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GENDER PECULIARITIES OF WORK-LIFE BALANCE OF UNIVERSITY STEM-DEPARTMENTS EMPLOYEES IN UKRAINE

Стаття містить аналіз гендерних відмінностей балансу роботи і приватного життя співробітників STEM-факультетів українського університету. Виявлено, що співробітниці STEM-факультетів майже не користуються різними видами підтримки університету (додатковою відпусткою або відгулами, гнучким робочим графіком, розподілом обов'язків тощо) або не володіють інформацією про неї. З'ясовано, що гнучкість робочого графіку збільшується із зростанням наукового ступеня викладача. Зроблено висновок про те, що більший дисбаланс між професійними та домашніми обов'язками притаманний для викладачів чоловічої статі. Висунуте припущення, що чоловіки з вищим рівнем освіти більше схильні до демократичного розподілу обов'язків в сім'ї, що може мати наслідком поширення на них явища подвійного робочого дня.

Ключові слова: гендерна рівність, університет, STEM-факультети, робочий графік, віддалена робота, баланс між роботою і приватним життям

The article contains an analysis of gender differences in the balance of work and private life of employees of STEM faculties of a Ukrainian university. Its results are part of a project implemented at Yuriy Fedkovich Chernivtsi National University (Ukraine, Chernivtsi) and Adam Mickiewicz University (Poland, Poznan).

It was found that female employees of STEM faculties almost do not use various types of university support (providing additional leave or time off, flexible work schedule, division of duties, etc.) or do not have information about it. A number of assumptions have been made: the university provides more support to men than to women; the higher the academic degree of the teacher, the greater the flexibility inherent in the work schedule (except for representatives of the administration); women tend to use flexible working hours to a lesser extent than men. It was found that the flexibility of the work schedule increases with the growth of the academic degree of the teacher.

It was determined that two-thirds of women were on parental leave, which most often lasted one or two years. It was concluded that such long breaks negatively affect the scientific career of women.

It was found that the representatives of STEM0 faculties of the university do not fully use the opportunities that could help them balance work and private life. In some cases, the reason is ignorance, however, most often, despite having information about certain opportunities, women rarely use them. The only form of support that was mainly used by women is parental leave.

It was concluded that a greater imbalance between professional and domestic responsibilities is inherent in male teachers. It is suggested that men with a higher level of education are more inclined to a democratic division of responsibilities in the family, which may result in the phenomenon of double working days spreading to them.

Key words: gender equality, university; STEM faculties; work schedule; remote work; balance between work and private life

Gender peculiarities of scientific careers in STEM sciences are determined by many factors, including occupational segregation, gendered perceptions of learning opportunities, sexist learning environment, lack of self-confidence, persistent gender stereotypes, lack of role models and support both from mentors and family. These reasons are complemented by gender peculiarities of family roles in Ukrainian society, which result in patriarchal distribution of household responsibilities and double working hours. In the mentioned conditions, the study of the balance between professional and private life is important, as it makes it possible to determine not only its impact on the gender aspects of a scientific career, but also the directions of social support for female scientists. In addition, achieving a balance between work and personal life makes it possible to prevent emotional burnout, increase professional productivity and improve the organizational culture of universities.

The aim of the article is to make a comparative analysis of gender peculiarities of work-life balance of the academic staff at STEM-faculties of Ukrainian classical university.

The issue of work-life balance has been an urgent scientific problem since the eighties of the 20th century. Scientists emphasize the need for a harmonious combination of these two most important spheres of each person's life.

Nigel Marsh (Marsh, N., 2011) is one of the well-known researchers, the Australian writer and marketer. He concluded that achieving a balance is possible with the help of the following four steps, i.e. to recognize the reality that work and career are incompatible with full and conscious participation in family life; to establish and maintain boundaries in life; to make realistic plans; and not to forget about different life aspects.

An example of a national study of work-life conflict is the work of Canadian researchers L. Duxbury and S. Higgins (Duxbury, L. & Higgins, S., 2003), which is based on the results of a survey of more than 31 thousand respondents from all sectors of the Canadian economy. It provides comparative data on how Canadian workers and Canadian families cope with stress and work-life conflict, as well as best practices for Canadian organizations' policies to support their employees.

