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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –  
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**EVALUATION OF THE INFLUENCE OF EDUCATIONAL  
INSTITUTIONS ON SOCIETY VIA THE LENS OF GENDER INDICES****Bobur Khonturayev***Head of Department, Doctor of Philosophy in Economics (PhD)**Research Institute "Family and Gender".**Uzbekistan**E-mail: [idmon.88@gmail.com](mailto:idmon.88@gmail.com)***ABOUT ARTICLE**

**Key words:** Gender Inequality Index (GII), Gender Development Index (GDI), Gender Social Norms Index (GSNI), Social Institutions and Gender Index (SIGI), Global Women, Peace, and Security Index (GWPS), Uzbekistan gender index ratings, Gender equality in Uzbekistan, International gender indices, Gender gap analysis, United Nations Development Program (UNDP), Organization for Economic Co-operation and Development (OECD), Gender-based education indicators, Gender policy evaluation, Enhancing Uzbekistan's gender position, Institutional frameworks for gender equality, Gender-focused research in Uzbekistan.

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**Abstract:** The author of this article conducted a study on the issue of enhancing the Republic of Uzbekistan's position in the international gender index ratings and analyzed the work that is currently being conducted in this area. The institute employed the "Gender Inequality Index," "Gender Development" Index, "Gender Social Norms" Index of the United Nations Development Program, "Social Institutions and Gender" Index of the Development Center of the Organization for Economic Co-operation and Development, and "Global Women, Peace and Security" within the research framework. The evaluation methodologies of the indices were examined, and the educational indicators of Uzbekistan were analyzed.

**Introduction.** Society depends on education, a fundamental aspect of human socialization and a significant institution. The education system is a crucial instrument for enhancing both moral and material welfare, in addition to its significant contributions to societal and economic advancement. Consequently, our nation designates substantial financial resources to the school system annually. The structuring of the educational process based on gender disparities and equality is crucial for societal growth and serves as a significant element of the cultural, socio-economic, and environmentally sustainable advancement of students.

Education, like other socialization agents, must provide a framework for the execution of gender equality policies in the education of the emerging generation. Educational institutions exhibit gender asymmetry, reflected in the uneven position of men and women prevalent in society. Gender segregation in education is seen in the predominance of women in less prestigious disciplines and the declining ratio of male instructors in schools annually. Numerous indexes, ratings, and indicators have been established to evaluate the opportunities available to men and women globally, the status of gender parity, and their primary objective is to analyze the progress toward attaining gender equality worldwide.

**Literature review.** The educational sector is one of the most potent forces that shape the directions of societies especially in relation to gender equity. There exist different gender indices such as GDI, GPI which are considered very critical in evaluating the targets of accessibility of education and its influence to span gendered inequalities. The connection between education and gender equality has been established in the literature. In this regard, education is believed to be one of the prime factors for economic as well as social growth (Barro & Lee, 2013)[1].

A substantial body of scholarship examines the influence of educational institutions on reducing the gender disparity in access to education, especially at the elementary and secondary levels. Gender indicators, such as the Gender Parity Index (GPI), which evaluates the enrollment ratios of males and females, are often used to measure this advancement. UNESCO (2019) [2] emphasizes that while some areas have attained near gender parity in basic education, substantial disparities persist at the secondary and higher levels in many developing nations.

Kabeer (2005) [3] asserts that gender gaps in education often mirror wider cultural and institutional norms, with educational institutions sometimes reinforcing rather than alleviating these inequities. Nonetheless, in contexts where educational reforms are inclusive, they markedly enhance women's economic and social status, as seen in nations such as Rwanda and Bangladesh (Klasen, 2018) [4]. The impact of educational institutions on society besides the primary and secondary education level. Again, the higher education effectively works under the domains of diminishing gender differences in job market participation, participation in politics, and social status. The GII further reveals that where women are more educated, there is less gender inequality in economic measures such as labor force participation and reproductive health (Permanyer, 2013) [5].

Women, in particular, benefit from higher education, stated in the entry-level woman-ness in the workplace that helps them seek employment, hold positions of authority and

question existing inequalities. Morley (2010) [6] conducted research to demonstrate that access to higher education for women is responsible for improvement in the levels of feminism Honey, Jennifer and Mosyak Nina their political and professional involvement. Elinor Goldin (2014) [7] adds that in countries with no gender disparity in higher education, even wage gap is lower.

