

WORKERS' RETENTION FACTORS: A STUDY ON PLANT WORKERS AMONG SMALL MANUFACTURING FIRMS

Vidhya VINAYACHANDRAN¹ DOI: https://doi.org/10.35782/JCPP.2022.4.04

Abstract: Human assets play a very important in the survival of small firms. There are prominent studies from developed and developing countries exploring the human resource practices among small firms. From the perspective of Resource Based View, human resources are regarded as potential assets that are indispensable for sustainability of all firms. Studies concentrating on human resource practices from small and large firms' perspectives are abundant. Still there are fewer studies which view the importance and factors for fostering workers retention from the purview of plant workers of small firms in developing countries. The objective of the study is to explore workers retention factors among plant workers and whether it differs significantly sector wise. The study confirms that human resource retention factors are important for retaining plant workers among small manufacturing firms. The findings also proves that there is significant differences in workers' retention factors with respect to demographic characteristics of workers. The study underlines that small manufacturing firms are relatively less conscious to retain workers in the plant thus leading to their instability.

Keywords: Sustainability; Human Assets; Human Resources; Resource based view; Plant workers

Introduction

Small manufacturing firms play a prominent role in the case of many developing nations. They are regarded as the most income generation avenues for these countries. The manufacturing competencies of Indian economy lies among small firms. These firms should focus on developing their capabilities in the form of innovation, technological expertise, infrastructure, as well as workers competence. The popularity of Indian small manufacturing firms has crossed even national borders, by providing quality products and services. Presently Industry 4.0 methodologies are practiced among firms in many developed and developing countries and this made small manufacturing firms to think ahead (Dutta et al., 2020). But implementing such methodologies require skilled employees. But their sustenance depends on efficient

¹ Dr., Assistant Professor, Department of Commerce and Management Amrita Vishwa Vidyapeetham, Kochi campus, Email: vidyapoornasree@gmail.com

retention strategies. The International Labor Organization strongly recommends the importance of strategies to retain those employees thereby increasing the competencies of the firms. While focusing on the developed economy, 99 per cent of European economies are small and medium enterprises which contribute enormously to wealth creation. The participants of OECD countries especially Australia, Canada, Japan, Korea and United States, where their respective Government prioritize growth of small and medium enterprises through well-defined policies and procedures, that is same in the case in Asian countries. When moving to East Asian countries like India, characterized by an agrarian economy, their entry into manufacturing sector resulted in a stagnant growth over the last two decades. This is because Indian Industries are dominated by Micro, Small and Medium Enterprises sharing their role in manufacturing and service markets. Out of the manufacturing sector, the MSMEs contribution is only 7 per cent and out of service sector the MSMEs contributed 30.5 per cent to India's GDP.

The success of every small firm lies in the tangible and intangible resources they possess. Each resource is distinct in terms of abilities they possess. Among them, human resources play a very important role. Because they are responsible for converting other resources into competent one. But small manufacturing firms are witnessed by frequent employee turnover (Park et al., 2019) thus resulted in lesser organizational performance. Humans without creative mind have nothing to contribute towards industrial development. Human capital is the aggregate of knowledge, skill, and experience inherent as well as acquired by the individual worker. A developing country is characterized not by increasing stocks of human capital, but by a declining trend in human capital stock. Evidence from empirical research proved that experience is an important constituent of human capital. The competitiveness of manufacturing sector is driven by skilled and active workforce. These assets need to be given significant importance so that their value will be appreciated and thus forms a source of competitive advantage. The sustenance of these values can be assured among small firms only by providing with best HR practices. (Gerhart & Feng, 2021).

The employment in the manufacturing sector especially Micro, Small and Medium enterprises is witnessed by increased use of migrant labours, limited skill development or training and poor working conditions. While the other resources such as machinery, building and materials shows the sign of depreciation, human resources are the only resource which appreciates through development and training (Teece, 2014). Studies on retention factors are conducted majorly in large growth-oriented firms. This is because small firms are unable to afford equal pay and compensation to workers as compared to large firms. The survival of small firms is at risk as a result of lack of skilled labour. This is due to the fact that strategies for retaining workers are less adopted in such firms. Therefore, it is important to understand the different types of retention strategies employed by small firms and to what extent it is deployed in developing countries.

The HR practices among small firms are informal and this resulted in focusing human resource retention factors in this study. The present study focuses on plant workers among small manufacturing firms concentrated in rural areas of South India, where the role of human resources is significant. Studies conducted in developed countries examines human resource practices with the performance of small firms, where there seems a positive relationship between these variables. (Sheehan, 2013). Talent retention is considered as one of the important factors for global success. Small firms are very poor in deploying practices necessary for retaining talented and skilled workers, thus necessitates to further understand the situation from developing country perspective. (Abdullah Al Mamun & Nazmul Hasan, 2017). Small manufacturing firms failed to deploy best practices which are crucial to retain skilled workers. Several authors have listed a combination of factors necessary for retaining employees among small firms. It includes sound working environment, compensation, career advancement, promotion opportunities, coworker support, training, and development etc. (Khalid & Nawab, 2018).