"The Maternity Protection Resource Package" from the International Labour Organization provides information on what the organization recommends to include in national legislation on maternity protection at work and how they can contribute to the achievement of the Millennium Development Goals and the Decent Work Agenda. The package includes information on recent trends, national experiences, good practices from around the world and helps stakeholders to assess the conditions for maternity protection and develop effective policies in the workplace (International Labor Organization, 2012).

The European Union's Gender Equality Strategy 2020-2025 contains the requirement of ratification by the Member States of the EU Directives on Work-Life Balance Directive, on gender equality in self-employment, social security, pregnancy and maternity, Part-time work directive, and Directive on transparent and predictable working conditions (Gender Equality Strategy, 2020-2025). It is expected that the adoption of these documents will increase the opportunities for gender equality in the workplace, professional career advancement and improve the working conditions of employees, primarily giving more opportunities for women to combine work and family responsibilities.

The results of the study are based on the materials of the project "When Science is a Woman", which was implemented in two universities - Yuriy Fedkovych Chernivtsi National University (Ukraine, Chernivtsi) and Adam Mickiewicz University (Poland, Poznan). It was aimed at studying gender differences in the careers of scientists in

mathematics, computer science and physics. Ukrainian researchers were represented by members of the Ukrainian Educational Research Association. Financial support was provided by the University of Dauphine (France).

A survey with an online questionnaire was the method of data collecting. The questionnaire developed within the framework of the project "Communities of PrACTice for Accelerating Gender Equality and Institutional Change in Research and Innovation across Europe" was used to collect information. The LimeSurvey online application ensures the confidentiality of research participants. In Ukraine, the survey was conducted at Yuriy Fedkovych Chernivtsi National University from March 17 to 31, 2021, and from February 17 to March 28, 2021 in Poland at Adam Mickiewicz University (Poznan). The analysis of the research results became the background for drawing conclusions and recommendations for the management of faculties and universities.

The information was collected in the following way: invitations to the survey were sent to the scientific and educational staff of technical faculties, the data obtained were counted only if the respondent answered two-thirds of the questions. The materials of the article contain the results of the research conducted in Yuriy Fedkovych Chernivtsi National University. Employees of the Institute of Physical, Technical and Computer Sciences, as well as the Faculty of Mathematics and Informatics took part in the survey (58 respondents in total, where 56.9% were men and 43.1% of women). The sample can be considered representative for these faculties. The distribution of respondents by gender does not fully correspond to the current situation in the studied units, but for the purposes of the study it was important to have a slightly higher representation of women.

Understanding the situation of gender equality in balancing work and private life is facilitated by comparing the responses received by gender. The questionnaire contained a special block of questions dedicated to the use of opportunities provided by the government to women with children.

Table 1

Розподіл відповідей на запитання "Чи маєте ви можливість попросити про додаткову відпустку або відгули?" (кількість осіб, %, за статтю)

Варіанти відповідей	Men		Women		Total	
	Абсолютні значення	%	Абсолютні значення	%	Абсолютні значення	%
Я не знаю, чи є така можливість	6	26	3	17	9	22
Я знаю, що немає такої можливості	1	5	1	6	2	5
Я знаю, що є така можливість, але я її не використовувала	7	30	12	67	19	46
Я знаю, що є така можливість, і я її використовувала	9	39	2	11	11	27
Всього	23	100	18	100	41	100

As can be seen from Table 1, although the percentage of women with children under the age of 17 is significantly higher than men, only 11% of them used the opportunity to request additional leave or time off. Other respondents did not use this opportunity or did

not have information about it. The percentage of men who used additional leave or time off is significantly higher than among women (39% vs. 11%). It can be assumed that men have a higher status than women, which leads to a higher level of their awareness. We also assume that women do not use the opportunity to ask for additional leave due to fear of public condemnation. A similar situation is observed when comparing the answers of respondents to the question about flexible working hours (see Table 2).

