

# A Case Study of Motivational Levels among Personnel Working in a Government Teaching Hospital of Punjab

RAVINDER NATH BANSAL and MEEENAKSHI MALHOTRA

<sup>1</sup>Deputy Medical Superintendent, GGS Medical College Hospital, Baba Farid University of Health Sciences, Faridkot, Punjab, India.

<sup>2</sup>Professor and Head, University Business Schools, Punjab University, Chandigarh, India.

<http://dx.doi.org/10.13005/bpj/976>

(Received: April 20, 2016; accepted: July 01, 2016)

## ABSTRACT

Motivation of healthcare workers is as important as is in other organisations, to be able to provide quality care to patients and ensuring better productivity of staff especially in public sector institutions. The aim of the study was to assess the motivation levels of personnel working at a public sector teaching hospital and to identify differences in various categories of personnel. Study was conducted on all the personnel working at the medical college including all doctors, nurses, paramedics and non-medicos except for class IV staff who could have not understood the questionnaire adequately. Respondents were ensured of the confidentiality of response and 621 personnel responded and filled the questionnaire. Statistical analysis was done using SPSS v20. Combination of non-parametric and parametric tests was used like mean, percentages, t-test and ANOVA analysis dividing the study groups into demographic profiles and various categories of personnel like Doctors, Nurses, Paramedics and Non-Medics. Showed significant differences in motivations levels between genders, job type between various motivational factors. Factors studied in this project are essential for ensuring quality in services and for higher productivity levels especially in healthcare setups. Introjected motivation factors is one such factor in addition to work environment which can be used as an opportunity by the management of healthcare organisations

**Key words:** Management in Public Sector healthcare institutions with limited options to exercise external motivation must actively look for other options like increasing their focus on introjected motivation and creating healthy work environments.

## INTRODUCTION

Quality of services provided by an organization, are a product of skill, motivational levels and satisfaction levels of its staff members. Management of a hospital, its respective leaders in the organization act as an important factor and their style translates into motivational levels and effectiveness of their staff<sup>1</sup>. Motivation is defined as the key for achieving personal and/or organizational goals through the processes that account for an individual's intensity, direction and persistence of effort toward attaining a goal<sup>2</sup>. Hospitals being manpower intensive industries; performance of their

system depends on the motivational levels of its personnel, translating into productivity and quality of output. Thus understanding the needs and motivational opportunities are important for service oriented organizations like hospital<sup>3</sup>. Large Hospital with a matrix of skilled professionals like doctors, nurses, paramedics and other supporting ministerial staff form a complex situation to maintain motivational levels of its employees. Further it becomes complex due to economic relationship with its customers coming from a wide variety of social background<sup>4</sup>. This becomes further complex in teaching hospitals with multiple hierarchy levels among different categories of staff members.

Various theories have been formulated by researchers including Maslow's Hierarchy of Needs, Herzberg's two factor theory, Alderfer's theory, Skinner's Reinforcement theory and McClelland's theory about what motivates people. Motivational state of an employee relates to 'content (what motivates a person), process (how a person is motivated) and the reinforcement theory (person's current behaviour is influenced by past actions)<sup>5</sup>. Motivation is not just an external award or an incentive, it is a product of relationship between work culture, chain of command, accountability and opportunities that exist within that organisation<sup>3</sup>.

Herzberg theory based on 'factors for dissatisfaction' identifies two types of motivation. One is to attain a particular post and to retain the same which satisfies the needs of job security, salary, working conditions and its luxuries. Second is performance improvement leading an emotional satisfaction for achievement and recognition<sup>3,6</sup>. Luthans (1998) asserts that 'motivation is the process that arouses, energizes, directs, and sustains behaviour and performance'. Motivation levels of a worker depend on the complex relationship between work allotted, work environment, relationship with supervisor, availability of resources required to perform, social environment<sup>7</sup>, work values of the organisation, human resources practices, expectations of the worker societal values and may more factors. Lower levels of motivation as a result of above factors may manifest as; absenteeism, inefficiency, poor performance, lack of courtesy towards patients and their relatives and poor efficacy thus hampering the overall performance of the organisation<sup>8</sup>.

'Deci and Ryan' had proposed that motivation depends on self-determination of an individual<sup>9</sup>. External motivation on one side forms the most controlled form of motivation and intrinsic motivation on the other extreme is least controlled form of motivation. In between two extremes is introjected regulation being closer to extrinsic and identified regulation being closer to intrinsic motivation.

