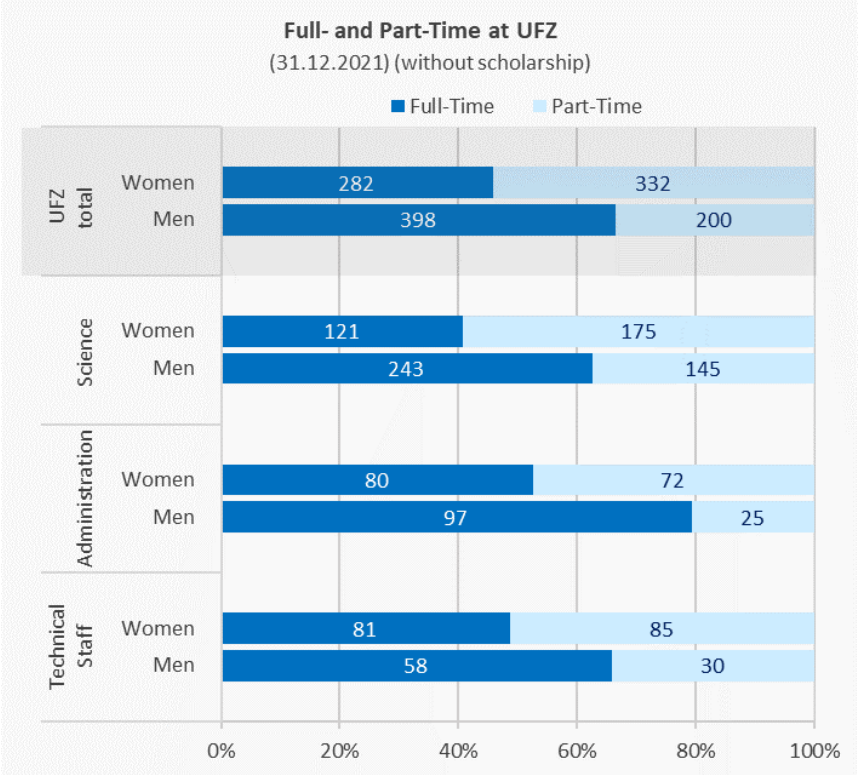

Figure 52 - Share of women and men working in part-time and full-time at UFZ (31.12.2021)

Figure 52 shows the share of women and men employed full-time and part-time at the UFZ - for the UFZ in total and by the fields of science, administration and technical support. In all areas, more

women than men work part-time. Despite various individual reasons for working full and part time, these numbers are mostly a typical expression of traditional gender roles in the distribution of responsibility for household and care work. At the same time, however, in many phases of life it is just necessary to reduce working time. The UFZ can provide support here, for example by enabling part-time leading positions.

