WOMEN ACADEMICS IN UKRAINIAN TERTIARY EDUCATION: GENDERED IMAGE OF OCCUPATIONAL SEGREGATION

MULHERES ACADÉMICAS NO ENSINO SUPERIOR UCRANIANO: O RETRATO GENDARIZADO DA SEGREGAÇÃO OCUPACIONAL

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Abstract. The representation of women in the managerial structure of the Ukrainian universities is the exception, rather than the rule. They are assigned to those sectors of university functioning that do not provide access to the management of resources (e.g. educational work), very rarely – position of deans of faculties and heads of chairs. After the analysis of conducted in-depth interviews with female and male rectors, vice-rectors and deans, some reasons for it could be mentioned: the influence of stereotypes (a successful woman in science is unsuccessful in family life; a woman is too emotional to be an effective leader), the insufficient activity of the women's (feminist) movement in the scientific space of Ukraine, uneven representation of women at all levels of university management. Vertical and horizontal occupational gender segregation is a mark of higher education system of Ukraine. The reasons are not only the overloading of women-researchers with housework, which does not allow them to compete with men successfully but also the effect of the "glass ceiling", which is very acute in higher education institutions.

Keywords: glass ceiling; glass walls; career advancement; gender equality; women in science.

Resumo. A representação das mulheres em cargos de gestão nas universidades ucranianas é a exceção e não a regra. Elas são responsáveis por setores de funcionamento da universidade que não implicam a gestão de recursos (são maioritárias, por exemplo, nas tarefas educativas) e muito raramente chegam a catedráticas ou a reitoras. Após a análise de entrevistas em profundidade realizadas a pessoas com cargos de gestão, pode-se avançar alguns motivos para essas dificuldades: a influência dos estereótipos (uma mulher de sucesso na ciência não tem sucesso na vida familiar; uma mulher não pode demonstrar emoção, de modo a ser tida como líder eficaz), a atividade insuficiente dos movimentos feministas no espaço científico da Ucrânia, e a representação desigual das mulheres a todos os níveis de gestão universitária. A segregação ocupacional vertical e horizontal é também uma caraterística do sistema de ensino superior da Ucrânia. O texto mostra que os motivos que explicam as dificuldades no acesso das mulheres a estas posições estão além da necessidade de assegurar outras tarefas, fora da academia, como o trabalho doméstico. Trata-se de mecanismos que não lhes permitem competir ao mesmo nível dos seus colegas homens, no espaço académico. O estudo que apresentamos revela, assim, os efeitos do "teto de vidro" ainda tão estruturante nas instituições de ensino superior.

Palavras chave: teto de vidro; paredes de vidro; avanço na carreira; igualdade de gênero; mulheres na ciência.

INTRODUCTION

Gender parity is a general civilizational dimension, a prerequisite for economic prosperity and competitiveness of economies in the world. The Global Gender Gap Index from 2020 records the progress of countries in achieving gender parity in 4 thematic clusters - economic participation and opportunity, educational attainment, health and survival, and political rights increasing (World Economic Forum, 2019). Empowering women, namely their ability to make decisions and take advantage of opportunities to achieve desired results, is essential for improving their lives, as well as the life of their communities and the world as a whole.

Gender inequality is to some extent inherent in all societies, regardless of the level of socio-economic development, state or political structure of the country. The different social roles society assigns to women and men determine the unequal opportunities for these gender groups in some areas of life, i.e. access to power structures, education, employment and income opportunities, property ownership and decision-making at the household level.

At the educational level, the gender aspect of the problem of academic staff is increasingly the subject of special comparative studies by both international organizations and individual researchers. After all, women's access to administrative positions in schools and higher education institutions is one of the

indicators of real equality in the field of education and employment in general. While some evident progress has been made, uneven gender access to managerial positions still exists in higher education, despite regulations and initiatives adopted at the national and institutional level to reduce gender-related issues in equal career opportunities (European Commission, 2019).

Our paper addresses this specific topic with the example of tertiary education in Ukraine. We start with an analysis of research on occupational gender inequalities compiled as a literature review. This literature review is focused on three areas potentially crucial for the identification of difficulties in the professional advancement of women: (1) gender stereotypes and other issues influencing women's career progress; (2) vertical and horizontal gender segregation in higher educational establishments; (3) gender inquiry of higher education landscape in Ukraine. In order to empirically investigate the reasons for inequalities in the distribution of managerial positions at universities we used a qualitative analysis method and conducted 30 semi-structured interviews with women and men occupying different managerial positions in Ukrainian universities. The data was further analyzed and discussed. We conclude the article with a discussion that is of relevance at the national and institutional levels.

LITERATURE REVIEW

Gender issues in career advancement

Research (Carli et al., 2016; Gorman, 2005; Lopez & Ensari, 2014; Makarova, Aeschlimann, & Herzog, 2019; Régner et al., 2019) suggest that one of the main factors influencing career advancement and gender inequality is gender stereotypes. Gender stereotypes construct a system of gender inequality and can be considered a tool of social stratification of society, which organizes a system of social hierarchy. Stereotypes do not just create inequality, as they justify it (Anker, 1997). Stereotype-based prejudices result in setting different expectations about male and female abilities at a workplace (Eagly & Karau, 2002; Makarova, Aeschlimann, & Herzog, 2019), including science and education domains (Carli et al., 2016; Reuben, Sapienza, & Zingales, 2014). The traditional view of gender roles assigning communality to women and social agency, primarily income provision, to men (Heilman, 2015; Lopez & Ensari, 2014) are still impeding women's career progression (Eagly & Karau, 2002; Heilman, 2012). Problems appear when skills and characteristics associated with a certain stereotype do not directly correlate with the skills and characteristics needed (or at least expected to be needed) for the job or position.

Stereotypes of different types can provide different influence on women's career advancement. Descriptive gender stereotypes, which are based on the description of what 'women are', promote negative expectations about women's ability to deal with male-typed activities due to the expected lack of fit between their 'inherit' qualities and the attributes considered necessary for successful performance in traditionally male jobs or positions. Thus, working in such positions, women can be seen as insufficiently competent or completely incompetent (Heilman, 2012; Struthers & Strachan, 2019). At the same time, the negative consequences for woman's job prospects directly depend on the extent to which the position is thought to be 'male', as well as on the number of gender stereotypes activated (Heilman, 2015). Scientific research on women's participation in managerial activities of various types of universities (Bound et al., 2019; Connolly, Fuchs, & Vinkenburg, 2011; Smith, Mayer, & Fritschler, 2008, pp. 163-197) highlights the existence of 'male' educational programmes or even institutions. Sometimes starting from initial stages of studying, many girls may be influenced by the stereotypes of being 'not enduring enough' for certain occupations, e.g. a surgeon, because the quantity of male lecturers and professionals in this field is predominantly higher (see also Alwazzan & Al-Angari, 2020; Vassie, Smith, & Leedham-Green, 2020).

