



The Impact of Automation on Gendered Differentiations in Job Insecurity: A Case Study of an Indian KPO

Abhishek Tiwary
Doctoral Student
Indian Institute of Management, Lucknow

Prof. Ajay Singh
Chairperson
Indian Institute of Management, Lucknow

Rajdeep Dey
Independent Contributor

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ABSTRACT

This paper delves into the intricate web of gendered differences in the perception of job insecurity within knowledge process organizations, with a specific focus on the disruptive influence of Robotic Process Automation (RPA). The digital transformation era has seen a surge in automation technologies, and RPA, in particular, has had a significant impact on the workforce landscape. This study aims to shed light on how this transformation is experienced differently by male and female employees.

Using a robust linear regression analysis, this research examines the data collected from a substantial sample size of 1034 employees across various knowledge process organizations. The analysis encompassed multiple facets of job insecurity, including the fear of job displacement, career stagnation, and overall job satisfaction, as affected by the integration of RPA into their work environment.

Our findings reveal intriguing gender disparities in the perception of job insecurity. Male employees tend to exhibit higher levels of job satisfaction in the face of RPA adoption, possibly due to perceived opportunities for up skilling and career growth.

Furthermore, the study opens up opportunities to study potential factors contributing to these disparities, such as the gender composition of job roles, access to training opportunities, and management support. Understanding these nuances is crucial for organizations seeking to address gender-related challenges in the wake of automation.

In conclusion, this research contributes to the growing body of literature on the impact of automation on the workforce and extends it by highlighting the gendered dimensions of job insecurity. It underscores the importance of implementing gender-sensitive policies and support mechanisms to ensure an inclusive and equitable transition in knowledge process organizations facing the automation wave.

This paper invites further discussions and empirical investigations to foster a more comprehensive understanding of the gendered dynamics in the age of automation and, consequently, promote fairer and more adaptive workplaces for all employees.

CHAPTER ONE

INTRODUCTION

Differential impacts of various job determinants predicated on gender is by no means a novel debate, but it is one that has pervaded all generations, spheres of work, and industries. As the new world of work takes shape, forged by a modern and advanced technological landscape, this debate is expected to rage on even more spectacularly. It is not unusual to observe that certain aspects of work are largely imbalanced from a gendered lens - often lending to or influenced by stark differences in societal values as well. In most professional organizations and in most industries, the pipeline to successful positions in leadership and management have been empirically shown to be set up against women professionals. By and large, annual research surveys from global organizations like Deloitte, McKinsey & Co., KPMG, and institutes such as Harvard Business School show the genesis of a cataclysmic phenomenon termed, 'The Great Breakup', alluding to the alarming proportion of women professionals and executives who are finding themselves unlikely to continue at their workplace and are hence either leaving their jobs or switching to roles at other organizations.

The primary and foremost causative to this widespread dissatisfaction of women professionals and executives with their job roles have been attributed to a pervasive feeling of job insecurity at their organizations, in most of which, the promotional pipeline does not appear to favor female professionals. Despite some moderate progress in the state of the leadership and C-suite pipeline across organizations, owing to a steady surge in diversity and inclusion mandates, female professionals and executives, especially ones who belong to marginalized cohorts, still find themselves meagerly represented in leadership roles. Especially for senior leadership positions, research suggests that only one in four leaders in the C-suite is likely to be a woman, and for women of color, the likelihood drops to one in twenty (McKinsey and Co., 2022). In fact, a large piece of the transformative work that is being done to alleviate what is known as the 'broken rung of the leadership ladder' is being taken up by women themselves, despite the risk of their efforts going unrecognized and their burnout aggravating, which also contributes to feeling of job insecurity and dissatisfaction.

There is a sense of criticality in the rate at which women professionals are finding it unsuitable to continue at the workplace, and this rate is dynamically more pronounced as we observe higher in the leadership chain. The perception of job insecurity that belies this feeling of dissatisfaction has its roots in a diverse array of organizational contexts - the contexts which act as headwinds signaling to women professionals about the hardships facing them while continuing or advancing in their roles. While in general, this perception of job insecurity experienced by these women professionals may be predicated on factors like microaggressions, precarious organizational contexts, fairness in compensation and recognition, lack of opportunities to advance, absence of transparency, and so on, one exclusively pervasive factor that has lately taken root in the job insecurity malaise may have been the introduction of robotic process automation, smart technologies, and robotics across organizations in recent times.

