Groping The Stimulus of Leadership on Creative Performance Behaviours of Employees Employed In R&D Departments.

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Abstract : Research and Development Department is the thrust of any organization. It acts as catalyst in this competitive world where the entire globe is a single market. Being the main source of innovation and breakthroughs, this department is highly vulnerable and uncertain. This is so because the outcomes may or may not result into radical implications. Due to this ambiguity, distinctiveness and intrinsically indefinite nature of R&D department these units must be managed differently from other departments of an organization. Assessing the key forces which impact the creativeness of the human resources in this department carries vital credentials. Further this department is often kept aloof from HR department of the organization due to complexity of its performance appraisal and low head count (1% of the total employees). Thus, the research study attempts to examine the relationship between the role of leadership and creative performance behaviours amongst the employees of R&D department engaged in the food & ingredients industry. Further it shall also study the impact of ethical behaviour of leaders on the employee's performance.

The Data was collected through interviews and survey questionnaire from 100 employees amongst 10 export houses in the food & ingredients industry. The study reveals positive relationship between the leadership and creative performance behaviours whereas ethical behaviours largely mediate the linkages.

Keywords : Leadership, ethical behaviour, creative performance behaviours.

I. Introduction

Vulnerable business environments and intensified competition has amplified the interests of management to constantly upgrade and maintain employee creativeness specially in R&D departments. It constituents the vital ingredient for knowledge and technology, leading to innovations in the dynamic business environment. Being huge capital stake involved in the R&D influx the realism of its outcomes outweighs the organizational overall performance. It exerts tremendous pressures on the employees in this department to maintain low failure rate and contribute towards innovations and product developments. To infer retaining and hiring creative employees is vital. The task of leader here calls out for balancing the beam between company's organizational competitiveness (in terms of time lag and capital expenditure involved in research) and at same time motivate its subordinates to achieve new elevations.

Employee creativity is defined as the production of novel and useful ideas by an individual or by a group of individuals working together (Amabile, 1983) and has been found to make important contributions to organizational innovation, growth and survival (Amabile, 1996; Madjar, Oldham & Pratt, 2002; Suh, Bae, Zhao, Kim & Arnold, 2010). Every employee has the potential to produce creative ideas that can generate valuable innovations for their employers and maintain high standards of innovations. These potentials can be further accelerated through effective leadership. Quite often R&D leaders are designated on the basis of their seniority and technical expertise, the human resource management skills are many a times overlooked. They fail to understand a leader must not only possess technical skills but need to effectively manage its subordinates to perform effectively and efficiently. So far researchers have successfully identified the type of leadership styles suitable to this department but the in-depth analysis remains delicate. Thus, the present study infusing the existing literature with its own contribution attempts to examine the relationship between the role of leadership and creative performance behaviours also, with mediating role of ethical behaviours amongst the employees engaged in the R& D department of food & ingredients industry.

The study lays its focus on export houses of food and ingredients industry, being one of the fastest growing industry but yet highly vulnerable due to complexities involved. The Indian Food Ingredients industry is highly fragmented but has grown rapidly due to the friendly patent regime and low-cost manufacturing structure. Intense competition, high volumes and low prices characterize the Indian market. Hence, analysing the human resources of R&D departments of these export houses who confront legal and quality standards in domestic and global markets is imperative. To elaborate on same the study has adopted the 39-inventory scale as used by Gupta et.al 2015.

2nd International Conference on 'Innovative Business Practices and Sustainability in VUCA World' 22 |Page Organized by GNVS Institute of Management – Mumbai in April - 2018

II. Literature Review

The entire literature is categorized into three subtopics i.e. literature relating to creative performance behaviours, leadership styles in R&D department and impact of ethical behavioural patterns.

There exists a thin line between creativity and creative performance behaviours, but unfortunately, they have coined to be similar in nature. Creativity is conceptualized and outcomes are measured in terms of behaviours and outcomes. (George Zhou 2001). On other hand creative performance behaviours are set of independent observable and unobservable activities such as ideas, problem solving ability, initiatives etc which may result into outcomes or may not. (Baer 2012). Further idea generation and idea promoting may have multiple outcomes involving technicalities posing challenge to HR managers while awarding compensation and performance benefits. Thus, to boost innovativeness recognizing creative performance behaviours through effective human resource policies is vital. The characteristics of R&D employees involves more of qualitative constructs than quantifiable ones this two-factor behaviour needs incessant motivational leadership. Cohesive teamwork brings out the best amongst the employees leading to significant impact on outcomes (Amabile, 1997). Leaders have said to impact their employees which can enhance their creative thinking, skills and task execution. They have said to empower their behaviour and fulfil the needs for autonomy improving their performance. They often act as buffers and bridge the gap between top level management and its employees. (Gupta et al 2013).