Indicator: Parental leave

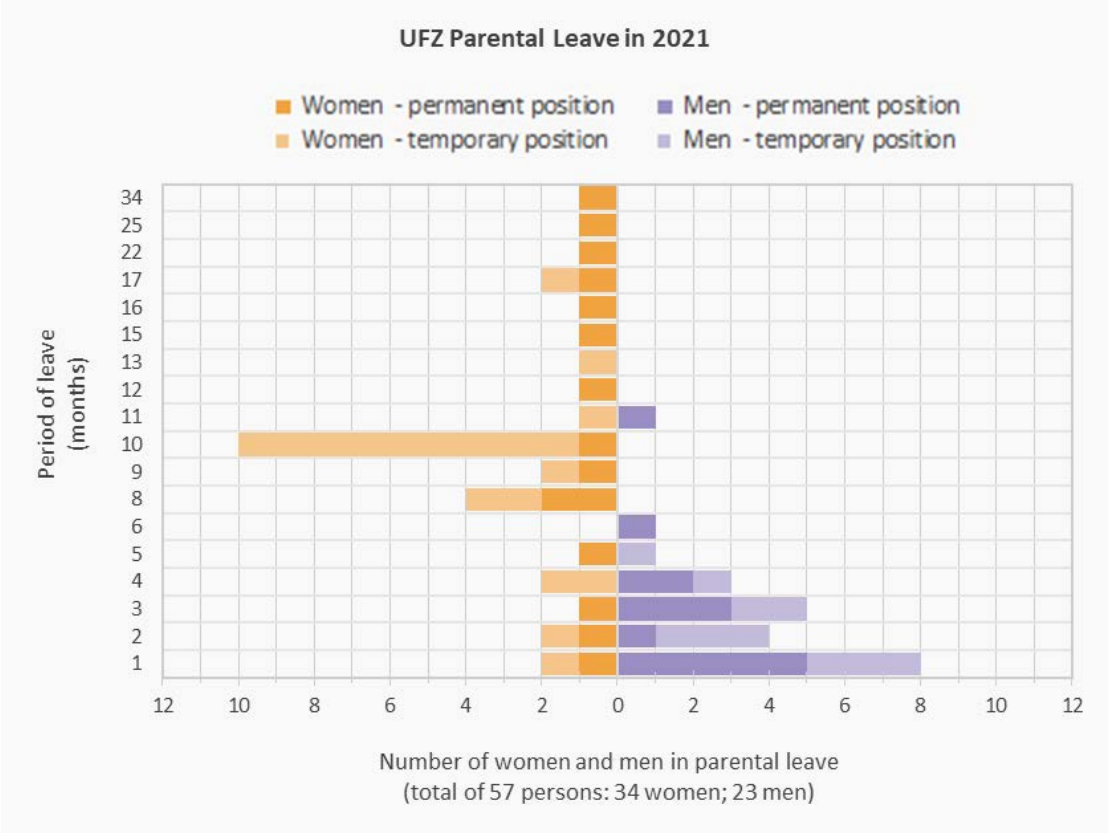

Figure 53 - Duration of parental leave at the UFZ by gender and by temporary/permanent position in 2021

Figure 53 shows how many men and women in total took parental leave in 2021 and to what extent. In 2021, women took more frequent and longer parental leave than men. Parental leave of more than one year was taken without exception by women, most of them in permanent employment. Compared to the previous year, men took less short, but somewhat longer parental leave. Only one man, but 26 women took parental leave longer than 6 months. The willingness of fathers to take (longer) parental leave makes an important contribution to the equal distribution of care work and professional opportunities. The UFZ supports mothers and fathers in reconciling parental leave and career development with many structural measures and expert advice.

Parental leave of about one year or longer is predominantly taken by persons with permanent employment contracts. Not all persons with fixed-term employment contracts have their contracts extended by the amount of parental leave taken. Therefore, parental leave is sometimes a major financial and planning challenge for persons with fixed-term contracts. Fixed-term contracts without the security of being able to extend the contract by the amount of parental leave taken make it much more difficult to reconcile care work and paid work. The same applies to care work for elderly or ill family members in need of care. Data on care periods are not yet collected at the UFZ.

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List of Figures

Appendix

Appendix A - CEWS University ranking 2021 applied for the UFZ

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University	Promotions	Post-Docs	Full-time scientific andartistic staff	Professorships	Increase in the proportion of women in thefull-time workforce. Scientificand artificialstaff	Increase in the proportion of female professors compared to2014
Legend: = top group = 2 points = middle group = 1 point = final group = 0 points						

Overall result for the UFZ

Indicator		**CEWS 2021**	**UFZ 2021**	**UFZ Points**
Promotions	Top group	0,94	1,13	2
	Final group	0,73		
Habil/AG management	Top group	0,93	0,56	0
	Final group	0,67		
Scientific staff	Top group	0,93	0,78	0
	Final group	0,80		
Professorship	Top group	0,66	0,44	1
	Final group	0,42		
Trend_Wiss.Personal	Top group	5	0,05	1
	Final group	0,001		
Trend_Professorship	Top group	5	0,01	1
	Final group	0,001		

➔ Result: 5 out of 12 possible points = ranking group 8

Calculation UFZ

$$I_{Prom} = \frac{\left(\frac{\text{Number of female doctoral scientists at UFZ}}{\text{Numer of doctoral scientists at UFZ}}\right)}{\left(\frac{\text{Number of female German and foreign students in Germany}}{\text{Number of German and foreign students in Germany}}\right)}$$

$$I_{PostDoc} = \frac{\left(\frac{\text{Number of female work group leaders at UFZ}}{\text{Numer of work group leaders at UFZ}}\right)}{\left(\frac{\text{Number of female doctoral scientists at UFZ}}{\text{Number of doctoral scientists at UFZ}}\right)}$$

$$I_{WissPers} = \frac{\left(\frac{\text{Number of female postdocs at UFZ}}{\text{Numer of postdocs at UFZ}}\right)}{\left(\frac{\text{Number of female German and foreign students in Germany}}{\text{Number of German and foreign students in Germany}}\right)}$$

$$I_{Prof} = \frac{\left(\frac{\text{Number of female professors at UFZ}}{\text{Numer of professors at UFZ}}\right)}{\left(\frac{\text{Number of female doctoral scientists at UFZ}}{\text{Numer of doctoral scientists at UFZ}}\right)}$$