Table 2

Розподіл відповідей на запитання "Чи можете ви мати гнучкий робочий графік?" (кількість осіб, %, за статтю)

Варіанти відповідей	Чоловіки		Жінки		Всього	
	Абсолютні значення	%	Абсолютні значення	%	Абсолютні значення	%
Я не знаю, чи є така можливість	3	14	2	11	5	14
Я знаю, що немає такої можливості	1	4	1	6	2	5
Я знаю, що є така можливість, але я її не використовувала	7	32	11	61	18	45
Я знаю, що є така можливість, і я її використовувала	11	50	4	22	15	36
Всього	22	100	18	100	40	100

According to Table 2, the percentage of women who can have flexible working hours (22%) is significantly lower than the percentage of men (50%). It is difficult to make a clear conclusion based on these data. Various assumptions can be made: (1) the university provides more support to men than to women; (2) the higher the academic degree of the lecturer, the more flexibility is inherent in the working schedule (except for the administration); (3) women are less likely than men to use the opportunity to work flexibly.

Table 3

Розподіл відповідей на запитання "Чи маєте ви можливість віддаленої роботи з дому?" (кількість осіб, %, за статтю)

Варіанти відповідей	Чоловіки		Жінки		Всього	
	Абсолютні значення	%	Абсолютні значення	%	Абсолютні значення	%
Я не знаю, чи є така можливість	0		1	6	1	3
Я знаю, що немає такої можливості	0		0		0	
Я знаю, що є така можливість, але я її не використовувала	3	14	1	6	4	10
Я знаю, що є така можливість, і я її використовувала	19	86	15	88	34	87
Всього	22	100	17	100	39	100

Table 3 demonstrates that the vast majority of respondents have the opportunity to work remotely. This situation is a consequence of the COVID-19 pandemic spread, which has significantly changed the attitude to remote work in training.

Table 4

Розподіл відповідей на запитання "Чи маєте ви можливість розподілити певні обов'язки між колегами?" (кількість осіб, %, за статтю)

Варіанти відповідей	Чоловіки		Жінки		Всього	
	Абсолютні значення		Абсолютні значення		Абсолютні значення	
Я не знаю, чи є така можливість	4	19	4	27	8	22
Я знаю, що немає такої можливості	1	5	1	6	2	6
Я знаю, що є така можливість, але я її не використовувала	3	14	6	40	9	25
Я знаю, що є така можливість, і я її використовувала	13	62	4	27	17	47
Всього	21	100	15	100	36	100

The percentage of women who use the opportunity to share certain types of work among colleagues (27%) is more than twice lower than the percentage of men (62%). There is also a noticeably higher percentage of female participants who are not aware of this option (27% vs. 19%). We can assume that the situation is related to the low representation of women in administrative positions.

Children, especially young ones, often hinders the career growth of women. The scientific and educational fields are no exception. The time spent on parental leave may indicate the period during which a woman may lose her qualifications. It also postpones the opportunity to be engaged in scientific work and not only conduct her own research, but also keep abreast of the latest scientific achievements. According to the data obtained (see Table 5), 68% of women and only 35% of men have children under the age of 17. Probably, this situation can be explained by the peculiarities of the gender and age structure of STEM-faculties of higher education institutions, where mostly men of older age groups are involved in research and teaching activities.

Table 5

Розподіл відповідей на запитання "Чи маєте ви дітей віком до 17 років?" (кількість осіб, %, за статтю)

Варіанти відповідей	Чоловіки		Жінки		Всього	
	Абсолютні значення	%	Абсолютні значення	%	Абсолютні значення	%
Так	9	35	13	68	22	49
Ні	16	61	6	32	22	49

Не бажаю відповідати	1	4	0	0	1	2
Всього	26	100	19	100	45	100

The table 5 shows that the number of women with children under 17 is almost twice as high as the number of men with children under 17.

The results presented in Table 6 demonstrate the domestic model of child care in Ukraine, according to which this is predominantly women's work. In particular, 67% of female survey participants were on parental leave, while not a single man gave a positive response.