Prescriptive gender stereotypes, which are based on the description of what 'women should be', function as gender norms and expectations for women's behaviour. Violations from expected 'feminine' behaviours, like success in a 'male' domain, are perceived as inappropriate and may result in the emergence of barriers for women to getting higher, managerial positions. As Heilman (2015) notes, women's success and activities that usually lead to it can create obstacles for their further career advancement. Overcoming expectations can also be harmful since there is a danger of being disliked and/or derogated (Eagly & Karau, 2002). Female managers are sometimes perceived less positively than their male counterparts since the assigned gender roles, and the roles of leaders do not usually match (Eagly & Karau, 2002; Heilman, 2015).

Even in cases when stereotypes do not accurately reflect women's competencies for executive positions, the notion of leadership is still perceived as being masculine (Ely, Ibarra, & Kolb, 2011). Cabrera et al. (2009) suggest that if expectations remain low for female professionals, it is more difficult for them to advance to leadership positions. The bias of that kind usually influences recruitment practices, internal

organizational promotion, access to mentoring, in-group favouritism, and results in moving women toward middle-level specialist roles rather than executive positions (Ibarra, Ely, & Kolb, 2013, September).

Matter of glass: 'ceiling', 'walls' or 'escalator'?

There are several well-known 'glass-related' terms in gender research. All of them represent quite widespread, but not always obvious segregational situations and practices.

Vertical segregation in organizations, where the progress of women is blocked, is called 'glass ceiling' (Gatrell & Swan, 2008). The 'glass ceiling' represents a certain level in the career hierarchy with limited opportunities for women to overcome it. In the context of higher educational institutions, a glass ceiling is widely traced (Charleston, 2014) and could be seen in the proportion (disproportion) of women and men who reach high academic positions. Although there are no formal restrictions on taking positions above the "glass ceiling" women cannot move beyond this barrier. The phenomenon is primarily rooted in the following societal and organizational practices:

1. The influence of stereotypes on recruitment and promotion is an obvious obstacle for women's career advancement. The most common case is discrepancies between female and male characteristics, with the latter being traditionally correlated with organizational and managerial success (Heilman, 2015; Macarie & Moldovan, 2012).
2. The institutional culture, which is often masculine in nature, restricts the vision of an ideal worker. Values and competencies essential for successful professional activities are the result of existing gender hierarchies and generally favour male workers. Thus, gender inequality has become a part of organizational logic extended with interactions and communication, identities, symbols and labour divisions (Acker, 2006). Gender hierarchies manifest themselves in occupational hierarchies, partly due to the uncertainty that surrounds women at a workplace (Purcell, MacArthur, & Samblanet, 2010).
3. Women's caring and family responsibilities foster the necessity for flexible workflow, which often limits the opportunities for hierarchical advancement. Women who are to devote part of their busy time to family care have a stretched phase of accumulating the scientific baggage necessary for career growth. As long as this phase of negative increment in scientific performance continues, freer competitors will inevitably and naturally overtake them (O'Brien & Hapgood, 2012).
4. A salary gap with women receiving less pay than men can be found in several professions across business, public and nonprofit sectors. The gender gap in salary may exist, even when such factors as the type of position, performance, specialization, experience, work hours, family situations are not taken into account (Purcell, MacArthur, & Samblanet, 2010). Rosser and Mamiseishvili (2014) claim that in higher education domain of many countries men remain disproportionately represented in management, especially at top positions, while the majority of women faculty members are overrepresented in early-career ranks. It produces both direct and/or indirect impact on salary levels. Direct impact reveals itself when pay levels are different among institutional types. Indirect glass ceiling impact occurs concerning gender in one institutional type (Rosser & Mamiseishvili, 2014).

Of particular note is the fact that numerous researchers (Jackson & O'Callaghan, 2009; Macarie & Moldovan, 2012) argue that the term 'glass ceiling', which is widely used in scientific vernacular, lacks a clear, commonly accepted definition for use in research.

Horizontal gender segregation (or 'glass walls') is another sensitive issue in gendered organizations. 'Glass walls' can be found in the organizational division of different management functions. According to 'Women in business and management' report (International Labour Office, 2019, pp. 44-46) women are over-represented at managerial positions in support functions, such as human resources, finance and administration, and marketing and sales. Accordingly, men are over-represented in research, operations, as well as in profit and loss management functions that are often viewed as more strategic for business and usually lead to executive or board-level positions.

Dämmrich and Blossfeld (2017) note that according to the human capital theory, women are considered to invest less time and effort into in-service professional training because of the additional burden of household and family responsibilities. It sometimes results in the lower interest of women in positions with demanding responsibilities. Alongside this, employers are more cautious about women in supervisory positions since they expect women to be inclined to have shorter working hours, and there exists a high probability of job interruptions (e.g. after childbirth or due to medical leaves) (Yaish & Stier, 2009).

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Employers may also rely on stereotypes about the usual professional and personal behaviour of certain groups when they decide on separate employees. Gender stereotypes and beliefs foster the deliberate removal of women from supervisory positions, because of employers' beliefs that women do not possess all the necessary characteristics for the jobs and are usually too emotional (Charles, 2003)

The concept of 'glass escalator' reflects both male and female gendered advantages in professions dominated by other sex (Alegria, 2019; Williams, 2013). Initially (see Simpson, 2004; Williams, 1995) the term explained why processes of discrimination did not prevent men from getting managerial positions in women-dominated occupations. Men quite often benefit from matching stereotypical gender traits to job expectations, earn more and are pushed into positions of authority.

Nevertheless, 'glass escalator' is not a straightforward phenomenon, and it does not work under all circumstances for all social or gendered groups. In the later research Williams (2013) has reconsidered the "glass escalator" theory, suggesting that the term needs a broader interpretation based on the intersections of gender together with race, social class and sexuality. Since the labour market worldwide broadly experience ethnic and racial inequalities, 'glass escalator' can be traced as a sign of racial privilege as well (Orupabo & Nadim, 2020; Wingfield, 2009). At the same time, due to the recent structural shifts in the workforce, the managerial roles and consequently, access to them has drastically changed. Unlike a 'glass ceiling' that keeps women from management, a 'glass escalator' can bring women to somewhat higher work roles, but in reality, they often move into middle management and face barriers into an executive level. Therefore, the upward process seems not to be blocked, but the glass ceilings still exist (Alegria, 2019; Eagly & Karau, 2002).