Robotic process automation is by no means an advent of recent times, particularly in the context of professional settings. The technology of automation has evolved from the related field of mechanization, which had its beginnings in the Industrial Revolution. Mechanization refers to the replacement of human (or animal) power with mechanical power of some form. The story of RPA started with the automation of user interface (UI) testing in the 1990s. The primary typical computer user persona started to shift from huge corporations' and governmental organizations' employees to ordinary home-based users. This was largely due to the emergence of Windows 95, the canonical operating system of that time. As a result, the shift kickstarted UI testing development as the requirements and screen sizes became more diverse.

The first key elements for RPA, as we know it now, emerged in the early 2000s. A big part of this was screen scraping technology, which is the automation of extracting data from an application to use it for other purposes. It turned out to be a significant boost to the efficiency and effectiveness of businesses that had to handle large amounts of data of all sorts. The real pivotal point for the RPA technology occurred around 2012 when the technology was finally officially recognized by large-scale businesses. This led to RPA taking the world by storm, as more and more enterprises started adopting RPA for their mission-critical tasks.

We are now entering the fourth industrial revolution, the era of all-around automation. RPA, as a driver of this revolution, inherits features of cloud deployment and mimics human cognition with unattended automation mechanics. Thousands of enterprises across the globe have already implemented the technology. Thus, the mammoth transformations in the world of technology in the last decade has allowed smart technologies and automation to grow into a domineering force that has recently started becoming inextricably linked to organizational success. From global behemoths like Apple, Netflix, Google, Amazon to local and regional enterprises - robotic process automation has become the kind of necessity that may very well dictate everything from productivity, efficiency, engagement, end-user satisfaction, analytics, market forecasting, and needs assessments for organizations - leaving little to no room for enterprises to sustain themselves without the use of these technologies. In the context of the Indian professional market, NASSCOM has noted that the automation market might expand its value to a figure of 90 billion USD by the year 2030, with a compounded annual growth rate of 30%.

Hence, it is neither unnatural nor immaterial to ponder upon the impact of robotic process automation (RPA) on the perception of job insecurity of employees across different organizations. Although the predominant public opinion has been one of trepidation and concern against RPA as a disruptive force which is likely to eradicate many job roles, especially those of a manual and cyclical persuasion, the academic literature on the impact of RPA has been largely divisive. From Smartsheet's 2017 study which concluded employees are highly enriched and supported in their day-to-day work responsibilities by utilizing RPA technologies, to several research studies by Brougham and Haar (2018) which introduced the concept of STARA (Smart Technologies, Artificial Intelligence, Robotics, and Algorithms) and reported that these technologies steadily and decisively contributed to feelings of job insecurity in employees - a consensus on such a dynamic landscape of RPA and AI seems positively unattainable in the near future.

At the same time, the research on perception of job insecurity has always been considered a largely divisive topic in both academic and professional circles. Though it is common knowledge that job insecurity is arguably the leading negative factor in the world of work which predicates an equally large number of negative job outcomes such as job dissatisfaction, turnover intention, attritional intent, decline in job performance, health, and well-being outcomes, the contention across academic zeitgeists has always been regarding a consensus on the causal factors that lead to a net feeling of high job insecurity within an individual.

Some of the causal factors that lead to a feeling of job insecurity for employees include organizational culture, financial compensation, managerial support and relationships with the management, organizational training, learning opportunities, and interventions, degree of engagement within the workplace culture, and so on. The presence of Robotic Process Automation at the workplace or in the employee's immediate working environment, and the awareness of it has led to a considerable degree of job insecurity among employees across different organizations and sectors. Now, it remains to be seen whether this level of job insecurity is different in men compared to women, and how the awareness of automation interacts differentially with different genders when it comes to job insecurity.

Another nuance that has been covered in our research is the organization that these studies with automation and gender are conducted in. The Business Process Management sector has received considerably less attention when it comes to scientific literature on automation and job insecurity. Furthermore, some extant studies which exist on this dynamic have covered only BPOs. However, Knowledge Process Organizations or KPOs have largely been left out of the ambit of the academic research on automation and job insecurity. KPO

(Knowledge Process Outsourcing) companies simply refer to the outsourcing of higher skills jobs that are knowledge-intensive (typically data and computing heavy and need specialized knowledge, skills, and education levels). The service delivered is insight and judgment based. Examples include research services, IT process improvement etc. while BPO refers to outsourcing non-primary activities to the third-party service provider for service to decrease the company's cost and increase productivity and efficiency. Example services of BPO include payroll, and technical support for a product while KPO examples include consulting research. Having noted this, it is easy to observe KPOs which are a specialized body of business process management, with additionally more analytical, experimental, and cognition-intensive job roles. This means that the presence of robotic process automation to erase the need for crude, repetitive, cyclical tasks has the potential to enrich KPO employees and leave ample room for them to take up more analytically-inclined job roles and responsibilities. This would signal that in KPOs, automation would create a much lesser degree of job insecurity compared to other industries, and even compared to their BPO counterparts. With India almost set to acquire a 70% share in the growing KPO industry (NASSCOM, 2017), the time is due to explore how KPO employees interact and engage with Robotic Process Automation tools in their organization. Hence, this paper aims to bring together these caveats and explore how job insecurity may differentially impact male and female KPO employees in the backdrop of automation awareness.

