

Factors Influencing Employee Productivity: With Approach to Personal, Interpersonal, Organizational and Environmental Factors

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Abstract: Improving employee productivity is one of the greatest challenges in today's business environment. Productivity is the measurement of relationship between the input and output. It is considered to be improved when there is an increase in the output with minimal changes or no changes in the input. There is a general myth that wages are considered to be the primary factor to influence employee productivity. However it is very important to understand the various factors that influence productivity from different perspectives. This research paper is focused on identifying the significant factors that influence employee productivity. The study was made in the garment sector and in specific to the Tirupur garment factories that contribute to about 80% of the country's export in this sector. It is still a developing district in terms of garments manufacturing, which is considered to be the knitting hub by means of exporting garments to countries including Europe, Middle East and Latin America. The study has imbibed a thorough literature review on factors influencing productivity and intends to measure the target in terms of both metric and non-metric variables. The employee revenue, skill, experience and nature of job are few of the non-metric variables included in the study to examine their impact on productivity. The metric variables were derived from literature search and consolidated into environmental factors, organizational factors including work policies, interpersonal and team influences and personal factors which are measured on a 5 point Likert scale. The paper aims in identifying the level of impact of these four variables on productivity using regression analysis; as well as to identify the key aspects under these four metrics, that have a specific impact on employee productivity using discriminant analysis.

Key Words: Employee Productivity, Garments Industry, Environmental Factors, Organizational Factors, Interpersonal Factors, Personal Factors

1. INTRODUCTION

“Productivity is the efficiency with regard to the conversion of physical Inputs [labour and capital] into physical outputs [goods and services]” (Rabin *et al* 1985) It is always true that big input leads big return but that does not mean there will be an improvement in productivity. Productivity has also been defined as “the rate at which goods are produced, especially in relation to the time, money and workers required to produce them” (Macmillan English Dictionary for Advanced Learners 2007). According to David *et al.* (1996), Pickworth (1994) Sasse and Richardson (1996) in their research they have identified that various inputs which influencing the productivity. They are capital, materials, infrastructure, manpower, training and technology. This is further classified by Pickworth (1994), as environmental and organizational. Environmental is considered as external factor such as legal, political, economy, social and cultural. Organizational is an internal factor which refers to administrative, operational and individual factors. When we consider human capital with productivity, it plays a vital role irrespective of what they produce in terms of product or service.

Productivity levels are linked with economic development (Shurchuluu, 2002). It is a core issue for any companies' performance and the nation's competitiveness. In specific, employee productivity is important, especially for the developing nations (Sauian, 2002). In today's world the textile and garments industry gives sound contribution to many national economies specifically in the developing nation (Dicken, 1998; Jones, 2002; Dickerson, 1995). The study on factors influencing employee productivity in apparel industry becomes vital. This research is conducted in Tirupur apparel industry in the state of Tamil Nadu, which is considered as knitting hub by exporting the garments to global market. Since most of the manufactures are involved in garments exports this city is also called 'Dollar city'.

2. LITERATURE REVIEW

It is very important to understand the factors that influence productivity because it is not enough to expect the productivity only by keeping monetary aspects in mind. There are lot many other factors which are not connected to the monetary aspects are also influencing the employee productivity. The idea of human capital theory is that the income generated by the individual is associated with their skill set. The concept of individual skill focused on psychological facts such as IQ measures and the training required entering in to a certain employment (Mincer 1958). Thus contemporary human capital theorists look at the expenditure of training, in terms of education tools as they relate to investments in obtaining an employment (Mincer 1958). From this perspective education and training is the important investment in human capital, since they provide knowledge, skill, way to handle the situations, all will make one more productive and lead to earn more (Becker, 1993). Human capital theory suggests that people with more years of training grasp more annual income (Mincer, 1958). The above mentioned like job characteristics, education, experience, training, knowledge, skill are the influencing the employee productivity.

According to Hector Sala, Jose I. Silva (2011), job training plays an important role to enhance the labour productivity growth. The research by Yilmaz Kilicaslan (2005), as a result of increasing the adaptability of labour market and skill up gradation enhances the productivity. Here the skill up gradation can be done through training programs as well. Harry J.Holzer (1988) in his research found that there is a positive effect on wages and productivity. Also, he expressed that low wages are paid to the female employees compare to the counterpart that is men. Through this study the authors have consolidated the various variables which influence the employee productivity into four major factors namely, Environmental factor, Organizational factor, Interpersonal factor and Personal factor.

