Examining the Growing Presence of Women in the Occupational Landscape: An Analysis of the Gig Economy

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Abstract

This research delves into the recent trends of women's involvement in freelancing activities, specifically focusing on the discernible increase in participation within the education sector as compared to other industries in India. The study systematically explores impediments and influential factors affecting women's engagement, with a particular emphasis on higher-level involvement. Obstacles faced by women include limited access to suitable and flexible opportunities, wage disparities, skill deficiencies, educational variations among different social groups, and a lack of social security. The study introduces and elucidates the concept of freelancing and its prospects for Indian women, particularly within the education domain. Employing both secondary data analysis and an offline survey, the research provides a comprehensive understanding of the subject matter. The project's findings indicate that freelancing has the potential to significantly impact women's participation in education and contribute to the expansion of India's gig economy. However, common constraints such as a lack of job awareness and basic skills persist. Given the current dearth of research on freelancing in India, its potential, and its activity, this paper aims to address existing gaps and propose solutions for the advancement of India's Gig economy. The proposed system utilizes Recurrent Neural Network (RNN), implemented through MATLAB software, enhancing the depth and analytical capabilities of the paper.

Keywords: Gig economy, higher secondary education, Adjunct faculty. Recurrent Neural Network

Statement and Declaration: This is notify that research paper is pure novel work where primary data has been collected through questionnaire. Research gap was identified that there is shift of faculty towards freelancing and this paper captures their reasons for the shift.

1. Introduction

The teaching profession, long perceived as inclusive, carries a misconception that women can ascend the career ladder, attaining senior positions not only within education but in other professions as well. Contrary to this notion, there is a discernible pattern of discrimination against women in education, with further education showing signs of an escalating, rather than diminishing, trend. The employment of women in education exhibits an inverse relationship with academic status and allocated resources across different educational levels. This trend is notable as the proportion of women declines from primary to secondary and further decreases as one ascends the hierarchy and salary scales within each sector.
Unequal treatment statistics reveal significant disparities, albeit insufficient compared to those highlighting social class disadvantage. Discrimination is evident across elementary, secondary, and post-secondary education, with a pronounced concentration of women in sectors characterized by lower status and resources. Although there have been minor shifts, such as a slight increase in female representation in post-school sectors, colleges have experienced a decrease. Overall, substantial variations persist in the distribution of men and women in higher education.

A noteworthy phenomenon is the increasing participation of educated professional women in India joining global freelancing platforms, contributing to the burgeoning gig economy in the country. In 2015, India ranked second globally with 15 million gig workers, showcasing its popularity for promoting efficiency, innovation, and competitive advantage while minimizing human resource costs. Freelancers in India, particularly women, are drawn to the gig economy due to the flexibility of work hours, autonomy, and the ability to choose projects aligned with their interests and responsibilities. This project focuses on women freelancers, discussing the challenges they face, the opportunities available to them, and the growing trend of gig structures in India embraced by a substantial number of Indian millennials (Verma, 2018).

The prevalence of unstable job opportunities has propelled individuals towards independent contracting or freelancing, offering adaptability inherent to this form of work. Particularly in developed countries, young workers adopt these contractual occupations as a lifestyle choice to avoid the constraints of permanent employment.

The evolving freelancing landscape has provided women with expanded opportunities for flexible work arrangements. The realm of tutoring and education, in particular, is experiencing a surge in online popularity. Whether seeking assistance with homework, improving grades, or enrolling in online courses, individuals can easily find skilled and experienced tutors or instructors in the freelancing sphere. The ability to evaluate freelancers based on trial runs, demonstrated expertise, and promptness offers a dynamic and accessible platform for both clients and freelancers alike.

2. Literature Review

The rise in workplace stress is becoming more pronounced, presenting a significant hurdle for women in the workforce, particularly due to gender-specific challenges like sex discrimination and the struggle to balance work and family obligations. While these issues have received limited research attention until recently, emerging studies indicate that they not only magnify the effects of general workplace pressures, such as excessive workload and underutilization of skills, but also have detrimental effects on individuals' health and well-being. Research underscores the importance of implementing a range of stress reduction methods for working women, encompassing individual stress management strategies and broader interventions targeting occupational stressors. Recognizing the impact of workplace stress on women, it becomes imperative to devise effective mechanisms to counteract its adverse consequences..

The 2011 census brings to light an uneven gender ratio, indicating 943 females for every 1000 males. This disparity underscores widespread gender inequality, which extends beyond religious, caste, community, and state boundaries. The recent surge in attention towards women's empowerment, gender discrimination, and violence against women signifies a growing awareness of issues that were previously overlooked. Despite societal changes exposing women to an unprotected socioeconomic, cultural, and political environment, the absence of a corresponding supportive social framework or institutions for social justice leaves their rights vulnerable. Unfounded suspicions and lingering fears about women's ability to enjoy
equal rights and assume roles similar to men persist, despite the expanding array of opportunities available to women.

