

An Assessment of determinants influencing labour working conditions (With special reference to SSI Sector)

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ABSTRACT

Purpose:

This paper tries to: (i) Determine the labour working condition in relation with safety measure taken by employers of Small-scale industries in Indore.
(ii) Determining the research gap in this area.

Design/Methodology:

The present study is descriptive cum analytical in nature. The study was undertaken in Indore whereby data from 100 respondents was gathered by technique namely simple random sampling by a way of first hand and secondary source of information as well. Null hypotheses were tested by using Linear Multiple Regression Model.

Findings:

The study revealed that some variables like precautions regarding health of workers in the factory, over-time payment policy of factory, per day working hours with sufficient breaks, etc. are showing positive impact while some variables has no effect on labour working condition.

Implications:

As a part CSR activities, SSI's have responsibilities towards the protection of their workers. If labours are protected and kept satisfied, productivity will be leading to growth of industry and overall improvement of the economy.

1. Introduction

The adoption of globalization and liberalization policies brought significant changes in Indian economy and the entry of MNCs has developed increased competition worldwide. After the independence, an agrarian Indian economy also diversifies itself in industrial division. In this regard, government also put herculean efforts for rapid progress of industrialization to become self-reliant and to achieve economic growth of country.

The targets concerning industrial investment were already set in five-year plans. Gradually, there seems that industrial sector is experiencing growth which would results in production of supplies leading to generation of employment opportunities. Various policies were framed in public as well as private sectors whereby special emphasis was given to small-scale units due to its low investment criteria, easy establishment in rural and urban areas and to promote industrialization. SSE are divided into two categories: Traditional as well as Modern. The former is labour intensive, which involves production of conventional goods and is located in rural areas. Traditional SSI engaged in handicrafts, handlooms, khadi & cottage industry or sericulture etc. While later is capital intensive that involves high tech in production and is located in urban areas. This study has taken into account in Indore city which is known as the industrial capital of Madhya Pradesh.

Madhya Pradesh is centrally located and has excellent connectivity with all four regions (East, West, North and South) of India. As Indore District engaged with small medium, large and service Industries, it build development opportunities and penetrate markets. In Indore district at one end we can see Automobile Industries, fabric dealing, software industries at

another end the district diversified itself to Pharmaceuticals sectors, freehold property and retailers. It has small scale units in Sanwer Road, Pologround Laxminagar, Rau Bhagirathpura Shivajinagar Pithampur and Hatod. Beedi Udyog, Agarbatti Udyog, Papad making, Achar making etc. are some of the small-scale industries established in Indore. It is observed that large number of workers engaged themselves in small scale manufacturing industries like rubber based products, plastic products, chemical products, glass and ceramics, or services sector including rice mills, engineering works, repairing works and drilling of wells etc.

Although, SSI open the door of employment opportunities for workers but they are confronted with various problems like long working hours, overtime, insufficient breaks, poor and filthy layout of premises to be employed, poor lighting etc. Many provisions related to labour laws are made where the factory act 1932 considered being the most important one. In this act, it was mentioned to take preventive measures against workers in terms of safety, health and for their welfare. In this regard, MPSIC is also doing well and provide support to SSI being its promotional and marketing agency. However, it has been viewed that proper implementation of those provisions are not yet applicable on working conditions of Small-scale units.

Workers are confronted with problems against their safety measures. For the present study, plastic packaging SSI of Indore is considered. As per Ministry of MSME, the average investment in plant and machinery was 25-30 lacs in cluster. This unit deals in HDPE Pipes, Woven Sacks, Films & Plastic Bags. There are around 135 functional units of plastic

packaging with 2500 crores turnover in clusters.

Openly 11000 and indirectly 20000 peoples get associated with this unit. Therefore, this study is an attempt to know the satisfactory level of labour working condition in Small-scale units with special reference to Indore.

2. Literature Review

The study of **Rathod, C.B. (2007)** put stress on small-scale entrepreneurs' contribution on world economy. His study described the growth pattern of SSI, examined the reason behind its success or failure, find out barriers faced by SSI and how to overcome these barriers, evaluate the overall impact of globalization on SSIs. This study ends up with the concluding remark that there is a need of good governance, simplified regulatory framework, and sufficient finance for easy accessibility, proper infrastructure etc. to exist in competitive environment.

Subrahmanyabala, M.H. (2004) threw light of impact of globalization on SSI. As SSI suffered from the various problems such as growth in units, employment, exports and many more, therefore in such case policy amendment can open new opportunities and markets for small-scale sectors. This could be achieved by adopting advanced technology and strengthening financial structure.

The study of **Santrip Shukla (2013)** proper lightning, furniture, restrooms and other health and safety precautions were the important factors leading to lesser absentism which would motivate workers to stay in such type of environment.

