

Neurological Consequences of Organizational Behaviour for Value Addition

Dr. Sharad R. Kulkarni

Asst. Prof; ATS, SBGI, Tilaknagar, Miraj-416414 (Maharashtra)
srkimrs@rediffmail.com 9923855927

Abstract:- Dynamic changes are affecting inter-relationships between different stakeholders of the entire organization. The remarkable impact may be noted on individual and group decisions, performance at work, balance between work and life etc. Group dynamics and leadership have direct impact on cognitive behaviour like decision making and job satisfaction.

This paper is an outcome of a research work which has been focused on neurological consequences of changes in organizational behaviour affecting the performance, innovation, decision making ability, team work, creativity and engagement among employees working in selective micro and small scale enterprises. The sample of 40 organizations located in Sangli District of Maharashtra State and representing manufacturing as well as service sectors is considered.

This study attempts to throw light on need of formulating suitable design of change management policy referring the neuro behavioural perspectives, to cope up with probable deviations in individual as well as group behaviour in the organizations. It also helps in identifying critical organizational results derived from change management practices for understanding feelings, emotions, attitudes and behaviour resulting into changing dimensions of turnover, decision making, job enrichment, leadership and employee engagement. Ultimately, all these attributes lead to value addition for organization in particular and business in general.

Keywords:- Neurological Consequences, Organizational Behaviour, Value Addition, Innovation, Employee Engagement.

I. INTRODUCTION

As per neurological observations, it has been determined worldwide that economic crisis has locked almost all the organizations between business accelerators and market responses. There is need to overcome dilemma between strategies to abolish vulnerable actions and revitalization of plans to respond the market fluctuations more dynamically. Human resource has to play a vital role for directing the situation through implementing certain changes. These changes might develop conflicts because of probable friction between existing practices with expected replacements. Once the smooth changeover in behavioural parameters takes place, then the sustainable development of organization would take place without any further barrier.

Practice of change management in organizations should be embedded with behavioural consequences.

Individual as well as group behaviour appears due to neurological stimuli. So it is essential to concentrate on behavioural dimensions in the vicinity of neurological perspective. The organizational behaviour is represented by decision making process, engagement with the work, organizational climate, job satisfaction and many other relevant dimensions. Some of them are considered in this study.

II. LITERATURE REVIEW

Neurosciences affect almost all actions and views of our life. Various disciplines now-a-days depend on neurological perspective of decision maker. Neuro-scientific experiences were identified in project management Religion, Theology, Politics, Jurisprudence, Life sciences and Psychology (Schweitzer, A, 2007)). In the beginning many authors have observed the wide area of business as an important field of neuro-scientific application, like,

- (1) Planning and control of projects
- (2) Expertise research, as well as learning and educational research and
- (3) Personality & cooperation research (conflict ability)

In the process of applying discipline, the human factor remains one of the crucial factors. Even in case of the best processes, perfect and complete information of customer and a perfect fit between task performance abilities, capability to fulfill the customer's needs and motivational parameters sensed by humans will cause the difference in a highly unique manner. Hence, it is essential to understand neurological motives behind making decisions and converting them into the best performance.

III. NEUROLOGY AND DECISION MAKING

The decisions are ultimately taken by human beings. It may be an individual person or a group of people. In fact, group decisions result from the multiple approaches of different sets of individual decisions. At a particular moment decision is appearing in the light of uncertainty of probable options. The decision has been declared means people have deduced a common consensus for a specific alternative. Normally multiple options to a decision are considered as possible expected outcomes at unpredictable circumstances with inappropriate information.

There is strong connection between decision making and motivation with multiple dimensions. It has been proved that decisions are not possible without suitable motivation. The entire decision making process is controlled by behaviour and motivation. Journey of decision making starts with internal motivation. It drives the behaviour of an individual or the group and ultimately converts into the overall performance. Highly motivated employees can be easily transformed into high performing human assets.