There is a noticeable dearth of research investigating the impact of a woman's prolonged absence from home on traditional roles, especially in the context of Bihar and Uttar Pradesh, India. In contrast to Western studies that emphasize persistent domestic stress with women often as the primary victims, insufficient attention has been given to this issue in the Indian setting. The employment of women has been linked to an improvement in the division of labor within households, as indicated by studies in Western countries. Key issues identified in these studies encompass challenges in securing employment, exercising job choices, expressing preferences for job changes, working hours, limited access to medical facilities, social insecurity, desired leave options, fatigue, and insensitive attitudes from employers towards working women. Significant factors affecting the overall happiness of working women include the impact of work on family income, relationships with children, husbands, family members, and the daily work routine.

While current literature extensively explores micro-level aspects like motivations, personality traits, and experiences of both female and male labor forces, it tends to overlook adequately interpreting the fundamental significance and valuable contributions of the female labor force. However, subsequent research aims to address this gap by concentrating on prescriptive thresholds chosen for their relevance and effectiveness in understanding and addressing the subject matter.

A comprehensive understanding of working women replaces speculative assessments with empirical research data. Women engaged in prestigious occupations tend to earn more than their counterparts in less prestigious jobs, and their primary motivation for working is often financial, driven by economic pressures. Many working women serve as the main providers for their families, supporting dependents and sometimes additional relatives. The study recognizes women's multifaceted roles as "women, wives, and mothers." Concerns have been raised about the potential disruption of the traditional division of labor within families due to women's employment, but the study's findings suggest this is unlikely. Cooking remains predominantly within the domain of women, maintaining a sort of monopoly. However, working women find themselves engaged in domestic activities that differ significantly from those undertaken by non-working women. Women handle almost all tasks with minimal assistance from men.

Talwar, Usha (1984). Despite years of planned development in India, the status of women, who make up half of the population, remains inadequate. This highlights the waning momentum behind women's rights, originally fueled by the struggle for independence and embedded in the constitution. The benefits of development have disproportionately favored a limited segment of Indian women, largely neglecting the broader majority. The situation of the silent majority, lacking access to a meaningful platform and a voice, has deteriorated. Despite the theoretical acknowledgment of economic, social, and political rights, these rights have not materialized in reality for them. This scenario has a direct and substantial impact on overall national development, emphasizing the pressing need for women to actively advocate for their rights.

Kamladevi Chattopadhyay (1987) Over the concise history of women's studies, diverse methodologies have been employed to comprehensively explore women's issues and formulate solutions. These approaches encompass investigations into the societal perceptions of women across different cultures and historical contexts, considering their biological roles and nature's intended functions for them. They also delve into the examination of women's diminishing power and status relative to men in intricate social evolution. Additionally, a commonly shared emphasis has emerged, advocating for the achievement of gender equality through economic and legal means, treating women as individuals rather than solely attributing them with traditional responsibilities.
Somjee, G (1989) The report highlights another obstacle, pointing out the scarcity of female executives serving as role models due to their limited presence in high management roles. The survival qualities developed by women in executive and managerial positions may render them less susceptible to the effects of traditional male hierarchies, potentially explaining their limited influence. While a management board composed entirely of men may influence the selection process, its subsequent authority is constrained.

Okolo (1989) The author asserts that the societal expectation for women to confine their activities within the home persists, despite ongoing changes in traditional perspectives. The metaphorical "prison wall" is mentioned as still intact. While it is becoming more common to observe women working outside the home, the historical notion that only women from lower social strata engaged in such labor persisted post-Vedic period. Mines emerged in the early twentieth century as avenues for women to secure employment in plantations. The most widely recognized catalyst for change in independent India has been women's socioeconomic liberation. However, women's employment has garnered a varied response from both professionals and the general public. It is acknowledged that societal shifts may provoke more negative sentiments than positive ones, even among social scientists, who have often held a pessimistic view on women's employment. Understanding the recent history of women's work, the structure of Indian society, and the cultural context is crucial in explaining the challenges women face.

Sharma, Anita (1990) Numerous studies have established that factors such as age, marital status, occupation, income, employer-employee relationship, motivation, and social background exert a considerable influence on the employment structure. Researchers have consistently aimed to quantify the significance of these characteristics in their investigations. In India, economists have predominantly focused on examining the causes and consequences of women's empowerment. The dynamics of women's relationships with various professions have been a subject of exploration, distinguishing between those engaged in fully-fledged professions like medicine, law, academia, and those in semi-professions such as nursing, teaching, clerical work, and the like.