Chopra (2010) suggested that a healthy and safe environment will give a positive energy to the employees due to which they are fully satisfied with their job. The connection between SSI application risk and economic conditions by estimating a series of discrete time hazard models on the monthly unemployment rate in the state for the span between 1996 and 2010 was examined in the study of Austin **Nichols et al., (2014)**. The data was collected by using Survey of Income and Program Participation (SIPP) linked to the Social Security Administration's 831 file. The results from hazard models implied that unemployment rates in industrially advanced states have a better and positive effect among jobless individuals, and our evidences suggest that female applicants are more responsive to local economic conditions than male. There is significant growth during 2000-01 to 2004-05, with respect to number of units, production, employment and even exports (till 2002-03).

Economic Survey, Government of India (2004-05). The average annual growth in the number of units had touched to 4.1 per cent, while employment rose by 4.4 per cent annually. Moreover, the average annual growth in production, at current and constant prices was 10.6 per cent and 7.6 percent respectively. The study of **Shree Devi and Ganpathis (2014)** taking the sample of 200 employees of various SSI in Kanyakumari district and tried to determine influence of various work related factors on QWL of employees.

Based on previous studies and variables of QWL reviews, questionnaire was designed. Besides, the list of industrial units

was obtained from District Industrial Centre of these cities and units were chosen through random sampling technique. The analysis from regression model revealed that independent factors like safe working arrangement, self improvement, fair compensation, job security have positive effects on QWL life in SSI.

Devendra S & Atul Kumar (2016) revealed that in SSI, various employees wants job satisfaction, bonus, better working environment and leave according to them. In small-scale industries lower position employee are not involve in any decision making process of management. There are number of studies, which had been conducted on small-scale sectors from different states of India.

Most of the previous studies were concerned with growth of SSIs, SSI and financial aspects, impact of globalization, entrepreneurship in SSIs. However, in the present study workers satisfaction level with respect to their working condition in SSI of Indore has been focused. Here, labour working condition was considered as dependent variable while safety measures like precautionary actions, lighting arrangements, first aid facility etc. were independent variables.

3. Objectives

To study the impact of safety measures taken by employers in SSIs towards labours working condition.

4. Hypotheses

1. H01: There is no impact of precautionary action taken regarding health of workers in the factory on labour working condition.
2. H02: There is no impact of over time payment policy of factory on labour working condition.
3. H03: There is no impact of working hours in a day with sufficient breaks on labour working condition.
4. H04: There is no impact of lighting arrangements at work place on labour working condition.
5. H05: There is no impact of first aid appliance facility in the factory on labour working condition.
6. H06: There is no impact of facility of canteen at factory premises on labour working condition.
7. H07: There is no impact of Precautions taken against Fire, Explosive or inflammable gas on labour working condition.
8. H08: There is no impact of Protection of Eyes precautions against Dangerous Fumes on labour working condition.

5. Methodology

Research design

The research design of is descriptive cum analytical in nature.

Sample Size and Sampling Techniques

The study was conducted in Indore city to find out the satisfaction level of workers working in small-scale industries with respect to safety measures. In Indore, there exist Clusters of Micro & Small Enterprise like Manufacturing Sector, Pharma,

Namkeen, Plastic Packaging, Rechargeable Torches, Readymade garments and many more. The data were collected from 100 respondents based on simple random sampling technique of Plastic packaging industry of Indore. The respondents of study were the workers of small-scale industries.

Data collection

The study comprises of both primary as well as secondary data. Primary source of information was collected with the help of designing structured questionnaire that were administered to respondents. The questionnaire split itself in two parts: demographic profile of the respondents and questionnaire based on variables related with labour working conditions.

In the second part, all the variables were marked on Likert scale in the range of 1 – 5, representing 1 as highly satisfied and 5 as highly dissatisfied. Secondary source of information was collected from various journals, books, newspapers and reports of government including MSME. Before data analysis processes, the reliability of collected data is tested through SPSS version 20.

Reliability test has been conducted with the help of Coefficient (Cronbach Alpha). Reliability of data is (.703) which is good. The required data were analyzed and inferences/interpretations had been made accordingly.

Tools applied

The collected data was codified, classified and entered in SPSS for the analysis. Statistical tools like percentage analysis were used to analyze data. Multiple regression model was also used for this study.

The model is as follows:

$$\text{Model 1: } Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + U_t$$

Where, Ys are dependent variables and Xs are independent variables. Y1 is labour working condition. The F ratio (ANOVA) is 7.897 was statistically significant at 1 percent significance level. Therefore, the model was acceptable.