Table 6

Розподіл відповідей на запитання "Чи перебували ви у відпустці по догляду за дитиною?" (кількість осіб, %, за статтю)

Варіанти відповідей	Чоловіки		Жінки		Всього	
	Абсолютні значення	%	Абсолютні значення	%	Абсолютні значення	%
Ні	25	96	5	28	30	68
Так	0		12	67	12	27
Не бажаю відповідати	1	4	1	5	2	5
Всього	26	100	18	100	44	100

As mentioned above, the duration of parental leave has a significant impact on women's career trajectory. Figure 1 shows that the majority of women spend one to two years. The number of those who take 2 years of leave made up one third.

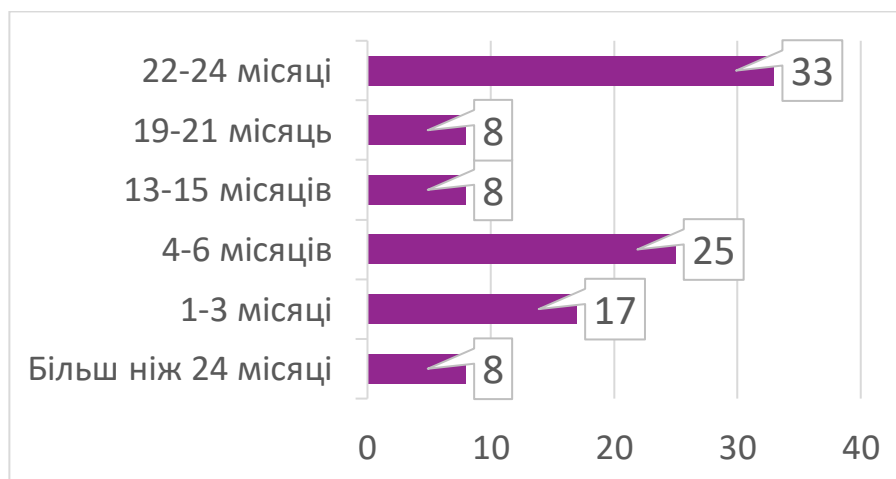


Figure 1. Amount of time spent on parental leave (in months)

Thus, the data presented above demonstrate that female academic staff do not fully use the opportunities that could help them balance work and private life. In some cases, the reason is lack of awareness, but despite being aware of certain opportunities, women rarely use them. The only form of support that was mostly used by women was maternity leave.

To obtain information about the overtime work of STEM-faculties representatives, the questionnaire contained the question "How many times a month do you usually work more than 10 hours a day / on Sunday / Saturday / at night ...?" The responses by gender

provide additional information on the (dis)balance of work and private life of men and women.

Table 7

Розподіл відповідей на запитання "Зазвичай, скільки разів на місяць ви працюєте більш ніж 10 годин на день / в неділю/ в суботу/ вночі ..."
(у %, за статтю)

Типи понаднормової роботи	Дуже часто		Іноді		Рідко		Ніколи	
	ч	ж	ч	ж	ч	ж	ч	ж
Між 22 та 5 годинами	10	8	27	27	17	8	8	5
Працюю в неділю	22	22	17	19	12	2	7	-
Працюю в суботу	24	20	15	20	12	5	5	-
Працюю більше 10 годин	27	5	15	17	15	12	5	5

Comparison of respondents' answers to the question about overtime shows that in most cases men work more often than women. In particular, it is worthy of special attention that more male respondents claim that they work more than 10 hours a day. This situation is not conducive to achieving a balance between work and private life. It can be assumed that domestic service work leaves women less time for activities at home. The division of responsibilities at home remains traditional, with a predominance of women's work. The consequence is a double working day, when women's professional employment makes it difficult to perform domestic duties. Perhaps this can explain the "sticky floor" syndrome with the "stuckness" of women at the initial positions of their scientific careers.