CHAPTER TWO

LITERATURE REVIEW

A. Gender and Job Insecurity

Existing bodies of research on perceived job insecurity (JI) are by no means scarce, nor are they unidimensional. However, certain perspectives on job insecurity through the lens of gender, gender identity, ethnicity, culture, and other intersectional nuances have received much less attention. Theoretical bases have sometimes been used to explain the differential levels of job insecurity amongst male and female employees. Using the gender role theory, some scholars have posited that different levels of job insecurity at the workplace may arise due to the inclination of male and female employees towards different job roles, and also the fact that employees belonging to each of these gender classes may place value on different dimensions of the job to derive their perception of satisfaction and security. A different line of argument holds that gendered differentials in perception of job insecurity and other job role-related perceptions may be predicated on several variables relating organizational structure, organizational context, organizational culture, and the gendered nature of the labor market. Indeed, there is truth to the fact that organizational contexts are gendered, and thus the difference in the organizational contexts may well translate into differentiated experiences and perceptions of male and female employees, and also in the way that the organization manages their workforce, which can be the root of job insecurity. Yet, very few studies have empirically explored the contingent effects of different organizational contexts on perceived JI and the gender differential.

In general, most organizational reports and contexts testify to certain degrees of gender inequality at work, and this condition of gender inequality is naturally expected to reflect upon the level of perceived job insecurity as well. Typically, a major proportion of literature reports women experiencing a greater degree of job insecurity in the workplace, compared to male employee. These results are usually based on a general measure that encompasses most if not all organizational contexts, employee experiences, and job perceptions. Scholars have researched to explore if job insecurity increases in a more vulnerable socio-economic context, such as lower household income, having children, and a lower level of education. Some bodies of research have also explored if the degree of perceived job insecurity increases in the case of being in a weak labor position, such as informal work, temporary contracts, part-time work, and having suffered a change in the contract. Overall, previous findings from different bodies of research have more or less suggested that men experience greater job insecurity than women, and are more vulnerable to job-related stress.

B. Gender and JI: Empirical and Theoretical Debates

Many scholars have tried to pinpoint theoretical explanations on differential perceptions of job insecurity and job outcomes arising out of gendered differences at work. Most notably, three such theories have predominated academic literature. Hakim's (2006) "preference approaches" theory hypothesizes that female employees have a tendency to compensate poor employment conditions by other job outcomes such as higher job security, higher flexibility and autonomy or agency at the workplace, and better pay structures.

Becker's human capital theory suggests that employees can increase their skill and expertise through investment training and learning, and this self-development may act as an antagonist to perceptions of job insecurity. Many feminist scholars however, have critiqued this theory for the role it has had in shaping gender focused development work. gender discrimination or segregation approaches (Glass, 1990). The third theory is the gender segregation theory by Glass (1990) which posits that the constraints in an organizational context that lead to the devaluation of a female employee's contributions can explain their precarity of their job security. Through the lens of these theoretical approaches, it would naturally point to the assertion that women experience a greater level of job dissatisfaction and job insecurity at the workplace. Yet, there are also contrary findings which make it difficult for scholars to arrive at consensus on gendered inequalities and their impact on job outcomes at the workplace.

While some bodies of research have empirically shown that female employees face a greater level of job insecurity compared to male employees (Mauno & Kinnunen, 2002; Stier & Yaish, 2014), other statistical studies show a neutrality, i.e. gender does not appear to cast an impact on job insecurity. (Bernston et al., 2010; Esser & Olsen, 2012; Gallie, et al., 2017; Armstrong-Stassen, 1998). Some academic literature even concluded with lower levels of job insecurity faced by female employees (N. Charles & James, 2003; Gaunt & Benjamin, 2007; Keim et al., 2014; McGuinness & Wooden, 2009). In this regard, and upon the subject of conflicted findings on differential gendered impact on job outcomes, Adekiya (2018) has noted that further exploration of gender as an antecedent of job insecurity is needed, albeit in a variety of contexts to provide more direction to the literature in this area.