Another gendered metaphoric term that needs attention is the 'sticky floor'. This phenomenon is closely related to the 'glass ceiling'. 'Sticky floor' implies a more extended stay of women, rather than men, in the initial positions of the organizational hierarchy (Purcell, MacArthur, & Samblanet, 2010). Men in the early stages of their careers move faster to upper levels of management, while women are delayed for a long time in the initial stages of their professional career. A faster career start for men subsequently provides them with the necessary professional and managerial experience, and thus allows them to overtake women in senior management positions, which leads to a 'glass ceiling' situation (Brown et al., 2020).

Gender in Ukrainian higher education

While the organizational logic in different areas of economy has recently shifted toward postindustrial era flexible models compatible with neoliberal theories (DiMaggio, 2001), universities often remain gendered organizations with formalized procedures, strict hierarchies and division of labour. Such gendered organizations, due to several factors (e. g. systems of rules and policies, contracts and pay scales, quality assurance practices) can reproduce inequalities by favouring men rather than women at some positions. As E. L. Kelly et al. (2010) note, organizations of that type often seek 'ideal workers', who are loyal, fully committed, rational and are not pressed by any outside responsibilities that may negatively impact the existing workflows. Those are usually stereotypically masculine attributes, which are not always compatible with the social expectations of women and their family workload, and thus can constrain women's professional progress (Benard & Correll, 2010). Thus, institutional context and characteristics often shape individual capabilities and life paths (Elder & Johnson, 2003), and have a decisive impact on the differences and inequalities between men and women entering the labour market, which has been confirmed by numerous comparative cross-country studies (Triventi, 2013; Yaish & Stier, 2009).

The structure of modern Ukrainian society can be considered patriarchal in many ways. Therefore, highly paid and prestigious positions often go to men. There is a well-established tradition of male domination in leadership positions at various levels. Surprisingly enough, that fact is also applicable to the higher education system, which otherwise seems to be progressive and sensitive to innovations. Access to professional activities and careers, which has increased enormously for women in comparison with the previous years, still does not lead to the necessary qualitative changes (Labur, 2007).

Ukraine occupies the 59th position out of 153 countries in the Global Gender Gap Report for 2020 (World Economic Forum, 2019). The high educational level of the population and equal conditions for men and women in access to education (indicator 0.949) have significantly influenced the current position. According to other criteria – economic participation and opportunities (0,737) and political powers (0,171 – p.13) - Ukraine ranks significantly worse. Some critical gender-based data on education and skills in Ukraine is given in Table 1 (World Economic Forum, 2019, p. 348)

Table 1. Selected contextual data on education and skills in Ukraine

EDUCATION AND SKILLS	FEMALE	MALE	VALUE
STEM	13.70	38.40	0.38
Agriculture, Forestry, Fisheries and Veterinary	2.43	5.61	0.43
Business, Administration and Law	31.61	24.72	3.00
Education	13.52	4.69	1.28
Engineering, Manufacturing and Construction	7.99	26.82	2.88
Health and Welfare	13.02	4.23	0.30
Information and Communication Technologies	1.53	8.20	3.06
Natural Science, Mathematics and Statistics	4.18	3.38	0.19
Services	4.91	13.00	0.38
Social Science, Journalism and Information	7.65	3.20	2.39
Vocational training	3.31	5.50	0.60
PhD graduates	n/a	n/a	n/a

Source: World Economic Forum, 2019, p. 348

The quantity of women is substantially higher among social and life science professionals, as well as in education studies, proving the existent horizontal gender segregation. Most of these professions give women the right to use their educational advantages in the labour market, although they do not guarantee high incomes. On the other hand, men are more likely to be employed in the physical, mathematical, technical, military and security sciences, IT, administration (State Statistics Service of Ukraine, 2019) (see Figure 1). Together with the overwhelming majority of men in senior management positions, the situation demonstrates gender-based preferences in education and training (Herasymenko & Maksymenko, 2016). It is worth paying attention to the fact that scientific and teaching positions in Ukrainian higher education establishments are in most cases poorly paid. It causes a constant outflow of men from the scientific field and its gradual feminization.
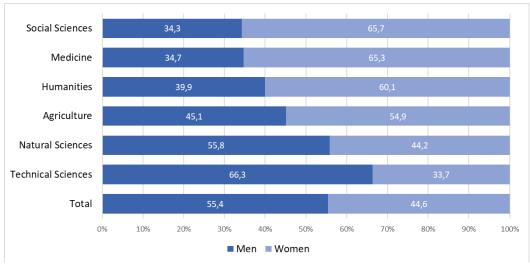

Figure 1. The gender distribution of Ukrainian researchers according to the scientific fields (2018)
Source: State Statistics Service of Ukraine, 2019

In Ukraine, the historical opportunity for women to enter science appeared in the late 19th - early 20th century, when they started to study in higher education institutions. During the Soviet period of Ukraine's history, the number of women among researchers has been continuously growing. At the collapse time in the USSR (in 1991), women made up 25 % of doctors of science and 45 % of PhDs (UNDP, 1999, p. 199). While economic and political transformations in 990s, the state of Ukrainian science deteriorated and in 1996 the proportion of women among doctors of science was 13.7 %, and 30.8 % among PhDs (UNDP, 1999, p. 200). The growth in the number of women with academic degrees has been extremely slow and has only recently reached the 30-year mark (State Statistics Service of Ukraine, 2019). This dynamic can be seen below in Figure 2.
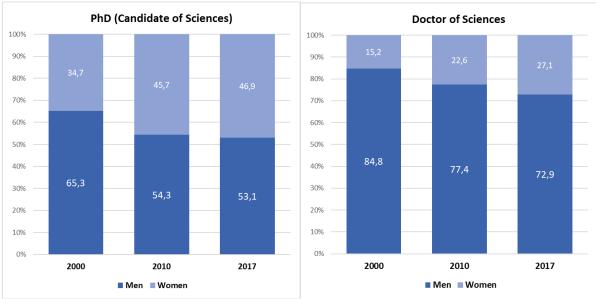
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Figure 2. The gender distribution of scientists with the scientific degree of PhD (Candidate of Sciences) and Doctor of Sciences in 2000-2017.

Although several national and international legislative acts support gender equality in Ukrainian education and broader social contexts, it is not always viewed as a critical issue at an institutional level. The reasons for uneven gender access to managerial positions in higher education institutions in Ukraine remain unclear. At least two problems persist: (a): What causes uneven access for women to managerial positions in tertiary education in Ukraine?; (b) How do academia managers view the uneven gender representation? Our study has developed the methodological strategy, which is explained in the next section to address these research questions.