Importance of the Study

The role played by plant workers in small manufacturing firms is critical. They are considered as most valuable for the performance of the organization. It is the responsibility of small firms to enhance their skills which will contribute to the productive efficiency of the entire team. In order to attract best talent, it is necessary to focus attention on developing strategies to retain them. A stable workforce is very crucial to sustain their performance. No equipment or technology works without the golden hands of workers.

Today, with the introduction of smart manufacturing and industrial systems, the plant should be modernized to adapt to modernized way of manufacturing and processes. According to the theory of RBV, human resources are regarded as the pillar to enable firms to remain competitive. Human resource practices are considered as unique resources which cannot be copied by other firms (Lado, & Wilson, 1994). From the perspectives of RBV, the retention initiatives can be enforced in the core areas of career advancement, tasks specific and incentive based. But in developing countries like India, due to lack of formalized HR system, small firms lack competent human resources. Humans without creative mind have nothing to contribute towards industrial development. Moving from traditionally focused man-made products, now the industries are focused towards machine building capacity, where the men should possess the knowledge on how to operate such automated systems.

The entrepreneurs in the small firms of many emerging countries do not focus on the economic and social progress of workers and they are employed in poor and unhealthy working environment. This in turn affects their competitiveness. The workers in small and medium enterprises are the heart and soul for improving the productivity of the sector. Even though a firm is abundant with respect to its material resources, their effective deployment requires the golden hands of workers, who convert the materials into productive outputs.

India is blessed with immense knowledgeable and skilled workers. (Voca & Havolli, 2019). As per the report of economic times, MSME employ close to 40 percent of India's workforce. Globalization has resulted in both employment generation and destruction. In order to meet the uncertain future environment, the industrial sector should be well equipped with human capital, as they form the core of any business activity. Even though MSME is placed second largest in employment next to

agriculture, it is not characterized by increasing trend in human capital; but exhibited a declining trend in human capital stock among small and medium enterprises. Researchers pointed that India is placed highest next to Philippines with respect to turnover rates of skilled workforce.

Literature Review

Concentration on worker's retention practices is vital for improving the productivity of the workers as well as the organization as a whole. Basically, in small manufacturing firms there is a tendency of frequent turnover of workers as it may hamper the quality of services offered by the firms. There is no formal HR department in many of the micro and small firms. Factors selected for workers' retention were identified from developed and developing countries perspectives. The term workers retention practices were most popular among skilled workers. The workers of public sector and private sector were not exposed to creative thinking. The retention practices like compensation, financial incentives, training, and promotional opportunities are less entertained among lower-level workers. Three Rs are vital for the survival of employees in the organization. It can be 'reward', 'respect' and 'recognition' which is regarded as critical factors for the employees of small firms. There are no such consistent practices of retention like performance management, motivational strategies, overtime incentives, career advancement opportunities to make the employees productive and efficient. Studies are deficient in terms of performance appraisal systems in terms of lower-level workers.

Sustainability is a broad term that are addressed from different perspectives. Investment in Human resource retention factors can be regarded as one of the important sustainability initiatives among various organizations. Resource Based View can be considered as one among the popular theory that addresses the issues of competitiveness and sustainability. Investment in HR practices will cherish the longterm profitability of firms.

Studies applying RBV in HRM related disciplines are in abundance (Wright et al., 1994; Wright et al., 2001). There are studies from both developed and developing countries that views human resource as an important resource and their skill set should be enhanced to foster unique set of capabilities. Whereas studies focusing on human resource practices as unique set of resources are scarce. The studies which are basically conducted under this purview focuses more on established firms and also focused on employees performing white collar jobs. But the present study views retention factors of workers of small firms as distinct resources which are vital for generating workers' competitiveness. Each factor of workers retention is treated as distinct resource which forms the basis of Resource Based View. Studies done by authors (Abdullah Al Mamun & Nazmul Hasan, 2017; Long et al., 2014; Kemelgor & Meek, 2008; Wagar & Rondeau, 2006) on various strategies for retaining workers include a few variables. Workers Retention Factors are crucial for enhancing job satisfaction among employees (Spector, 2021). The authors claims that A worker is satisfied only if they are provided with better compensation, favorable work environment, better career advancement opportunities and promotional measures. Additionally other variables such as Personality training, technology training, employee counselling, participation in decision

making, on the job training, off the job training, suggestion Scheme, performance appraisal, grievance procedure, updating the technology, achievement goals, protective equipment, pollution control measures, rest time, flexible working hours, medical facility, canteen facility, housing facility, leave facility, recreation facility, first aid, coolers, toilets in adequate areas, effectiveness of emergency situations, inspection of work surroundings, fair and adequate pay, bonus, retirement benefits, educational loans and loans for purchase of goods were also explored with special reference to small firms. Studies empirically proved that financial incentives are important constituent of employee retention. Career plans should also be encouraged to employees at all levels.