Some bodies of literature suggest that gendered differences in job insecurity may arise because men and women are inclined to view different facets of their job identity and job role differently, and accordingly vest differential levels of importance into these different facets, which may be influenced by gendered self-perceptions and job perceptions. These hypotheses are typically based on extrapolations of the social identity theory. The social identity theory posits that men are more prone to be impacted by the threat of job loss because professional security forms an integral part of the male social identity, and at a greater degree compared to women. Gaunt & Benjamin's theory (2007) on gender role also seems to suggest that men with more traditional social values are likely to experience a greater degree of job insecurity than women who also follow traditional social values. Here "traditional" refers to societal values that either embrace or perpetuate gender differences. However, it was also seen that men and women who hold egalitarian social values typically experience a similar degree of job insecurity. In the same vein of research, according to the deviation theory (Inanc, 2018; Nolan, 2009), unemployed men "deviate from their prescribed breadwinning role", hence their stronger reaction when they face the threat of job loss. Gender role theories also argue that women feel more concerned about work conditions and work content, whereas men are more preoccupied by financial rewards (compensation and promotions). Rosenblatt et al. (1999), for instance, demonstrate that JI profiles differ between men and women and that men feel more bothered about financial aspects of their job, whereas women are more focused on intrinsic dimensions.

It has not been proven, however, whether the observable dimensions related to jobs are sufficient to explain the differential between males and females in terms of JI.

In addition, it seems interesting to question the gender role postulate abundantly mentioned in the literature about men's breadwinner identity, especially since this postulate is undoubtedly less relevant today due to social and societal changes.

Job insecurity has already been through a gendered lens in many empirical and theoretical studies. However, no concrete consensus has been reached in the scientific literature regarding the relationship established between job insecurity and gender. Some bodies of literature demonstrate a greater degree of job insecurity among women, with the results explained in context of the suggestion that women usually take more flexible, temporary and part-time jobs. Another contrarian view posits that, there are no gender differences in relation to job insecurity, and even considers this gendered differentiation immaterial - emphasizing that job insecurity acts as a "stressor" both in men and in women.

C. Perceived Job Insecurity, Organizational and Market Changes that Influence JI, and the Gendered Differentiation in Perceived JI

Perceived job insecurity has been conceptualized as "a feeling or experience of powerlessness to maintain the desired continuity in a threatened job situation". It is also defined as "one's expectations about continuity in a job situation" or "the general concern of employees in terms of the future continuity in a desired job situation".

The avenues of research on perceived job insecurity consider this phenomenon as a stressor, assuming that flexible and deregulated labor relations and conditions are always prone to induce feelings of malcontent in employees. Thus research has shown that these perceived experiences of job insecurity have the potential to severely impact employee-well being. Pronounced effects on an individual's general mental health has also been identified, with severe experiences leading to chronic depression, host of anxiety disorders, as well as, in extreme cases, suicidal ideation. In relation to physical well-being or specific adverse symptoms related to physical health, for example IBS and heart conditions have also been implicated as an effect of persistent feelings of job insecurity. Lübke and Erlinghagen researched the differential experiences in perceived job insecurity in different countries across the globe, according to the situation of the labor market in the past, the current economic situation and the welfare policies implemented. Likewise, recent literature reviews have confirmed this fact, finding that as unemployment rates grow, there are higher levels of job insecurity.

Even though, much progress is being made with regards to the socioeconomic and turnover impacts of job insecurity, research on the way in which gender inequality, historically generated in the employment scenario is related to job insecurity, is still scarce and a widespread topic of debate with little consensus. There is extensive empirical evidence showing differences between men's and women's work based on discrimination against women, which are repeated and increase over the years. This fact is translated in specific phenomena such as the gender pay gap, occupational segregation, higher rates of part-time and informal employment in women, as well as a greater burden of care work. However, we believe that it is also necessary to know its implication in the characteristics and development of job insecurity.

In terms of age, previous studies have found that job insecurity increases with the increase in the employee's age. Fullerton and Wallace noted however, that the relationship between these two variables may not be a linear one, but rather a curvilinear one. This demonstrates that the youngest and oldest employees have less fear of losing their jobs.

