

Impact of Demographic, Economic and Organizational Factors on Employee Motivation in Plastic Industry: An Empirical Study in Kurunegala District

N.M. Aloysius^{1*} and H.M.K.N.B. Herath²

¹School of Business, National Institute of Business Management, Sri Lanka

nimeshika@nibm.lk

²Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka

nalakaherath13@gmail.com

INTRODUCTION

Within the organizational context, human resource is the most valuable and indispensable factor essential to carry out the organizational functions smoothly, effectively and efficiently (Serasinghe et al., 2016). Employee motivation is one of the important dimensions that managers need to increase effective job management amongst the employees within the organization (Ali and Ahamed, 2009). Motivation as stated by Ran (2009) is the “process that accounts for an individual’s intensity, direction, and persistence of effort toward attaining a goal”. Literature indicates employees motivation is affected by age, marital status, sex, education as demographic variables (Thomas and Martin, 1979); pay and incentive as economic variables; upward mobility, integration, formal and instrumental communication as organizational variables (Porter and Steers, 1973).

Successful manufacturing industry is the key for a sustainable development of a country (Rajala et al., 2016). The Sri Lanka Export Development Board states that plastic processing is a flourishing industry in Sri Lanka for over 45 years. Plastic industry provides direct and indirect employment for thousands of skilled and non-skilled labour (Kahangamage and Mangala, 2005). The country is still at a preliminary production stage, and it is only beginning to seek out new opportunities and explore new markets (Sri Lanka Export Development Board, 2017). For the better survival within the market while attaining competitive advantage, each manufacturer in this industry should have highly motivated employees who strive to attain high quality production (Patrick, 2012).

Herzberg (1959) found that there are two different sets of factors that affect motivation. One set of factors are hygiene factors, those which, if absent, cause dissatisfaction. The other set of factors are motivators, which produce the feelings of satisfaction and if present, serve to

* Corresponding Author

motivate the individual to superior effort and performance. Followed by interviews with HR managers in set of selected plastic manufacturing factories, the research was able to recognize a gap between the actual and expected levels of performance among the operative employees. This created a need of providing recommendations to increase the performance of operative employees in plastic industry in Kurunegala district.

AIMS AND OBJECTIVES

This empirical study was carried out with the aim of investigating the impact of demographic, economic, and organizational factors on employee motivation in plastic industry. The main objective was to evaluate the relationship between the identified factors and employee motivation in the plastic industry.

THEORY

Based on the findings of literature, age, marital status, gender and education level were selected as the demographic variables; pay and incentive as the economic variables; and upward mobility, integration, communication and working environment were selected as the organizational variables. It hypothesized that these factors have a significant impact on employee motivation in plastic industry which is the dependent variable.

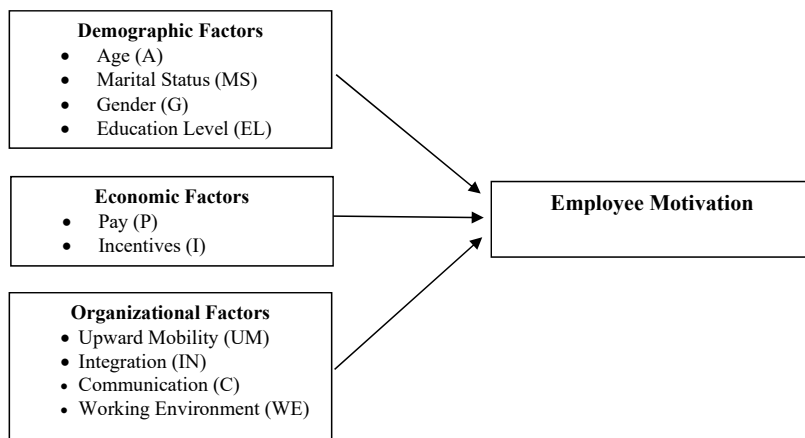


Figure 2: Conceptual framework

METHOD

The population under this study included operative employees working at plastic manufacturing factories in Kurunegala district, of whom 200 operative employees were included randomly in the research sample. As the base of selection of the sample, operators within the factory was

selected using simple random sampling method while factories were selected using purposive sampling method. A semi structured questionnaire was used to collect data and prior to the real survey, pilot survey was carried out in order to validate the questionnaire (n=10).