The workers employed in small firms are not provided with adequate pay and compensation in accordance with the skills and education they possess. They are not allowed to open with their creative ideas which is vital for improving the manufacturing competencies of the organization. Workers should be encouraged in participative decision making which makes them to feel a significant part of the organization. As technology advances every human force are considered as unique. Studies discussed that employee voice is a significant part of organizational effectiveness. This is similar in small manufacturing firms. Workers should be encouraged to express their work related, innovative ideas and concerns they feel to be shared and to be justified. (Soumyaja & Kuriakose, 2020) . This is not the case of manufacturing firms, but the case of service organizations as well. The workers should feel they are physically and mentally safe within the organization (Psychological safety) thus enhancing job satisfaction among workers. Knowledge advancement can be made possible by investment in both internal and external training programmes which improves the thought management process of workers. As the workers employed in small firms are basically having low levels of education, this need to be taken into consideration (Soumyaja & Sowmya, 2020). Studies coined that, as there are less specialized workers in small firms, they are paid less. Along with these findings, job rotation, team efforts, training and development are less focused in such firms. Those firms that has effective HR practices exhibited successful performance than others. This is empirically justified in the case of IT sectors (Sawant Dessai, n.d.). Many small firms in the manufacturing sectors does not have a formal HR policy. Otherwise, to make it clearer, there are no standardized HR practices that commonly accepted to be followed. The studies on strategies for retaining workers are basically conducted among senior executive officers of developed countries (Wagar & Rondeau, 2006). As workers are basically responsible for generating new and innovative ideas, they are considered as knowledge generator within an enterprise. Better Human Resource Practices enhances their knowledge reservoirs. Therefore, retention factors also help in knowledge management among small manufacturing firms. Authors conducted studies to test the role of HR practices among knowledge-oriented firms and they found to be significantly influencing firm performance. (Singh & Vohra, 2009), Still there are limited studies that enhances these retention practices in small organizations.

Problem Statement

Increased turnover rates may be due to decreased satisfaction among workers. The reason for increased turnover rates among workers can be different. It can be due to lack of compensation, lack of motivation, unhealthy working atmosphere, lack of proper welfare and training facilities. Multinational Organizations are equipped with sufficient resources required for retaining employees. But small organizations do not sufficiently employ retention practices. In order to withstand in a competitive era, small manufacturing firms should focus on retaining their workers, which is an important strategy for creating competitive advantage. This study is undertaken to know if there is any significant difference with respect to worker retention factors among small manufacturing firms with special reference to plant workers. The study identified 30 variables from extensive literature and intends to explore those specific variables relevant to plant workers among small firms in Kerala. After exploring the relevant factors specific to plant workers, how these factors are considered important with respect to small firms has necessitated the generation of second objective. It is evident from studies of both developed and developing countries that workers are discriminated based on their demographic characteristics. Evidence from studies claims that demographic features like age, income, education, experience, does have a significant negative impact on job satisfaction. This motivated to study the differences in workers' retention factors with respect to demographic characteristics among small firms. Studies said that Workers' age is a significant predictor of dedication and satisfaction. As Younger workers have more employment avenues, their persistent stay in the organization is a challenge (Haves, 2015; Lambert et al., 2012), specifically for small firms. Therefore, it is necessary to identify whether retention practices are focused on small firms to retain younger talents. At the same time viewing retention practices from the point of view of unique resources are rarely mentioned in the literature and this strongly motivates to mention the present work with RBV. The present study considers the plant workers since they are the most valuable workforce and are prone to greater risk to industry hazards. This motivated to formulate the following hypotheses as follows:

Proposed Hypotheses

H1: There is significant difference in the workers retention factors among small manufacturing firms.

H2: There is significant difference in workers' retention factors with respect to demographic characteristics (age and experience) among small manufacturing firms.

Resources and Methods

The data were collected directly from the plant workers through interview schedules who are employed in the plant of manufacturing small firms in Ernakulam, Kerala. As per the State Report of Ministry of MSME 2018-19, Ernakulam District is considered as commercial capital of Kerala and highest revenue yielding district. The small manufacturing firms are characterized by those firms that are enacted by the Micro, Small and Medium Enterprise Development Act in 2006 (Sawant Dessai, n.d.). As per the Act, the medium manufacturing or production enterprises are those, which have an investment in plant and machinery between Rupees 50 and 100 million. The micro enterprises are limited to spend an investment within 2.5 million rupees and the small enterprises come with the investment limits between 2.5 and 50 million rupees. The samples were selected from food, engineering, and plastic sectors of Kerala where the role of workers in the plant are found significant. The total population of plant workers as per plant register maintained by these firms' is 1158. By applying Yamen's formula, the sample size was derived as 297. The Questionnaire were distributed among 297 samples and the only usable ones were only 215. The variables for human resource retention factors were identified from various studies. (Singh & Vohra, 2009). Small manufacturing firms should realize that their competitiveness depends on talented and knowledgeable employees. Kerala's small firms has been characterized by increased labour turnover because of tempting offers from other companies and countries. Therefore, Micro, Small and Medium Enterprises has to find out best possible way to retain their present workers. This include Personality training, technology training, employee counselling, participation in decision making, on the job training, off the job training, suggestion scheme, performance appraisal, grievance procedure, updating the technology, achievement of personal goals, protective equipment, pollution control measures, rest time, flexible working hours, medical facility, canteen facility, housing facility, leave facility, recreation facility, first aid, coolers, toilets in adequate areas, effectiveness of emergency situations, inspection of work surroundings, fair and adequate pay, bonus, retirement benefits, educational loans and loans for purchase of goods. A total of 30 variables were used for the study which were taken from established works (Abdullah Al Mamun & Nazmul Hasan, 2017). The present study explores the factors of workers retention specific to plant workers and also identifies whether these factors are significant for small manufacturing firms.