According to Keim et al., young people experience most insecurity, and this relationship is aggravated at times with higher unemployment rates. In the same line, Buonocore et al. have identified specific generational differences: people born between 1980 and 1994 tended to perceive higher levels of job insecurity than previous generational groups at the time of the study, carried out in 2010. In terms of education, job insecurity has traditionally been related to a lower educational level, although more recent studies show an inverted relationship. Thus, Kinnunen et al. and Keim et al. state that it also depends on macroeconomic variables, so that when there are high unemployment rates, people with higher qualifications have the highest job insecurity levels. In contrast, when the job offer is sufficient, having higher education levels dampens job insecurity. On the other hand, household-related variables have also been analyzed as possible predictors of perceived job insecurity. The studies by Näswall and De Witte and Richter et al. compare the impact of having dependent children in different countries, without concluding that it is a predictor of job insecurity. Another variable of interest is the family's economic situation, related to the main breadwinner, and the existence of a spouse who also works and contributes to the household income. In this respect, Mauno and Kinnunen observe, in man-woman couples with two salaries, that the concern for the economic situation of one of the spouses generates greater job insecurity in the other one.

Structural and financial changes in the employee's organization, such as structural, functional, or hierarchical re-organizations, or changes to the salary and incentives (compensation and benefits) structure can trigger perception of job insecurity in the employee. Furthermore, adverse changes such as pay reductions or workforce reductions significantly impact not only the job satisfaction of employees, but also introduce a feeling of insecurity in their job role. All types of employees, both contracted as well as self-employed ones, are highly susceptible to this experience. It has been noted that, "given the increase in self-employed workers in recent years (e.g., Eurostat 2017 data), informal work, without contractual relationships, is presented as an important form of precariousness with serious implications for insecurity and health."

In this context, we think that job insecurity must necessarily be a phenomenon that is affected by this inequality. Therefore, this research proposes to explore how gender is a differentiating factor in the levels of job insecurity that is experienced by employees due to their awareness of automation and RPA.

CHAPTER THREE

RESEARCH GAP

Studying job outcomes from a gendered lens has pivotal avenues where simultaneously existing research has made consistent forays and yet leaves much to be desired. Particularly in the backdrop of smart technology, automation, and artificial intelligence pervading the market at an unimaginably disruptive pace, academic research is yet to fully catch up to the myriad implications of such advancements on the workforce and its future. The fact that research has found, while working with automated technology, recent past performance can have a significant impact on the subsequent job outcomes like job insecurity, and could potentially play different roles in KPOs and BPOs on employees' relationships with companies as well is a signal that there are intricacies and nuances waiting to be explored with urgency.

In the same line of thought, the organization type and the line of work are highly determinant of the degree to which automation is either accepted or rejected by employee circles or departments, how it is integrated into job security and job performance outcomes, and how organizational changes may moderate this relationship- this is one area where literature is woefully scarce concerning business process organizations (BPOs), and lesser still for knowledge process organizations (KPOs). In addition, organizational change is often tied with negative connotations in the organizational cultures, often being tied with a manifold turnaround to the organizational setting that would seek to upset the workplace balance and weigh down harshly upon employees, whereas organizational changes could also allude to a broad spectrum of positive initiatives undertaken by the organization to help assimilate training, knowledge, concerns, and feedbacks with these employees. Overall, with India steadily increasing its share in the KPO industry and the automation market, it is imperative to study the impact of automation on employees, particularly from the standpoint of their perception of job insecurity due to automation awareness, through a comprehensive and intersectional lens - an endeavor which has not yet been fully leveraged in recent academic research. Hence this paper aims to explore the impact of automation awareness on job insecurity through the covariates: gender, business function, business location, and age of employees in a global KPO, who have their branches in India.

CHAPTER FOUR

RESEARCH AIM AND HYPOTHESES

To examine if automation awareness impacts the perception of job insecurity in employees of a knowledge process organization differentially based on the gender of the employee. Some additional covariates such as age, business function, and business location have also been added within this analysis framework. Hence, our hypotheses are as follows:

H1: Women are prone to greater perceived job insecurity compared to men when automation awareness is factored into account.

H2: The degree of perceived job insecurity increases as age of the individual increases.

H3: All business functions within a KPO ecosystem will have an equal degree of perceived job insecurity.

H4: All business locations of the KPO in metropolitan cities of India will have an equal degree of perceived job insecurity among its employees.

CHAPTER FIVE

RESEARCH METHODOLOGY

This research aims to explore the impact of automation awareness on the perceived job insecurity of employees specifically native to KPOs and how covariates such as age, gender, business function and business location are differentially impacted. The targeted population, therefore, involves those whose jobs had already undergone the manifold transformation of being automated by STARA, particularly, by the organization's own software and technology. "Industries that are susceptible to automation are transportation & logistics, construction, sales, education, repair & maintenance, administration & office support, service (including financial and legal), manufacturing, and agriculture" (Frey and Osborne, 2017; Nedelkoska and Quintini, 2018). The KPO macrocosm and its intra-organizational job outcomes across various departments in the light of automation were the primary aims of this research. Following this line of inquiry, the sample was selected to be employees from a global consulting firm in its Indian centre- from its branches in the four leading metropolises- Pune, Bangalore, Delhi NCR, and Kolkata.

