

VULNERABILITY AMONG CONTRACT LABOURERS OF MANUFACTURING UNITS IN INDUSTRIAL ESTATES OF GOA: AN EMPIRICAL STUDY

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ABSTRACT

The employment of contractual workforce in the organised manufacturing industries through a mediator is a globally observed trend. The prime focus of this study is, an exclusive comparative analysis of the vulnerability level among contract workers employed in different job categories so as to provide an insight into the variations in the vulnerability faced by them and the reasons thereof. Based on a sample of 350 respondents across several job categories including unskilled and semiskilled workers engaged as contract labourers employed in the manufacturing units in the industrial estates in Goa, this cross sectional study, presents an analysis of the impact of job category, education level and gender on the vulnerability of the workers. This research provides the foundation for strategic planning process to reduce the vulnerability. The findings show that vulnerability level differs significantly among the contract workers employed in different job category. A more determined implementation of the legislative provisions made under the labour law complimented with a stronger thrust on the creation of awareness among the workers about the legislative provisions made for them, would definitely reduce the feeling of vulnerability among the workers. This paper contributes to the existing literature on understanding the different level of vulnerability of the contract workers and suggesting measures to reduce it and throwing light on the shortcoming of the present strategies adopted for the labour welfare.

Keywords: Contract Labour, Job Category, Vulnerability

INTRODUCTION

A contract worker is identified as the one who is supplied by a contractor to a principle employer and they do not feature in the muster roll of the company (Section 2, Contract Labour Regulation and Abolition Act, 1970). The *Hire and Fire system* has gained huge momentum in the industrial scenario worldwide. There is a huge divide of opinion among economists about the contract labour system itself. Undoubtedly, the engagement of workers on contract is economical for the enterprise, but, may severely hamper the welfare of the workers. Development Economics is one of the specific subject areas that delineate the construct of vulnerability. It is a variable that cannot be observed directly. The absence of a single widely accepted definition of vulnerability adds to the commotion in the policy implementation that could have directly target towards its reduction. Deeper research on vulnerable employees would be extremely productivity as it would help in giving a better literal definition of the concept of vulnerability. It would also assist in identifying the vulnerable group and predicting the consequences and working towards the welfare of the workers. Chaykowski & Slotsve (2008) have shortlisted certain category of this construct, namely, Economic Vulnerability arising due to poor pay, insecure job and non standard employment ;Social Vulnerability due to discrimination faced in the social circle and Political Vulnerability due to the denial of any kind of active participation in the democratic development of the nation. It reveals the fact that vulnerability has various dimensions and a single study will not be able to cover all the dimensions.

LITERATURE REVIEW

The construct “Vulnerability”, among workers have been studied by researches in India and abroad. A review of the existing literature is presented in the following paragraphs:

UK Government, Department for Business and Innovation, (2006) has specified a vulnerable labourer as the one who lacks the ability to fight against the injustice of being deprived of the right to employment, Naik & Unni (2013) have coined the concept of vulnerability in relation to a situation when the workers are facing job insecurity and social insecurity with some influencing variables such as the nature of work, location of work, leave facilities and size of the employment. Greenan & Seghir (2017) have highlighted risk at workplace and the threat from adverse working conditions that may cause potential harm to the worker as the definition of vulnerability. They have assumed that vulnerability is not restricted to certain category of workers and to some specific job characteristic. Greenan & Seghir (2017) have tried to identify vulnerable employee using prediction and probability computation. The study on vulnerable workers in Britain emphasised that the description of vulnerable workers should be based on power imbalance in the employment relationship and has casted serious doubts on the effectiveness of the policy regulations in employment of non-regularized workers (Pollert & Charlwood, 2009).

Cunninghama, et al., (2018) have done an analysis of evaluation of safety training and sources of safety information of the migrant workers in small and large construction firms and has pressed upon the need for the employers to provide training to the workers in this respect. Gokhool, Kasseeah & Ragoobur (2018) indicate the need for higher attention towards training, education and social protection of the vulnerable workers in their study focused on gender and youth of the vulnerable workers in Mauritius.

The available literature on vulnerability shows a lacuna in the studying the perception of the workers toward this feeling of vulnerability based on Job Category, Educational Level and Gender. The concept of vulnerability is still taking concrete shape in the world of research. There is no widely accepted definition of this concept. Majority of the study is on the various risk associated with work and the inability of the person to come back to the position that he was before he faced the risk. The focus of this paper is on the economic and social vulnerability faced at the workplace. The conceptual approach taken in this paper only considers the following parameters.