Frese and Fay (2001) projected a multifaceted model of distal and proximal factors that influence performance in organisations, whereby the environmental supports (such as support for PI, control at work), knowledge, skills and abilities (such as cognitive ability) and personality influence individual orientations (i.e. self-efficacy, handling errors, active coping) which, in turn, influence PI. In this way, PI is conceptualised as a set of active behaviours, and is directly linked to effective performance in organisations. There is a growing body of research examining the association between PI and innovation. Specifically, the relationship between PI and conservatism in the work place has been studied. Results show that conservatives showed significantly less PI than their less conservative counterparts, were less orientated towards growth and challenge, and were less innovative. In exploring environmental influences on PI, research shows that increases in job complexity and job control can help enhance PI at work (Frese et al, 2007). The next important criteria which impacts employee performance is the ethical behaviours of the leaders. We are in the midst of frauds, deception and corruption at large but at individual level we always aspire to expect in return is justice. An employee is often motivated when he/she is rewarded with respect and recognition. Individual dignity plays a crucial role especially in R&D departments where contribution is not based on seniority but innovativeness. Well defined beliefs and ethical practices by leaders lead to improved work commitments and decreases labour turnover (Mayer et al 2008).

Thus, evaluating the three dimensions in the R&D department of Food & Ingredient industry is crucial as both the industry and the department are susceptible to volatility and complexities in terms of innovation and labour turnover. The organization stands to lose if the employee departs and takes away the unlocked knowledge as patents cannot be registered unless completed nor knowledge can be replicated. The organization need to engage its employees effectively to sustain in the long run.

The research article fills in the gap by identifying the labour turnover in R&D department and understanding the interrelations between creative performance behaviour, leadership and ethical behaviour of leaders.

III. Research Objectives

- 1. To analyse the VUCA prevalent amongst the employees engaged in R&D departments of food and ingredients industry in India.
- 2. To study the inter relationships between creative performance behaviours, leadership qualities and ethical behaviour of leaders working in the R&D departments of food and ingredients industry in India.
- 3. To understand the mediating role of ethical behaviour of leaders while establishing the inter relationships amongst the three dimensions under study.
- 4.
- 5. To draw conclusions and social implications of the research study.

IV. Research Hypothesis

H_{A1}- The labour turnover is significantly high in the R&D department compared to other departments

 H_{A2} - There is significant co relationship between creative performance behaviours of employees and leader behaviours.

 H_{A3} - Ethical behaviour of leaders improves the relationship between creative performance behaviours of employees and leader behaviours.

2nd International Conference on 'Innovative Business Practices and Sustainability in VUCA World' 23 |Page Organized by GNVS Institute of Management – Mumbai in April - 2018

V. Research Methodology

The research methodology is the synthesis of operational definitions, data collection and interpretation through statistical techniques.

Operational Definitions

VUCA – Volatility, Uncertainty, Complexity and Ambiguity in R&D department is measured through labour turnover which is ascertained from recruitment and resignation rate. Further the data is extracted from Labour Market Survey, Manpower and Research Department ILO. (2017)

Creative Performance Behaviours – It was measured using combination of scales using five likert scale based on constructs of problem identification, information search, idea generation, idea promotion.

Leader Behaviour – It was assessed on basis of 4 dimensions i.e. Task oriented, Recognizing and inspiring, Team - building and developing and leading by example.

Ethical behaviour – It was studied through employee perceptions relating to distributive, procedural and interactional justice, on five scale.

Data Collection and Analysis.

The primary data was collected from 100 employees working in R&D departments of food and ingredient industry. Out of 100 employees in 10 different export houses, 10 were leaders and other employees. Further to avoid data inflation and avoid common method bias the leader behaviour was assessed from employee responses and employee creative behaviours were assessed through leader's feedback. The mediation of ethical behaviour describes the causalities and how it impacts the pace of other dimensions. The data was collected in form of questionnaire and interview.

The secondary data is analysed with the help of ANOVA of single factor using XLSTAT 365 while primary data through SPSS.

Controlled Variables – The demographic variables like age, gender, job level and no of years of service were modelled as control variables.