On review of literature it was found that many studies have been done assessing the motivation levels in non healthcare organisations.

However, very few studies have been done in healthcare and that too mostly in non-teaching hospital. Objective of this study is to find the overall motivation levels of different types of employees in a non-profit making teaching hospital and additionally identifying and comparing the possible variation in motivations levels within the various groups.

### Hypothesis

- a) H<sub>0</sub>1: That is there is no significant difference between motivational levels in male and female employee under study
- b) H<sub>0</sub>2: That is there is no significant difference between motivational levels in regular and contractual employee under study
- c) H<sub>0</sub>3: That is there is no significant difference between motivational levels based on the duration of service of employees under study
- d) H<sub>0</sub>4: That is there is no significant difference between motivational levels based on the age of the employees under study
- e) H<sub>0</sub>5: That there is no significant difference between motivation levels between Doctors, Nurses, Paramedics and Non-medicos employees under study

### MATERIALS AND METHODS

For the purpose of this study one of the Government Medical Colleges in Punjab was selected. This institute was established more than 30 years ago. Hospital today has an average OPD of more than 1800 patients per days with more than 36000 admissions per year supported by 700 plus beds and being manned by 1000 plus personnel including 275 doctors, 282 nurses, 143 paramedics, 96 non-medicos and 250 plus class IV staff

### Study Instrument

It consisted of two parts namely: personal profile of the respondent and component of the motivation. Motivation questionnaire proposed by 'Motivation at Work Scale' (Gagne, 2010) was used. Motivation was measured for factors namely intrinsic Motivation, Identified regulation, Introjected regulation and extrinsic motivation (Table.1). Internal consistency of the scale was checked and found to be adequate with Cronbach's alpha found to be 0.910, which testified the strong reliability of the scale.

### Sample Size and Sampling

For the purpose of this study all doctors, nurses, paramedics and non-medical employees (Class III) were selected. Questionnaire was distributed to 796 eligible personnel as per the above criterions. Employees were met either in small groups or individually. Study instrument was pretested on 5 subjects for clarity, comprehension and flow of questions.

### Statistical analysis

Each of the motivational factor was tested using 3 questions for each factor on a 7 point likert based scale ranging from non-agreement at score 1 to exact agreement with score 7. Further assessment of motivation levels was done as comparative levels using t-test and ANOVA. Data management was done using Excel sheet and Statistical package (SPSS, Ver.20). The items were scored on a seven-point Likert scale according to the following response categories. 1 = not at all, 2 = very little, 3 = a little, 4 = moderately, 5 = strongly, 6 = very strongly, 7 = exactly. Higher scores indicated higher levels of motivation. With respect to the data, imputation of missing values was applied for missing values among the items pertaining to items in that scale.

### RESULTS

Distribution of respondents: 621 respondents completed their questionnaire. The sex ratio of respondents was in favour of females (66:34). 71% of the respondents were regular employees and the rest were contractual staff members. Study group respondents included 33% doctors, 39% Nurses, 16% paramedics and 12% Non-medicos.

Among the 621 respondents, Introjected Regulation had highest mean value of 16.22 ( $\pm 6.34$ ) followed by Identified Regulation 15.58 ( $\pm 6.27$ ), Intrinsic Motivation 13.73 ( $\pm 5.6$ ) and least mean value was for Extrinsic Regulation 11.99 ( $\pm 5.60$ ). Lower Extrinsic Motivation is in line with the assumption that external rewards are not possible in public sector organisations (table 2).

Overall motivation levels were higher in male employees 59.25 ( $\pm 21.38$ ) as compared to that of female employees 53.76 ( $\pm 26.79$ ), this was statistically significant using t-test at 0.05 levels of significance with  $p=0.005$ . Further male employees had higher means for all the four motivational factors as compared to female employees. However using t-test this difference was statistically significant only

**Table 1: Various Motivational Factors under Study**

S.No	Motivational factor	Statement numbers	Type
1	Intrinsic Motivation	1-3	Autonomous Motivation
2	Identified Regulation	4-6	
3	Introjected Regulation	7-9	Controlled Motivation
4	Extrinsic Regulation	10-12	

**Table 2: Mean Values for Different Motivation Factors**

	N	Minimum	Maximum	Mean	Std. Deviation
Introjected Regulation	620	0.0	21.0	16.216	6.3317
Identified Regulation	621	0.0	21.0	15.580	6.2724
Intrinsic Motivation	621	0.0	21.0	13.734	5.6014
Extrinsic Regulation	621	0.0	21.0	11.995	5.6034
Total Motivation	621	0.0	84.0	55.641	24.8886
Valid N (listwise)	620				

for motivational factors Intrinsic Motivation, Introjected Regulation and External Motivation with p value of 0.002, 0.006 and 0.041 respectively. Using t-test no statistical difference was found in motivational factor identified regulation among male and female employees with  $p=0.146$ .