Hence, it is essential for employers to understand the processes of decision making. In what motivational spirit human being takes decision; which options of decisions make changes in their behaviour are some of the questions that may disclose the link of neuro managerial perspectives with the process of decision making

In today's world of rising network prone environment and dynamic aspects of change, it is highly essential to recognize the factors associated with social behaviour of human capital working in the organizations.

The study of motives behind specific social behaviour in terms of cognitive and affective neuroscience is useful for practice in business world. Social neuroscience identifies the biological co-relations between human resources. It considers other attributes which can be activated and evaluated for better results. These include attitude, belief and values.

IV. NEURO PERSPECTIVES OF EMPLOYEE ENGAGEMENT

According to Gallup Organization, there are three levels of employee engagement,

- Actively Disengaged Employees
- Not Engaged Employees
- Engaged Employees

As observed by Csikszentmihalyi, (2008) and Posner et.al, (2009), engagement involves the central and autonomic nervous system to maintain the internal attention and rewarding states. There are brain networks affected by the threat and reward response and thus by engagement levels. These are:

1. Cognitive networks: These provide the capacity for clear thinking and better executive attention. (Posner et. al, 2007).
2. Limbic system: The reward experience and positive emotion require the involvement of the higher immune function and body coordination. (Tang et.al, 2009).
3. Social network: Collaboration and understanding others are the vital abilities for success and survival. (Fair et.al, 2008).
4. Self-regulation network: It is responsible for the regulation of both cognition and emotion for conflict resolution. (Tang and Posner, 2008).
5. Learning and habit circuits: Positive experience of engagement facilitates and enhances and strengthens working memory. (Tang, 2009).

Loyalty is a subconscious outcome of engagement. The time, energy and money spent to attach with one brand, against the possibility of attracting towards cheaper and more convenient alternative is known as loyalty. Negative emotions are more dominant over positive emotions in the process of decision making. Normally, engagement is positively linked with the reward. It is required to double the reward to overcome the negative outcome before making decisions involved with the risk.

V. NEUROSCIENCE OF HIGH PERFORMANCE

No two workplaces are exactly similar so there is no any standard formula to design high performing work places. But, there are specific attributes firmly related with highly productive work places. Organizations have to consider systematically about job design, performance measuring tools, workplace structures, leadership styles, values and behaviors. All these elements lead to all time high performing work environments. Commitment and focus towards results are important aspects of motivation. As soon as the target has finalized, the challenge becomes visualized. As challenge knocks the skills, an urge get derived which results into enthusiastic flow of actions leading to high performance.

Different ideas are integrated which encourage fellow team members. Once the primary personal needs are accepted, the cognitive transmission towards social needs takes place. This situation encourages for better teamwork which ultimately strengthens the team work. An initiative and creativity might be vanished due to unsafe and fearful work environment which diminishes the optimum performance.

VI. ABOUT THE STUDY

6.1. Objectives

Present study focuses on following objectives

1. To understand concept of neurology as perceived by respondent organizations.
2. To recognize correlation of neurological aspects and human behaviour.
3. To analyze impact of neurological perspectives in organizational success.

6.2. Research Methodology

Considering increasing importance of neurological approach for almost every activity in the organization, the study was carried out with help of first hand responses. The convenient sampling method was used to select the sample organizations for this study. Small and medium enterprises working in manufacturing and service sectors were randomly chosen. As shown in Table 1; forty organizations represent the study sample with equal participation (twenty each) from manufacturing and service organizations.

Table 1 Respondents' Profile

Sr. No.	Organizations	Respondent		
		No.		%
A	Manufacturing			
1	Agricultural Processing	5	20	50
2	Engineering Products	5		
3	Pharmaceuticals	5		
4	Textiles	5		
B	Service			
5	Banking	5	20	5
6	Communication	5		
7	Health	5		
8	Hospitality	5		
Total			40	100

Source: Field Study

The data was collected on the basis of structured questionnaire. The questions were related with different dimensions of neurological perspectives, change management experiences and corresponding consequences in organizational behaviour. The hypotheses set for this study were tested using Spearman's Rank Correlation Coefficient (r) Method.