- Health and Safety risk due to Physical environment at work place
- Nature of work
- Income sufficiency
- Job Security
- Adverse Social Environment
- Social Insurance protection
- Unionisation
- Personal Characteristics of the labour
- Technology
- Training

STATEMENT OF THE PROBLEM

Perry, Berlingieri & Mirchandani (2019) observe that power imbalance in the industrial relationship occurs due to harassment and violation of job standards with the workers engaged in precarious nature of work which makes the workers vulnerable. Vulnerability amongst the labour force is wide spread as they lack protection. There is a pressing need to identify those in vulnerable employment and eliminate the causes with a multidimensional approach (Burgess &

Connell, 2015).

Lack of a permanent job offer coupled with the predicaments associated with job search in industrial units pushes the migrant workers to seek the mediation of contractors for job placement. Research on vulnerability experienced by workers in different professions has been made under different parameters. However, the complex situation of contract workers has not been given much attention. Therefore the present study, aims to examine the vulnerability under contract labour system. Multiple questions directing the construct of vulnerability have been addressed, such as: Does the feeling of vulnerability differ with Job Category? What is the impact of the level of education of the workers on the feeling of vulnerability? Does gender also matter in the feeling of vulnerability?

OBJECTIVE OF THE STUDY

The study is in line with the previous research, Greenan & Seghir (2017) who have advocated the existence of difference of vulnerability levels in different job characteristics. The main objectives are listed below.

- i. To examine the difference in the vulnerability of the contract labourers employed in varied job categories in the manufacturing units.
- ii. To study the influence of education on the vulnerability of the contract labourers employed in varied job categories in the manufacturing units.
- iii. To study the influence of gender on the vulnerability of the contract labourers employed in varied job categories in the manufacturing units.

CONCEPTUAL FRAMEWORK

The existing literature on various dimensions of vulnerability, job category and the factors associated with contract labour system has laid the foreground for the development of the conceptual framework. The hypothesized relationship visualized is as follows (Figure 1):

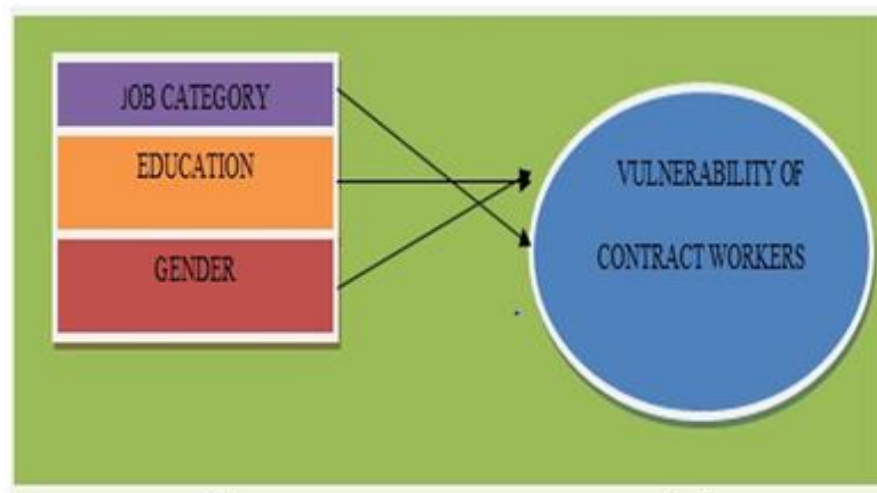


FIGURE 1
CONCEPTUAL FRAMEWORK

HYPOTHESE DEVELOPMENT

Taking the foundation of the conceptual model the following hypothesis is formulated for

the study:

H01: There is no significant difference in the scores of vulnerability experienced of contract labourers with respect to job category.

H02: There is no significant difference in the scores of vulnerability of contract labourers with respect to education of contract labourers.

H03: There is no significant difference in the scores of vulnerability of contract labourers with respect to gender of contract Labourers.