Mitra, Jyothi (1997). The report asserts that in India's patriarchal society, women are often confined to the roles of homemakers and perceived primarily as sexual objects, leaving them vulnerable to exploitation and mistreatment. This structurally reductionist mindset hinders women from fully exploring their options and realizing their potential.

Dube L. (2001) The study highlights that women's economic well-being often experiences enhancement through the pursuit of independent income sources. This improvement correlates with elevated self-esteem, better family conditions, and a holistic advancement within their communities. The study emphasizes that a significant contributor to the gender disparity in women's economic well-being, social standing, and empowerment is the prevailing gender gap in property ownership and control.

Andal (2002) A The study focused on the "work-family conflict" experienced by 239 married female production operators in dual-career families. It delved into the social support they received and the coping strategies employed to address this conflict. The findings revealed that job interference with family matters was more prevalent than the reverse. The intensity of work-family conflict was notably higher in the earlier stages of the life cycle compared to later stages. Notably, around two-thirds of the women expressed an intention to resign from their jobs if they were to have another child, primarily due to the increasing cost of childcare services. Additionally, the participants reported receiving the least social support from their supervisors compared to other sources, and they tended to navigate conflicts through reactive role behavior and personal role redefinition tactics.
Ahmad, Aminah (2007) ‘The study identified implicit limiting factors encompassing financial management, skills, creative impulses, self-interest, family engagement, and the utilization of family funds. Women in the study expressed aspirations related to obtaining a new job, securing employment for family members, achieving independence, gaining business and family experience, addressing economic necessities, building self-confidence, acquiring technical expertise, generating income, finding a suitable job, and contributing to economic growth. However, the study revealed that only the utilization of family funds for self-interest, as well as experience, employment, and family member involvement, did not exhibit a significant relationship with rural women workers.’

Afrin, Islam and Ahmed (2010) ‘Indian women still experience clear prejudice at work,’ according to the report. Sexual harassment in the workplace is a big issue for working women. Women who work night shifts are particularly prone to this kind of event. Nurses, for example, deal with this issue daily. In hospitals, little is done to combat and address the dangers they face. One explanation for the rise in workplace sexual harassment is the flagrant disrespect for present Indian legislation. Furthermore, Indian women are frequently denied promotions and advancement possibilities at work, however, this does not apply to all working women. The Equal Remuneration Act of 1976 continues to deny the majority of working women their right to equal pay, and they are underpaid in contrast to their male counterparts. This is common in factories and labour-intensive industries.

Legal Indian Admin (2010) ‘The majority of female employees are dissatisfied with their professional development programmes, and women are discriminated against when it comes to advancement possibilities.’ Organizations should endeavour to ensure that career development programmes are designed to help women advance in their careers. Women's career development should be prioritised by top management, and businesses should implement affirmative action to address women's career development. It has been stated that the advisory board observed that many women were willing to go through whatever training was required to advance into management positions. The board recognised three critical issues that needed to be addressed before these ladies could achieve their goals. Ali, Sophiya (2011) They include:

1. misunderstandings concerning archaic views about women,
2. women’s lack of learning experiences, and iii. women's lack of managerial skills.

'India is a traditional country with a wide range of religions, cultures, and customs,' explain. In India, women's roles are primarily domestic and limited to domestic matters. Women can work as nurses, doctors, and instructors in the caring and nurturing fields in some situations. Even if there are well-qualified female engineers, managers, or geologists available, a male with equal qualifications will be given preference. The cost of living, expenses for children's education, and the cost of housing properties in India have all increased, forcing every Indian family to look for ways to supplement their income. As a result, women in India who were previously known for being homemakers are being compelled to work and even choose vocations formerly thought to be only fit for men, such as working night shifts. Working women, particularly those in paid work, encounter challenges just because they are women. The public perception of women's roles lags far behind the law. Those who hire employees are prejudiced because of the notion that women are only suitable for specific positions. As a result, women can readily find work as nurses, doctors, teachers, secretaries, or assembly line workers. Gender bias becomes a barrier during the recruitment process. Even while the law declares equality in remuneration, it is not always followed. The ingrained belief that women are incapable of doing difficult work and are less effective than males.
have an impact on the payment of differential salaries and compensation for the same job. In most families, however, her pay is given to her father, spouse, or in-laws. As a result, in many women's cases, the primary motivation for looking for work is to obtain economic independence. When technological innovation leads to employee retrenchment, women in the industrial sector face gender bias issues. Mental harassment, sexual harassment, workplace discrimination, working women's safety when travelling, a lack of family support, insufficient maternity leaves, job insecurity, workplace adjustment, and a variety of other issues are among the significant issues that women encounter at work. Barati, A, Rooh Allah and others (2014)

Our view on literature review: -
The advancements in science and technology have eradicated the once-prevailing distinctions and inequalities between men and women. Women are now venturing into diverse occupations, ranging from scientific roles to piloting and beyond. The trajectory of modernity has instigated a transformation, leading to increased flexibility and a redefinition of gender roles for both men and women. The conventional perspective of men as sole providers for basic household needs and women as primarily responsible for childbearing and domestic duties is obsolete in today's society, especially in the context of evolving social structures and economic dynamics.