Overall motivational levels were higher in regular employees 56.70 ( $\pm 24.28$ ) as compared to that of contractual employees 53.61 ( $\pm 25.95$ ), however this difference was statistically insignificant at 0.05 levels of significance with  $p=0.142$ . Similarly there was no statistical difference in motivation levels of employees for all the four motivational factors tested individually.

Using t-test it was found that there was no statistical difference in motivational levels based on the duration of service and age of the employees.

Employees were further divided into 4 broad categories based on their profession into

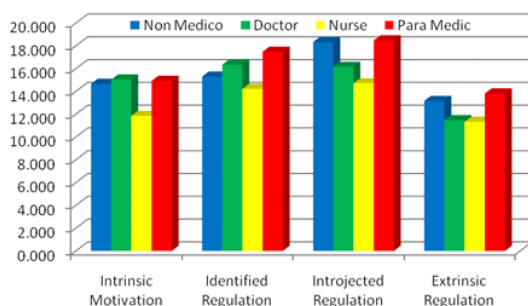
Doctors, Nurses, Non-Medicos and Paramedics. Overall motivation levels (Table 3, Graph 1) were higher in paramedics 64.02( $\pm 19.66$ ), followed by non-medicos 60.85( $\pm 17.56$ ), doctors 57.87( $\pm 20.18$ ) and least was for nurses 48.78 ( $\pm 30.08$ ). ANOVA analysis was done and this difference was statistically significant ( $p=0.000$ ) at 0.05 level of significance.

Mean Intrinsic Motivational levels were highest for doctors 15.04( $\pm 5.24$ ), followed by paramedics 14.93( $\pm 4.74$ ), non-medicos 14.67 ( $\pm 4.7$ ) and least was for nurses 11.86( $\pm 5.96$ ). This difference was statistically significant ( $p=0.000$ ) based on ANOVA analysis at 0.05 levels of significance.

Mean Identified Regulation level was highest for paramedics 17.48( $\pm 5.20$ ), followed by doctors 16.35( $\pm 5.26$ ), non-medicos 15.30( $\pm 5.45$ ) and least was for nurses 14.23( $\pm 7.32$ ). This difference was statistically significant ( $p=0.000$ ).

**Table 3: Mean Values for Different Motivation Factors for Different Categories of Personnel**

	Intrinsic Motivation		Identified Regulation		Introjected Regulation		Extrinsic Regulation		Total Motivation	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Para Medic	14.93	2	17.49	1	18.48	1	13.82	1	64.03	1
Non Medico	14.67	3	15.31	3	18.33	2	13.17	2	60.85	2
Doctor	15.04	1	16.35	2	16.16	3	11.48	3	57.88	3
Nurse	11.86	4	14.23	4	14.72	4	11.34	4	48.78	4
Total	13.73		15.58		16.22		12		55.64	



**Fig. 1: Graphical representation of mean values of motivational levels among various categories of employees**

Mean Introjected Regulation level was highest for paramedics 18.47( $\pm 5.09$ ), followed by non-medicos 18.33( $\pm 4.60$ ), doctors 16.16( $\pm 5.38$ ) and least was for nurses 14.71( $\pm 7.45$ ). This difference was statistically significant ( $p=0.000$ ).

Mean Extrinsic Motivational level was highest for paramedics 13.82( $\pm 5.37$ ), followed by non-medicos 13.17( $\pm 4.85$ ), doctors 11.48( $\pm 4.81$ ) and least was for nurses 11.34( $\pm 5.37$ ). This difference was statistically significant ( $p=0.000$ ).

Further multiple comparison was done for professionals (doctors, nurses, non-medicos and

paramedics) for each of the motivational factors separately. On analysis for Intrinsic Motivation it was found that mean motivational levels were similar among doctors, paramedics and non-medicos. However Intrinsic Motivation levels were significantly lower for nurses compared to other 3 groups.

On analysis for Identified Regulation it was found that mean motivational levels were similar among doctors, paramedics and non-medicos. However Identified Regulation levels were significantly lower for nurses compared to other that of doctors and non-medicos.