6.3. Hypotheses

A) First Hypothesis

Null Hypothesis (H₀): Neurological perspectives of change management do not affect organizational behaviour significantly.

Alternative Hypothesis (H₁): Neurological perspectives of change management affect organizational behaviour significantly.

B) Second Hypothesis

Null Hypothesis (H0): Manufacturing and service sectors do not have similar results from neuro perspectives of organizational behaviour through change management.

Alternate Hypothesis (H1): Manufacturing and service sectors have similar results from neuro perspectives of organizational behaviour through change management.

7. Data Analysis and Findings

1. Need to implement Change Management (C M)

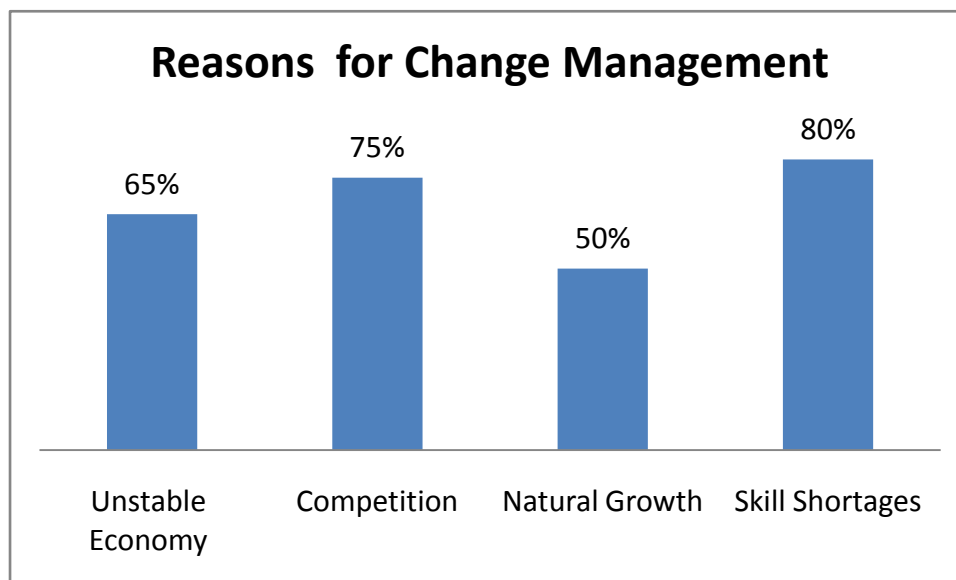
Table 2 Need of Change Management

Sr. No.	Reason for C M	Respondents					
		Manufacturing		Service		Total	
		No.	%	No.	%	No.	%
1	Unstable Economy	12	60	14	70	26	65
2	Competition	16	80	14	70	30	75
3	Natural Growth	10	50	10	50	20	50
4	Skill Shortages	13	65	19	95	32	80

Source: Field Study

As observed from above table, for manufacturing sector, change management is essential for improving competence (80 %), overcoming skill shortages (65 %), withstanding in unstable economy (60 %) and aligning with natural growth (50 %). The service sector organizations apply change management for meeting skill shortages (95 %) and enhancing competitive strength as well as absorbing economic fluctuations (70 % each). Half of the respondent service sector organizations prefer change management to acknowledge the natural growth.