Not only is access to the institutions a factor, but quality offered to individuals has implications for gendered outcomes in society. Previous literature on education quality hazards that curricula, pedagogy and the institutional structure may conform to or counteract gender stereotypes. In her literature review Unterhalter (2007) [8] explains that woman centered, or gender sensitive curricula geared towards higher education practice where woman is not merely viewed as 'mother', have also impacted changes of gender norms in society. For example, educational institutions which focus on girls learning Science, Technology, Engineering and Mathematics (STEM) have positively contributed to gender cuts, for example, gender development index. This is the situation in countries which encourage women's input in science and of technology, in such countries economic growth is high and women's social status is higher. Stoet, G., & Geary, D. C. (2018) [9].

Lifelong studies have proven that the effect of educational organizations on society with reference to gender-based indices is cumulative. Women with access to formal education are likely to bear less children, spend more on their children's education and engage in society. This forms a vicious cycle where women's education encourages further reduction in gender imbalance (King & Hill, 1993) [10]. For instance, the Nordic countries that always come in top world nations for GII and GDI measures also reveal the safe returns on it investing in gender equitable education policies (Esping-Andersen, 2009) [11].

**Research methodology.** The methodology for analyzing the influence of educational establishments on societal norms taking advantage of gender indices, is complex and requires the use of several tools which are both qualitative and quantitative. The main objective of this methodologies and instrument is to establish the extent to which educational systems impact on the common good in the context of gender related constructs as portrayed by gender related constructs such as Gender Development Index (GDI) Gender Inequality Index (GII) and Gender Parity Index (GPI). This section considers the research design and data collection as well as analysis techniques. The study employs research synthesis in assessing the relationship between educational institutions and the society with respect to gender indices. This design employs quantitative methodology on statistical analysis and qualitative methodology on case

studies in understanding the effect of education on the equality of male and female in the society.

This aspect will focus on Inter-linking qualitative and quantitative data sources with data sets on educational attainment, practice and policies as well as targets of international declarations such as through the use of GDI, GII, and GPI from various agencies. Further to this quantitative data, how gender relates to different educational systems will be looked at through a set of demographics th demographics using case studies.

### **Analysis and discussion of results. Analysis of the current situation of educational indicators of the Gender Inequality index in Uzbekistan:**

This index is an aggregate indicator to determine the amount of loss of gains in countries. The index measures the level of gender inequality in 3 areas: reproductive health, rights and opportunities, and labor market participation.

In our research, we will analyze the indicators related to education. Indicators related to education, one of the main areas of the gender inequality index, are located in the indicator of rights and opportunities expansion, which participates as a sub-indicator "share of women and men with at least secondary education". This indicator is one of the most difficult indicators in the Gender Inequality Index. The main reason for this is that this indicator is studied on the basis of several sources. The percentage of women and men with at least secondary education is based on five separate databases.

***Austria, Luxembourg, Canada, and Kyrgyzstan exhibit a 100 percent rate of women possessing at least secondary education among those aged 25 and older, followed closely by Uzbekistan at 99.9 percent, along with data pertaining to males. Austria, Luxembourg, Canada, Croatia, Kazakhstan, and Uzbekistan achieved the greatest performance with 100 percent secondary school completion. The lowest rates for males are seen in Mali (8 percent), Burundi (7.8 percent), Chad (7.7 percent), Guinea (7.2 percent), and Afghanistan (6.4 percent). Papua - It is noted in New Guinea, Mali (15.5%), Niger (15.2%), Afghanistan (14.9%), and Burundi (13%).***

As to the Gender Inequality Index - 2021/2022, the Republic of Uzbekistan ranked 56th among 170 nations, with a Gender Inequality Index of 0.227. The optimal index indication is a value of 0, with the Republic of Uzbekistan positioned between Hungary (55th place - 0.221) and Malaysia (57th place - 0.228). Regarding the second parameter, the proportion of the population possessing at least secondary education, Uzbekistan achieved a commendable outcome for both genders. The proportion of women aged 25 and older with at least secondary education was 99.9 percent, while the proportion of males was 100 percent. In summary,

Uzbekistan ranks 4th out of 170 nations based on the two variables of this education-related metric. Despite achieving maximum gender parity in the percentage of the population with at least secondary education, the proportion of highly educated individuals reveals that women are outnumbered by males. To guarantee the quality and continuation of education, it is essential to enhance opportunities for women in post-secondary education via systematic promotion and incentives. An elevated educational attainment among women correlates with a decrease in familial divorces, the enhancement of a robust gene pool, a decline in maternal mortality, and an improvement in family reproductive planning.