RESEARCH METHODOLOGY

The study includes both theoretical as well as empirical investigation to examine the hypothesis devised. A thorough scrutiny is made of the already existing literature on contract labour system and vulnerability which has given an insight into various factors influencing vulnerability of the workers. Under the empirical part of the study, an assessment is made on the vulnerability experienced by the contract workers. Primary data is collected from the contract workers employed in four industrial estates of Goa, namely industrial Estates of Tivim, Madkaim, Canacona & Margao through direct contacts with the respondents as well as through informal discussions. The sample of the study consisted of 350 workers supplied through contractors to the Industrial estates in North and South Goa. Convenience sampling is used for data collection through structured questionnaire. Considering the poor educational attainment and language barrier, the data was also collected through interview and informal discussions. The designing of the questionnaire was based on the literature collected (Greenan & Seghir, 2017). Some of the questions were close ended while others scored on a seven point likert scale ranging from strongly agree to strongly disagree. To test the hypotheses, One way ANOVA test was used.

EMPIRICAL RESULTS AND DISCUSSION

Job Category and Vulnerability

H01: There is no significant difference in the scores of Vulnerability of contract labourers with respect to job category among the contract labour.

Since the values of Skewness and Kurtosis for vulnerability with respect to all groups are within the acceptable range *i.e.*, -1 to $+1$, also the “W/S test” indicated that the group wise vulnerability scores are distributed normally, hence, One way ANOVA test is used to test the Null hypothesis. As Levene Statistics for Homogeneity of variances is found to be statistically significant, hence, Welch statistics for the testing of the above hypothesis is reported.

Job category	N	Mean	SD	Test Statistics
Technician	60	162.40	9.64	Welch (5,114.546)=26.03, p=.000*
Plant & Machinery operator	91	163.23	11.62	
Assembly worker	49	147.04	16.34	
Packaging worker	83	147.94	9.96	
Supervisor	22	157.00	11.71	
Helper & Loader	45	152.16	17.00	
Total	350	155.38	14.29	

(Note: * sig at 1 %)

Source: Author's estimates based on data from field work, 2021

As it can be seen in table 1, the p value in the above test statistics is less than .01 hence, it is concluded that, the vulnerability scores with respect to job category of contract workers differ significantly. It is also observed that, the vulnerability scores of the contract workers employed as Technician and Plant & Machinery operator are 162.40 and 163.23 respectively which are higher than that of other job category of contract workers such as Assembly worker (M=147.04, SD=16.34), Packaging (M= 147.94, SD=9.96), Supervisor (M= 157, SD=11.71) and Helper & Loader (M=152.16, SD=14.29). Further, Scheffe Post Hoc test is conducted to identify the pairs of the job category whose scores are differing significantly (Figure 2 & Table 2).