To reach a representable sample of the population, an online questionnaire was constructed by amalgamating several scientifically pre-validated scales for examining our target variables and distributing them across the Indian branches of the organization via Microsoft Forms. The total amount of collected respondents was 1043, to which several inclusion and exclusion criteria were applied. During data screening, the moderators examined gender, organizational or business function, business location, and financial compensation for three years (2019, 2020, 2021) as covariates. Only 1 participant response was based out of Kolkata, which was excluded as the singular response was not statistically significant for deduction and analyses. Secondly, one major exclusion criterion was observed in job performance. Respondents whose job performance data was not available, redacted, or not sufficient, or the employment was terminated in the course of these three years were marked as N/A and excluded. The screening was also done for discrepancies or typographic errors in age and other control and demographic information that were deemed to be unsalvageable. No further exclusion criteria were applied. The remaining sample consists of 684 respondents.

All participants are currently residents in India, out of which women were percent and men constituted percent. The industry participants who constituted the most prominent business functions were from administration, tax, advisory, and capability hubs.

Table 1: shows the percentage distribution of respondents between 'male' and 'female' gender identities. An option for non-binary identity was also included within the survey. However, no responses from non-binary candidates, if any, were elicited.

Gender Identity	Frequency	Percentage
Male	517	49.9
Female	519	50.1
Total	1036	100

Table 2: shows the distribution of respondents on the basis of business locations, i.e., where their organization workplace was located in India.

Business Location	Frequency	Percentage
Bengaluru	687	67.68
Delhi NCR	188	18.52
Kochi	131	12.91
Pune	9	0.89
Total	1015	100

Table 3: Shows the distribution of respondents on the basis of business functions, i.e., the primary work description of the groups in different verticals of the KPO.

Business function	Frequency	Percentage
Advisory	193	18.63
Audit	586	56.56
Capability Hubs	23	2.22
Tax	234	22.59
Total	1036	100

A. Measures

The variables in this research study were all measured by using Likert scales.

➤ *Independent variable*

The independent variable used for this study was Automation Awareness, measured using Brougham and Haar's (2018) four-item scale for Automation awareness ($\alpha = 0.85$). Example items are: "I think my job could be replaced by STARA." and "Some tasks I perform now for my job will be able to be replaced by STARA."

➤ *Dependent variable*

"The perception of Job insecurity is related to a range of negative individual and organizational outcomes" (Silla et al., 2009). A wide spectrum of research on the construct of job insecurity has explored how a range of job outcomes such as commitment, satisfaction, work attitudes are negatively impacted through an increase in job insecurity (Ashford et al., 1989; Loseby, 1992; Ruvio & Rosenblatt, 1999). Even perceived work performance (but not objective work performance) was negatively associated with job insecurity (Rosenblatt & Ruvio, 1996; Ruvio & Rosenblatt, 1999). For this paper, job insecurity was measured using the four-item job insecurity scale from de Witte (2000) ($\alpha = 0.85$). Example items are: "Chances are, I will soon lose my job.", "I am sure I can keep my job." and "I feel insecure about the future of my job."

CHAPTER SIX

ANALYSIS RESULTS

The analyses in this paper were conducted both for the purpose of adding supplemental value to the literature on the gendered dynamics of automation and job insecurity as well as to delineate possible scope for further research in the future. For these analyses, we used the information collected from the surveys regarding the employees' business location, business function, and age as covariates within the relationships and associations. The objective was to determine if any of these variables may have a significant impact on the relationship or either of the variables in the relationship.

Note: Business Function: The job role group or department that the respondent employee works in. The four categories or business functions were Tax, Advisory, Audit, and Capability Hubs.

Business Location: Respondents were approached from branches of the global KPO situated in five branches in India. The cities were Delhi NCR, Kolkata, Pune, Bangalore, and Kochi.

Table 4 refers to the linear regression results for finding the relationship between job insecurity (JI) and automation (AU) after adjusting for control variables. It was found that automation significantly impacted job insecurity ($\beta = 0.33$, $p = 0.00$). It could therefore be said that with every unit increase in automation, overall job insecurity increases by 0.33 units. After this general observation, the results of the hypotheses were analyzed.