METHOD

Procedure and participants

The study relied on an inductive approach and used semi-structured in-depth interviews, to explore the views and attitudes of top university managers towards the career advancement of women in higher education in Ukraine. The in-depth interview guide included four thematic blocks: the qualities of a successful woman and the components of personal success; the role of the family in a woman's professional growth, judgments about the causes of gender segregation, the presence of gender discrimination and stereotypes, and suggestions for overcoming gender discrimination in a higher education institution.

The interviews were conducted in April 2020 with a total of 30 female and male (equal quantity) academia managers of classical, medical, technical, and pedagogical universities from different regions of Ukraine. The participants occupied the following positions at time of the interview: rector – 7 participants (4 women, 3 men), vice-rector – 9 participants (5 women, 4 men), dean – 14 participants (6 women, 8 men). The participants were generally representative of the target population of university managers in terms of age (36 to 67 years, median age 51.5 years) and experience (from 9 to over 30 years). Consent was obtained from the interview participants. All of them were informed of their rights and assured of anonymity. Due to COVID-19 pandemic and remote mode of work, the interviews were conducted over the phone, with the participants' consent. An audio recording of the interview was made with subsequent encoding and transcription. The content of the audio files was analyzed following the guidelines of Cohen et al. (2007) for the analysis of qualitative data. The transcripts of the interviews were later passed on to another author, who conducted a qualitative analysis of them. The obtained data was triangulated by examining all responses and identifying relevant literature sources to validate the responses.

The encoding for study analysis was based on a description of the statuses that are taken for analysis: figure – the interview number (from 1 to 30, in order of collecting information); the first letter – gender status (F – female, M – male); the second letter – the position at the university (R – rector, VR – vice-rector, D – dean).

Limitations of the study

Limitations of the study include a small sample size of respondents (2 rectors, 2 vice-rectors and 2 deans). The biggest problems arose with the survey of rectors. The interview was conducted in the conditions of the COVID-19 pandemic, but in connection with the transition of Ukrainian universities to distance education, administrative staff also switched to remote work. It made it difficult to access sensitive information, such as personal phone numbers. The universities were chosen randomly; the search for the participants' contact details was carried out through personal acquaintances of the authors.

The study was also limited to the regional representation of universities. Since 2014, the war in the East of Ukraine has been continued, the sample did not include universities located on the non-controlled territory of Ukraine, and no employees of these universities were interviewed. However, we believe that this fact can not significantly affect the results obtained.

RESULTS AND DISCUSSION

The in-depth interview guide consists of three blocks on creating an image of women career advancement in Ukrainian higher education institutions. The first block allowed examining the reasons for the low representation of women at managerial positions in universities. Female interviewees most often mentioned the phenomenon of a double working day, the effect of a glass ceiling, and overloading with family responsibilities. The difference in the conditions for starting a career for women was also a significant reason. They became competitive much later when children grew up: "a woman spends significant career time on the family" (9-W-VR); "women devote their years to the family when it is possible to build a career" (14-W-R). Comparing the responses of women and men allowed the authors to suppose that there are differences in the evaluation of such ratings.

The family culture of Ukraine can explain the situation mentioned above. It is characterized by a weak involvement of men in bringing up children and performing household duties. Similar feminization of care work is based on a gender-role approach, according to which men and women have specific responsibilities determined by their gender. Working women find themselves in a situation of double working hours under such conditions,

Analysis of the array of men's and women's responses allow the authors to define three groups of stereotypes. The first group is grounded on a lack of necessary personal and professional qualities and excessive emotionality of women. The authors find it in the responses of both women and men. In particular, "women are more emotional" (6-W-D); "if emotions dominate and most women are prone to this, then it is better to have a man (leader)" (11-W-VR). Men's responses were somewhat sharper: "while electing to a position, they think about professional qualities, and not about gender" (17-M-D), "there is a stereotype that a woman is a worse leader than a man" (29-M-R). The second group of stereotypes is related to the fact that women themselves do not apply for high-level positions: "women themselves do not submit their candidates for electoral positions" (4-W-D), "men are naturally active due to status, traditions, and women are less active" (26-M-VR), "women themselves do not nominate" (18-M-D), "this is just the unwillingness of women to actively promote themselves" (24-M-VR), "most women are not self-directed to hold the position of rector or vice-rector, because it requires more time and dedication" (20-M-D). It is worth paying attention that every third male participant gave the arguments mentioned above. These results suggest that even if women want to take part in a competition for a high position, they will not be able to venture upon this step, because society will consider them immodest. The third group of stereotypes based on the opinion that women are "home keepers": "this is a tradition that must be defeated" (17-M-D); "this is a cultural tradition in the field of education. It is accepted that man can act at leadership position better" (20-M-D); "first of all, this is due to the traditions that we have in society" (25-M-VR); "there is a traditional attitude in society regarding the role of women. It is often associated with service personnel. A woman should pay more attention to her family and home. Men are detached and therefore have more time, and women have less" (26-M-VR); "family plays a key role" (29-M-R). In the male respondents' opinion, the family is the central sphere of self-realization of a woman, and work should play a secondary role in her life.

It is worth paying attention to the constancy of this stereotype in the minds of Ukrainians. Sexist assessments are frequently made at the level of public consciousness despite the families with two working parents, the examples of successful careers of women, and the growing number of women in many life spheres (science, politics, mass media). In this context, others undertake to independently determine the importance of the family in women's lives: "we associate a woman with the family keeper. She holds

everything together. Men try to realize their professional career at this time" (19-M-D); "woman's main priority is family, and she devotes much time to the family, so she can not always realize herself as a leader" (17-M-D); "the reasons are not in gender policy, but in the fact that a woman has more home and family matters. She can be a leader, but she pays more attention to the family. Bringing up children is a barrier" (27-M-VR); "I think that everything grounds on a mental or ideological attitude of a Ukrainian woman to her family and children, and career is on the second place" (25-M-VR). Consequently, the authors can suppose that men's responses are often stereotyped.

The authors asked interviewees to formulate the qualities necessary for career growth. The majority of participants mentioned the following qualities: leadership, hard work, responsibility, professionalism, purposefulness, and dedication. It was also suggested that practical communication skills significantly contribute to success, namely: sociability, benevolence, psychological flexibility, stress tolerance, the ability to delegate authority, and the possibility to enable people you work with to implement their ideas. At the same time, female informants emphasized that sufficient self-esteem is one of the essential qualities: "...there should be a sufficient self-esteem with no underestimation. It always bothered me, and when I started pushing it away, it helped" (4-W-D). Some interviewees mentioned the ability to inspire confidence in people as another essential quality: "a woman should describe the algorithm for achieving the goal. Then there is trust in a particular person and trust in his statements. Trust is a key element while choosing somebody to a certain position" (7-W-VR). Men defined such a quality as the authority (scientific, teaching), as well as the rigidity of character: "some masculine qualities. So that she can be tough, can say "no" when necessary". Several study participants, on the contrary, emphasized feminine qualities that can contribute to career advancement: "women think more about people and listen to the opinions of employees. Women benefit a little from this. Men are more principled and categorical" (28-M-R); "qualities of a home keeper. The Ukrainian female university leader should be kind, intelligent, and has communication skills" (29-M-R). To sum up, the female and male participants mentioned similar qualities, but the men emphasized the importance of authority and the ability to be tough, that is, to adopt male character traits.