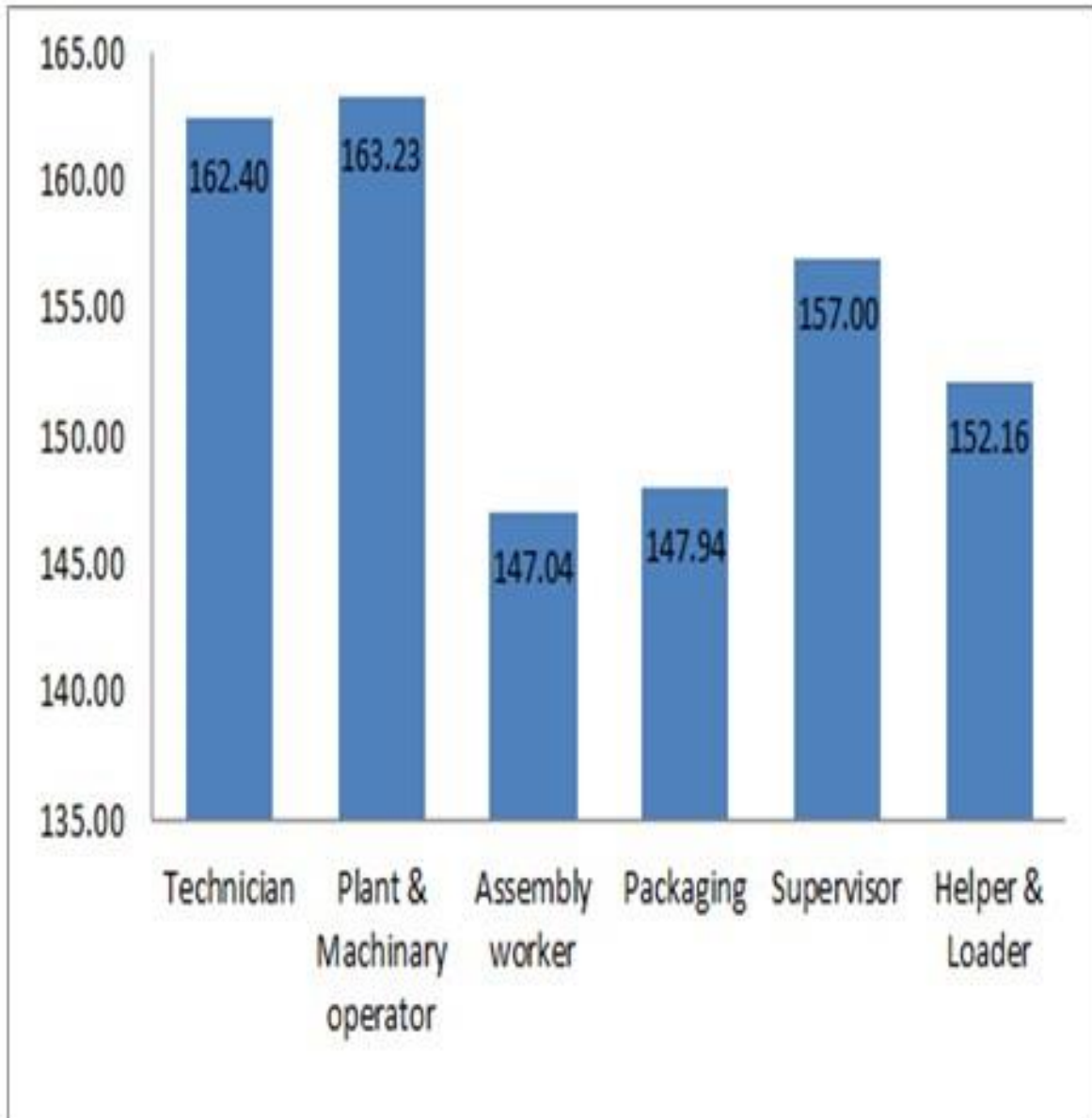


FIGURE 2
VULNERABILITY OF CONTRACT WORKERS WITH RESPECT TO JOB CATEGORY

Note: Mean Vulnerability(Y axis) and Job Category(X axis) of Contract workers

Source: Author's own calculation based on data from field work, 2021

Job Category I	Job Category J	Mean Difference (I-J)	Std. Error	Sig.
Technician	Assembly worker	15.35918*	2.4167	0.000
Technician	Packaging workers	14.46024*	2.1269	0.000
Technician	Helper & Loader	10.24444*	2.4751	0.005
Plant & Machinery operator	Assembly worker	16.18995*	2.2240	0.000
Plant & Machinery operator	Packaging	15.29101*	1.9050	0.000
Plant & Machinery operator	Helper & Loader	11.07521*	2.2873	0.000

(Note: * sig at 1 %)

Source: Author's estimates based on data from field work, 2021

The study hypothesized that the vulnerability does not differ as per the job category. However, from the Post hoc test it is clear that, the vulnerability of contract workers differ significantly between Technician and Assembly worker, Packaging workers, Helper and Loader, Plant and Machinery operator and Assembly worker, Packaging and Helper and Loader, since p value less than 0.01 ($p < 0.01$). As witnessed and perceived from the fieldwork, the job category deeply influence the feeling of vulnerability among the workers. All of them are facing the same insecure position due to job uncertainty; however, workers employed in a less demanding and a safe nature of work feel less at risk. The worker employed in precarious kind of job feel highly vulnerable, although they are paid more, yet, the precarious nature of work makes them feel vulnerable.

Education and Vulnerability

H02: There is no significant difference in the scores of Vulnerability of contract labourers with respect to Education of Contract labourers.