Table 8

Розподіл відповідей на запитання щодо балансу між професійними та домашніми обов'язками (у %, за статтю)

Частота ситуацій	Кілька разів на тиждень		Кілька разів на місяць		Один чи два рази		Ніколи	
	ч	ж	ч	ж	ч	ж	ч	ж
... приходите додому з роботи занадто втомленими, щоб виконувати домашні обов'язки come home from work too tired to do household chores	10	5	22	28	10	8	17	-
буває складно виконувати обов'язки в особистому житті через кількість часу, проведеного на роботі it	16	6	14	19	11	14	19	5

can be difficult to fulfill responsibilities in personal life due to the amount of time spent at work								
приходите на роботу занадто втомленими, щоб нормально працювати, після виконання домашніх обов'язків come to work too tired to work properly after doing household chores	2	-	10	2	20	15	28	22
вам буває складно сконцентруватися на роботі через домашні обов'язки you find it difficult to concentrate on work because of household responsibilities	16	3	14	19	11	14	19	5

The opinion about double working day is confirmed by the data in Table 8, according to which one third of women often come home too tired to perform household duties. At the same time, quite contradictory are the answers of men, who more often than women find it difficult to concentrate on work due to household responsibilities; the same applies to 16% of men who find it difficult to fulfill responsibilities in their personal life several times a week due to the amount of time spent at work. Thus, a greater imbalance between professional and domestic responsibilities is inherent in male teachers. We assume that this situation can be explained by the fact that men are more represented in administrative positions.

Working during a pandemic is a challenge the world faced in 2020. Its consequences will be studied for a long time, but even at the beginning of the pandemic, it became clear that our ideas about the workplace and the performance of work duties at home are being transformed. The question raised about the limitations that work from home imposes on the possibility of work-life balance.

Respondents were asked to express their attitude towards a number of statements (on a scale: difficult to answer, no, rather no, rather yes, yes)

- *the pandemic has helped men's professional development;*
- *it is easier for women to perform their professional duties than for men during the pandemic;*
- *it is more difficult for women to reconcile work and family life than for men during the pandemic;*
- *it is more difficult for women to perform their professional duties than men during the pandemic.*