H1: It was remarkably interesting to note that gender showed unexpected results. Women on average showed decreasing job insecurity with an increase in automation as compared to men at a high significance level ($\beta = -0.18$, $p = 0.001$). Thus it could be said that, compared to men, with every unit increase in Automation Awareness, women show 0.18 units less job insecurity.

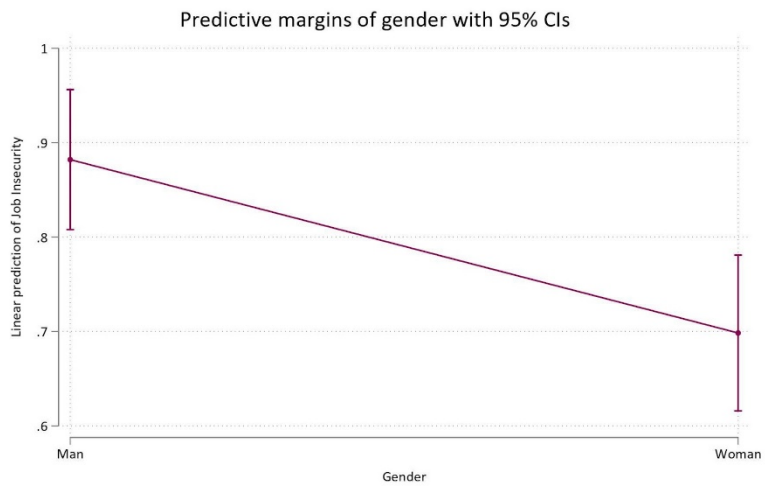
H2: As the employee gets older with age, we found job insecurity to significantly increase by 0.02 units with every increase in automation by one unit ($\beta = 0.02$, $p = 0.01$).

H3: Compared to the Advisory business function, all business functions showed a significant increase in job insecurity with increase in Automation Awareness, however, only Capability Hubs did not have insecurity at a significant level ($\beta = 0.07$, $p = 0.72$).

H4: Compared to Bangalore, Kochi showed significantly less job insecurity with an increase in Automation Awareness. We found job insecurity to significantly increase by 0.17 units with every increase in automation by one unit ($\beta = 0.17$, $p = 0.04$). We did not find significant levels of decrease in job insecurity in Delhi NCR and Pune compared to Bangalore.

Table 4: shows the linear regression results for JI (Job Insecurity) with Automation Awareness (AU) after adjusting for control variables.

	Std. Error	Beta	T	p-value	Lower Bound	Upper Bound
Age (in yrs)	0.01	0.02**	2.60	0.01	0.00	0.03
Audit	0.07	0.35**	4.73	0.00	0.21	0.50
Capability Hubs	0.21	0.07	0.35	0.72	-0.34	0.48
Tax	0.08	0.29**	3.69	0.00	0.14	0.45
Woman	0.06	-0.18**	-3.20	0.00	-0.30	-0.07
Delhi NCR	0.09	0.07	0.71	0.48	-0.12	0.25
Kochi	0.08	0.17*	2.03	0.04	0.01	0.33
Pune	0.28	0.20	0.72	0.47	-0.35	0.75
AU	0.03	0.33	13.02	0.00	0.28	0.38



CHAPTER SEVEN

DISCUSSION OF RESULTS

The central finding in the analyses of this paper was that women show less job insecurity as compared to men with automation awareness. This finding has a vital potential to serve as a cornerstone for further development and a statement in favor of GLOBAL KPO's organizational policies geared towards women's performance at the workplace. The topic of gender disparities in job insecurity within Knowledge Process Organizations (KPOs) is both relevant and complex. While existing research on this specific issue is limited, it is essential to consider broader trends and factors that may influence job insecurity among women and men in KPOs.

Historically, gender imbalances in the workplace have been prevalent, with women often facing various challenges, including wage gaps and limited career advancement opportunities. However, recent societal changes have led to increased gender diversity in KPOs. This shift could potentially impact job insecurity.

Several factors may contribute to the perception that women in KPOs experience lesser job insecurity than men. First, KPOs often prioritize skills and knowledge, which can mitigate gender-based biases. Second, women tend to excel in areas such as communication, teamwork, and multitasking, which are highly valued in KPOs. Additionally, women's collaborative and adaptive qualities can help them navigate uncertainties in the rapidly evolving knowledge industry.

However, it's essential to approach this topic with caution. While these factors may suggest a reduced level of job insecurity for women in KPOs, other aspects, such as leadership roles, promotions, and long-term job stability, may still exhibit gender disparities. Further research is necessary to provide a more comprehensive understanding of gender-related job insecurity within KPOs, including examining the impact of intersectionality and workplace policies. Ultimately, achieving true gender equality in KPOs requires ongoing efforts to address these complex issues.