Since the values of Skewness and Kurtosis for vulnerability with respect to all groups were in acceptable range *i.e.*, - 1 to +1, also, the "W/S test" indicated that group wise vulnerability scores are distributed normally, hence, One way ANOVA test is used to test the Null hypothesis. As Levene Statistics for Homogeneity of variances is statistically insignificant which indicates that the assumption of homogeneity of variances holds good for the data set, hence, F statistics can be used to test the null hypothesis. The result is presented in the table 3 below:

Education	N	Mean	SD	Test Stat
Elementary & Illiterate	54	149.37	15.54	F(3,346)=5.3035, p=0.002
Secondary	130	158.13	14.61	
Higher Secondary	57	154.49	13.48	
Graduation & Diploma	109	155.54	12.83	
Total	350	155.38	14.29	

Source: Author's estimates based on data from field work, 2021

Since p value is less than 0.01, it indicates that the level of Education of Contract workers has an impact on the vulnerability scores. It observed that mean score of Contract Workers with education up to secondary level (M=158.13, SD=14.61) is the highest among other groups of education. Minimum Vulnerability scores is observed for contract workers with education up to elementary level or Illiterate (M=149.37, SD=15.54) (Figure 3).

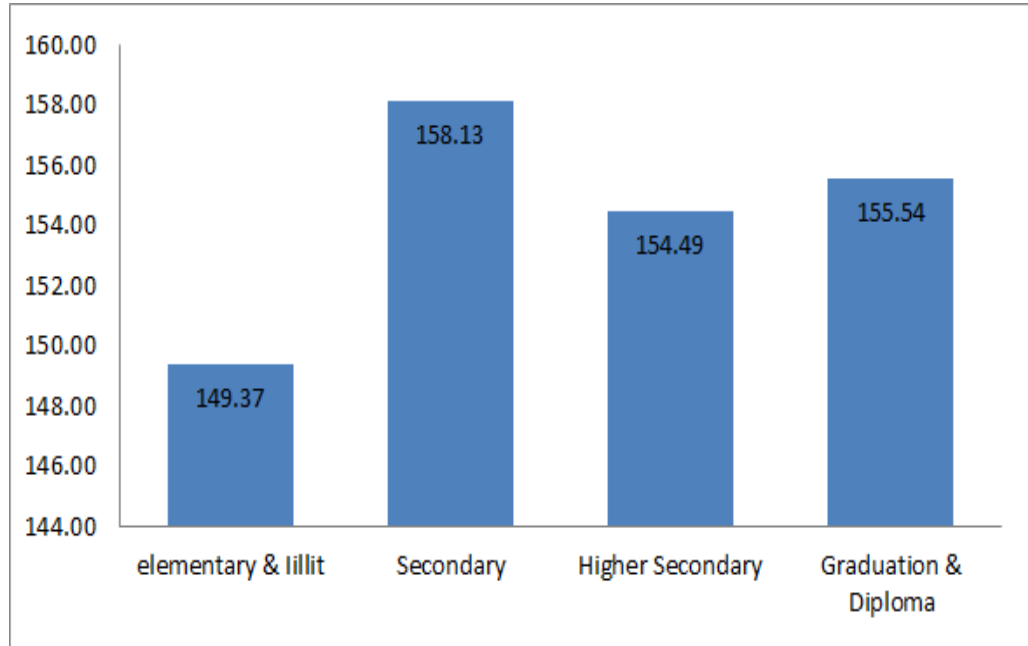


FIGURE 3
VULNERABILITY AND EDUCATION OF CONTRACT WORKERS

Note: Mean Vulnerability(Y axis) and Job Category(X axis) of Contract workers

Source: Author's own calculation based on data from field work.

Further, the Scheffe Post Hoc test result indicated that the vulnerability scores differs between workers with Elementary level of education or Illiterate and workers with Graduation and Diploma.

Vulnerability and Gender

H03: There is no significant difference in the scores of Vulnerability of contract labourers with respect to Gender of Contract Labourers.

Since values of Skewness and Kurtosis for vulnerability with respect to all groups were in acceptable range *i.e.*, - 1 to +1, also the “W/S test” result indicated that group wise vulnerability scores are distributed normally, hence, independent sample t test is used to test impact of gender on vulnerability of contract workers. From the test statistics it concluded that, there is significant difference in the vulnerability scores of workers since p value is less than 0.01 ($p < 0.01$). Further, it is observed that then mean scores of Male workers is 160.32 where as the mean score of the Female workers is 144.85. It is concluded that Male workers are more vulnerable as compared to Female workers. The high level of vulnerability of Male contract workers is mainly due to the nature of the work performed which involves health and safety risks associated with the job. More over the Male workers are the main breadwinners of the family. An insecure job in the form of temporary contract

gives a sense of instability.

Gender	N	Mean	SD	Test statistics
Male	237	160.32	12.85	t(345)=10.80, p=0.000*
Female	110	144.85	11.44	
<i>(Note: * sig at 1%)</i>				

Source: Author's own calculation based on data from field work, 2021.