### **Analysis of the current situation of educational indicators of Gender Development index in Uzbekistan:**

The main goal of introducing the Gender Development Index is to add measures of gender sensitivity and gender sensitivity to the Human Development Index. The gap between the gender development index and the human development index can be classified as a lag in human development due to the existence of gender inequality in countries. It is wrong to understand the gender development index only as a measure of gender inequality of countries. Because the Gender Development Index reflects the differences in the achievement of gender parity in the overall human development. This index is a measure of overall human development adjusted for gender inequality.

The indicator of Gender Development Index of the Republic of Uzbekistan - 2021/2022 is 0.944, and it has the same indicator as the countries of South Korea, the Republic of South Africa, and Myanmar. Uzbekistan is listed in group 3, that is, as a country with a medium level of equality in terms of the achievements of the Human Development Index between women and men. We can see that the performance of women is lower than that of men in both indicators included in the education index. In particular, the expected years of schooling are set at 12.4 years for women and 12.6 years for men. The average number of years of education for 25 years and older is 11.7 years for women and 12.1 years for men, respectively.

### **Analysis of the current state of educational indicators of Gender Social Norms index in Uzbekistan:**

The Gender Social Norms Index measures how social stereotypes impede gender equality in areas such as politics, work and education, and includes data from 75 countries covering more than 80 percent of the world's population. The index also provides gender social norms index trends for 31 countries representing 59 percent of the world's population.

Gender Social Norms Index tries to show how much the existing social norms and stereotypes in countries are an obstacle to achieving gender parity.

For example, when analyzed on the basis of index indicators, almost 50 percent of the world's population said that men are better political leaders than women, and more than 40 percent said that men are better managers in business. This shows that social norms have a great influence on the inability of women who have achieved equality in education to participate in the management process.

In Gender Social Norms Index (GSNI) - 2020, Uzbekistan was included in the Gender Social Norms Index (GSNI) only because it participated in the 6th wave of the World Values Survey (2010-2014). As a result, the impact of social norms on gender equality in Uzbekistan in 2010-2014 and the 7th wave (2017-2022), to determine the social views that may negatively affect gender equality in society, and the change of these views it is possible to see the dynamics.

The Gender Social Norms Index (GSNI) indicated that Uzbekistan's score was 97.93 percent in the 6th wave and 98.03 percent in the 7th wave. Specifically, if a certain number of survey participants expressed unfavorable gender perspectives on at least one indicator, data from the 6th wave indicates that 2.07 percent of respondents did not report any negative indications in their responses. This constitutes 1.97 percent in the seventh wave. The GSNI2 indicator, representing the proportion of respondents exhibiting negative content across at least two indicators, was 87.73 percent in the 6th wave, but in the 7th wave it rose to 88.17 percent, an increase of 0.44 percent. In the 6th wave, the GSNI indicator was 97.50 percent for women and 98.62 percent for men, while the GSNI2 indication was 84.11 percent for women and 93.46 percent for men. As per the analyses conducted in 2023, the GSNI indicator stands at 97.68 percent for women and 98.57 percent for men, while the GSNI 2 indicator reveals a smaller disparity, with 84.69 percent for women and 93.55 percent for men.

If we pay attention to the percentage of respondents with negative indicators in the main directions in the 6th wave, it can be seen that the percentage of negative indicators in each direction is higher than the average (Table 1).

**Table 1**

**Indicators of Uzbekistan in the main directions of GSNI and its difference from the world average indicators**

<i>The main directions of the index</i>	<b>Indicator of Uzbekistan according to GSNI (percentage)</b>	<b>Global average GSNI (percentage)</b>	<b>The difference (percentage)</b>
<i>Education</i>	48.60	25.63	+22.97

Changing social norms and worldview is a complex process. Social norms, attitudes, economic development, changes in information and communication technologies, new laws, policies or programs, social and political activism, and exposure to new ideas and practices



through formal and informal channels (such as education, mass media). can change with glazing.