Assessing women's job satisfaction and understanding workplace constraints requires a comprehensive examination within a social framework encompassing value systems, social structures, cultural norms, and economic compulsions. Despite women's significant contributions to the workforce, signs indicate that their participation rates remain lower than those of men. Various constraints contribute to this disparity, including financial constraints, rigid schedules, familial pressures, vulnerability, a socially ingrained male-oriented structure, apprehensions of displacement, limited and ineffective government support, and a lack of awareness about available provisions to safeguard their rights. A literature review underscores these factors as key impediments to women's full participation and highlights the existing gap between theoretical approaches and practical applications, often resulting in a conflation of prescription and implementation.

3. Understanding Freelance Teaching:
A freelance teacher is an educator who collaborates with one or more schools on a per-class or per-hour basis rather than serving as a full-time staff member with a fixed salary. Despite the typically higher hourly wages for freelance teachers compared to full-time employees, they may not receive additional benefits and might experience fewer hours and a less predictable schedule. Freelance educators enjoy the flexibility of supplementing their income by offering private lessons and working across multiple educational institutions.

1. Why Do Educational Institutes Opt for Freelance Teachers? Educational institutions may opt to engage teachers as freelancers instead of full-time employees for various reasons: i. Cost-Efficiency: Hiring freelancers is a more cost-effective option for schools, as they are not obligated to cover expenses such as social security, healthcare, or liability insurance. Additionally, freelancers are subject to lower tax rates. This is especially advantageous when a school requires a teacher for part-time hours or a temporary assignment.

2. Safety Considerations: From the school's perspective, hiring freelance teachers is less risky. Employing a full-time teacher entails significant commitments and contractual obligations, which can be overwhelming for smaller language centers. Freelance arrangements involve less bureaucracy, making it easier for schools to adapt to changing student demands.
3. **Flexibility:** Hiring freelance teachers enables schools to adopt a "pay-as-you-go" approach, offering students the benefits of a flexible class schedule. The flexibility associated with engaging freelance instructors allows schools to respond swiftly to surges in student enrollment without the bureaucratic challenges associated with hiring full-time staff.

4. **Advantages of Freelance Teaching for Educators:** iv. **Freedom of Choice:** Freelance teaching provides educators with substantial freedom. Unlike school employees, freelancers are not bound by set minimum or maximum monthly working hours or constrained by the school's timetable. Freelance teachers have the liberty to make choices like avoiding specific age groups or limiting work hours after a certain time—decisions often restricted for employed teachers.

5. **Higher Salary Potential:** Freelancers often enjoy a higher net "take-home" wage per hour compared to their employed counterparts, thanks to cost savings for the school on taxes. Negotiation skills and an understanding of local tax rates empower freelancers to secure higher hourly pay.

6. **Increased Opportunities:** Freelance teaching opens up a broader spectrum of opportunities. In competitive job markets, many institutions are hesitant to hire teachers as full-time employees due to various reasons outlined earlier. Freelancers, on the other hand, find it easier to secure contracts with schools, offering them a wider array of opportunities.

1. **Gender Gap Widening at Top Level**

Contrary to popular belief, males outnumber women in the teaching profession. Even though women continue to prefer the profession, as evidenced by the fact that female candidates outnumber male applicants in both school and college-level teacher eligibility examinations — TET and UGC-NET — males are gaining more positions as teachers across all designations.

According to the Higher Education Report 2017-18, India has 2,05,339 more male teachers than female instructors. Males account for 57.99 per cent of India's total 12,84,755 teachers. According to data from the Union Ministry of Human Resource Development, the gender gap widens as we travel higher up the corporate ladder. In the case of contract jobs, however, the gender discrepancy is minor.

While males are more likely to hold higher positions, such as associate professors and professors, the number of women teaching jobs is more than double that of men, according to HRD data.

Reasons for the greater gender gap in higher education

The following factors contribute to the existence of a gender gap:

a. **NET performance is poor**

The fact that women do worse on teacher eligibility examinations than males is one of the reasons why men acquire more permanent jobs. The National Eligibility Test (NET) is required to be considered for a position as an assistant professor. Despite receiving more applications, women are far less likely than men to pass the NET.

