

The Role Of Women In Science Reform And Their Scientific Activity

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Abstract: The article examines the education of women in the field of science and their contribution to science, the activities of women in various fields of science. This paper examines the historical evolution of women's participation in science, emphasizing the substantial obstacles they have surmounted and the prospects for future growth via the implementation of gender equality programs. The results of the research aimed at determining the characteristics of the social image of women in the field of science in Uzbekistan are highlighted

Key words: education, science, science, women, field, analysis, question, degree, socialization, research, gender equality, scientific development.

INTRODUCTION

In research centers engaged in scientific research related to the activities of women in science, attention is being paid to the development of mechanisms for increasing the scientific research activity of women and to a number of scientific problems. The field of women in science explores multiple theoretical and empirical approaches to better understand gender disparities, biases, and structural barriers women face in science.

RESEARCH METHODS

Research methods Empirical methods such as theoretical-comparative analysis, analysis, questionnaire survey, document analysis were used. At the 45th session of the UN Committee on the Elimination of Discrimination against Women in Geneva, it was recognized that great work has been done in Uzbekistan to further improve the welfare of women, to create decent living, working, and educational conditions for them" [1]. Science and technology are one of the socio-economic driving factors in the well-being of all sections of society and any nation. The role of women in science is crucial for the overall development of Uzbekistan. "In 2020, as a result of further increasing the activity of women in society, including the creation of conditions for their effective participation in scientific activities, the share of women among those approved at the scientific level is 31% for DSc and 37% for PhD" [2] . In 2023, "as a result of the conditions created for women, women make up 34% of those approved at the scientific degree of Doctor of Philosophy (PhD) and 30% of those approved at the scientific degree of Doctor of Science (DSc)" [2].

It serves to further increase the desire and purpose of women and girls to study and engage in scientific activities. Another important situation is the adoption of the law "On science and scientific activity", the rapid development of reforms in the field of science and scientific activity, the practical results achieved in the development of the system of training of scientific personnel, the women of our country is another reason for wider involvement in the field of science.

RESULTS AND DISCUSSIONS

Women face difficulties in working in some (technical, technological, engineering) scientific fields than men. There are more men than women in exact and technical sciences. It is wrong to think that it is related to the ability of women, it is related to cultural tradition and family, social environment. It is necessary to support women working in the field of STEM - (Science, Technology, Engineering, Mathematics), who define role models for women in order to avoid stereotypes.

1,634 women were involved in the research on the activities of women in the development of science and the process of socialization in Uzbekistan, and their opinions were studied through a questionnaire.

In the family where you were born and raised, how much attention was paid to women's education (becoming scholars)? to the question, 75.2% of the participants noted that the education of women (becoming a scholar) was constantly supported in the family where they were born and raised, while 17.7% supported it in most

cases -powered, 4.6% reported less support. Support and attention from family members is important for women and girls to be educated.

We come to the conclusion that, due to the support of women and girls by family members, it helps them to achieve scientific achievements and conduct scientific activities. "Who helped you achieve scientific achievements and conduct scientific activities?" 24% of the respondents answered my mother, 21% my father, 16.9% my teacher, 15.6% my spouse, 9% my family, 4.8% my colleagues, 3.3% my friends. , 3% answered like bosses at work.

Based on the analysis of the activities of women in the development of science in our country, it is necessary to highlight the following points:

attracting women to science, expanding opportunities for women, strengthening their role in the life of society and the state, and achieving sustainable development;

disclosure of social aspects of women's activities in the development of science and sociological research;

increase the effectiveness of women's activities in the development of science;

to provide women with opportunities for gender equality, to support them in socio-political, economic-legal and scientific activities, to develop indicators of their social activation;

According to scientists V. Fomin, I. Gladkova, it is not for nothing that the emphasis is placed on girls in this regard, because research shows that it is among them who express a desire to continue their work in the fields they have studied directly the number of girls is much higher than that of boys [3]. Women have an important place in society, women working in the field of science are working in lower positions in the family and professional activities, traditional and modern approaches to the role of women in science are developing. According to R. Feldman, women have historically been excluded from scientific research due to limited access to education, resources, and support. Consequently, they are under-represented in prestigious academic awards and high academic positions [4]. Researchers examine the potential impact of gender bias on the objectivity of scientific research and the types of inquiry conducted in scientific fields. Ethical issues are very important when discussing women in science. It addresses the ethical implications of exclusion, the ethical need for diversity in science, and the ethical implications of research that may perpetuate gender stereotypes or inequality.

