

Breaking the Glass Ceiling: Empowering Women from Margins to Mainstreams

Swapna Siddamsetti (swapnangit2021@gmail.com), Corresponding Author & Research scholar,
Department of Computer Science GITAM Institute of Sciences, GITAM University, Visakhapatnam;
& Assistant Professor, Neil Gogte Institute of Technology, Hyderabad, India

Karanam Deepthi (karanamdeepthi59@gmail.com)
Student, Neil Gogte Institute of Technology, Hyderabad, India



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Abstract: *This paper explores women's empowerment, focusing on its dimensions: economic, educational, social, political, and psychological. The objective is to investigate the correlation between female literacy rates and women's political engagement using rigorous analysis. It defines women's empowerment as a dynamic process that enables women to exercise agency, access vital resources, and exert influence over their lives. It highlights the significance of economic, educational, social, political, and psychological aspects in this process. To examine the correlation between female literacy rates and political engagement, the paper employs thorough analysis. The findings reveal a positive relationship: higher literacy rates correspond to increased political participation, underscoring the pivotal role of education in empowering women. Furthermore, the paper underscores the importance of educational empowerment in achieving overall empowerment. It advocates for comprehensive education and training to equip women with the knowledge and skills necessary for informed decision-making, active economic participation, and meaningful contributions to society. In conclusion, this research explores the dimensions of women's empowerment and establishes a positive correlation between female literacy rates and political engagement. It emphasizes the crucial role of education and highlights the on-going need to prioritize educational opportunities for women.*

Keywords: Co-Relation, Gender Equality, Societal Aspects, Woman Empowerment, Women's Rights

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Introduction

The term "breaking the glass ceiling" refers to the difficulty that women face in advancing their careers, particularly in male-dominated fields. The glass ceiling is an imperceptible barrier that keeps women from reaching the top of their professions, regardless of their qualifications or abilities. Scholars and researchers have studied this phenomenon extensively, and there is a growing body of literature that explores the various factors that contribute to the glass ceiling and the strategies that can be used to break it.

Women's empowerment from the margins to the mainstream is the crux of the matter that must be addressed in today's society. Women from marginalized groups, such as women of colour, LGBTQ+ women, disabled women, and low-income women, face even greater obstacles in breaking through the glass ceiling. [9]

In terms of authority and choices Despite advances in boosting the women percentage in leadership positions, there remains a considerable gender disparity in management jobs, with women occupying just 28% of such positions globally in 2019—a statistic that has remained constant since 1995. Additionally, in 2020, just 18% of enterprises had female CEOs, but only 7.4% of Top 500 corporations were led by women. While the share of women in legislature has climbed fourfold internationally, it will not reach 25% until 2020. The number of female cabinet ministers has more than quadrupled in the previous 25 years, but at 22%, it remains substantially below parity. [7]

TIME PERIOD	REF AREA	REF AREA Desc	SEX	OBS VALUE
2010-2020	356	India	F	8.9

Table 1: The table shows the observation value of gender inequality

Despite significant progress in recent years, gender inequality continues to be a prevalent problem in many industries and workplaces. Women are still underrepresented in leadership roles, and they receive less payment when compared to men for doing the same work. This inequality not only affects women, but it also has repercussions because it limits the potential for innovation, growth, and progress.

The need to move women from the margins to the mainstream has never been greater. It is a matter of not only social justice but also of economic and political stability. Women can contribute to the economy, drive innovation, and create positive social change when they are empowered and given the opportunity to reach their full potential. [1][3]

For women, having control over their own resources, such as property or income from a job or government assistance, puts them on an even playing field with men in their intimate relationships, improves their negotiating position within families, and gives them the option to leave relationships if they so choose. A sufficient level of living for older women relies on individuals having their own financial stability.

This research will look at the various factors that contribute to the glass ceiling and strategies for breaking it. It will concentrate on empowering women from undeserved communities and investigating the unique challenges they face in breaking through the glass ceiling. The research will also examine and evaluate the measures and campaigns that have been incorporated to encourage gender parity at work in order to empower women. [10]

The research will be carried out through a thorough review of existing literature, which will include academic articles, books, and reports from international organizations. Case studies and interviews with women from marginalized communities who have successfully broken through the glass ceiling will also be included in the paper.

Overall, the purpose of this research paper is to contribute to the ongoing discussion regarding women's empowerment. The purpose of this study's conclusions is to inform policymakers, employers, and other stakeholders about how crucial it is to advance gender equality and give women from all backgrounds more influence. We can create a more equitable and just society for all by breaking the glass ceiling and empowering women from the margins to the mainstream.

Literature Review

Women' Empowerment: Women's emancipation efforts attempt to raise gender equality awareness, allowing women to fulfil their full potential, seek independence, and contribute to progress. According to numerous sources, women can enhance their autonomy, strength, and courage through these measures.