Chart 1



2. Barriers in managing changes

Table 3 Barriers in Change Management

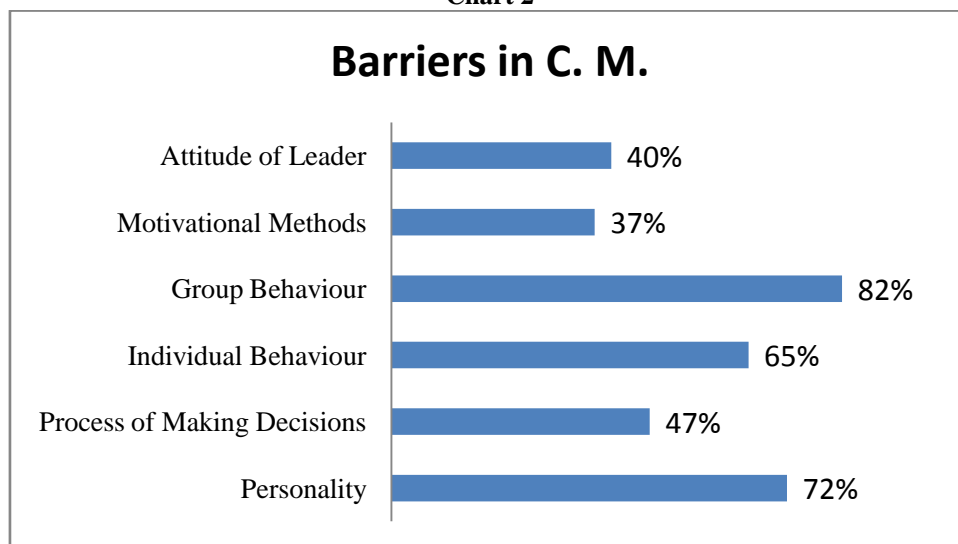
Sr. No.	Barriers in C M	Respondents					
		Manufacturing		Service		Total	
		No.	%	No.	%	No.	%
1	Personality	13	65	16	80	29	72
2	Process of Making Decisions	09	45	10	50	19	47

3	Individual Behaviour	14	70	12	60	26	65
4	Group Behaviour	16	80	17	85	33	82
5	Motivational Methods	06	30	09	45	15	37
6	Attitude of Leader	08	40	08	40	16	40

Source: Field Study

Opinions regarding constraints during implementation of change management have disclosed that the group behaviour and individual's personality are most significant barriers as viewed by 82 % and 72 % respondents. These were followed by individual behaviour, decision making process, leader's attitude and motivational methods with 65 %, 47 %, 40 % and 37 % responses respectively.

Chart 2



3. Neurological Perspectives of Change Management

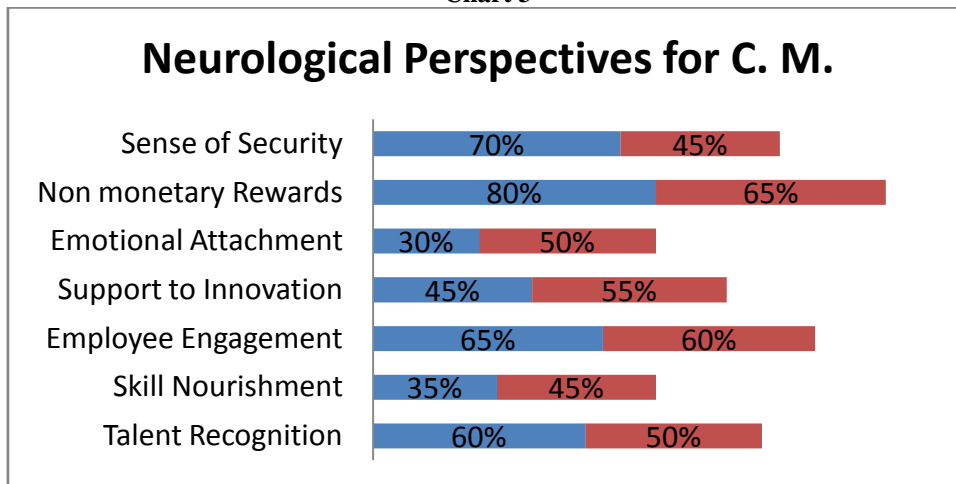
Table 4 Neuro-Perspectives of Change Management