Should the qualities necessary for women's career growth differ from those of men? According to the majority of respondents, these qualities are gender-neutral. At the same time, a quarter of women stressed on the fact that women have psychological differences related to testosterone levels and psycho-physiological indicators: "women have empathy; men are tougher" (2-W-D); "men and women are emotionally different. The psychological type is different. The basic principles are the same, but there are specifics" (12-W-R). Several respondents explained the existing difference in qualities with a double work, which requires more organization and the ability to allocate time: "they should not differ. But due to life circumstances, they are different, because a woman still has responsibilities at home and she is not successful at work" (8-W-VR); "without a doubt, they are different. It has always been more difficult for a woman to achieve career advancement because her family and children are always there. Man has got everything ready" (7-W-VR). On the other hand, to successfully compete with men, women need to have qualities that distinguish them from men: "they must be different. Because there is a stereotype in society and it is challenging to overcome it" (3-W-D); "I have a pragmatic male approach to things" (10-W-VR). Consequently, women who are successful in achieving high managerial positions in universities have a set of universal and gender-neutral qualities. At the same time, they should be more organized, have masculine pragmatism, and use psychological differences in career advancement.

All respondents mentioned that it is easier for men to make a career. The existence of primordial stereotypes; the reproductive function of women, which slows down and often complicates the possibility of career growth; and family worries, which men have less were among the arguments: "when children get sick, then the mother is at the bed, and the father is at work" (5-W-D); "if a man starts doing something, then he is strong and smart, and if a woman, then she makes a fool of herself. There is such an attitude" (9-W-VR). Men also supported those ideas: "it is harder for a woman. men influence women. A woman needs to prove that she can manage, and a man can do it right away" (18-M-D). At the same time, three respondents believe that modern women have equal opportunities with men, especially if the woman is unmarried: "an unmarried woman has all the opportunities. If she is worthy, willing, and has organizational skills, she can achieve success. Men see everything from a practical point of view, and a woman can also add gossips" (27-M-VR).

There are some suggestions on the existence of the "glass ceiling" phenomenon in the university career advancement. The authors asked the respondents to explain the "disappearance of female giftedness" when the number of excellent students among girls is higher than among boys, but after receiving diplomas (including higher education), they leave the career path. According to interviewees, the perfectionist

syndrome makes a woman unsuccessful: "…so I try not to let anyone down. But this is a minus" (15-W-R); "I think that the perfectionist syndrome interferes in life. They are perfectionists, and sometimes they have low self-esteem. And it stops at some point" (7-W-VR). Overall, these results indicate the existence of one more reason for unsuccessful career advancement of women. It is the desire to perform everything correctly, which implies excessive requirements for themselves (and this, in turn, provokes a downside – low self-esteem).

Some of the participants explained the phenomenon of "the disappearance of female giftedness" by specific upbringing, as well as overloading with family responsibilities: "women are brought up in such a way that their only task is to get married successfully" (6 -W-D); "we have early marriages. And the woman is distracted by what is important" (14-W-R); "in the beginning, women are hindered by family roles" (4-W-D); "there are very few talented people. Ninety per cent is daily hard work. There is a powerful job behind the talent. Does a woman have the power to invest one hundred per cent in science if she has a family? A woman sets priorities. She gives a man the opportunity to career advancement, or chooses women's happiness, which is the prerogative for any woman" (10-W-VR). Male respondents also state that women do not want to build a career because of excessive overloading with household responsibilities: "very often they do not want to. Many girls get married and pay all their attention to the family" (18-M-D); "I think they do not want to" (18-M-D); "child is the most precious thing for each woman" (27-M-VR)

The authors suppose that such experience does not apply to everyone. Most likely, respondents extrapolate their cases, since they have noted that "the new generation already has a different view of the world. The younger generation first wants to realize themselves professionally, and then start a family" (3-W-D); "in our Ukrainian society, a woman is ambitious. I look at our female students and realize that they all want to be someone" (9-W-VR).

Men's responses are dominated by explanations related to gender-specific life paths. In particular, men's career growth starts from graduating from university, while women are physiologically focused on the birth and upbringing of children. When children grow up, and women can return to career advancement, men are far ahead: "they remain in the shadows only because of tradition. The high positions are already occupied by men" (17-M-D).

The authors can presume that starting a family at a young age is an obstacle to the career growth of young women, but such a life strategy is no longer widespread. Some girls are focused on achieving career success, and only after that on starting a family. Female respondents stressed on the transformation of life strategies of some university graduates.

It was supposed that horizontal gender segregation ("glass walls") which means an unequal distribution of women and men in different professions in terms of successful women in science and educational management could be one more reason for women's low representation at a managerial position in higher education institutions of Ukraine. Interestingly, most men could not find the answer to the question on the glass walls' existing. The responses have been grouped as follows:

1. The influence of gender stereotypes, when girls are deliberately not encouraged to achieve success in the exact sciences: "I have the impression that at the beginning the vector is not quite chosen correctly and girls were said "why do you need it - you are a girl!". Parents and school form such an attitude" (2-W-D); "I think that the root of this phenomenon is still in stereotypes. Parents can set up their children, namely, they set up boys for more technical specialities, and girls for humanitarian ones" (9-W-VR); "in my opinion, these are stereotypes. They drive women, and therefore they do not show themselves" (10-W-VR); "there are stereotypes about male and female professions. But, for example, there are many women in law enforcement agencies" (18-M-D).

2. Gender peculiarities of career choice, which ground on the fact that parents direct children to high-paying professions, while in girls' upbringing this aspect is not essential: "the prestige of the profession is also possible. It is easier for techies to earn more money, and women agree to a lower salary" (11-W-VR).

3. Some professions require physical strength and endurance, so men dominate them: "if we are talking about surgery, it is complicated physically. And in this sense, it is easier for men" (13-W-R).