The level of empowerment of women within the national power hierarchy is primarily controlled by three considerations: their economical, societal, and social identities, each with its own weight. These components are inextricably linked and interdependent, and any absence or weakness in one can impede progress in the others, making it difficult to maintain momentum in women's empowerment activities. To attain true empowerment, all three parts must be handled and linked with one another, ensuring that the sociological, economic, and legal variables impacting women's lives successfully intersect. This method is critical for women's full and holistic empowerment. [3]

The Dimensions Relating to Women's Empowerment: To improve country's socioeconomic development, the United Nations Development Program originally created the index of human growth in 1990.

The 1995 study placed a strong emphasis on the necessity of empowering women for the advancement of humanity as a whole. The Gender Development Index (GDI), which considers the achievement prevailing between men and women, and the Gender Empowerment Measure (GEM), which measures the degree to which women have influence over all the domains which were both introduced to study the statistics relating to human advancement and the share of women. [10]

Economic Empowerment: The accomplishment of women's rights and gender balance depends on women's economic empowerment. The ability of women to manage their own time means of survival, and health, in addition to their greater participation, influence, and current position in taking rational decision at all stages, from the home to global bodies, can all lead to increased economic empowerment for women. Women may gain greater economic autonomy in a variety of ways, including by being better able to control their personal time, activities, and health.

The attainment of rights for women and gender parity depends on the development of women in economic domain. The potential of women to manage their own time, careers, and health, in addition to their increased presence, influence, and current role in taking rational decisions in all aspects, from the home to international

organizations, are just a few ways in which they may grow more economically empowered. Women may gain greater economic autonomy in a variety of ways, including by being better able to control their own time, activities, and bodies. [3][7]

The economic development is directly proportional to the work they do. The economic empowerment of women improves productivity, broadens the economy, by promoting income equality and it involves in other positive development outcomes. [1] It should be noted, nevertheless, that progress does not always equate to a decline in gender-based inequality. For example, raising female employment rates in OECD nations to Sweden's level may boost GDP by USD 6 trillion [11]. Yet, it is estimated that the cost of disparities in gender in economy is about 15% of GDP. [11]

Educational Empowerment: The idea of women's empowerment was first promoted during the international women's conference, 1985. Education was regarded as a key component in empowering women to confront challenges, question established gender roles, and make good changes in their lives.

Education is closely tied to the economic empowerment of women, yet historically many women—particularly those who are living in rural areas—have been denied permission to school because of social duties and conventions. Women need education to prosper in a variety of areas, including the social, intellectual, commercial, and family spheres. Women must have access to many types of education, including taking classes, receiving training in capacity-building and skill-development, and receiving mentoring on crucial issues related to women's economic empowerment (WEE). It is crucial to remember that depriving women and girls of justice and equal chances not only hurts them personally but also has a bad influence on society overall.[5][14]

Social Empowerment: The process of obtaining the independence, authority, and self-assurance, as well as other crucial skills, allows them to affect change and build a better future. This process is known as social empowerment. Both the individual and communal levels of this process are involved. Acquiring the inner and external resources required making self-decisions, such as choosing one's living situation and diet, and exercising control over one's surroundings and way of life, can be a part of social empowerment on an individual level. [1]

At the collective level, social empowerment entails the creation of communities, organizations, and groups that may cooperate to address shared issues and bring about change. Building social networks, acquiring leadership abilities, and encouraging social cohesiveness and solidarity are some examples of how to do this. [5]

The Actions Taken in the Social Domain toward Empowerment:

1. Efforts are being put forth to guarantee that all the women and girls receive education, promote equality, cognize education, establish a gender-sensitive system of education, enhance the enrolment and retention rates of girls, and improve the educational experience in order to support women's development of occupational, career, and technological skills as well as lifelong learning.
2. The requirements of women and girls at all phases of the life cycle are being given special consideration as a component of an integrated approach to women's health that incorporates both nutrition and healthcare services.[5]
3. Eliminating physical and psychological abuse of women, whether it occurs in the home or in society as a whole, as well as abuse that results from recognized norms, traditions, or practices, has been given top importance.

Political Empowerment: The notion of power in terms of distribution is embraced by a mainstream view of political empowerment (the transfer of power to those who do not have it). In light of this idea, political empowerment must involve granting members of underprivileged population's access to various political offices, including positions in the government. The research on political empowerment makes an effort to evaluate how minorities' general well-being is affected by having access to political positions. Many relationships between the "haves" and the "have-nots" are changing, according to one interpretation of political empowerment. [9][13]

Psychological Empowerment: Reverse psychology might be quite important in this situation in order to mentally empower women. This indicates that if we start educating women about their potential, they will gradually begin to believe in themselves, which will increase their confidence. [1]

At the same time, if appropriate measures are taken to guarantee that women participate in programs, conversations, and sessions that focus on how they (women) form the foundation of any society, this might result in a rise in self-esteem and self-worth.