For Introjected Regulation using multiple comparison it was found that there was significant difference in the motivation levels for non-medicos vs nurses, paramedics vs nurses and paramedics vs doctors with the later one in the pair having lower motivational values.

For External Motivation using multiple comparison it was found that there was significant difference in the motivation levels for paramedics vs nurses and paramedics vs doctors with the later one in the pair having lower motivational levels.

## DISCUSSION

Healthcare organizations are manpower intensive industries. Though driven by protocols, human touch has more psychological and healing impact than medications. Being manpower intensive, motivation levels of the employees significantly affect the satisfaction levels of the patients and their relatives. Like for most of the service sectors where human factor is crucial, similarly, those working in a hospital play a crucial role in medical care and treatment<sup>7</sup>, and authorities should give particular attention to their motivational needs and demands. Motivating is the management process of influencing behaviour based on the knowledge of what make people tick (Luthans, 1998).

A study conducted by Masoud Asl and his colleagues indicated that giving attention to 6 factors 'good work environment', 'job security in the organization', 'official rules and regulations',

'reasonable payment', 'having a sense ad responsibility towards the job', 'interest in the work' and 'being successful in the job' could have an effect on workers' performance<sup>12</sup>. Deci and Ryan, 1985 proposed that motivation differs in degree of self-determination. The range is from the most controlled form of motivation (External Regulation) which represents behavior directed by external demands to the least controlled form of motivation (Intrinsic Motivation) where motivation is simply a result of personal enjoyment of the activity. With respect to non-profit organizations, the limited motivation research that does exist, has mostly focused on the impact that pay systems have on intrinsic motivation (Calder & Staw, 1975; Cameron & Pierce, 1994; Tang & Hall, 1995; Deckop & Cirka, 2000; Wright, 2007; and Perry, Hondeghem & Wise, 2010).

Government institution differ from other institution in lacking the scope for providing performance based pay and incentives. Of the four types of motivational factors, External Motivation was correlating with the fact that in Government organization there is little scope for external motivation and that any /all applicable incentives like salary hike and promotion are time bound and not bound to the performance of the individuals. However in our research Introjected motivation had a highest mean value (16.216), this provides an opportunity to the administrators to be used as effective tool for increasing the performance in Government organization. In our study, finding of lower Intrinsic Motivation level (13.7) is contrary to opinion of Smith 1995, Salamon 2002.

In our study males had higher motivational levels compared to females. No similar study could be traced to compare the motivational level difference between males and females in rural segment, healthcare, public sector organisations. Authors correlate this to the possible fact that male members in the society need to perform better to keep satisfying themselves; however the female employees particularly in the rural segment of population, seem to had more commitment towards their families than work. However this was contrary to findings of another study<sup>22</sup>.

The findings also suggest that there was no statistical difference among motivational levels

among regular and contractual employees, this supports the claim of the earlier studies that organization work environment and policies are a major factor affecting the motivational levels<sup>23,24</sup>. In public sector organizations pay and incentives being predefined for each category of employees thus leaving little scope for difference in motivational levels.

There was no statistically significant difference in degrees of motivation present in the employees of different age groups  $\leq 35$  yrs, 35-45 yrs, 45-55 yrs,  $>55$  yrs ( $P=0.44$ ), this supports the claim of earlier studies<sup>22,25</sup>.

There was no statistically significant difference in degrees of motivation present in the employees based on duration of service  $\leq 2$  yrs, 2-4 yrs,  $>4$  yrs ( $P=0.34$ ) of the employees in our study which correlates to the findings of Lambrou P. et al<sup>22</sup>. While in another study showed that different degrees of motivation is present in the employees based on duration of service<sup>25</sup>. The differences could be due the different setups, with our study being done in a Government organisation and the others done in a private setup.

Our study showed highest motivation (mean score) for paramedics followed by non-

medicos, doctors and least in nurses. This is in contrast to the finding of Jaiswal P. et al 2014. The other explaining factors might be good salary (proportionate to working hours) for paramedics and non medicos in comparison to their colleagues working in the private sector; favourable and safe working condition; flexible assignments; flexible duty hours; good collaboration between occupational groups; leave provision and compensatory leave, etc. The reasons for nurses being the least satisfied in our study could be due to improper recruitment policy, improper deployment, few career growth opportunities, lesser option for trainings, poorly defined job description and priority towards family considering the rural segment of population. Further studies are required for investigation of lower level of motivation among nurses in government teaching hospital of Punjab.

Due to the scope and limitations of the study, author recommends that further research on the factors affecting motivation is required be undertaken to be able to better understand the variation in motivational levels in the current study. This will help government authorities to align their strategies for better performance of staff; leading to improvement in performance of employees and thus the better services.