Results and Discussions

The highest number of plant workers are employed in micro and medium sectors. Above 70% of the workers are male in small manufacturing firms. There are a smaller number of female workers employed in these firms. In the case of micro sectors larger group of workers in the plant belong to the age group of 40-50. But this is not the case of small and medium sectors. The small sectors open the plant as training platform for those who have come out after their education. In small sectors, larger number of workers in the plant belongs to the age group of 20-30. Majority of them are employed as trainees on a temporary basis. But under medium sectors middle aged group (30-40 years) constitutes higher number than the rest of the groups. In the case of experience, medium sectors are rich with experienced hands than small and micro. In relation to employment status, larger proportion of permanent workers are employed in medium sectors. It is clear that majority of the workers among micro sectors are non-keralite. These workers are from Orissa, Jharkhand, Tamil Nadu as well as Bihar. The constitutions of non-keralite workers are relatively low in small as well as medium sectors.

The study identified large set of variables (30 variables) which contribute towards worker retention factors. To reduce these variables, an exploratory factor analysis was conducted. This statistical tool is used in order to reduce huge set of variables into a reduced size, which simplifies the variables required which suits the scope of the study. The factors obtained through this statistical technique are useful for machine operators in the plant of Micro, Small and Medium enterprises in the district of Ernakulam.

For performing exploratory factor analysis, Keyser Meyer Oklin measure of sampling adequacy should be greater than 0.5, where the present study's KMO value is about 0.8, which is adequate. Also, Bartlett's test of sphericity also generated significant value of less than 0.05. Factors generated should have an eigen value greater than 1 which provides greater information with respect to variables as a common criterion. Rotated component matrix was used to interpret the factors which have a highest loading to least loaded among the work environment factors. By conducting exploratory factor analysis, four factor component matrix was generated. A questionnaire with 30 items was distributed to the respondents and by conducting factor analysis nine items were eliminated because of low factor loading less than 0.4. A rotated component matrix table was generated which determines the important factors of work environment of plant workers among MSME.

It is very important to determine the sampling adequacy before extracting the data. This provides information with respect to the suitability of data. It is also useful for determining the strength of correlation among different items. The KMO test of sampling adequacy determines the sampling adequacy of whether the samples are adequate or not. A value close to 0.5 is considered to be a satisfactory level to proceed.

Kaiser-Meye	0.792	
Deutlette Test of	Approx. Chi-Square	3778.787
Bartlett's Test of Sphericity	Df	561
sphericity	Sig.	P<0.05

Table 1. KS test

Source: Primary data

From Table 1, KMO sampling adequacy is 0.792 which is acceptable to conduct a satisfactory factor analysis. Bartlett's test of sphericity determines the strength of relationship among variables. Also, Bartlett's test of sphericity is less than 0.05, signifies the strength of relationship between the variables, hence it is concluded that factor analysis is appropriate. Bartlett's test of sphericity generates chi-square value that should be significant. This test is suitable for determining the structuring of data.

Four components were extracted which determines underlying correlations among the variables selected for the study. The higher the value of loadings, the more the factor is contributing to the variable.

Variables extracted	1	2	3	4
Inspection of work surroundings	0.820			
Coolers, toilets in adequate areas	0.809			
Measures to control accidents	0.809			
Effectiveness of emergency situations	0.775			
Protective equipment	0.716			
Pollution control measures	0.555			
Suggestion schemes		0.793		
Performance appraisal		0.705		
On the job training		0.704		
Promotional policies		0.652		
Participation in decision making		0.643		
Encouraging higher education			0.702	
Technology training			0.701	
Challenge in work			0.453	
Feeling of competence through job rotation			0.762	
Discipline			0.429	
Loans for purchase of goods				0.820
Educational loans				0.789
Bonus				0.713
Adequate and fair compensation				0.646
Retirement benefits				0.439

Table 2. Factor Extraction Table

Source: Primary data

The first and foremost factor is the physical settings of the plant, where the workers spend their maximum time. A better physical setting provides a peaceful atmosphere for the workers and their commitment to work is improved as a result. Through the same, the productivity is improved by reduced turnover and absenteeism in the plant. The second factor extracted is in relation to development of human capacities which includes training in relation to enhancement of skill, operation, and other basic amenities available in the plant. It also includes recognition in the form of suggestions and promotions provided to foreman and low-level workers. The third factor is in relation to career enhancement which encourages the workers to take up more challenging and responsible positions. Career enhancement brings about motivation to take over more responsible positions by procuring better opportunistic skills. It includes discipline, challenging work, opportunity for higher education, employee counselling as well as making aware about new technologies. The fourth factor generated is in relation to fair pay and compensation with reference to adequate salary/wages, bonus, retirement benefits, providing educational loans as well as loans for purchase of goods.