4. Physiological features, in particular, the structure of the brain affects the abilities of men and women: "men have more developed logical thinking. But a woman can intuitively find the right answer faster" (5-W-D); "biological factor. Hemispheres work differently that is why women perceive many things emotionally, passing through themselves. Men perceive everything through analytics. Men are resilient" (9-W-VR); "it is associated with the way of thinking. A man is a logos, and a woman is an emotion" (11-W-VR); "women have a humanitarian mindset, and men have an

abstract-logical one" (21-M-D); "not all women can understand the technical component. It depends on genetic characteristics" (27-M-VR).

5. This is a natural phenomenon: "this is how nature laid down. A woman needs many words, beliefs, and the environment where there are more soul and love, when it is much less in technical areas" (13-W-R); "thinking is different. For men, it is logically structured, for women – romantically" (29-M-R).

The authors could suggest gender discrimination that women academics face in the higher education system of Ukraine. According to the answers of most of the respondents, this phenomenon is absent in their profession: "on the contrary, the fact that I am a woman often helped me" (5-W-D); "some managers even prefer women, but they pay attention to the fact that woman has adult children" (2-W-D).

It could be followed by a noticeable correlation between the status of the position and the assessment of discrimination. At the level of deans, there are no positive responses; at the level of vice-rectors and rectors, the number of positive responses increases markedly (see Table 2).

Table 2. Gender discrimination in higher education

POSITION	WOMEN		MEN	
	YES	NO	YES	NO
Dean	-	6	1	7
Vice-rector	2	3	1	3
Rector	3	1	-	3
Total	5	10	2	13

Source: compiled by authors

The authors could suppose that men (like some women) cannot recognize situations of discrimination. It can be assumed that this phenomenon is too common, familiar in an academic environment, so the respondents do not notice it. Interestingly, the underrepresentation of women in high positions at universities is invisible to men, and they do not consider it as discrimination. A quote from an interview with one of the rectors is quite revealing to demonstrate a lack of understanding of what discrimination is: "I have never refused in employment on the grounds of gender" (29-M-R).

In the mentioned context, the quote of one of the study participants (the rector of the pedagogical university, where the majority are women) could strengthen the discrimination existence: "I have been the rector of the university for 11 or 12 years and the first woman. It is much easier for men" (12-W-R). Some female respondents noted the hidden nature of discrimination: "to be explicit, then no. But I have encountered different jokes and veiled phrases that offence me as a manager" (9-W-VR). Moreover, one of the male vice-rectors noted that such cases are frequent: "Yes. Often. Men told women they were stupid just because they were women" (24-M-VR).

Consequently, the situation of non-awareness and non-recognition of the existence of gender discrimination requires a separate further study. At the same time, the university community needs to introduce special gender literacy courses, since discrimination will continue to exist until men and women learn to recognize it in the academic environment. As noted above, the majority of participants claim that they do not face gender discrimination in the field of education, despite this, it exists and is most manifested in the political, financial, and family spheres.

It is pretended that gender stereotypes are attributes of everyday thinking, self-awareness, and interaction of individuals in the social space. One of the guide's questions was the presence of stereotypes in women's a professional environment (for example, a woman who is successful in science is unsuccessful in family life; a woman is too emotional to be an effective leader). The majority of respondents noted that the phenomenon exists: "sexism, unfortunately, is present" (15-W-R); "there is a stereotype "a woman wants to control me". You speak, and you are emotional"(11-W-VR); "yes. She can not be a leader because this is a female team and it is better to put a silly guy" (10-W-VR). The distribution of responses by gender shows a fascinating picture: the number of women who deny the existence of stereotypes is in twice higher that of men (see Table 3). It can be assumed that women assess their stay in a high position as a manifestation of the absence of stereotypes in their professional environment. Besides, the stereotype has a negative connotation, so it is psychologically unpleasant to apply it to a person's characteristic. On the other hand, because of the severity of the problem, men may tend to look politically correct. It could be supposed that stereotypes about women are more common in the male environment, so they are more informed.

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Table 3. Distribution of answers to the question: "Have you ever encountered the influence of stereotypes in your profession?"

	WOMEN	MEN
YES	9	12
NO	6	3

Source: compiled by authors

The male view of the problem of stereotypes existence is expressed in assessments of the importance of family status influence on the career advancement ("yes, they work. An unmarried woman is a frivolous woman" (19-M-D); "I have such a stereotype: a woman who is successful in science is unsuccessful in family life. These are my observations. I have many friends far from education sphere, and our opinions coincide" (22-M-D)), in greater emotionality of women ("a woman is more hormonally sensitive. And a female manager may have a nervous, emotional outburst. It is much easier to offend a woman. But they train themselves" (18-M-D)), and in assessing the stereotype as reality ("yes, of course. Some are not stereotypes, but reality" (27-M-PR)). In the authors' opinion, the problem of gender stereotypes is evaluated ambiguously by the respondents.

It could also be supposed that a woman's family life complicates her opportunities for professional advancement. The responses of male and female participants did not differ significantly on this issue (see Table 4)

Table 4. Distribution of answers to the question: "Does a woman's family status affect her career advancement?" (depending on gender)

	WOMEN	MEN
YES	9	11
NO	6	4

Source: compiled by authors

It is apparent from this table that men are more likely to see the family as the main obstacle to women's career growth: "if she is married, then someone is sacrificing" (24-M-VR); "unmarried women move faster in career" (19-M-D); "unmarried women have more chances because they devote more time to their career" (17-M-D); "women who have not started a family develop their career faster" (22-M-D).

At the same time, men pay attention to the vital role of the family in supporting women's efforts: "if there are love and support in the family, then there will be a successful career" (19-M-D). This opinion is supported by most of the study participants: "the attitude of the man who is next to you affects. If he supports, then the woman is successful" (11-W-VR); "if a man helps, then this is only a plus" (15-W-R); "there are self-sufficient women who are married and have children. They manage to do well both at work and at home. But in this situation, you need help and support from the family" (9-W-VR); "a huge role. When I was offered this position, I first consulted with my husband. And if my husband was against it and I did not have the support of my family, I would not agree to this position" (8-W-VR).

In turn, women find more convincing arguments to explain the reasons that complicate their career advancement: "the family likely takes time, and it can slow down this process a little. When I need to write an article or cook dinner, I will cook dinner, but this often takes up my sleep time. I think that it may have a partial impact. Nevertheless, it all depends on the people" (5-W-D); "if there are many children and family worries, then you will not be able to grow professionally and get a position, because you do not simply have enough time for something else" (2-W-D).

Interestingly, the respondents did not answer clearly on the impact of the marital status of women on career advancement. On the one hand, an unmarried woman can focus entirely on her career so that she can achieve more success. On the other hand, if a man supports a woman, then she is thriving. Furthermore, it is significant that women emphasize the importance of a happy marriage and the statement that married women are successful: "if a woman is happily married, then she is more successful" (1-W-D); "married. They feel some support. All my friends who have defended their doctoral dissertations are married" (6-W-D).