The statistics indicate that female workers employed through a contractor feel less vulnerable. The probable reason could be, that they are engaged in work that is not precarious in nature and in majority of cases, the family does not mainly depend on their income.

A narrative description of the information collected during field work is presented for a better comprehension of the perception of vulnerability by the contract workers.

“The leather apron given to us does not give complete protection to the whole body. The pair of shoes is of not good quality, so it wears off soon. I have to spend around Rs. 600/- to by a pair of shoes for myself. Sometimes a few drops of liquid metal spills on me as I work in metal molding section. On Sundays, I spend the whole day removing the fragments of metal that is pricked into the skin of my palm”.

Canacona (Field Notes, January 2021)

“I am not aware of any maternity leave benefit. When I delivered I had to quit my work. I don't think that any of my friends have taken this leave. Nobody told us about it”.

Tivim (Field Notes, February 2021)

“I was trained for just one or two days in the beginning of my job. Rest of it I learned all by myself. I like my work but there is no growth in it. Next twenty years also I will be doing the same work”.

Margao (Field Notes, February 2021)

“There is no point in switching over to another contractor. All are the same. I will get the same amount of meager wage under all of them, I have been living in a dingy rented room for almost a decade whereas these contractors buy land and build a house within just a few years”.

Madkaim (Field Notes, February 2021)

“Nobody cares even if we die. Some time back a young worker died while working. His aged father came from the native place. We all collect the ashes and protested. It was only after the protest, a small amount was given as a compensation to the old man”.

(Field Notes, February 2021)

“The permanent workers do not talk to us. In fact they try to push their share of work on us and idle around. We can't complain as we might not be employed again by the company.”

Canacona (Field Notes, January 2021)

“I don't want to get involved into union activities as I fear that if I do so, my contract might not be renewed”.

Madkaim (Field Notes, February 2021)

“I am a technician. I have so many ideas to improve the production process but when I try to put forth my suggestion, it is not liked. So I just do what is told. There is no appreciation. I don't feel a sense of belonging with the company”.

Margao (Field Notes, February 2021)

The above quoted statements precisely reflect the state of mind and the feeling of vulnerability among the contract workers. Evidently, this feeling of insecurity with the type of work, helplessness, ignorance about the entitlements and social exclusion makes the contract workers more vulnerable. The absence of on- the- job training makes their career stagnant.

CONCLUSION

The study analysed the dimensions influencing the vulnerability level of the contract workers. The research findings give evidence that the job category, educational attainment level and gender of the workers are significant factors that influence the vulnerability level of the workers under contract. Women are less exposed to vulnerability related to nature of work as they mainly prefer to work in packaging and assembly section unlike the Men who are employed in Plant and Machinery operation. A majority of the women take up the job as a secondary source of income, hence, they do not expect job security and higher level of training for career advancement. As a result the vulnerability level is lower. This result casts a new light on the influence of gender on the feeling of vulnerability. Undoubtedly, various provisions have been made in the labour law to make the workers less vulnerable but, the enforcement of the existing regulation is a questionable.

Although this study was limited to investigating the difference in vulnerability in certain industrial estates, yet, it presents a real situation faced by contract workers as extensive primary data has been collected and an in depth analysis has been performed. This study can be further extended to a comparative study with direct workers who do not get placements through contractors using the same dimensions which can give additional insights into the finding of the study. The statistical analysis are presented to support the argument about the significance of Job Category, Educational Qualification and Gender as crucial influencing variables on vulnerability of the workers.

To conclude, vulnerability among the contract labour needs deeper research with empirical analysis under different dimensions in order to outline the critical challenges that need attention. In-depth study will generate evidence for this pressing issue of vulnerability among the contract workers. The level of vulnerability of all contract workers is not the same, so the policy response to vulnerability should also consider the difference. The absence of any initiative in this respect will lead to a poor work engagement which is a form of economic loss even for the principal employer. Hence, it is in the interest of the employer, contractor and the economy to work towards making the contract worker less vulnerable. The nature of employment may be temporary contract but the strategy towards the development of this workforce should be permanent. The study suggests that vulnerability and the factors influencing it has to be given a serious consideration while amending the labour law. This evaluation matrix can be the foreground for further research in understanding the predicaments of the contract workers.

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