Factors	Cronbach's alpha	CR	AVE
Physical settings	0.828	0.799	0.823
Human capability building	0.779	0.875	0.793
Career Enhancement	0.649	0.733	0.617
Fair Pay and Compensation	0.647	0.740	0.623

Table 3. Measurement	of Reliability	and Validity
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Source: Primary data

From table 3, the reliability of the factors extracted is found to be satisfactory, as it is greater than 0.6 (Hair, 2009). For determining validity Confirmatory Factor Analysis was used. The validity of the constructs is assessed with the help of convergent validity. As the Average variance extracted is greater than 0.5 and Composite Reliability is greater than 0.7, the validity of the constructs is proved to be satisfactory.

H1a: There is significant difference with respect to physical work settings among small manufacturing firms

	Туре	Mean	Ν	Std. Deviation	p – value
	micro	1.9835	78	0.92036	
Physical Work Settings	small	3.2663	59	1.07543	<.001
	medium	3.6410	78	1.15892	<.001
	Total	2.9369	215	1.28196	

Table 4. Mean Comparison

Source: Primary data

	Type of sectors	Comparison among sectors	Mean Difference
	Micro	small	-1.28283*
Physical Work	MICIO	medium	-1.65751*
Settings	Small	micro	1.28283*
Settings		medium	-0.37468
	Medium	micro	1.65751*
	Medium	small	0.37468

Table 5. Post Hoc test

Source: Primary data

From table 5 there is significant difference in physical work setting among Micro, Small and Medium enterprises. Statistically significant difference exists among groups of micro and small (p<0.05) and micro and medium sectors (p<0.05). Here H1a is partially supported. However, there is no statistical difference exist among small and medium sectors. Mean difference with respect to physical work settings is higher for medium sectors. Medium sectors prefer safer workplace settings than small and micro sectors. The sharing of responsibilities among all the workers especially in the micro sectors also provide less focus to the safety and hygiene with respect to physical workplace. The workers are less educated with respect to the consequences in future as a result of poor safety and hygiene with respect to workplace in small sectors. H1b: There is significant difference with respect to human capacity building among small manufacturing firms

	Type of sectors	Mean	Ν	Std. Deviation	p - value
	micro	1.8769	78	0.78375	
Human capacity building	small	2.5627	59	0.99132	<.001
	medium	3.0923	78	0.93957	<.001
	Total	2.5060	215	1.03703	

-		~	3.6	0	•
н	able	6.	Mean	Com	parison

Source: Primary data

	Type of sectors	Comparison among sectors	Mean Difference (I-J)
	Micro	small	515*
Human Capacity	MICIO	medium	811*
Building	Small	micro	.515*
		medium	297*
	Medium	micro	.811*
	wiedium	small	.297*

 Table 7. Post Hoc Test

Source: Primary data

From Table 7, there is significant difference with respect to human capacity building with respect to micro, small and medium sectors. Here H1b is supported. Human capacity building is highly significant for medium sectors, at 0.05 significance level. Also, from table 4.H3, human capacity building should be greatly focused for micro sectors, as the workers are not consistent with respect to survival among micro sectors.

H1c: There is significant difference with respect to career enhancement among small manufacturing firms

	Type of sectors	Mean	Ν	Std. Deviation	p - value
Career Enhancement	Micro	2.0495	78	0.72032	
	Small	2.5278	59	0.82076	<.001
	Medium	2.9872	78	0.82891	<.001
	Total	2.5209	215	0.88134	

 Table 8. Mean Comparison

Source: Primary data

Type of sectors	Comparison among sectors	Mean Difference (I-J)
Micro	small	47839*
	medium	93773*
Small	micro	.47839*
	medium	45933*
Medium	micro	.93773*
	small	.45933*
	Micro Small	Micro small medium Small micro Medium micro

Table	9	Post Hoc	Test
Lanc		1 051 1100	IUSU

Source: Primary data

From table 9, there is statistically significant difference exist among groups of micro, small and medium sectors (p<0.05) with reference to career enhancement. Here H1c is fully supported. It is clear that medium sectors show greater mean difference as compared to micro and small sectors. Plant workers need to be given training on operations in relations to machineries for their optimum utilization. Since medium sectors provide training to plant workers with the help of professional group of machinery suppliers either from national or international level, the production of wastage with respect to faulty materials or products is relatively low.

Since micro sectors are equipped with conventional production equipment, career enhancement facilities are relatively low. But the workers in the micro and small sectors especially those employed under engineering units are competent with respect to any technical work they undergo as a result of bulk of experiences than those come out with technical qualifications. Competency of micro and small sectors are improved through job rotations. This is applicable for medium sectors also. Introduction of punching system in few among the medium sectors motivated the habit of discipline among the workers.