I_{Prof} = share of women among postdocs at UFZ year 1 – share of women among postdocs at UFZ year 2

I_{Prof} = share of women among professors at UFZ year 1 – share of women among professors at UFZ year 2

Differences to the CEWS ranking in the calculation for the UFZ:

- Students = no UFZ figures, therefore reference to Germany-wide graduation figures
- PhD = registered as a PhD student at the UFZ as of 31.12.2020 (CEWS: number of completed PhDs in the census year)
- Qualification = deposited as working group leader at the UFZ as of 31.12.2020 (CEWS: number of completed habilitations and W1 professorships)
- Professorship = persons paid by the UFZ as W2/W3 (CEWS: number of persons paid W2 and W3 as well as the fulltime visiting professorships)

Data UFZ

Data	2016	2021*
Number of women at the UFZ with ongoing doctorates	54	104
Number of all doctoral students at the UFZ	108	184
Number of German and foreign female students in the winter semesters (Federal Statistical Office)		1480369**
Number of German and foreign students in the winter semesters (Federal Statistical Office)		2947495**
Number of working group leadership by women at the UFZ	28	33
Number of working groups at the UFZ	93	105
Number of women scient. Staff at the UFZ (R2+R3, without PHDs and without professorship)	143	182
Total number of scient. Staff at the UFZ (R2+R3, without PHDs and without professorship)	408	462
Number of female professors (all women paid by the UFZ as W2, W3 or C)	7	10
Number of professors (all persons paid by the UFZ as W2, W3 or C)	30	40
Proportion of women among scientific staff at the UFZ	35,05%	39,39%
Share of women in professorships	23,33%	25,00%

* 31.12.2021

** Students in winter semester 2021/2022: https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/11/PD21_538_21.html;jsessionid=D9B5CC1565542E3D04ED8C6DBDC2163D.live732#fussnote-1-581746

Gender-specific choice of subjects

Some fields of study are unevenly preferred by men and women. The CEWS ranking indicates the share of women as doctoral researchers in relation to the share of female students at the university (CEWS Ranking p. 31/33), i.e. it uses a corrected indicator for the share of women as doctoral researchers to account for gender-specific subject preferences.

The subject background of doctoral researchers at the UFZ is currently not systematically recorded. Due to the wide scope of the UFZ research and the enrolment of its doctoral researchers at over 40 universities in Germany, it can be assumed that doctoral researchers do not stem from a certain gender-specific subject. Experience shows that mainly doctoral researcheres from social science and natural science work at the UFZ. According to the *Federal Report on Young Academics* (BuWiN2021 (e.g. Fig. B2, p.79)), the proportion of women graduates in Germany is as follows: Social Sciences 56%, Natural Sciences 47%, Agriculture/Forestry/Nutrition 63%, Engineering 24%. At UFZ, the share of women among doctoral researchers made up 57%, the share of men 43% (31.12.2021).

Against this background, the gender-specificity of the choice of subjects should not in itself be the cause of the UFZ's hypothetical position in the CEWS ranking.

Appendix B - Glass Ceiling Index

Center	Proportion of female scientific staff (31.12.2020)	Proportion of women in W3/W2 professorships (31.12.2020)	Glass Keiling Index
Center	46%	23%	2,05
Center	48%	21%	2,27
Center	43%	27%	1,62
Center	41%	36%	1,14
Centre (UFZ)	39%	24%	1,61
Center	31%	29%	1,07
Center	51%	39%	1,30
Center	42%	33%	1,25
Center	24%	14%	1,76
Center	21%	31%	0,67
Center	25%	15%	1,72
Center	24%	34%	0,70
Center	34%	29%	1,18
Center	24%	19%	1,30
Center	24%	13%	1,78
Center	22%	19%	1,14
Center	58%	29%	1,99
Center	32%	13%	2,47
Helmholtz	**30,0%**	**23,1%**	**1,30**