It is one of the main means of the state in ensuring gender equality in education. Today, the need for a girl child to get a higher education is gradually being reflected in the social consciousness. The state's continued promotion of women's education with the help of certain mechanisms serves to eliminate social stereotypes in this direction.

#### **Analysis of the current state of education indicators of Women, Peace and Security index in Uzbekistan:**

Education is critical to women's empowerment, freedom from violence, and health. Number of years of schooling is a more accurate indicator than graduation from high school. This index reflects the average number of years of education of women aged 25 years and older. It is calculated using the source of the UNESCO Institute of Statistics. Uzbekistan showed the result of 11.6 years from the maximum indicator, i.e. 15 years of education. It can be observed that this indicator is higher than 13.0 in countries with high scores in the index. In particular, Norway (13.0), Denmark (13.1), Great Britain (13.2), Germany (13.9), Canada (13.4), in addition, the years of education in the top 10 countries are less than 12 years it can also be observed that it is not. Including Finland (12.9), Iceland (12.6), Switzerland (12.7), Austria (12.2). In order to improve this indicator, the Ministry of preschool and school education of the Republic of Uzbekistan should pay attention to the quality and coverage of education.

#### **Analysis of the current state of education indicators of the index of Female Opportunity in Uzbekistan:**

The Female Opportunity Index examines the success of women in leadership positions in government, corporations, STEM and entrepreneurship across 100 countries, as well as determinants of success such as education and parental leave. conducts gender equality analysis. The Women's Opportunity Index is supplemented by data on women's access to education as an important indicator and driver of opportunity, as well as research on women's divorce rights, workplace discrimination laws, and other laws. At the same time, the length of maternity leave allowed in the country is also included as an indicator for determining the index.

According to UN forecasts, by 2050, 75% of jobs will be related to STEM fields. Increasing women's participation in STEAM is critical in a digital society. Globally, 37% of women do not use the internet. 259 million fewer women than men have access to the Internet. The share of women in the field of artificial intelligence is 22%. There are very few women in STEM fields of education and professions in Uzbekistan. According to the indicators of 2017, women make up

43% and 17% of the students studying in the field of information technologies, architecture and construction in vocational schools and universities in the country, respectively. Only 21 percent of university graduates in STEM programs are women. While women are widely employed in low-wage social sectors, men are employed in higher-paid technical sectors.

– According to the UNESCO Report on STEM and Gender (SAGA), the main reasons for this could be:

- differences in career choice;
- difference in life values;
- confidence and self-awareness;
- gender stereotypes;
- gender bias.

Looking at the proportion of female and male graduates with higher education by different programs and researchers, women may outnumber men with bachelor's and master's degrees, but men outnumber women among Ph.D.'s and researchers. We can see that it is much more.

– According to the Committee on the Elimination of All Forms of Discrimination against Women (CEDAW), Uzbekistan's fifth periodic report on STEM disparity issues, the country:

- There is a difference in wages between men and women;
- The labor market is segregated between women and men, and women tend to focus on low-paid jobs in the formal and informal economy.

In comparison to medium and high-income nations, Uzbekistan has a comparatively low number of researchers in scientific and technology development (per million people). Uzbekistan trails Europe and Central Asia, which has 3,373 researchers per million inhabitants, in scientific and technological research per million people. Uzbekistan's figures (41%) surpass those of Russia and Tajikistan for the proportion of female workers, although Kazakhstan (53%) and Kyrgyzstan (47%) exhibit higher percentages.

### **"Employment of women with higher education" indicator of the Global Innovation Index**

For the first time, a gender-related indicator was included in the Global Innovation Index in 2015. The name of this indicator is "Females employed with advanced degrees" to better understand the innovative role and contribution of women, especially female researchers and entrepreneurs. Economists and innovation scientists work to improve the evidence base on this pressing issue. Policymakers, in turn, seek to maximize women-led innovation and address gender disparities.