According to the National Testing Agency (NTA), which administers the NET, the number of female candidates was nearly one lakh (93419) higher than the number of male applications in June 2019, yet 3,975 more males qualified for the professorship exam. Males made up 1,07,632 fewer candidates than females in the NTA's UGC NET December 2018 exam, although 637 more males passed.

"The age bracket of candidates eligible to appear for UGC NET falls under 25 to 32 years, and according to social norms, this is considered a marriageable age for women," said Kalpesh Banker, managing partner of Sunshine, an education recruitment firm that conducts several studies on gender inequality in hiring in
education institutes. Due to a lack of support and a good learning environment, women's performance suffers as a result of these social restraints."

"To do well in competitive tests, candidates require coaching, a complete ecosystem, including investment, and so on," he continued. Even now, parents would choose to invest in boys over girls. At times, women would favour closer-to-home coaching at the expense of schooling quality. These variables have an impact on their performance.

b. There will be fewer promotions.
In Indian higher education institutes, men are given priority for higher jobs and promotions among those who qualify. In 2005, just 6.67 per cent of Indian educational institutes (54 out of 810) were led by women, according to a Gender Inequality Index (GII) report by Edushine Advisory Group, and in 2018, the number fell to 6.25 per cent, with 63 institutes out of 1008 universities being led by women.
The education staffing firm is presently working on its third study, which will look into why fewer women pursue higher-level academic roles. "While the inquiry into why there are fewer women in leadership positions is still ongoing, the notion of leadership in India, even in educational institutes, remains masculine," Banker added.

"Most private institutes are also family-managed, with male heirs preferring to take over," he noted.
iii. Hiring prejudices that go unnoticed
Former UGC member MM Ansari informed indianexpress.com that there are inherent prejudices in Indian educational institutes' recruiting processes. "In India, 30-40% of university seats are vacant, and even those who are qualified are not hired due to a lack of resources, resulting in ad hoc (temporary) hiring."
"This technique of recruitment is being used by an increasing number of institutes," he stated. It should be emphasised that the number of males and females is equal at the ad-hoc level.
"Women have to face queries like when are you getting married or planning to have children" when selecting permanent professors, according to Ansari. Women with children are considered to dedicate less time to work or to be unavailable at unusual hours when needed. In comparison to men, a permanent female teacher would have additional perks, such as maternity leave, which are taken into account by recruiters. Prejudices based on social structure play a crucial influence in hiring and promoting women, even if they are not explicitly acknowledged."
Working and qualified women sometimes bypass promotions because of their spouse's transferrable job, marriage, and family commitments, according to him.
States with the highest percentage of female teachers and the lowest percentage of female teachers. The situation is particularly bad in Bihar and Jharkhand, where only 20.93 per cent and 29.87 per cent of teachers, respectively, are female. Male candidates also outnumber female candidates in Maharashtra (39.76%), Odisha (35.77%), Telangana (38.38%), Uttar Pradesh (32.84%), and West Bengal (32.84%). (34.58 per cent).
In Dadar and Nagar Haveli, where 96 per cent of the 205 instructors are female, the tendency is the opposite. Teachers are predominantly female in Kerala (60.91%), Chandigarh (58.62%), and Delhi (56.17%). Female instructors account for 54.97 per cent, 52.38 per cent, and 55.45 per cent of teachers in Goa, Haryana, and Punjab, respectively.

2. Reasons for Inactivity of Women at Higher Level of Education Sector
According to studies, a mix of societal, cultural, and economic restraints, such as family duties and a lack of education, are the primary reasons why women choose not to pursue higher education (Cojocaru, 2017).
The next sections will go over these reasons in detail.

A. Responsibilities of the Family
In several studies undertaken by the World Bank, Riinvest, and D4D, women's inactivity has been attributed to a lack of time to work owing to family duties. Women's reasoning is said to be heavily influenced by culture and social conventions. Women's inactivity is primarily ascribed to family responsibilities, which include a child or elder care, as well as home chores. According to a World Bank study, only 6% of inactive males cited family care responsibilities as the key cause for their inactivity, compared to more than 65 per cent of women (Cojocaru, 2017). In other words, women are supposed to care for the home, children, and elderly, while men are expected to offer financial stability.