Environmental factor

The Future of Work of Life Balance is the book by Tyler, mentioned the word "balance" will exist on the settled equilibrium can be achieved between employment and outside the employment. A proper balance between job and a life outside job will help to deliver better output. A research says that the improved work environment plays a vital role in the employee productivity. The improved working environment will stimulate the creativity of the employee (Chaddha and Pandey, 2011). According to the research, absenteeism leads for the short in productivity and the main factor that influence the lower presenteeism is health related problems (Cheryl, Kenneth, James, etl.,2002). A research drew the finding that there was a strong direct causative correlation between high productivity and high morale and vice versa(Greg, 1999).

Organizational factor

Promoting of productive efficiency becomes a common objective for the management and unions which made both party to converge. The improved industrial relation that is union management relationship is practiced in India to meet the common objective called productivity (Tamilselvan and Bhavani, 2010). The effective organization will have a culture of involving employees into decision making, target setting or problem solving. As a result this consequently reflects in employee performance (Hellriegel, Slocum & Woodman, 1998). According to Miller and Monge (1986), productivity can be increased through job satisfaction which also brings high quality motivation through increased operational capabilities at course of action.

Interpersonal factor

The factors that affect productivity can be related to how motivated the employee feels to do his job in the most capable manner in a given set of circumstances for the person and his team (Nabil, Kassim and Noel). Working in team or a group does not mean that overshadowing the individual or personal skill, where else it helps to enhance the one's individual skills. It is very important for every individual to know about their team to create a win-win situation.

Personal factor

Apart from the work related characteristics some personal characteristics such as age, marital status and race also influences the productivity (Shack-Marquez, 1984). For instance experience is an important characteristic required for increased productivity. The research conducted by Adebayo B (2004) found that schooling plays a vital role in labor market participation and inducing the growth in market productivity. Spending additional years for postsecondary education, influence the rise in productivity and the same reflects on wage hike. There are various research has done globally by using different methodology and data set to support this hypothesis on education, training and human capital theory (Mincer 1958;1962, Spencer, 1973, Bloch and Sharon, 1977, Jones and Long, 1979, Killingsworth 1983, Killingsworth & Heckman 1986, Khandker, 1987). Job characteristic is the required attribute to complete the task given. This can be gained through experience, education, etc. According to the Steinberg (1984) each job requires different skill sets and responsibility. This creates the difference in pay “in productivity related job- content characteristics”. The productivity difference crop up due to the variations in characteristics such as education, skill set, training and development.

3. OBJECTIVES

- To study the existing level of employee perception of their productivity, environmental factors, organisational factors, interpersonal factors and personal factors that influence employee productivity in the Tirupur garment industries.
- To study if there is any relation among the four factors considered for the study
- To study the level of impact that these factors create on productivity

4. NEED FOR THE STUDY

There are two reasons for focusing on productivity of employees in apparel industry in this study.

First, garments manufacturing is highly dependent on manpower. Second, garment manufacturing employee earning is purely based on productivity, since piece rate method still exists in the industry for various process. Ironically speaking, though the growth potential of garment enterprise was high (Saigal, 2001) in last decade, the research on employee productivity in apparel industry had not been carried out effectively in any of the entrepreneurial research studies in India especially in Tirupur district. As any other industry technology like robotic operations and conveyor systems was not so influenced in garment enterprises. Most of the process is done manually and the industry is purely relied on human resource on its productivity. Since productivity is dependent on employees, it is very much important to understand the factors that influencing employee productivity of Tirupur apparel industry.

5. METHODOLOGY

The study is descriptive and casual in nature. It describes the factors influencing the employee productivity perceived by the employees. Also the study intends to explore the cause and effect of the factors influencing the productivity. A pilot study was done in order test the reliability of the questionnaire for the intended target group of employees in garments manufacturing industries located at Tiruppur and the overall reliability was found to be 0.89. The pilot study data was used for preliminary analysis and to study the above mentioned objectives. Mean value analysis, correlation and regression were the tools used to achieve the same.