Sr. No.	Neuro-Perspectives of C M	Respondents					
		Manufacturing		Service		Total	
		No.	%	No.	%	No.	%
1	Talent Recognition	12	60	06	30	18	45
2	Skill Nourishment	07	35	16	80	23	57
3	Employee Engagement	13	65	12	60	25	62
4	Support to Innovation	09	45	11	55	20	50
5	Emotional Attachment	10	50	16	80	26	65
6	Non monetary Rewards	16	80	08	40	24	60
7	Sense of Security	14	70	09	45	23	57

Source: Field Study

There are certain neurological perspectives which play significant role in success of change management initiatives. Emotional attachment between employee and organization, employee engagement status and providing non monetary rewards are noteworthy perspectives according to 65 %, 62 % and 60 % respondents respectively. The 57 % organizations were in favour of skill nourishment and security, while 50 % have observed support for innovation as important neuro perspective. The recognition of talent has been viewed significant only by 45 % respondents.

Chart 3



4. Elements affecting Organizational Behaviour

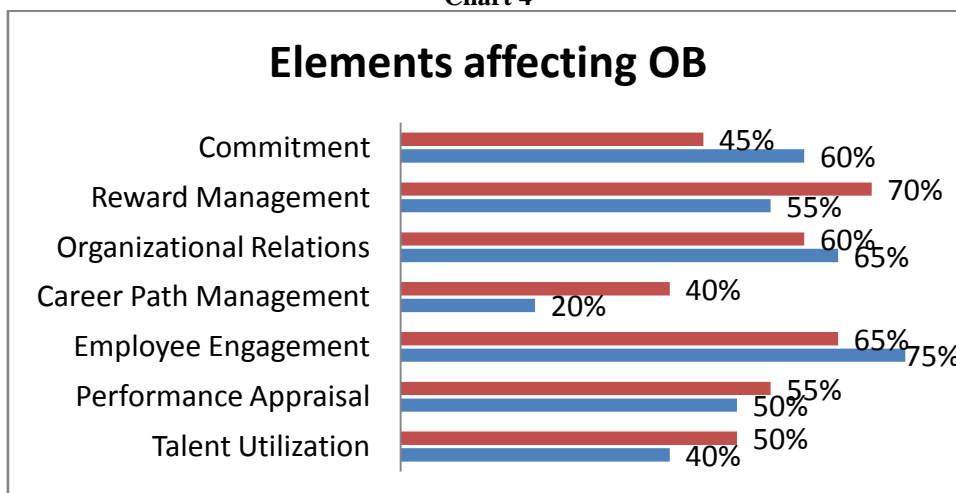
Table 5 Elements affecting Organizational Behaviour

Sr. No.	Elements	Respondents					
		Manufacturing		Service		Total	
		No.	%	No.	%	No.	%
1	Talent Utilization	08	40	10	50	18	45
2	Performance Appraisal	10	50	09	45	19	47
3	Employee Engagement	15	75	13	65	28	70
4	Career Path Management	04	20	08	40	12	30
5	Organizational Relations	13	65	14	70	27	67
6	Reward Management	11	55	12	60	23	57
7	Commitment	12	60	11	55	23	57

Source: Field Study

As far as elements affecting organizational behaviour are concerned, the maximum 70 % respondents found employee engagement as the most effective element. It was followed by organizational relations (67 %), reward management and commitment (57 % each), performance appraisal (47 %) and utilization of talent (45 %). Only 30 % respondents viewed the career path management as element affecting organizational behaviour.