B. Training and Education
Women's participation is influenced by their educational attainment. Even though education is not seen as the primary reason for women's refusal to join, research shows that there is a proportional relationship between their degree of education and their willingness to join. According to a D4D poll of 1,070 participants ranging in age from 18 to 64, 95 per cent of women have completed higher secondary education in the "previous three years" (D4D, 2017). The majority of individuals who have sought a job, on the other hand, hold a bachelor's or master's degree (D4D, 2017). This demonstrates a negative relationship between education and inactivity, indicating that the lower the amount of education, the more likely women are to avoid entering the education sector, and vice versa. Furthermore, women in the age cohort 25 to 34 years old who have just received a master's degree are more likely to avoid entering the labour due to family care responsibilities than women in the same age cohort who have obtained a secondary level of education or higher (Cojocaru, 2017). Inactivity is more related to a lack of career options for people who have completed upper secondary education or above.

4. Constraints in the Workplace for Women
Women have an important role in our society's economic development, and their contribution is equal to or greater than that of their male counterparts. Even so, women confront several concerns and problems in the form of limitations. Women are treated equally in some workplaces and inferior to their male co-workers in others. They do not often receive the same perks as male colleagues since female job is undervalued and underestimated. This instills in them a sense of inadequacy. This syndrome causes undue stress. It becomes even worse when they are confronted with unfair pay structures, insecurity, sexual harassment, inadequate family support, and so on.

The following are some of the barriers that women face:
1. Role conflict or numerous roles create a constraint. Women do a variety of tasks, including managing work at their workplace, managing their families at home, and fulfilling other societal commitments. Working women in the service sector experienced a significant challenge in balancing work and family obligations. Working women with strict schedules have more domestic problems than working women with more flexible schedules. This issue arises as a result of the time constraints that working women experience while balancing home and work duties.

2. Working women in the service sector face additional challenges such as insufficient maternity leaves. It has an impact not only on their professional performance but also on their personal lives, especially when it comes to family matters.
3. One of the issues that working women in the service sector encounter is ineffective family support. While leaving the house and going to work, women are inevitably scouted. They also dislike working long hours in the office, which has an impact on their physical and emotional well-being.

4. Women are subjected to enormous pressures as a result of insufficient security systems at work and in their surroundings.

5. Uneven compensation is another big hurdle that women confront as they advance in their careers. Women are underpaid even when they perform tasks more efficiently than males. This causes despair and demotivation, resulting in work-family conflict and a decline in their work performance. It leads to gender disparities in the workplace, which are common.

6. The foundation of gender discrimination is embedded in the Indian legal system. Households. Individuals who are members of the same household, not just society, condemn women for going out to look for work. They are preached and taught to take care of their families, in-laws, and children, among other things. Women in some communities are compelled to follow Purdah (veil).

7. Despite technical improvements, women in society have been discriminated against due to the inaccessibility of technology to them. The tradition of refusing permission to work outside the home is still seen as a sign of low social rank. External engagements are forbidden for women in conservative and even partially modernised households.

8. India has not yet moved to the point where nodes and the communication and transportation matrix are advanced. For women, getting from the house to work is still a difficult task. Backwardness in technology is a fundamental problem that prevents a balanced approach.

The subjects impose constraints:

1) Perceived Constraints in The Workplace
   a) Job intentions
   b) self-efficacy

2) Constraints Related to Workplace Justice and Equality
   a) Procedural Justice
   b) Distributive justice
   c) Gender and Transfer/deployment.

3) III. Constraints of Organization
   a) Bullying,
   b) Career Barriers,
   c) Stressors,
   d) Compromises and Sacrifices

4) Constraints Related to Workgroup Interaction
   a) Mentors and support groups
   b) Support from co-workers’,
   c) how co-workers reacted to the promotion.

5. Special Measures to Improve Women's Status
   A. National Commission for Women: - The government established this official organisation in January 1992 with the particular goal of studying and monitoring all things relevant to the constitutional and legal guarantees afforded for women, reviewing current legislation and suggesting revisions where appropriate, and so on.
B. Reservation for Women in Local Self-Government: - Women are guaranteed one-third of total seats in all elected offices in local authorities, whether in rural or metropolitan regions, by the 73rd constitutional Amendments Act, passed by Parliament in 1992.


D. National Policy for the Empowerment of Women: - Many policies have been developed to promote women's advancement, development, and empowerment.

E. Multiple Provisions: - Other arrangements have been made to ensure women's empowerment in areas where global concerns are addressed through the Millennium Development Goals.

As a result, women in India can work outside the home and earn a living. This also aids them in exploring the prospect of job opportunities, thereby elevating their social position and prestige. They've been joining workplaces in greater numbers than ever before, and they've figured in more distribution than ever before. Indeed, independence and economic equality are the true indices of women's empowerment. Women's representation in the agriculture, industry and service sectors has increased to achieve both goals. Even if the service sector ensures people social security and fair treatment at work, the study reveals several difficulties that scholars are interested in. The greater domain of restrictions has been used to clarify these concerns.