Hypothesis Testing

HA1- The labour turnover is significantly high in the R&D department compared to other departments

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Total Recruitment	8	14.9	1.8625	0.325536		
Total Resignation	8	12.3	1.5375	0.225536		
Sales& Marketing Department Recruitment	8	10.7	1.3375	0.054107		
Sales& Marketing Department Resignation	8	8.4	1.05	0.048571		
Administrative Department Recruitment	8	17.1	2.1375	0.665536		
Administrative Department Resignation	8	14.3	1.7875	0.495536		
Technical Department Recruitment	8	17.1	2.1375	0.742679		
Technical Department Resignation	8	14.6	1.825	0.205		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	8.096875	7	1.156696	3.349709	0.004724	2.178156
Within Groups	19.3375	56	0.345313			
Total	27.43438	63				

The p value obtained is less than 0.05 which leads to non-acceptance of null hypothesis. In other words, the labour turnover in form of average monthly recruitment and resignation rate is higher in technical department ie R&D department compared to others in any organization. The average mean and variance of technical department is higher compared to total recruitment and resignation in the entire organization. Inferring that R&D department is more susceptible to VUCA, which needs to be managed effectively and efficiently.

$H_{\rm A2}\text{-}$ There is significant co relationship between creative performance behaviours of employees and leader behaviours

Pearson Correlation Test had been used to evaluate the relationship between the two. An overall score based on their feedback were assigned and calculated. The maximum score for both the leaders and employees was 120.

	Correlations		
			Creative
		Leadership	Performance
		Score	Score
Leadership Score	Pearson Correlation	1	.415
	Sig. (2-tailed)		.000
	Ν	96	96
Creative Performance Score	Pearson Correlation	.415	1
	Sig. (2-tailed)	.000	
	Ν	96	96

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

The correlation score of 0.415 is obtained which signifies that as there exists a significant positive correlation between leader behaviour and creative performance behaviour of the employees. This re affirms that leaders influence their employee's performance which is capable of optimizing organization's goals and mission.

H_{A3} - Ethical behaviour of leaders improves the relationship between creative performance behaviours of employees and leader behaviours.

No matter how corrupted the environment around us is, as an individual we always prefer to receive what we deserve. The work place environment significantly impacts individual's personality and emotions. The study therefore attempts to correlate ethical behaviour of leaders with creative performance behaviour of an employee.

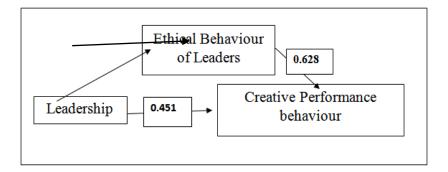
Treative Performance Score			
Creative Performance Score	Pearson Correlation	1	.628**
	Sig. (2-tailed)		.000
	N	96	96
Ethical Behavior	Pearson Correlation	.628**	1
	Sig. (2-tailed)	.000	
	N	96	96

The Pearson Correlation test exhibit significant strong positive correlation of 0.628 implying that ethical behaviour of leaders largely impact the performance of employees. It acts as a catalyst while ensuring innovation and improved organization goals. Thus, it leads to non-acceptance of null hypothesis.

VI. Conclusion

The study vividly demonstrated that an effective leader acts as an architect who bridges the gap between organization vision and employee's creativeness. Further employees engaged in R&D department are often more insecure when it comes to their contribution as their creditability stands at loss due to unethical practices and lack of legal protection. Further this gets even more ambiguous since his/her contribution in initial stages is difficult to be quantified. This is one of the major reason why the tendency to switch jobs is high. Though, HR department independently evaluates its performance but in reality, by and large the feedback of leaders in R&D department influence the decision-making process due to complexities involved. Monetarily they are paid of well what inspires them is token of appreciation and recognition. Thus, the ethical behaviour of leaders accelerates the creative performance behaviour of the employees. The study demonstrates the interlinkages between the three as below

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Ethical practices of leaders lead to development of strong positive perception towards organization and lead to synergy effects with improved commitments.

Implications of the Study

Managing human capital is a pre-requisite for sustaining the organization in a healthy way. The study therefore attempted to identify the key factors in one of the most vulnerable but crucial departments of an organization. The management should take special care while appointing leaders. The ideology of promoting human resources based on seniority should not outweigh the other key factors as identified by the study. Promotion based on seniority should not be the only criteria especially in areas where innovativeness and complexities are involved. Lastly, Ethical behaviour standout to stimuli the creative performance of the employees. Therefore, infusing the study of ethics amongst the demography carries paramount importance.

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