Chart 4



5. Outcome of OB through neurological consequences

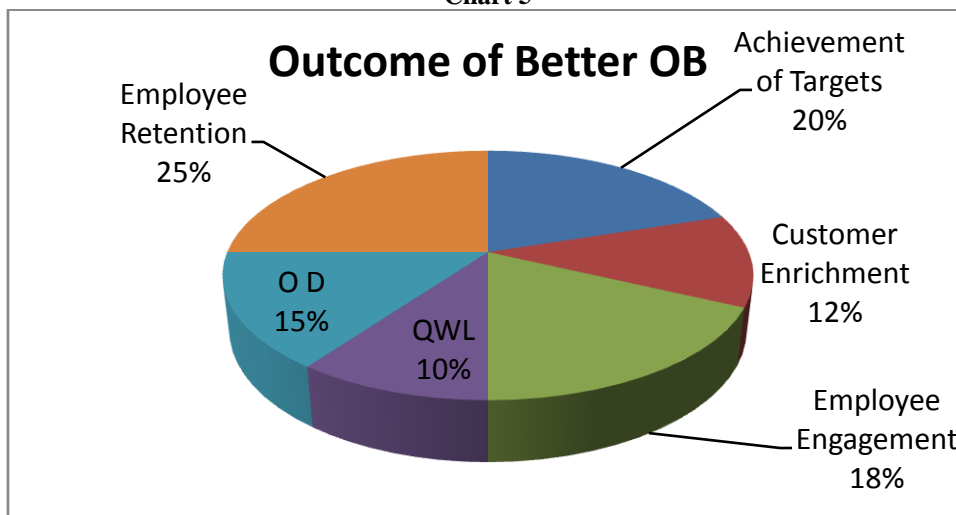
Table 6 Outcome of Better Organizational Behaviour

Sr. No.	Results	Respondents					
		Manufacturing		Service		Total	
		No.	%	No.	%	No.	%
1	Achievement of Targets	05	25	03	15	08	20
2	Customer Enrichment	01	05	04	20	05	12
3	Employee Engagement	04	20	03	15	07	18
4	Quality of Work Life	02	10	02	10	04	10
5	Organizational Development	03	15	03	15	06	15
6	Employee Retention	05	25	05	25	10	25

Source: Field Study

The better organizational behaviour leads to different useful results which not only strengthens but also enhances sustainability of organizations. The 25 % respondents observed retention of employees through appropriate OB. Target achievement and employee engagement were the results viewed by 20 % and 18 % respondents respectively. The organizational development, customer enrichment and balance between work and life were identified as significant outcomes of better OB by 15 %, 12 % and 10 % respondents respectively.

Chart 5



6. Neurological aspects of job satisfaction

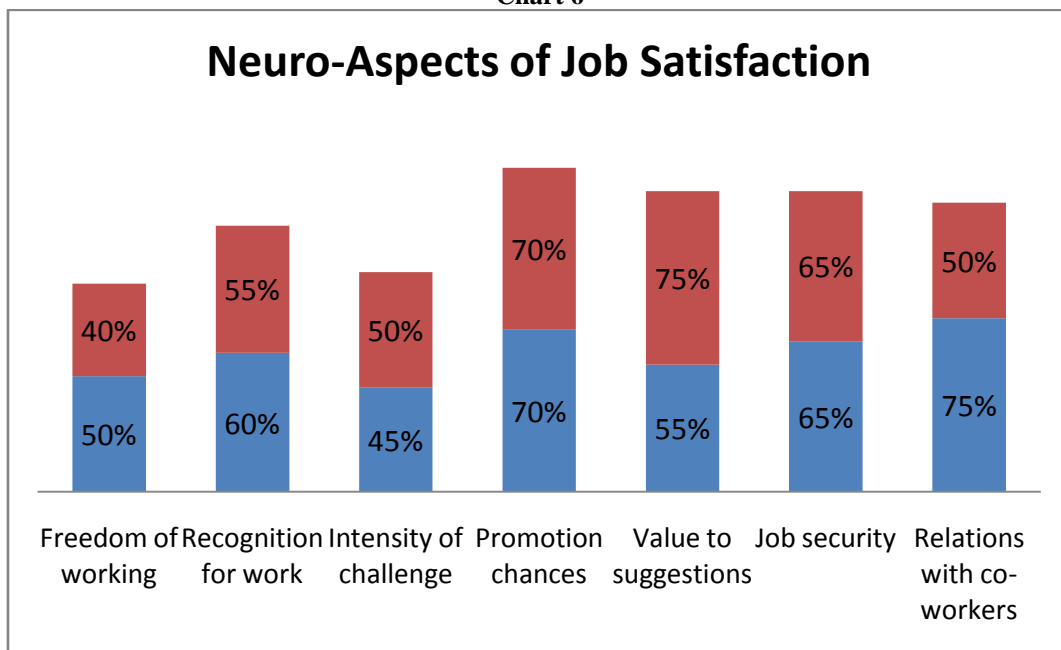
Table 7 Neuro-Aspects of Job Satisfaction