H1d: There is significant difference with respect to fair pay and compensation among small manufacturing firms

Fair Pay and Compensation	Type of sectors	Mean	Ν	Std. Deviation	p - value
	micro	2.8359	78	0.61644	
	small	2.8237	59	0.67781	<.001
	medium	3.2333	78	0.72033	<.001
	Total	2.9767	215	0.69687	

 Table 10. Mean Comparison

Source: Primary data

	Type of sectors	Comparison among sectors	Mean Difference (I-J)
	micro	small	0.01217
Compensation s		medium	39744*
	small	micro	-0.01217
		medium	40960*
	medium	micro	.39744*
	meann	small	.40960*

 Table 11. Post Hoc Test

Source: Primary data

From Table 11, statistically significant difference exists among groups of micro and medium (p<0.05) as well as small and medium sectors (p<0.05). Here H1d is partially supported. Thus, medium sectors give greater importance to workers through providing them with pay without fail, bonus, educational loans etc. The workers belonging to micro sectors have complaints with respect to making defaults in paying salaries as a result of delayed payments from public sector undertakings. The workers under small sectors are also less satisfied with respect to lower percentage of bonus which is given occasionally.

H2: There is significant difference in workers retention factors with respect to demographic characteristics among small manufacturing firms

Prior studies identify a strong relationship with retention factors and demographic profile of employees. In the case of service organizations, this is proved as having a strong relationship with job satisfaction. Younger age groups are less satisfied in their job as compared to older ones. In the case of organizations focusing on academics, academicians above 51 years of age have more chances to quit. Those workers who have more than 10 years of experience have greater prospects of enthusiasm in their work, than those having lesser experience. Older groups are proved to have greater tolerance as they are having less expectations and more dedication towards their job (Kabungaidze et al., 2013). But this may vary from organization to organization.

H2a: There is significant difference in workers retention factors with respect to age among small manufacturing firms.

Age is an important factor in absorbing the diversified nature of jobs. Presently the business environment is dynamic in nature. The organization itself needs to adopt the changes with respect to methods, processes, technologies which are vital for firm's survival. Therefore, in order to be equipped with such opportunities, the workers should possess qualities in terms of willingness to learn and work hard in order to employ them in the current business context. Therefore, age determines the receptiveness of workers to such changes and circumstances.

Variable	Age	Ν	Mean	Standard deviation	F	p value
Compensation	20-30	65	3.60	1.14		
	30-40	<u>30-40</u> <u>68</u> <u>4.57</u> <u>1.94</u> <u>40-50</u> <u>59</u> <u>4.61</u> <u>1.76</u> <u>5.1</u>		1.94	E 1/E	0.002
	40-50			5.105	0.002	
	Above 50	23	4.91	2.86		
Physical work settings	20-30	65	18.17	8.54		0.004
	30-40	68	23.53	8.34	4.618	
	40-50	59	21.53	8.89	4.018	
	Above 50	23	21.13	6.28		
Human capacity building	20-30	65	19.20	7.86		
	30-40	68	24.79	8.31	7 500	< 0.001
	40-50	59	22.12	7.40	7.500	<0.001
	Above 50	23	25.91	6.16		

Table 12. Mean, Standard deviation and F value for Age

Variable	Age	Ν	Mean	Standard deviation	F	p value
Career enhancement	20-30	65	11.02	4.76	3.041	0.030
	30-40	68	12.46	4.19		
	40- 50	59	13.02	4.62		
	Above 50	23	13.74	4.55		

Source: Primary data

From table 12, it is clear that there is significant difference in workers retention factors with respect to age as p<0.05. In this case H2a is fully supported. The workers belonging to the age group of 20 and 30 are not satisfied with respect to compensation, physical work settings, human capacity building and career enhancement. The younger age groups are more vigilant to the surroundings they are exposed to. They also claimed that settings in relation to fixtures, cranes and placement of other equipment and machines are not systematic and orderly. There are less provisions of exhausts or ventilations in micro units. In connection to human capacity building, as all the manufacturing processes are carried through conventional technologies, not many initiatives for human capacity building is entertained. The same is applicable for career enhancement opportunities.

H2c: There is significant difference in workers retention factors with respect to experience among small manufacturing firms

Experience enhances the ability of workers. Micro, Small and Medium Enterprises are considered as a provider of immense experience and flexibility in creating new and improved ideas. It is the pillar for accumulating job relevant knowledge. Experienced hands are considered as asset for Micro, Small and Medium Enterprises.

Variable	Experience	Ν	Mean	Standard deviation	F	p value
	Below 5 yrs	3	7.00	0.00		<0.001
	5-10 yrs	45	3.67	1.02		
Componentien	10-15 yrs	66	4.06	1.60	8.591	
Compensation	15-20 yrs	61	4.33	2.00	0.391	
	20-25 yrs	33	4.82	2.23		
	Above 25 yrs	7	7.57	1.27		
Physical work settings	Below 5 yrs	3	15.00	0.00		<0.001
	5-10 yrs	45	18.47	9.76		
	10-15 yrs	66	18.52	7.55	5.892	
	15-20 yrs	61	23.30	8.41		
	20-25 yrs	33	25.85	6.56		
	Above 25 yrs	7	23.57	6.90		
Human capacity building	Below 5 yrs	3	26.00	0.00		
	5-10 yrs	45	18.24	7.82	5.456	< 0.001
	10-15 yrs	66	21.58	7.97		