## REFERENCES

1. Hasenfeld Y. Human Service Organizations. New Jersey: Prentice Hall; 1983.
2. Robbins SP: Organizational Behavior, 9<sup>th</sup> ed. New Jersey: Prentice Hall; 2001.
3. Franco LM, Bennett S, Kanfer R. Health sector reform and public sector health worker motivation: a conceptual framework. *Soc Sci Med* 2002;**54**:1255-66.
4. Goldsmith SB. Principles of Health Care Management Compliance Consumerism and Accountability in the 21st Century. 1<sup>st</sup> ed. Sudbury MA: Jones and Bartlett; 2005.
5. Skinner BF. Behaviour of organisms. New York: Appleton-Century-Crofts; 1938.
6. World Health Organization: Training manual on management of human resources for health. Section I, part A. Geneva 1993.
7. Franco L.M, Bennett S, Kanfer R and Stubblebine P. Determinants and consequences of health worker motivation in hospitals in Jordan and Georgia. *Soc Sci Med* 2004; **58**: 343-55.
8. Gilson L, Alilio M, Heggenhougen K. Community satisfaction with primary health care services: An evaluation undertaken in the Morogoro region of Tanzania. *Soc Sci Med* 1994; **39** :767-80.
9. Deci EL, Ryan RM. *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press; 1985
10. Gagné M, G. Forest MH. Gilbert CA, Morin E, Malorni A. The Motivation at Work Scale: Validation Evidence in Two Languages. Educational and Psychological



- Measurement* 2010; **70**: 628–46.
11. Luthans F. *Organisational Behaviour*, 8<sup>th</sup> ed. Boston: Irwin McGraw-Hill; 1998
  12. Masoud Asl A, Akhavan Behbahani A, Nosrati nejad F, Gholamreza nejad A. relationship between hygiene and motivational factors with job satisfaction of personnel of teaching hospitals of Yasouj based on Herzberg motivational theory. *Journal of medical sciences of Islamic Azad University*. 2010; **20**: 52-7.
  13. Ryan RM, Deci EL. Self-determination theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-being. *American Psychologist*, 2000; **55**: 68-78.
  14. Calder BJ, Staw BM. Self-perception of intrinsic and extrinsic motivation. *Journal of Personality and Social Psychology* 1975; **31**: 599-605.
  15. Cameron J and Pierce WD. Reinforcement, Reward, and Intrinsic Motivation: A Meta-Analysis. *Review of Educational Research Fall*. 1994; **64**: 363-423
  16. Tang S, Hall V. The over justification effect: A meta-analysis. *Applied Cognitive Psychology* 1995; **9**: 365-404.
  17. Deckop JR, Cirka CC. The risk and Reward of a Double-Edged Sword: Effects of a Merit Pay Program on Intrinsic Motivation. *Nonprofit and Voluntary Sector Quarterly*. 2000; **29**: 400-18.
  18. Wright BE. Public Service and Motivation: Does Mission Matter?. *Public Administration Review*. 2007; **67**: 54-64
  19. Perry JL, Hondeghem A, Wise LR. Revisiting the Motivational Bases of Public Service: Twenty Years of Research and an Agenda for the Future. *Public Administration Review*. 2010; **70**: 681-90.
  20. Smith DH. Some Challenges in Nonprofit and Voluntary Action Research. *Nonprofit and Voluntary Sector Quarterly* 1995; **24**: 99-101.
  21. Salamon LM. *The State of Nonprofit America*. Washington D.C.: Brookings; 2002
  22. Lambrou P, Kontodimopoulos N, Niakas D. Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. *Human Resources for Health*. 2010; **8**: 26.
  23. Bent R, Seaman EA, Ingram A. Staff motivation in small food manufacturing enterprises. *Br Food J* 1999; **101**:654–67.
  24. Steers RM, Porter LW. *Motivation and work behavior*. 5th ed. New York: McGraw-Hill; 1991.
  25. Bajwa SJS, Viridi SS, Bajwa SK, Ghai GK, Singh K, Rana CS, et al. In depth analysis of motivational factors at work in the health industry. *Ind Psychiatry J* 2010; **19**: 20-9.
  26. Jaiswal P, Singhal AK, Gadpayle AK, Sachdeva S, Padaria R. Level of motivation amongst health personnel working in a Tertiary Care Government Hospital of New Delhi, India. *Indian J Community Med* 2014; **39**: 235-40