Sr. No.	Neuro-Aspects of Job Satisfaction	Respondents					
		Manufacturing		Service		Total	
		No.	%	No.	%	No.	%
1	Freedom of working	10	50	08	40	18	45
2	Recognition for work	12	60	11	55	23	57
3	Intensity of challenge	09	45	10	50	19	47
4	Promotion chances	14	70	14	70	28	70
5	Value to suggestions	11	55	15	75	26	65
6	Job security	13	65	13	65	26	65
7	Relations with co-workers	15	75	10	50	25	62

Source: Field Study

There is direct relation between neuro aspects and job satisfaction. About 70 % organizations have identified link between promotion and job satisfaction, 65 % respondents each favoured employees’ suggestions and security for the job; while, 62 % organizations trust in relations with workers. According to 57 % respondents, recognition of work yields job satisfaction. The intensity of challenge and freedom of work are also important for job satisfaction as observed by 47 % and 45 % respondents respectively.

Chart 6



8. Hypotheses Testing

The hypotheses were tested using Spearman’s Rank Correlation Method.

Table 8

Hypotheses Testing

Sr. No.	Hypothesis	Spearman’s Rank Correlation		Remarks
		Critical Value	Actual Value	
1	First	0.7450	0.8929	Actual value is more than critical value. Hence, reject H0 and accept H1.
2	Second	0.7450	0.8527	

Source: Field Study

As per the results of hypotheses testing, the actual value is greater than the Spearman’s rank correlation coefficient, the null hypothesis is to be rejected and obviously alternate hypothesis has to be accepted. Hence, it has been proved that,

1. Neurological perspectives of change management affect organizational behaviour significantly.
2. Manufacturing and service sectors have similar results from neuro perspectives of organizational behaviour through change management.

IX. CONCLUSION

Human behaviour is product of different multiple processes. It reflects interaction of different specialized subsystems. These systems interact continuously to determine behaviour. This results sometimes that the brain sometimes argues with itself, as these systems deduce different solutions about what should be done. Human behaviour, in general, is not under constant and intensive control. Neurological aspect of organizational behaviour reflects through reflex actions, impulses, instincts, habits, customs, fashion and addictions.

By observing engagement through the purview of neuroscience, it could be recognized that deeper engagement makes direct impact on performance of human being. Job satisfaction has found to be related with

intelligence quotient, emotional attachment, mental health and personality variables. All these parameters affect organizational behaviour. In the changing work environment, it is highly essential to address neurological perspectives of organizational behaviour for better results through change management practices.

REFERENCES

- [1]. Brief, (1998), '*Attitudes in and around organizations*', Sage Publications, pp 124-129.
- [2]. Gallup N. D., (2009), '*Employee Engagement*', Washington.
- [3]. Luthans, Avolio, (2007), '*Psychological Capital: Developing Human Competitive Edge*', Oxford University Press
- [4]. Subramaniam, Kounios, Parrish, Beeman, (2009), '*A brain mechanism for facilitation of insight by positive effect*', *Journal of Cognitive Neuroscience*, 21, pp 415-432.
- [5]. West, Patterson,(2008), '*Organizational Psychology*', Prentice Hall, pp 433-438.
- [6]. www.aberdeen.com
- [7]. www.blackwellpublishing.com
- [8]. www.business-systems-review.org
- [9]. www.canvas8.com
- [10]. www.cpmr.org
- [11]. www.gallup.com