Table 13. Mean, Standard deviation and F value for Experience

Variable	Experience	Ν	Mean	Standard deviation	F	p value
	15-20 yrs	61	25.26	8.23		
	20-25 yrs	33	23.52	6.55		
	Above 25 yrs	7	27.86	3.24		
Career enhancement	Below 5 yrs	3	13.00	0.00		0.001
	5-10 yrs	45	10.82	4.88		
	10-15 yrs	66	11.58	3.40	4.243	
	15-20 yrs	61	12.77	4.90	4.245	
	20-25 yrs	33	13.79	4.99		
	Above 25 yrs	7	17.57	3.21		

Source: Primary data

In table 13, we can see that there is significant difference in workers retention factors with experience. Here H2c is fully supported. In terms of compensation the workers having greater experience are paid with better compensation. In terms of physical work settings, the workers with less working experience are not satisfied with this aspect. With reference to human capacity building the workers above the experience of 25 years are imparted with operational skills from outside experts from within the country and outside. In relation to career enhancement the workers who have the experience of 20-25 years are exposed to career enhancement opportunities.

Discussions

Retaining workers in the plant is very crucial for the growth of Micro, Small and Medium enterprises. Retaining workers in the form of providing them with better physical settings, capability of development of human capacities, career enhancement, welfare facilities as well as better compensation enables the MSME to reduce their turnover rates. More focus towards development of HR related policies and practices enables micro and small sectors to be competent and ensures them to have a steady growth. It is the responsibility of the entrepreneurs to safeguard the interest of workers by taking into consideration their health and safety aspects coupled with improvement in their skill and capacity. The workers responsiveness to work is determined by the attitude and support of entrepreneurs. The results of analysis with respect to retention factors identified that there is more scope for development of workers in the medium sectors. Focus on workers retention factors depends on the nature and size of business. Micro sectors do not have sufficient funds to invest in the development and promotion of workers. Also, micro and small sectors do not have enough funds to create safety awareness programmes, which hampers awareness among these workers on importance of workplace. But in the case of small sectors, especially plastic processing units where the main focus of operations are manufacturing of packaging materials, less investment with respect to machineries are required. But there are small engineering units in the category of manufacturing of kitchen equipment, heavy electrical equipment, scientific measurement equipment which require sophisticated machineries that demands skilled operators/workers to perform the job. This is same in the case of medium sectors. But medium sectors identify opportunities with respect to machineries which is highly cost effective, which generates different product varieties from the same technology. Hence, same technology training is crucial for medium sectors. As a result of such costeffective techniques, medium sectors can focus to generate better outcomes, which enables to invest for better advancement of workers. With respect to human capacity building, as technology updates are not taking place in micro and small sectors no investment in training is made. In small firms, career enhancement opportunities are imparted in the form of encouragement to pursue higher education is commonly seen. But discussing on specific context, micro and small sectors are less conscious, and this can be the basic reason for younger talents not attracted towards small firms. In relation to compensation packages, micro and small sectors are not consistent in providing bonus and incentives as a result of inconsistency in profit earning capacity. These findings have some implications while looking into the demographic aspects especially in terms of age and experience. Even though retention initiatives are less focused on micro and small sectors, it is surprising that workers with more than 15 years of experience and who belongs to older age group continue to work in such units. This is only because of their loyalty to the master.

Conclusions

The objective of the study was primarily to derive on important factors relating to retention of plant workers. As contrary to previous studies, the present study explores and signifies the relevance of career advancement factors, human capacity building, and physical work settings rather than compensation and incentives. The study also underlines that small manufacturing firms are less conscious in extending these support programmes, especially in micro and small sectors. For medium sectors, still there is a scope to provide outreach training programmes where the workers can collaborate with foreign consultants and improves their knowledge capital. Welfare funds should be kept side especially by micro and small sectors which could be used for the welfare of workers. There are micro and small units which are working as ancillary units of State Government. They complain about delay in receiving payments from public sector undertakings.

Recommendations

The findings of this research emphasize on the responsibility of managers among small manufacturing firms to focus on the measures for retaining workers through various career enhancement programmes. Government establishments should make timely payment for the orders received from small firms. Well written policies and procedures relating to HR should be framed by top management which takes care of the management-based functions of HR. Younger talents should be given better pay and promotional measures so that they feel secured within the firm. At the same time participative decision making can also be encouraged which improves the commitment and dedication among plant workers.

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Conflict of Interest

The authors confirm that there is no conflict of interest to declare for this publication.