Collected data were analyzed using both descriptive and inferential measures. Descriptive analysis was performed to summarize and to understand the demographic and other baseline information of the respondents. Multiple linear regression analysis was carried out using SPSS version 21, to develop a model, which represents the relationship between selected dependent and independent variables as denoted in equation 1. Moreover, since gender, marital status and education level were categorical variables, dummy variables were created.

$$\text{Employee Motivation} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_4 X_n \quad (1)$$

Where,

$\beta_0, \beta_1, \dots, \beta_4$ – Standardized Coefficients

X_1, X_2, \dots, X_n – Demographic, Economic, and Organizational Factors

RESULTS

Out of the total number of respondents, most of them were males (61%) and 57% of the employees were married (Table 1).

Table 1. Descriptive statistics

Variables	Category	Percentage
Age	<20	20
	21- 25	25
	26-30	1
	31-35	33
	36-40	16
	>40	5
Marital status	Married	57
	Single	43
Gender	Male	61
	Female	39
Education Level	Up to O/L	68
	Up to A/L	24
	Above A/L	8

Majority were under the age group of 31 - 35 years (33%). Only eight percent of the respondents had educational qualifications above A/L, the majority had only studied up to O/L (68%).

The model summary of the multiple regression is shown in table 2.

Table 2. Model Summary

Model	R	R Square	Adjusted R Square
1	0.232 ^a	0.71	0.57

The results of the regression analysis are displayed in table 3, including estimated regression weights (standardized coefficients), standard errors and p-values for all the selected factors.

Table 3. Results of Regression Analysis

Variables	Std. Coefficients	Std. Error	P value
Constant (β_0)	2.895*	0.847	0.001
Age	-0.188*	0.269	0.046
Marital Status (Married)	-0.172	0.130	0.189
Gender (Male)	0.280*	0.233	0.023
Education Level	0.122	0.841	0.065
Pay	0.177*	0.152	0.031
Incentives	0.288*	0.137	0.038
Upward Mobility	0.304*	0.447	0.006
Integration	0.188	0.556	0.127
Communication	0.255*	0.268	0.034
Working Environment	0.106*	0.160	0.011

Dependent Variable: Employee motivation

**Significant at 0.05 level*

Based on the results, the following model was developed to express the relationship between significant variables and employee motivation (equation 2).

$$\text{Employee Motivation} = 2.895 - 0.188 A + 0.280 G + 0.177 P + 0.288 I + 0.304 UM + 0.255 C + 0.106 WE \quad (2)$$

DISCUSSION

The model summary of the multiple regression shows that 57% of the employee motivation is explained by the selected variables (adjusted R square = 0.57). Out of the demographic factors selected only age and gender were statistically significant. Age denotes a negative relationship with employee motivation (Std. coefficient value = - 0.188) while gender denotes a positive relationship (0.280) where male employee's motivation is 0.28 units higher than that of females. Both pay and incentives selected as economic factors were statistically significant and positively related to employee motivation with standardized coefficient values 0.177 and 0.288

respectively. Organizational factors namely, upward mobility, communication and working environment were statistically significant and positively related to employee motivation with standardized coefficient values 0.304, 0.255 and 0.106 respectively.

Overall findings of the study contribute to the fact that, employee motivation significantly and positively related to pay, incentives, promotions, communication and quality of working environment, which is compatible with the previous studies carried out by many scholars such as; Perry and Poirter (1982); Hosseini (2014); Porter and Steers, (1973) etc. Out of all factors, upward mobility had the highest standardized coefficient (0.304) contributing to the fact that non-monetary positive motivators foster team spirit and include recognition, responsibility, and advancement (Onanda, 2015). Job enlargement and job enrichment can be practiced among employees, giving more duties and responsibilities for them respectively. Companies that have instituted flexible employee arrangements have gained motivated employees whose productivity has increased (Patrick, 2012). Programs incorporating flextime, condensed workweeks and job sharing can be implemented successfully for the motivation of employees.