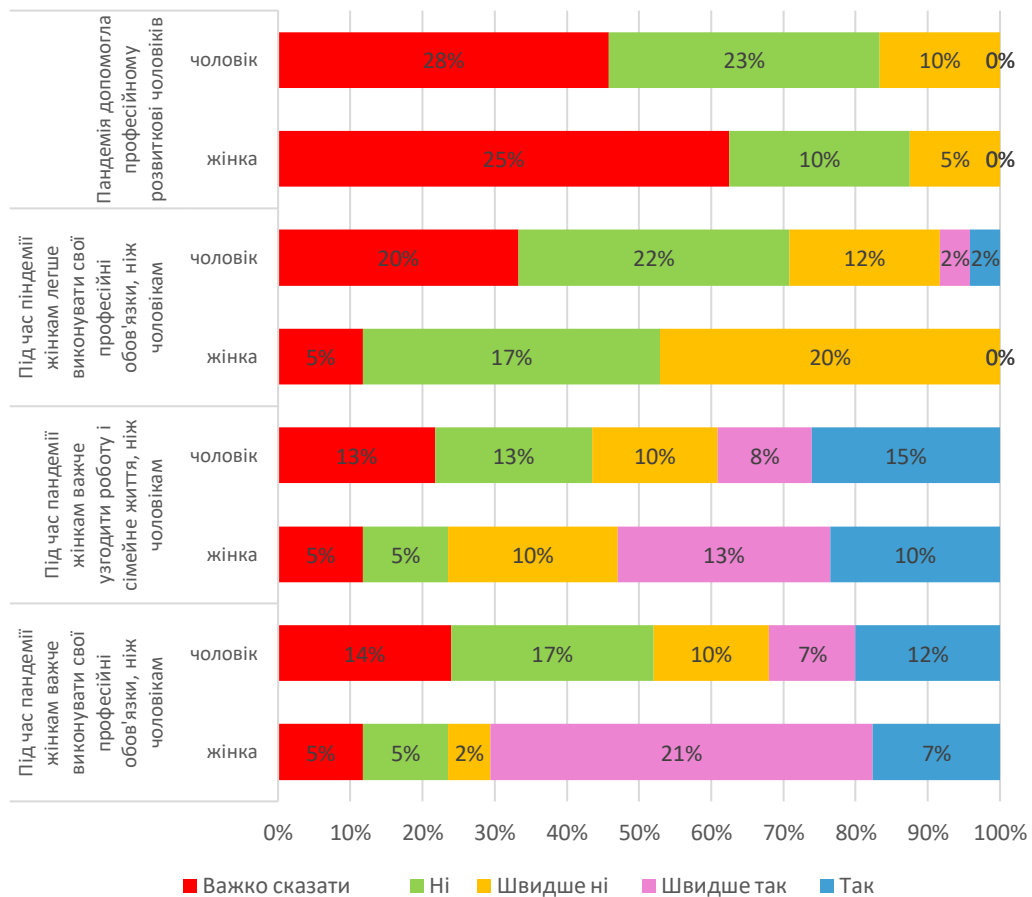


Рисунок 2. Розподіл відповідей на запитання «Наскільки ви погоджуєтеся з наведеними нижче твердженнями щодо балансу між роботою і особистим життям під час пандемії?» (у %, за статтю)

According to the data obtained (see Fig. 2), neither men nor women agree with the statement that the pandemic has helped men's professional development. A significant percentage of women (37%) disagree (answers "no" and "rather no") that it is easier for women to perform their professional duties than for men during the pandemic, while a certain (4%) percentage of men believe that it is "rather yes" and "yes". The same percentage of women and men (23%) state that it is more difficult for women to reconcile work and family life than for men during the pandemic. At the same time, representatives of both sexes reacted differently to a similar statement that it is more difficult for women to fulfill their professional duties than men during the pandemic. This is "rather yes" and "yes" according to 28% of women; their opinion is shared by 18% of men, while 27% of men say that this is not true (answers "no" and "rather no"). Thus, we can conclude that regardless of gender, the pandemic has not contributed to professional development. In general, there are no significant gender differences in the assessments of men and women.

The above mentioned allows to draw the following conclusions.

1. Female employees of STEM-faculties almost do not use various types of university support (additional leave or time off, flexible working hours, distribution of responsibilities, etc).
2. The higher the academic degree of the teacher, the more flexibility is inherent in the working schedule (except for the administration). Due to the fact that men more often have higher academic degrees, they have more opportunities to build a flexible schedule for themselves.

3. The share of work between colleagues makes it possible to reduce stress in the process of performing professional duties. Women practically do not use this type of workload reduction, which is probably due to the low representation of women in administrative positions.

4. A greater imbalance between professional and domestic responsibilities is typical for male teachers. We assume that the higher professional status of men leads to a greater number of responsibilities at work. On the other hand, as a rule, men with a higher level of education are more inclined to democratic division of responsibilities in the family, which may lead to the spread of the phenomenon of double working day.

The study of the peculiarities of the work-life balance of STEM-faculties teachers makes it possible to propose to the university management to advise the staff to inform them about the basic legal principles of social protection of women with children, as well as the main provisions of the Work-Life Balance Directive of the European Union. It allows combining of professional self-realization and private life more fruitfully.

References:

Duxbury, L., Higgins, C. (2003). Work-life conflict in Canada in the new millennium: A Status report [Електронний ресурс] / Retrieved March 24, 2006. – Режим доступу: http://www.phac-aspc.gc.ca/publicat/work-travail/pdf/rprt_2_e.pdf

Gender Equality Strategy 2020-2025. URL: https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en#gender-equality-strategy-2020-2025

Maternity Protection Resource Package. From aspiration to Reality for All [Електронний ресурс]. International Labor Organization. 2012. URL: <http://mprp.ilo.org/pages/en/index.html>

Nigel Marsh. How to reach the balance between work and life. URL: <https://coaching-way.com/nigel-marsh-how-to-make-work-life-balance-work/>

Заболотна, О., Щудло, С., Медіна, Т. Загоруйко, Л. (2022). *Коли наука - жінка: моніторинг гендерної рівності в університеті. Анотований звіт за результатами дослідження STEM-підрозділів Чернівецького національного університету імені Юрія Федьковича*. Дрогобич: УАДО і ТzOV «Трек-LTD».