6. Rationale

Among the 5 M's of the organisation, now a day's men is considered valuable asset for the organization. Men should be treated with due care and not as machines in any organisation. The unorganized workers are widely spread and engaged in SSI. Thus, many provisions in favour of labours are laid down and came into existence for organized workforce.

Indian government duly promotes SSI because it is labour intensive technique and large number of rural and urban people gets the employment opportunity. The proper working environment of SSI's helps the workers to retain the organisation for long period. The conditions, which can dissatisfy the workers are: poor health facilities; no safety conditions; no crèches; no proper drinking water, no overtime payment policy, no proper lighting and ventilation conditions, no breaks, no proper sanitation, no proper hygiene and welfare of individual worker etc. The proper safety measures helps to promote the health and welfare of the workers of SSI's and to prevent haphazard growth of SSI's.

7. Results

In the descriptive statistics (Table-1) 6 variables on workers condition in SSI is considered. For age the mean value is 3.04 which denoted that more people with matured group age category is involved is associated with SSI with SD is 0.8. The SSI worker's age group 18-60 was the sample unit. In the sample size of 100, majority of respondents were from the age group of 36-45 years, which counts to 54%.

Least number of respondents only 2% falls in the age group of 18-25 years. This indicates that involvement of youth workers is less and mature workers are more. Around 73% of SSI workers were male and 27% were female. This shows that male workers were more in number than female with ratio i.e. 8:3. The average score was 1.27 showing variability. Educational Qualification is one of the main factors in deciding the skilled and unskilled workers. The workers of SSI are not highly qualified.

It is found that maximum percentage of SSI workers, which counts to 46%, belongs to middle education level between classes VI- VIII. Around 14% of them belong to the group of primary educated including illiterate workers also, 30% of them belong to the group of secondary educated between Class IX-X and 2% are graduated. The mean value of educational status is 2.38 The mean score of duration of employment was 2.81 with SD .77 which exhibit that there is more or less stability of workers in past few years in SSI.

It could be depicted that 49% are associated with SSI for the period between 6-10 years and 31% of workers are employed in SSI between period 3-5 years. Only 1% is associated between periods of 16-20 years. The reason behind this is that in past less number of SSI units were established. Therefore, it is inferred that maximum number of workers are working in SSI within last 10 years.

Table 1: Descriptive Statistics

Age of SSI Workers	Frequency		Percent
18-25 yrs	2		2.0
26-35 yrs	20		20.0
36-45 yrs	54		54.0
46-55 yrs	20		20.0
56-60 yrs	4		4.0
Mean	3.0400	SD	0.80302
Gender	Frequency		Percent

Male	73		73.0
Female	27		27.0
Total	100		100.0
Mean	1.2700	SD	.44620
Educational Status	Frequency		Percent
Upto Class V	14		14.0
Class VI-VIII	46		46.0
Class IX-X	30		30.0
Class XI-XII	10		10
Total	100		100.0
Mean	2.3800	SD	0.89646
Duration of employment	Frequency		Percent
Within 2yrs	3		3.0
3-5 yrs	31		31.0
6-10 yrs	49		49.0
11-15 yrs	16		16.0
16-20 yrs	1		1.0
Mean	2.8100	SD	0.77453

Source: Primary Data

The coefficient of precautions taken regarding health of workers in the factory is positive. The t-stat is 2.729. ($p < 0.05$). Therefore, the null hypothesis is not accepted at 5 percent significance level. It can be said that precaution taken regarding health has positive impact on the labour working condition. If labour feel that employer is concerned about his health then his productivity also get increases. The coefficient is positive. The t-stat is 10.424. ($p < 0.05$). Therefore, the null hypothesis is rejected at 5 percent level of significance. This indicates that over time payment policy of factory has positive impact on the labour working condition. Labour gives more than 10 hours on regular basis to their factory. In such situation if over time payment facility is given to them then they would be more satisfied and will result in improved working conditions. As labours spend most of their time in factory, therefore it is necessary that sufficient breaks or recreation activity should be made permissible. The coefficient is positive and statistically significant at 5 percent level of significance. The t-stat is 5.569. ($p < 0.05$). If sufficient breaks are given during working hours they get refresh and will have positive impact on working condition. The coefficient of proper lighting facility at work place is positive. The t-stat is 4.323. ($p < 0.05$). Therefore, the null hypothesis not accepted at 5 percent level of significance. Proper lighting arrangements and proper ventilation is necessary because machines or tools used for making a product requires full concentration and sometime requires finishing of material. Due to proper lighting arrangement, labour working condition positively affected. The coefficient of first aid appliance facility in the factory is positive. The t-stat is .527. ($p > 0.05$). This indicates that the null hypothesis is accepted at 5 percent level of significance. It can be said that first aid appliance facility in the factory has no impact on the labour