Manufactures in plastic industry can follow a performance based pay structure and incentive scheme. Moreover, they can provide overtime payments for the employees who work at extended working hours. The employees who successfully complete extra tasks and who hold higher level of responsibility can be paid with bonuses at festival seasons. Promoting participatory environments and treating employees with fairness and respect will find their employees to be highly motivated. In order to set up a friendly working environment, collective activities can be conducted within the work place, such as staff get-togethers, annual trips, celebrating cultural and religious activities, parties etc. Through these activities employees will create positive peer groups and will feel relaxed and make their working environment a friendly one. Moreover, safety should be prioritized at workplace, as most of the individuals who work in the plastic manufacturing industry have to operate dangerous machines and equipment.

IMPLICATIONS

Upward mobility, which is a job content factor had the highest standardized regression coefficient. This contributes positively to the findings of Herzberg's two factor theory, where he states that motivators related to the basic nature of the job, serve to motivate the individuals to superior effort and performance (Herzberg, 1959). The findings of this research will be helpful for the manufacturers in plastic industry in implementing strategies to motivate their employees to reach performance standards. Further studies can be carried out to analyze the impact of different types of incentives on employee motivation. In addition, research opportunities are

available for future researches on testing the research framework for other manufacturing industries in Sri Lanka.

KEYWORDS

Demographic Factors, Economic Factors, Employee Motivation, Organizational Factors, Plastic Industry

REFERENCES

- Ali, R. and Ahmed, M.S. (2009), "The Impact of the reward of recognition program on employee motivation and satisfaction", *International review of business research papers*, Vol. 5, No.4, pp.270-279.
- Herzberg, F., Mausner, B. and Snyderman, B.B. (1959), *The Motivation to Work*, John Wiley & Sons, New York.
- Hosseini, S.A.R. (2014), "Factors Affecting Employee Motivation", *Management and Administrative Science Review*, Vol. 3, No.4, pp. 713-723.
- Kahangamage, U.P. and Mangala, K.H.J. (2005), *Investigation of Problematic Issues of Mould Design and Manufacture for Plastic-based Industry in Sri Lanka*, IESL, Sri Lanka.
- Onanda, B. (2015), "The Effects of Motivation on Job Performance: A Case Study of KCB Coast Region", *International Journal of Scientific and Research Publications*, Vol. 5, No.9.
- Patrick, A. (2012). *Motivational Packages and their Effects on Employee Performance in the Ghana Education Service: A Case Study of Asante Akyem Senior High Schools*. Institute of Distance Learning, Kwame Nkrumah University of Science and Technology.
<http://ir.knust.edu.gh/xmlui/bitstream/handle/123456789/4359/Ampofo%20Patrick.pdf?sequence=1>.2018.04.14
- Perry, J.L. and Porter, L.W. (1982), "Factors Affecting the Context for Motivation in Public Organizations", *The Academy of Management Review*, Vol. 7, No.1, pp. 89-98.
- Porter, L.W. and Steers, R.M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, 80(2), 151-176. <https://psycnet.apa.org/record/1974-04029-001>.2018.02.11
- Pradifa, I.A. and Welly, J. (2014), "The Influence of Motivation against Employee Turnover", *Journal of Business and Management*, Vol. 3, No.1, pp. 89-101.
- Rajala, R., Westerlund, M. and Lampikoski, T. (2016), "Environmental sustainability in industrial manufacturing: re-examining the greening of Interface's business model", *Journal of Cleaner Production*, Vol. 115, pp. 52-61.
- Ran, B. (2009), "Motivation", in Wankel, C. (Ed.), *Encyclopedia of business in today's Research in Personality*, 42(4), pp. 1109-1115.
- Serasinghe, S.A.A.Y.P., Anjalee, G.H.I. and Athauda, A.M.T.P. (2016), "Transformational Leadership and Organizational Citizenship Behaviour in Food and Beverage Industry in Colombo District", in proceeding of 15th Agriculture Research Symposium, pp. 165-169.
- Sri Lanka Export Development Board (2017). *Plastic Products*.
<http://www.srilankabusiness.com/plastic>.2018.04.20
- Thomas, N. and Martin, J.R. (1979), "A Contextual Model of Employee Turnover Intentions", *Academy of Management Journal*, Vol. 22, No.2, pp. 313-324.