Moreover, self-help groups (SHGs) may be crucial in assisting women in overcoming their weaknesses and anxieties. It's interesting to note that these groups are seen as the best method for changing society.

It is important to remember that women who are mentally empowered naturally become powerful in other areas as well. This is due to the fact that when women begin to believe, they become aware of who they are, what is undesirable about their circumstances, and how they could be in a better one, as well as what is within their reach and what they could do to improve themselves, which happens when they are mentally sound. [8]

So, psychologically empowering women might act as a key to a world of opportunity. We should focus on this since women can only think, make decisions and work for themselves if their minds and brains are fully enlightened.

Proposed Methodology

Step 1: By using correlation analysis, we are drawing a significant connection between the level of female literacy and women's political participation and stating how they are related.

Step 2: Using a hypothesis test [T-test], determine the significance of the co-relation coefficient.

Step 3: To conclude, women's political participation tends to increase with female literacy.

Research Methods

STEP 1:

A statistical technique for assessing the strength of a relationship between two variables is correlation analysis. It is a method that enables you to establish whether a relationship exists between two variables and, if so, what kind of relationship it is.[2]

It is possible to tell if two variables are favourably, negatively, or unfavourably correlated using correlation analysis. A positive correlation between two variables indicates that if one increases, the other will follow. Two variables that are negatively connected show an increase in one and a decline in the other. If there is an uncorrelated connection, then there is no relationship between the two variables.

Next, we need to collect data on female literacy and illiteracy in different parts of the world. Using UNESCO statistics, we examine the correlation between the global distributions of female literacy rates. We have collected data from five consecutive years (i.e., 2017, 2018, 2019, 2020, and 2021)

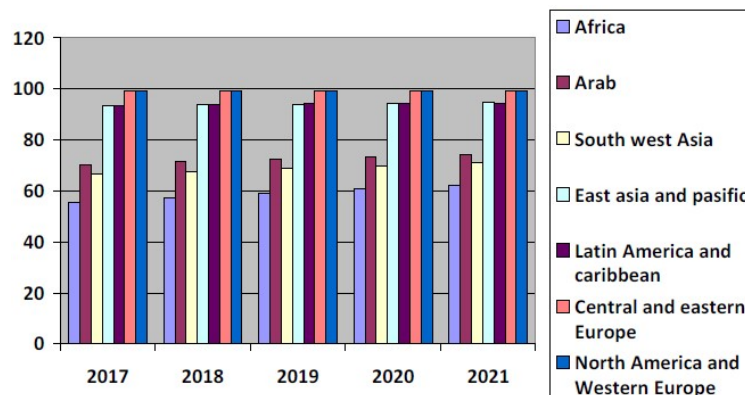


Figure 1: Literacy rate of women around the world

Region	2017	2018	2019	2020	2021
Sub-Saharan Africa	55.6	57.3	59.0	60.7	62.3
Arab states	70.3	71.4	72.4	73.4	74.4
South and west Asia	66.6	67.7	68.8	70.0	71.1
East Asia and the pacific	93.4	93.7	94.0	94.3	94.6
Latin America and the Caribbean	93.5	93.7	94.1	94.2	94.4
Central and Eastern Europe	99.0	99.1	99.2	99.3	99.4
North America and Western Europe	99.0	99.1	99.2	99.3	99.4

Table 2: Literacy rates of women all around the world from the years 2017-2021

From the above Table 2, we have taken the mean of all the regions for that particular year. The mean is calculated by the below-given formula.

MEAN = SUM OF OBSERVATIONS/NUMBER OF OBSERVATIONS

YEAR	FEMALE LITERACY RATE
2017	82.48%
2018	83.14%
2019	83.81%
2020	84.45%
2021	85.08%

Table 3: Mean literacy rate of women for the 5 consecutive years

Similarly, we have taken UNESCO data for women who participated in political fields and the mean of all the years were calculated and the data is depicted in Table 3.