6. ANALYSIS

Factors influencing employee productivity

The factors influencing productivity is measured using the Mean score and standard deviation. Table 1 gives the mean values of Environmental factor, Organizational factor, Interpersonal factor, Personal factor on productivity. The factors are measured on scale of 5 to 1. The positive agreement of the respondent with respect to the factors is given a maximum score of 5 and the disagreement with the variables in the factors is given as

1. Hence a value near to five is a high score that represents that the factor is perceived at the higher end.

Table 1 – Factors influencing employee productivity

	Minimum	Maximum	Mean	Std. Deviation
EF	2.00	5.00	3.6538	.62260
ORGF	2.00	4.00	3.5192	.64140
IPRF	2.00	5.00	3.8077	.76795
PF	2.00	5.00	3.7115	.80041
PRD	2.00	5.00	3.9808	.89641
Valid N (listwise)				

The table 1 shows that Interpersonal Factor (3.8077) has scored high, value among the other factors that depicts that the respondents observe their productivity is influenced by interpersonal factor and

have given a favored score. Whereas, the respondents productivity nearing 1 are least influenced by organizational factor, which has been obviously scored converse (M= 3.5192). This means that the organizational factors like the policies and procedures, delegation, availability of time, supervisor support, motivational schemes that contribute to this factor is satisfactory and the employees have observed these variables in a mild role note in their workplace. Whereas, interpersonal factors like team skills, culture differences, knowledge of work, reasonable targets to achieve play a comparatively positive and is scored encouraging.

Analysis of association between factors and employee productivity

The association between the four factors like environmental, organizational, interpersonal and personal was studied through correlation. Also the correlation of the factors helps us to predict if there is any interrelationship between the factors. As we discussed earlier the four major factors like Environmental, Organizational, Interpersonal and Personal factors as independent variables they are associated with each other. The factors influencing productivity is measured using the Mean score and standard deviation. Table 1 gives the mean values of Environmental factor, Organizational factor, Interpersonal factor, Personal factor on productivity. The factors are measured on scale of 5 to 1. The positive agreement of the respondent with respect to the factors is given a maximum score of 5 and the disagreement with the variables in the factors is given as 1. Hence a value near to five is a high score that represents that the factor is perceived at the higher end.

Correlations

	EF	ORGF	IPRF	PF	PRD	
EF	Pearson Correlation Sig. (2-tailed)	1	.655**	.309*	.386**	.445**
			.000	.026	.005	.001
ORGF	Pearson Correlation Sig. (2-tailed)	.655**	1	.485**	.412**	.461**
		.000		.000	.002	.001

IPRF	Pearson Correlation Sig. (2-tailed)	.309*	.485**	1	.642**	.564**
		.026	.000		.000	.000
PF	Pearson Correlation Sig. (2-tailed)	.386**	.412**	.642**	1	.757**
		.005	.002	.000		.000
	Pearson Correlation	.445**	.461**	.564**	.757**	1

	Sig. (2-tailed)	.001	.001	.000	.000	
PRD						

** . Correlation is significant at the 0.01 level (2-tailed).

Impact of various factors on employee productivity

To study the level of impact that factors like environmental, organizational, interpersonal and personal creates on employee productivity; regression is used as a tool for analysis.

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782 ^a	.612	.579	.58190

a. Predictors: (Constant), PRRC, EFRC, IPRRC, ORGRC

Coefficients^a

Model	Un-standardized Coefficients	Standardized Coefficients	t	Sig.		
	B	Std. Error				Beta
	(Constant)	-.044	.563		-.078	.939
	EF	.181	.177	.125	1.019	.313
1	ORGF	.113	.183	.081	.616	.541
	IPRF	.105	.147	.090	.711	.480
	PF	.692	.137	.618	5.040	.000

a. Dependent Variable: PRD

7. CONTRIBUTION OF THE STUDY

As absorbed most of the garment enterprises in Tirupur district, adapts both piece rate and shift base to wage their employees. In piece rate method, based on the productivity, employee decides how much he or she should take home as their earnings. Where else, in shift method employer needs to take a call on productivity from the employee for what he pays. On both the face, productivity plays a vital role on monetary aspects. The beneficiary of this study is going to be employee and employer of the industry. The increase in employee productivity will reflect in his earnings, this may bring better standard of living with the reasonable buying parity. On the other side, employer gets better productivity means optimal utilization of the most important resources called manpower. To understand the factors that influence the employee productivity will help to identify their contribution towards increase or decrease in productivity. This research on the factors influencing employee productivity is not only going to contribute to the employee society, also to the employer to bring up their output.

8. CONCLUSION

This study is sought to investigate the factors influencing employee productivity in apparel industry with special reference to Tirupur district. Garments manufacturing is a global industry which is active in developed and developing countries. India is competing with other nation in race with its unique advantage of low cost labour. If the developing country like India is not able to improve its employee productivity especially in the industry like garment manufacturing, the benefit of low cost labour will be nullified. As a result on findings and suggestion may help to strengthen the positives and weaken the negatives on the factors influence the employee productivity.

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