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CONCLUSION

The study allowed us to identify the reasons (barriers) that prevent Ukrainian women academics from achieving career growth:

1. The "glass ceiling" existence: as the status of positions in the university hierarchy increases, the chances of achieving them decrease at each step, reaching 31.7% of women's representation as deans, 22.7% as vice-rectors and 10% as rectors.

2. Gender differences in the explanation of barriers to career advancement: according to women, their underrepresentation in senior positions in Ukrainian universities is associated with the effect of a glass ceiling, overloading with family responsibilities, postponement of the career start due to the performance of reproductive functions, and low self-esteem (or a perfectionist syndrome). According to men, women themselves do not want to apply for high positions, because they are less active. Moreover, women in Ukraine are "home keepers", and when choosing between family and career, they prefer family.

3. Discrimination in the form of low representation of women in leadership positions at universities. Despite this, respondents of both sexes do not assess this situation as discrimination, although they recognize that it is much difficult for women to make a career than for men.

4. Gender stereotypes: most female respondents have not encountered the existence of gender stereotypes in their professional activities (however, the higher the level of women's positions, the more often they talk about their existence). Most men recognize the significant prevalence of gender stereotypes in the higher education system. Perhaps they want to be politically correct, but on the other hand, gender stereotypes about women are more widespread among men, so they are informed more.

6. The ambiguous assessment of the family role in women's career advancement: on the one hand, an unmarried woman can entirely focus on her career so that she can achieve tremendous success; on the other hand, if the family supports a woman, then she is also thriving. Starting a family at a young age is an obstacle to the career growth of young women. In the context of increasing the age of starting a family, their life strategies are transformed, when some girls are focused on achieving career success, and only then on starting a family.

7. The effect of "glass walls" (horizontal gender segregation): it is associated with the influence of gender stereotypes when girls are deliberately not encouraged to achieve achievements in the exact sciences; the existence of gender features of career guidance, which does not direct girls to material success, but forms beliefs about the secondary importance of women's income in the structure of the family budget; physiological features, in particular, in the structure of the brain, which affect the abilities of men and women.

The obtained results allow us to expand the field of scientific research. In particular, the situation of non-recognition of gender discrimination by women requires a separate in-depth study. Besides, the research revealed the existence feminization of higher education system in Ukraine, which requires studying the motivation of scientific activities of men and women.

REFERENCES

Acker, J. (2006). Inequality regimes: Gender, class, and race in organizations. *Gender & Society, 20*(4), 441–464. doi:10.1177/0891243206289499

Alegria, S. (2019). Escalator or step stool? Gendered labour and token processes in tech work. *Gender & Society, 33*(5), 722–745. doi:10.1177/0891243219835737

Alwazzan, L., & Al-Angari, S. S. (2020). Women's leadership in academic medicine: a systematic review of extent, condition and interventions. *BMJ open, 10*(1), e032232. doi:10.1136/bmjopen-2019-032232

Anker, R. (1997). Theories of occupational segregation by sex: An overview. *International Labour Review, 136*(3), 315-339.

Benard, S., & Correll, S. J. (2010). Normative discrimination and the motherhood penalty. *Gender & Society, 24*(5), 616-646. doi:10.1177/0891243210383142

Bound, J., Braga, B., Khanna, G., & Turner, S. (2019). Public universities: The supply side of building a skilled workforce. *RSF: The Russell Sage Foundation Journal of the Social Sciences, 5*(5), 43-66. doi:10.7758/rsf.2019.5.5.03

Brown, J., Crampton, P., Finn, G., & Morgan, J. E. (2020). From the sticky floor to the glass ceiling and everything in between: protocol for a systematic review of barriers and facilitators to clinical academic careers and interventions to address these, with a focus on gender inequality. *Systematic Reviews, 9*, Article number: 26. doi:10.1186/s13643-020-1286-z

Cabrera, S., Sauer, S., & Thomas-Hunt, M. (2009). The evolving manager stereotype: The effects of industry gender typing on performance expectations for leaders and their teams. *Psychology of Women Quarterly, 33*(4), 419-428. doi:10.1111/j.1471-6402.2009.01519.x

Carli, L. L., Alawa, L., Lee, Y., Zhao, B., & Kim, E. (2016). Stereotypes about gender and science: Women ≠ scientists. *Psychology of Women Quarterly, 40*(2), 244-260. doi:10.1177/0361684315622645

Charles, M. (2003). Deciphering sex segregation: Vertical and horizontal inequalities in ten national labor markets. *Acta Sociologica, 46*(4), pp. 267–287. doi:10.1177/0001699303464001

Charleston, L. (2014). Using human resource software technology to mitigate glass ceiling effects in higher education: Interdisciplinary applications for managing diversity. *New Directions for Institutional Research, 2013*(159), 63-73. doi:10.1002/ir.20054

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York: Routledge.

Connolly, S., Fuchs, S., & Vinkenburg, C. (2011). Work-life balance in academia – Evidence from two technical universities. In C. Leicht-Scholten, E. Breuer, N. Tulodetzki, & A. Wolffram (Eds.), *Going diverse: Innovative answers to future challenges: Gender and diversity perspectives in science, technology and business* (pp. 175-194). Opladen; Farmington Hills: Verlag Barbara Budrich. doi:10.2307/j.ctvhhhh3g.18

Dämmrich, J., & Blossfeld, H.-P. (2017). Women's disadvantage in holding supervisory positions. Variations among European countries and the role of horizontal gender segregation. *Acta Sociologica, 60*(3), 262–282. doi:10.1177/0001699316675022

DiMaggio, P. (2001). *The twenty-first-century firm: Changing economic organization*. Princeton, NJ: Princeton University Press.

Eagly, A., & Karau, S. (2002). Role congruity theory of prejudice towards female leaders. *Psychological Review, 109*(3), 573-598. doi:10.1037/0033-295X.109.3.573

Elder, G. H., & Johnson, M. K. (2003). The life course and aging: Challenges, lessons, and new directions. In R. A. Settersten (Ed.), *Invitation to the life course: Toward new understandings of later life* (pp. 49-81). Oxon, New York: Routledge.

Ely, R., Ibarra, H., & Kolb, D. (2011). Taking gender into account: theory and design for women's leadership development programs. *Academy of Management Learning & Education, 10*(3), 474-493. doi:10.5465/amle.2010.0046

European Commission. (2019). The European Research Area: advancing together the Europe of research and innovation [ERA progress report 2018]. Retrieved from https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/5641328c-33f8-11e9-8d04-01aa75ed71a1

Gatrell, C., & Swan, E. (2008). *Gender and diversity in management: A concise introduction*. London: Sage.