"The L'Oreal-UNESCO Awards for Women in Science is an award for women in science that aims to improve the status of women in science by honoring outstanding researchers who have contributed to science. The award is the result of cooperation between the French cosmetics company L'Oreal and UNESCO, and consists of a grant of 100,000 US dollars for each laureate [5]. These awards support women scientists who have achieved scientific achievements and talented young women researchers in science programs.

"In India, the number of female candidates up to the postgraduate level is the same as that of male candidates, but is lower than the doctoral level. Women continue to be employed in universities and higher education institutions. The Government of India has offered various programs, scholarships and financial grants to the research community to carry out basic and advanced scientific and technological research. It describes the development of the potential of women scientists conducting research on advanced technologies at the Science and Engineering Research Council (SERB), and the participation of women in the development of science [6]. In India, according to statistics, women correspond to 30.45% of the total awarded doctoral dissertations [7]. The average participation of women in research and development in India is 18.6% [8].

"The EU's innovation performance continues to improve steadily, with 10% growth since 2017 and 0.5% growth between 2023 and 2024. According to the European Innovation Scoreboard (EIS) 2024 published today, most EU member states have increased their innovation performance, but the growth varies greatly [9]. Globally, there is a shortage of women researchers in fields such as science, technology, technology and mathematics. For example, only 17% of researchers in the Republic of Korea, 9% in engineering are women" [10].

Also, compared to men, women face difficulties in working in some (technical, technological, engineering) scientific fields. There are more men than women in exact and technical sciences. It is wrong to think that it is related to the ability of women, it is related to cultural tradition and family, social environment. To get rid of stereotypes, it is necessary to illuminate the lives of women who are working and achieving success in the

field of STEM - (Science, Technology, Engineering, Mathematics), which defines the role models of women through mass media. According to statistics, "the percentage of women in science is as high as Argentina (54.1%), Bulgaria (47.4%), Indonesia (45.8%) and Portugal (43.7%)" [11] dominates the countries.

CONCLUSION

In general, in order for objective changes to occur in women's views on choosing fields of science, it is necessary to undergo certain transformation processes at the level of social consciousness, moods and views in society. In modern conditions, the dynamics of political and social participation of women in society, their activities in acquiring scientific potential, the level of employment in the labor market, and their activities based on value approaches are described according to the theories of historical periods. Development of women's social activity on the basis of a gender approach and a valuable approach to the individual today serves to improve the educational sphere and the spiritual level of young people.

References

1. The website of the National Information Agency of Uzbekistan (UzA) // www.uza.uz/ – The interests of women and girls are under constant protection. 2010 July 12
2. Website of the Higher Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan. <https://oak.uz>
- Decree of the President of the Republic of Uzbekistan No. PF-6108 dated November 6. 2020 "On measures to develop the fields of education and science in the new development period of Uzbekistan" // <https://lex.uz>
3. Фомин В. Н., Гладкова И. А. Гендерные особенности профессионального самоопределения учащейся молодежи // Социально-гуманитарные знания. – 2016. - №8. – С.279.
4. Feldman, R. (2023). Women in science: myth, harsh reality, or advantage. *Frontiers in Human Neuroscience*, 17.
5. <https://ru.wikipedia.org>
6. <http://pubs.acs.org/journal/acsodf>
7. All India Survey on Higher Education (AISHE) Home Page. <https://aishe.gov.in>
8. Research & Development Statistics at a Glance 2022–23. <https://dst.gov.in>
9. <https://ec.europa.eu>
10. <https://www.nobelprize.org/prizes/facts/nobel-prize-facts>
11. <https://ru.unesco.org>