YEAR	WOMEN'S POLITICAL PARTICIPATION
2017	23.3%
2018	24.3%
2019	25.3%
2020	26.2%
2021	27.1%

Table 4: Mean political participation of women for the 5 consecutive years

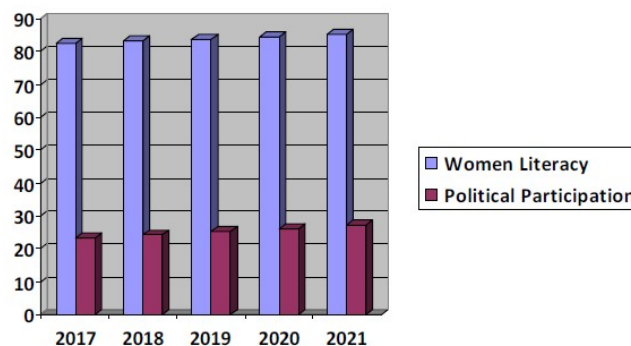


Figure 2: Mean political participation of women for the 5 consecutive years

To conduct correlation research, we can figure out the correlation coefficient between these two variables. The correlation coefficient lies between -1 to 1 '-1' denotes perfect negative co-relation

'1' denotes perfect positive co-relation [4]

'0' denotes no co-relation [4]

We now calculate the correlation coefficient between the female literacy rate and women's political participation for the past 5 years.

CORRELATION COEFFICIENT BETWEEN 2 SIMULTANEOUS VARIABLES 'X' AND 'Y'

$$r_{xy} = \frac{n \sum x_i y_i - \sum x_i \sum y_i}{\sqrt{\{n \sum x_i^2 - (\sum x_i)^2\} * \{n \sum y_i^2 - (\sum y_i)^2\}}} \text{---[formula-1] [4]}$$

Where

'n' is for the number of (x, y) pairings that make up the data set, or data points. At each point in the data collection, $x_i y_i$ is the product of the x-value and y-value added together.

The x-values in the data are expressed as x_i

The total y-values in the data set is y_i

The squared sum of the all the x-values in the data present is equal to x_i^2 .

y_i^2 is equal to the sum of the squares of the data set's y-values.[4]

Here, 'X' will be the female literacy rate data of the past five years, 'Y' will be the female political participation data of the past five years, and N will be

6

$\sum X_i$	$\sum Y_i$	$\sum X_i Y_i$	$\sum X_i^2$	$\sum Y_i^2$
82.5	23.3	1922.25	6806.25	542.89
83.2	24.3	2021.76	6922.24	590.49
83.8	25.3	2120.14	7022.44	640.09
84.5	26.2	2213.90	7140.25	686.44
85.1	27.1	2306.21	7242.01	734.41
$\sum X_i=419.1$	$\sum Y_i=126.2$	$\sum X_i Y_i=10584.26$	$\sum X_i^2=35133.19$	$\sum Y_i^2=3194.32$

Table 5: The table depicts the calculated values for the formula

If we substitute the Table 5 values in the Formula-[1] we get the co-relation coefficient to be 0.99~=1

STEP 2: TEST THE SIGNIFICANCE USING T-test

1. DEFINING NULL HYPOTHESIS

We define null hypothesis to state that there is no relating relationship between women's political participation and female literacy rates.

2. DEFINING ALTERNATIVE HYPOTHESIS

We assume that the two parameters, female literacy rate and female political participation, are highly correlated.

3. T-TEST FORMULA FOR STATISTICAL MEASURE

$$t = r * \sqrt{(n-2) / \sqrt{(1-r^2)}} \quad [6]$$

r = the co-relation coefficient

n = the sample size

We know the sample size in this case is 5.

We may compare the estimated t-value to the crucial t-value from a table with all the three degrees of freedom using a significance threshold of 0.05 (because $n-2 = 3$).

When we substitute the correlation coefficient, we got from steps 1 and n into the t statistical formula, we get a t-value and a crucial t-value where degree 3 is found to be 3.182[6].

If the computed value is larger than the critical t-value, we can reject the null hypothesis and conclude that there is a substantial relationship between the female literacy rate and women's political activity.

We may draw the conclusion that there is a strong positive relationship between women's political engagement and the female literacy rate. This indicates that women's political engagement tends to rise along with the rate of female literacy.

Conclusion

The goal of this study is to determine whether two dimensions are connected to one another and how one dimension affects the other. All dimensions were found to have an impact on empowerment at the same time, but partial testing in the political and educational spheres revealed a positive and significant impact on women's development in those areas. We can also see from recent years that women actively participate in all of the spheres. The research's analytical methods and implications demonstrate the swift development of all areas of women's empowerment.

Future Scope

1. Future research may employ experimental or quasi-experimental techniques to investigate if expanding educational possibilities for women increases their likelihood of participating in politics.
2. Examining how culture and cultural norms have a role. The link between education and political engagement is the main topic of your study, but it may also be influenced by other cultural or societal elements. Future studies should look at how gender stereotypes and conventional gender roles, for example, affect women's engagement in politics and the educational system.
3. The link between education and political engagement may be different in various circumstances, even if your study may have been focused on a particular country or region. Future research might look at this relationship in other nations or areas to learn more about how it differs in other settings.

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