Gorman, E. H. (2005). Gender stereotypes, same-gender preferences, and organizational variation in the hiring of women: Evidence from law firms. *American Sociological Review, 70*(4), 702–728. doi:10.1177/000312240507000408

Heilman, M. E. (2012). Gender stereotypes and workplace bias. *Research in Organizational Behavior, 32*, 113–135. doi:10.1016/j.riob.2012.11.003

Heilman, M. E. (2015). Gender stereotypes: Impediments to women's career progress. In I. Welpe, P. Brosi, L. Ritzenhöfer, & T. Schwarzmüller (Eds.), *Auswahl von Männern und Frauen als Führungskräfte [Selection of men and women as managers]* (pp. 73-84). Wiesbaden: Springer Gabler. doi:10.1007/978-3-658-09469-0_7

Herasymenko, H., & Maksymenko, M. (2016). *Otsinka hendernykh pytan v Ukraini – 2016 [Analysis of gender issues in Ukraine - 2016]*. Retrieved from http://www.nas.gov.ua/siaz/Ways_of_development_of_Ukrainian_science/article/16094.027.pdf

Ibarra, H., Ely, R., & Kolb, D. (2013, September). Women rising: the unseen barriers. *Harvard Business Review, 91*(9), 60-66.

International Labour Office. (2019). *Women in business and management: the business case for change*. Geneva: ILO. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_700953.pdf

Jackson, J. F., & O'Callaghan, E. M. (2009). What do we know about glass ceiling. *Research, 50*(5), 460–482. doi:10.1007/s11162-009-9128-9

Kelly, E. L., Ammons, S. K., Chermack, K., & Moen, P. (2010). Gendered challenge, gendered response: Confronting the ideal worker norm in a white-collar organization. *Gender & Society, 24*(3), 281-303. doi:10.1177/0891243210372073

Labur, O. (2007). *Istoriografichnyj abrys gendernyh vidnosyn v Ukrai'ni [Historiographic Outline of Gender Relations in Ukraine]*. Kyiv: KNUBA.

Lopez, E., & Ensari, N. (2014). The effects of leadership style, organizational outcome, and gender on attributional bias towards leaders. *Journal of Leadership Studies, 8*(2), 19-37. doi:10.1002/jls.21326

Macarie, F., & Moldovan, O. (2012). Gender discrimination in management. Theoretical and empirical perspectives. *Transylvanian Review of Administrative Sciences, 35 E*, 153-172.

Makarova, E., Aeschlimann, B., & Herzog, W. (2019). The gender gap in STEM fields: The impact of the gender stereotype of math and science on secondary students' career aspirations. *Frontiers in Education, 4*(Article: 60). doi:10.3389/feduc.2019.00060

O'Brien, K., & Hapgood, K. (2012). The academic jungle: ecosystem modelling reveals why women are driven out of research. *Oikos, 121*(7), 999-1004. doi:10.1111/j.1600-0706.2012.20601.x

Orupabo, J., & Nadim, M. (2020). Men doing women's dirty work: Desegregation, immigrants and employer preferences in the cleaning industry in Norway. *Gender, Work & Organization, 27*(3), 347– 361. doi:10.1111/gwao.12378

Purcell, D., MacArthur, K. R., & Samblanet, S. (2010). Gender and the glass ceiling at work. *Sociology Compass, 4*(9), 705–717. doi:10.1111/j.1751-9020.2010.00304.x

Régner, I., Thinus-Blanc, C., Netter, A., Schmader, T., & Huguet, P. (2019). Committees with implicit biases promote fewer women when they do not believe gender bias exists. *Nature Human Behaviour, 3*(11), 1171–1179. doi:10.1038/s41562-019-0686-3

Reuben, E., Sapienza, P., & Zingales, L. (2014). How stereotypes impair women's careers in science. *Proceedings of the National Academy of Sciences (PNAS), 111*(12), 4403-4408. doi:10.1073/pnas.1314788111

Rosser, V., & Mamiseishvili, K. (2014). Using salary as a measure of glass ceiling effects: Lessons for institutional researchers. *New Directions for Institutional Research, 2013*(159), 13-23. doi:10.1002/ir.20050

Simpson, R. (2004). Masculinity at work: The experiences of men in female dominated occupations. *Work, Employment & Society, 18*(2), 349–368. doi:10.1177/09500172004042773

Smith, B., Mayer, J., & Fritschler, A. (2008). *Closed minds? Politics and ideology in American universities.* Washington, DC: Brookings Institution Press.

State Statistics Service of Ukraine. (2019). *Naukova ta innovatsiina diialnist Ukrainy: Statystychnyi zbirnyk [Science and innovation in Ukraine: Statistical digest].* Kyiv: State Statistics Service of Ukraine. Retrieved from: http://ukrstat.gov.ua/druk/publicat/kat_u/2019/zb/09/zb_nauka_2018.pdf

Struthers, K., & Strachan, G. (2019). Attracting women into male-dominated trades: Views of young women in Australia. *International Journal for Research in Vocational Education and Training, 6*(1), 1-19. doi:10.13152/IJRVET.6.1.1

Triventi, M. (2013). The gender wage gap and its institutional context: a comparative analysis of European graduates. *Work, Employment & Society, 27*(4), 563–580. doi:10.1177/0950017012460322

UNDP. (1999). *Gendernyj analiz ukrai'ns'kogo suspil'stva [Gender analysis of Ukrainian society].* Kyiv: UNDP. Retrieved from http://www.gender.org.ua/images/lib/gender_analysis_ukr.pdf

Vassie, C., Smith, S., & Leedham-Green, K. (2020). Factors impacting on retention, success and equitable participation in clinical academic careers: a scoping review and meta-thematic synthesis. *BMJ open, 10*(3), e033480. doi:10.1136/bmjopen-2019-033480

Williams, C. L. (1995). *Still a man's world: Men who do "women's work.".* Berkeley: University of California Press.

Williams, C. L. (2013). The glass escalator, revisited: Gender inequality in neoliberal times, SWS Feminist Lecturer. *Gender & Society, 27*(5), 609–629. doi:10.1177/0891243213490232

Wingfield, A. H. (2009). Racializing the glass escalator: Reconsidering men's experiences with women's work. *Gender & Society, 23*(1), 5–26. doi:10.1177/089124320832305

World Economic Forum. (2019). *Global gender gap report 2020.* Retrieved from http://www3.weforum.org/docs/WEF_GGGR_2020.pdf

Yaish, M., & Stier, H. (2009). Gender inequality in job authority: A cross-national comparison of 26 countries. *Work and Occupations, 36*(4), 343–366. doi:10.1177/0730888409349751