A. Limitations of this study

- Only sample sizes from major metropolises were used. Developing cities and smaller business enterprises can enhance the range of these findings.
- A single Indian KPO was sampled for this study. Studying this phenomenon across various KPOs would fortify these findings.
- Only a cross-sectional approach was used in this study. A longitudinal model can help study the impact of automation over a period of time.
- Demographics like women who are mothers, marginalized categorizations of women, women from ethnic, racial or geographical minority communities were not considered, and is required to be explored in future research.

CHAPTER EIGHT

CONCLUSION

This comprehensive exploration of gendered differences in job insecurity has shed light on the intricate web of factors that contribute to varying levels of vulnerability faced by men and women in the contemporary workforce of Knowledge Process Organizations. Throughout this paper, we have delved into the multifaceted nature of job insecurity, considering its causes, manifestations, and consequences, all while scrutinizing the disparities that persist along gender lines.

While our literature review has unveiled a disconcerting reality: despite significant progress in the pursuit of gender equality in recent decades, the specter of job insecurity continues to cast a disproportionately long shadow over women – particularly marginalized women, women who are mothers, specially abled women, as well as women with families. It is evident that women face a unique set of challenges, which often result in heightened levels of job insecurity. These challenges include gender-based wage gaps, occupational segregation, and the burden of unpaid domestic labor. Moreover, the intersectionality of factors such as race, age, and socioeconomic status amplifies these disparities, rendering some women even more vulnerable.

Women, particularly mothers, frequently experience higher levels of job insecurity during pregnancy and the postpartum period. This is indicative of a workplace culture that inadequately accommodates the needs of working parents and the persistent bias against women in the workforce. Such discrimination can have detrimental consequences, not only for women's economic stability but also for their overall well-being and family life. Furthermore, our analysis of literature has highlighted the detrimental effects of job insecurity on both genders. While men and women may experience different forms of insecurity, the negative impact on mental and physical health is a shared outcome. Pervasive job insecurity contributes to heightened stress, anxiety, and reduced job satisfaction. This, in turn, can lead to diminished productivity and innovation in the workplace, ultimately hindering economic growth and societal progress.

However, one of the key findings of this research is the stark contrast in job insecurity in women working in a KPO setting. Our analyses have discovered that women in KPO settings rate lower in perceived job insecurity over their male counterparts. This finding has as many implications as it has considerations. The explanation for this finding needs a greater exploration of proof and examination of the working conditions which may allow women to fare better at their operating environment than men in the same or similar positions. As the literature review has revealed, perception of the job role and responsibilities, the quality of expectations from the role, and the sociocultural and administrative contexts in the organization can heavily influence the differential experiences of job insecurity between genders.

Having said that, this finding does open up hopeful doors to reducing feelings of job insecurity for women in KPO and BPO contexts, and furthermore, across all organizations and job roles. However, we would remiss to disregard the fact that job insecurity still exists as a phenomenon, and is quite severe in different industries and workplaces, and as such, is influenced heavily by gendered differentiations as well from a sociocultural lens. As we look to the future, it is imperative that policymakers, employers, and society as a whole address these gendered differences in job insecurity head-on. The persistence of these disparities not only hinders the advancement of women but also deprives society of valuable contributions from a diverse and talented workforce. To rectify this, comprehensive solutions are required.

First and foremost, workplace policies must be reformed to accommodate the unique needs of women, particularly during life transitions such as pregnancy and motherhood. Paid parental leave, flexible working arrangements, and affordable childcare are just some of the initiatives that can mitigate the gendered impact of job insecurity. Employers must also engage in proactive efforts to challenge biases and promote diversity and inclusion at all levels of their organizations.

Education and awareness campaigns are equally essential. Societal attitudes and stereotypes about gender roles need to be challenged and dismantled. Schools, universities, and workplaces should actively promote gender equality and diversity, fostering an environment where all individuals are empowered to pursue their career aspirations without fear of discrimination or insecurity.

In conclusion, the issue of gendered differences in job insecurity is a complex and deeply ingrained problem that demands our attention and action. While this paper has provided a comprehensive overview of the topic, there is much work to be done to rectify the disparities that persist. By implementing the proposed solutions and fostering a culture of inclusivity and equity, we can pave the way for a future where job insecurity is no longer a gendered phenomenon, and all individuals have equal opportunities to thrive in the world of work.

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