References

- Abdullah Al Mamun, C., & Nazmul Hasan, M. (2017). Factors affecting employee turnover and sound retention strategies in business organization: a conceptual view. *Problems And Perspectives in Management*, 15(1), 63-71. doi.org/10.21511/ppm.15(1).2017.06
- Bilan, Y., Mishchuk, H., Roshchyk, I., & Joshi, O. (2020). Hiring and retaining skilled employees in smes: Problems in human resource practices and links with organizational success. *Business Theory and Practice*, 21(2), 780-791. doi: 10.3846/btp.2020.12750
- Dutta, G., Kumar, R., Sindhwani, R., & Singh, R. (2020). Digital transformation priorities of India's discrete manufacturing SMEs – a conceptual study in perspective of Industry 4.0. *Competitiveness Review: An International Business Journal*, 30(3), 289-314. doi.org/10.1108/cr-03-2019-0031
- Gerhart, B., & Feng, J. (2021). The Resource-Based View of the Firm, Human Resources, and Human Capital: Progress and Prospects. *Journal Of Management*, 47(7), 1796-1819. doi.org/10.1177/0149206320978799
- Ghani, B., Zada, M., Memon, K., Ullah, R., Khattak, A., & Han, H. et al. (2022). Challenges and Strategies for Employee Retention in the Hospitality Industry: A Review. *Sustainability*, 14(5), 2885. https://doi.org/10.3390/su14052885
- Hair, J. F. (2009). Multivariate data analysis.
- Hayes, T. M. (2015). *Demographic characteristics predicting employee turnover intentions* (Doctoral dissertation, Walden University).
- Kabungaidze, T., Mahlatshana, N., & Ngirande, H. (2013). The Impact of Job Satisfaction and Some Demographic Variables on Employee Turnover Intentions. *International Journal of Business Administration*, 4(1). doi.org/10.5430/ijba.v4n1p53
- Kemelgor, B. H., & Meek, W. R. (2008). Employee retention in growth-oriented entrepreneurial firms: An exploratory study. *Journal of Small Business Strategy*, 19(1), 55-68.
- Khalid, K., & Nawab, S. (2018). Employee Participation and Employee Retention in View of Compensation. SAGE Open, 8(4), 215824401881006. doi.org/10.1177/2158244018810067
- Sánchez-Rodríguez, C., & Martínez-Lorente, A. R. (2011). Effect of IT and quality management on performance. *Industrial Management & Data Systems*, 111(6), 830-848. doi.org/ 10.1108/02635571111144937

- Kossivi, B., Xu, M., & Kalgora, B. (2016). Study on determining factors of employee retention. Open *Journal of Social Sciences*, 4(05), 261. doi.org/10.4236/jss.2016.45029
- Lado, A., & Wilson, M. (1994). Human Resource Systems and Sustained Competitive Advantage: A Competency-Based Perspective. *Academy Of Management Review*, 19(4), 699-727. doi.org/10.5465/amr.1994.9412190216
- Lambert, E. G., Cluse-Tolar, T., Pasupuleti, S., Prior, M., & Allen, R. I. (2012). A test of a turnover intent model. *Administration in Social Work*, 36(1), 67-84. doi.org/10.1080/03643107.2010.551494
- Long, C. S., Ajagbe, M. A., & Kowang, T. O. (2014). Addressing the issues on employees' turnover intention in the perspective of HRM practices in SME. *Procedia-Social and Behavioral Sciences*, 129, 99-104. doi.org/10.1016/j.sbspro.2014.03.653
- Park, C., McQuaid, R., Lee, J., Kim, S., & Lee, I. (2019). The Impact of Job Retention on Continuous Growth of Engineering and Informational Technology SMEs in South Korea. *Sustainability*, 11(18), 5005. doi.org/10.3390/su11185005
- Sawant Dessai, D. (2016). MSME and Role of Government in MSME Development. SSRN Electronic Journal. doi: 10.2139/ssrn.3072996
- Sheehan, M. (2013). Human resource management and performance: Evidence from small and medium-sized firms. *International Small Business Journal*: Researching *Entrepreneurship*, 32(5), 545-570. doi.org/10.1177/0266242612465454
- Singh, M., & Vohra, N. (2009). Level of Formalization of Human Resource Management in Small and Medium Enterprises in India. *The Journal of Entrepreneurship*, 18(1), 95-116. doi: 10.1177/097135570801800105
- Soumyaja, D., & Kuriakose, J. (2020). Psychological Safety and Employee Voice in IT Sector: Parallel Mediation Effect of Affective Commitment and Intrinsic Motivation. Ushus Journal of Business Management, 19(4), 1-17. doi: 10.12725/ujbm.53.1
- Soumyaja, D., & Sowmya, C. (2020). Knowledge management and innovation performance in knowledge intensive organizations - the role of HR practices. *International Journal of Knowledge Management Studies*, 11(4), 370. doi: 10.1504/ijkms.2020.110668
- Spector, P. E. (2021). Industrial and organizational psychology: Research and practice. John Wiley & Sons.
- Teece, D. (2014). The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms. *Academy of Management Perspectives*, 28(4), 328-352. doi.org/10.5465/amp.2013.0116
- Voca, Z., & Havolli, Y. (2019). The Impact of Human Resources Development on Small and Medium Enterprises (SMEs) Performance. *Journal of Economics and Management Sciences*, 2(2), p. 45. doi: 10.30560/jems.v2n2p45

- Wagar, T. H., & Rondeau, K. V. (2006). Retaining employees in small and mediumsized firms: Examining the link with human resource management. *Journal of Applied Management and Entrepreneurship*, 11(2), 3-16.
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource-based view of the firm. *Journal of Management*, 27(6), 701-721. doi.org/10.1177/014920630102700607
- Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. *International Journal* of Human Resource Management, 5(2), 301-326. doi.org/10.1080/ 09585199400000020.