6. Research Methodology

1. Recurrent Neural Network:-
Feed-forward neural networks with a focus on temporal modelling are known as recurrent neural networks (RNNs). RNNs are characterised by their capacity to transmit data over time steps. RNNs feature an additional parameter matrix in their structure for connections between time steps, which encourages training in the temporal domain and takes advantage of the input's sequential character. The predictions made at each time step by RNNs are trained to be based on both the most recent input and data from earlier time steps. The study of input in the time series domain is applicable to RNNs. Items in one time step are related to elements in earlier time steps, thus data in this domain are ordered and context-sensitive.

![RNN Block Diagram](image)
The main reason neural networks are created is to recognise or classify patterns. These, however, are inadequate for time series data modelling. Due to the fact that the initial uses of neural networks focused on the detection of patterns in arrays of measurements that do not vary over time. The dynamic nature of spatiotemporal data as time series necessitates the development of new techniques. In order to give the neural network memory, you can store previous values of nodes in higher layers that are output (state layer) or hidden (context layer). These additional layers are similarly related to the concealed layer as the input layer.

7. Analysis and Findings of Research Study
We choose a data set of 252 economically active women between the ages of 21 and 64 who fall into the upper percentile of the income distribution. 152 samples from this data set were utilized for the training phase, while the remaining samples were used for the testing phase. Recurrent Neural Network is used in proposed system. MATLAB script is used for implementation of RNN.

8. Results
In the data we are covering various points which is as follow

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Figure 2 Accuracy Curve of Training Data
Figure 3 Sensitivity Curve of Training Data

Figure 4 Specificity Curve of Training Data

Figure 5 NSR Curve of Training Data
**Figure 6** Accuracy Curve of Testing

**Figure 7** Sensitivity Curve of Testing

**Figure 8** Specificity Curve of Testing
Performance of a classifier
The performance of a classifier is measured using sensitivity, specificity and accuracy:
where:
TP=Number of True Positive classified cases
TN=Number of True Negative classified cases
FP=Number of False Positive classified cases
FN=Number of False Negative classified cases
The proportion of correctly categorized participation events is provided by sensitivity, whereas the percentage of correctly diagnosed non-participation events is provided by specificity. The Noise/Signal Ratio was utilized to choose the best model (NSR).
\[ \text{NSR} = \frac{1 - \text{sensitivity}}{\text{specificity}} \]
This metric calculates the ratio of provided positive signals to incorrect signals. In order to pick the model that minimizes the value of NSR, a decent mode selection rule was developed.
HC—Hamming Clustering

RECOMMENDATIONS:
Based on the study's findings, the report provides the following recommendations:

CENTRAL LEVEL
The following actionable proposals are offered at the central level to be adopted in order to improve the position of women and lessen the degree of constraints:
1. Working women's social, economic, and political rights should be protected and safeguarded by adequate budgetary resources. Addressing their health and hygiene issues should be a top priority. It would assist women in defending and mainstreaming their rights.
2. The central government should develop an innovative public-private partnership approach in which stakeholders from various sectors can pool their expertise and resources to address the challenges faced by working women.
3. Working women require special transportation, which can only be provided with the full support of
central initiatives. In the long run, the national government should consider allocating some funding for this purpose.

4. Women should have access to well-equipped educational and professional programmes, as well as 100 per cent central aid. It should include educational facilities ranging from elementary school through higher education, as well as effective occupational pursuits.

5. The federal government should guarantee effective interest for women who deposit earnings from their savings, which can be used by them or with their approval.

6. Psychiatrists should be chosen by the central government at every organisation in conjunction with the NCW. Counsellors should be in continual contact with the NCW's updated resource base in order to deal with male workers who are sexually perverted. Psychiatrists may also produce annual statistics on the subject for the review of experts at the centre.

7. Wherever possible, policy measures are needed to ensure that women receive equal pay, benefits, promotions, and opportunities, and non-compliance with the laws should be rigorously dealt with. In these cases, the constitutional requirements pertaining to women's rights should be ensured.

8. A functional gender sensitization committee against sexual harassment must be established, with a monthly action taken report to the NCW being required. If necessary, appropriate advice for making workplaces zero-tolerance in the case of sexual harassment may be explored.

9. To raise awareness regarding provisions against unequal salaries, antidotes to sexual harassment, and other topics, appropriate media should be used. The importance of local languages should be considered in the information disseminated by the media.

10. Budgetary allocations should be made at the federal level to install CCTV cameras in every workplace. It should be overseen by a group of specialists, who should report to the NCW on a monthly basis.