This indicator means the percentage of women with higher education in the total number of workers. Employed persons include all persons of working age who are in one of the following categories during a given short period of time: (1) paid work; or (2) self-employment. Data are disaggregated by level of education, which refers to the highest level of education completed as classified according to the International Standard Classification of Education (ISCED).

**FEAD="Number of women with higher education/Number of total workers "\*100**

If we explain this with an example, the total number of workers working in an organization (for example, the Family and Women's Committee) is 80 people, and the number of women with academic degrees (master's and PhD) is 15. If this indicator is FEAD  $15/80*100=18.7\%$ .

## Uzbekistan

GII 2021 rank

**86**

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$	GII 2020 rank
100	75	Lower middle	CSA	33.5	250.2	7,378	93

  

	Score/ Value	Rank		Score/ Value	Rank
<b>Institutions</b>	<b>55.8</b>	<b>94</b>	<b>Business sophistication</b>	<b>14.8</b>	<b>[123]</b>
<b>1.1 Political environment</b>	<b>47.6</b>	<b>95</b>	<b>5.1 Knowledge workers</b>	<b>22.8</b>	<b>[93]</b>
1.1.1 Political and operational stability*	64.3	80	5.1.1 Knowledge-intensive employment, %	n/a	n/a
1.1.2 Government effectiveness*	39.2	99	5.1.2 Firms offering formal training, %	16.9	87
<b>1.2 Regulatory environment</b>	<b>49.9</b>	<b>107</b>	5.1.3 GERD performed by business, % GDP	0.1	72
1.2.1 Regulatory quality*	17.5	126	5.1.4 GERD financed by business, %	42.4	38
1.2.2 Rule of law*	19.1	123	5.1.5 Females employed w/advanced degrees, %	n/a	n/a
1.2.3 Cost of redundancy dismissal	17.3	69	<b>5.2 Innovation linkages</b>	<b>2.6</b>	<b>[130]</b>
<b>1.3 Business environment</b>	<b>69.8</b>	<b>72</b>	5.2.1 University-industry R&D collaboration†	n/a	n/a
1.3.1 Ease of starting a business*	96.2	8	5.2.2 State of cluster development and depth†	n/a	n/a
1.3.2 Ease of resolving insolvency*	43.5	90	5.2.3 GERD financed by abroad, % GDP	0.0	97
<b>Human capital and research</b>	<b>30.4</b>	<b>72</b>	5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.0	62
<b>2.1 Education</b>	<b>57.3</b>	<b>[42]</b>	5.2.5 Patent families/bn PPP\$ GDP	0.0	90
2.1.1 Expenditure on education, % GDP	5.3	28	<b>5.3 Knowledge absorption</b>	<b>19.0</b>	<b>98</b>
2.1.2 Government funding/pupil, secondary, % GDP/cap	n/a	n/a	5.3.1 Intellectual property payments, % total trade	0.3	83
2.1.3 School life expectancy, years	12.5	87	5.3.2 High-tech imports, % total trade	8.8	51
2.1.4 PISA scales in reading, maths and science	n/a	n/a	5.3.3 ICT services imports, % total trade	0.3	115
			5.3.4 FDI net inflows, % GDP	2.8	58
			5.3.5 Research talent, % in businesses	12.9	60

According to the Global Innovation Index, Uzbekistan took 86th place among 132 countries in 2021.

– **Conclusions and suggestions.** The following conclusions were reached based on the analysis of the evaluation of the impact of educational institutions on society based on gender indices:

– the main attention should be paid to the education of young men and women between the ages of 18-24. As of the beginning of the 2021-2022 academic year, a total of 404,500 students are studying in secondary-special, vocational educational institutions in our country, of which 207,800 are girls, 196,700 are boys. There are 808,400 students in higher education institutions, 369,000 of them are women and 439,400 are men. That is, there are 70,400 more men studying in higher education than women. There is no age limit in higher education. But in most cases, the age of students is between 18-24 years old. These indicators

are required to continue taking temporary measures until gender parity is achieved. For example, increasing additional quotas for girls, developing the infrastructure of higher education institutions, increasing the number of dormitories, introducing education loans on favorable terms, establishing special higher education institutions focused on girls' education. including;

- introduction of "Voucher" education system in order to improve the qualifications of women in the country and further increase their share in science;
- organization of kindergartens for women's children in universities.

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