working condition. This is because employers provide safeguards to labours in order to prevent from any serious or hazardous incidence. Moreover, labours themselves also before operating any machines wear safeguards and remain conscious to avoid such risky situation. Besides, in case of accident, first aid and ambulance facility is readily available. The coefficient of facility of canteen at factory premises is positive. The t-stat is .771. ($p > 0.05$). Therefore, the null hypothesis is accepted at 5 percent level of significance. The reason behind this is labours generally prefer to bring tiffin and want to enjoy homemade food as this would give strength to their body. The food available in canteen might be unhygienic and can cause diseases which would affect their productivity. Therefore, It can be said that Facility of Canteen at factory premises has no impact on the labour working condition. The coefficient of precaution taken against fire, explosive or inflammable gas is positive. The t-stat is 1.704. ($p < 0.05$). Therefore, the null hypothesis is rejected. The precaution must be taken against fire, explosive or inflammable gas because for labours, factory is the second home where they spend maximum time. Therefore, labours must be provided mask or some precautionary action must be taken so that they become healthy and could not be affected by any of these incidence. More the precautionary action is taken towards labour, more number of labours will be satisfied. The coefficient of protection of eyes against dangerous fumes is positive. The t-stat is -2.490. ($p < 0.05$).

Therefore, the null hypothesis can not be accepted at 5 percent level of significance. It can be said that Protection of Eyes (precautions against Dangerous Fumes) has positive impact on the labour working conditions.

Table 2 : Impact of Safety Measures on labour working conditions

$R^2 = .897$		Adjusted $R^2 = .885$				
Std. Error of the Estimate = .33879526		F=7.897 Sig. .000				
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
	B	Std. Error	Beta			
(Constant)	-4.283	.663		-6.462	.000	

1	Precautions regarding health of workers in the factory	.128	.047	.104	2.729	.008	H ₀₁ Rejected
2	Over Time payment Policy of factory	.450	.043	.522	10.424	.000	H ₀₂ Rejected
3	Working hours in a day with sufficient breaks	.304	.055	.275	5.569	.000	H ₀₃ Rejected
4	Lighting arrangements at work place	.190	.044	.182	4.323	.000	H ₀₄ Rejected
5	First Aid Appliance Facility in the factory	.033	.063	.026	.527	.599	H ₀₅ Accepted
6	Facility of Canteen at factory premises	.029	.037	.027	.771	.443	H ₀₆ Accepted
7	Precautions taken against Fire, Explosive or inflammable gas	.093	.055	.167	2.704	.042	H ₀₇ Rejected
8	Protection of Eyes precautions against Dangerous Fumes	-.124	.050	-.125	-2.490	.015	H ₀₈ Rejected
Reliability Statistics							
Cronbach's Alpha=.703				N of Items 13			

8. Suggestions

- Although safety measures and precautionary actions are taken but there is a need to integrate private health centers to improve working conditions.
- Precautions should be continuously taken to improve industrial hygiene and controls environmental hazards.
- Plastic packaging of SSI come up with the problem of availability of raw material. Therefore, proper arrangements for supply raw material should be considered with the permission of government.
- Training should be provided to unskilled persons, as operational cost incurred is very costly.

9. Limitations

While collecting data from respondents there might be a chance of biasness in the responses of respondents.

The entire result cannot be generalized for other district as the present study focuses on Indore district only. The sample size taken is too small. More the sample size better would be the results.

10. Conclusion

Small-Scale Industries Sector plays a significant role in the economic development of a certain geographical area. An analytical study was undertaken for assessing the impact of labour conditions on the productivity of the workers. This study was undertaken on the SSI units of Indore district primarily and it also paves the way for further research. It is observed that SSIs' make major economic contribution to Indore District by providing employment opportunities to large numbers of individuals. Some of these people become self-employed after getting associated with them. As a part of CSR, SSI's are responsible towards the protection of workers. This can only be achieved if as per changing environment SSI's adopt updated technology and provide all safety and welfare measures to their labours. If labours are satisfied with working conditions, they will be able to focus more on the productivity. This will lead to growth of industry not only in the geographically bound area but will lead to overall development of economy of the country.

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Annexure 1: Communalities

Items	Item Load
First Aid Appliance Facility in the factory	.629
Facility of Canteen at factory premises	.712
Precautions taken against Fire, Explosive or inflammable gas	.628
Precautions taken against activity which may Affect your body or health	.717
Protection of Eyes precautions against Dangerous Fumes	.715
Over Time payment Policy of factory	.796
Working hours in a day with sufficient breaks	.876
Lighting arrangements at work place	.709