11. Information about women's welfare programmes, schemes, and provisions should be communicated in such a way that even low-income women can benefit from it.

12. A digital page for women to write and share their problems may also be built. The state has the authority to choose the web portal's linguistic format. The state government may be able to give internet access through suitable federal government programmes.

STATE-LEVEL

The government's involvement is critical in bolstering people's expectations and aspirations by ensuring good governance. The state, as a major social control agency, can fulfil its responsibilities by easing the restraints faced by working women in the following ways:

1. The government should implement a public awareness campaign aimed at improving people's attitudes about women who are forced to work under pressure.

2. To eliminate any illnesses, proper sanitation facilities at women's restrooms should be provided.

3. States should ensure that women have equal access to health care, quality education, career and vocational advice, employment, equitable remuneration, workplace health, safety, and social security.

4. In every state of our country, strategies should be established to create an environment for the complete development of women through favourable economic and social policies, allowing them to reach their full potential.

5. The government should encourage women to work in both public and private sectors by providing incentives and assuring social security.
6. The government should encourage women to save by offering them effective interest rates at state-run banks. Women should be able to use dedicated bank facilitation counters.

7. Sponsored mobility is critical in addressing the state of deprivation that has resulted in uneven development. Victims are most likely women. Reservations for women working in government positions should be strictly enforced.

8. A skill development programme should be tailored to their specific needs at home and at work.

**LOCAL/SELF GOVERNMENT LEVEL**

No modern civilization can ever claim to be progressive unless women's full participation in all aspects of life is guaranteed. Women's contributions inevitably contribute to positive socio-economic developments and progress. Women have entered a variety of occupations as a result of the 73rd and 74th amendments, resulting in increased social cohesiveness and economic progress. In light of the degree of constraints that working women confront, comparable considerations have yet to be addressed. Following practical guidelines is likely to be essential in lowering the degree of constraints faced by working women:

1. More legal clout should be given to the NCW so that it can handle prosecutions on its own.
2. Any occurrence that violates women's rights should be immediately reported to the NCW so that the cause can be determined.
3. PRIs should develop local business models that are aligned with gender equality in terms of the functional format.
4. Women should be required to have routine health checks at the institute level.
5. The local government should also develop a sustainable strategy for women's transportation.
6. Male family members, as well as caste officials and community leaders, should have a supportive attitude toward independent women.
7. The local government should implement a comprehensive strategy and programme for women's empowerment.
8. A forum for independent women to discuss views on women's issues should also be established at the local level to identify and address local issues.
9. Women and young girls must be encouraged to work as freelancers in their own communities, as migration to cities for work undermines their social lives.
10. In order to illuminate with any sort of innovation aimed at improving the condition of working women, study recommendations should be distributed from state to centre to local level and vice versa.

**Future Prospects of Our Study: Unveiling Opportunities for Women in the Gig Economy**

India, as the world's second-largest market for independent professionals, presents a vibrant landscape for the gig economy. Despite the substantial growth in this sector, women's participation remains hindered by various gender-related challenges such as compensation disparities, lack of job security, and limited flexibility. In our study focusing on increased women engagement in the occupational structure, we have identified key areas for future exploration and intervention:

1. **Empowering Financial Autonomy:** Shielding women's wages from familial expectations and promoting awareness about financial rights and savings management can enhance their economic independence. Implementing programs at federal, state, and local levels can ensure these rights are protected.
2. **Tailored Skill Development**: Designing skill development programs that cater to both workplace requirements and family obligations can empower women to thrive in their careers. Internal promotions with consistent skill enhancement can rejuvenate their professional journey.

3. **Health and Well-being Support**: Prioritizing routine health screenings, providing necessary health amenities at workplaces, and offering psychological counseling can address the unique health challenges faced by freelancing women.

4. **Infrastructure and Safety Measures**: Ensuring safe transportation options, adequate sanitation facilities, and a conducive work environment for women can improve their overall work experience and productivity.

5. **Awareness and Sensitization**: Conducting regular awareness programs on women's rights, gender sensitization, and sexual harassment prevention can foster a more inclusive and supportive workplace culture.

6. **Research and Policy Advocacy**: Promoting regular research on women's workplace challenges and advocating for policy measures such as gender sensitization committees against sexual harassment can drive meaningful change.

**Conclusion:**
Our study underscores the need for concerted efforts to enhance women's participation in the gig economy and address the multifaceted challenges they face. By focusing on financial empowerment, skill development, health support, infrastructure improvements, awareness campaigns, and policy advocacy, we can create a more inclusive and empowering environment for women in the workforce. Despite the limitations of our study, including limited sampling and time constraints, we believe these future prospects offer valuable insights for further research and action in this critical area.

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