An Empirical Examination of Factors That Influence Work Motivation of Academic Staff in Higher Education

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Abstract

One of the key performance indicators of higher education institutes is its academic staff. Satisfaction and motivation of academic staff contributes a lot to the student learning as well as the research outcome of the institute. Therefore, studying motivation of academic staff is crucial for the performance of higher education institutions (HEIs). The present study aims to identify factors of work motivation for academic staff in HEIs. Data collected from 150 faculty members working at various HEIs, was analysed using descriptive and multivariate statistical tools. Findings highlight academic staff's motivation dimensions and extract 9 factors out of 53 items. These factors play an important role in motivating academic staff at HEIs.

Key Words

Work Motivation, Higher Education Institutions, Academic Staff, Motivational Factors, Exploratory Factor Analysis

INTRODUCTION

Development of any country predominantly depends on its education system. Higher education has the maximum contribution of 59.7 per cent of the entire education system of India (Education Sector in India, 2018). According to this web report, India is world's largest higher education system and ranked

second in terms of student enrolment in higher education; the average growth of higher education in India is expected to reach 18% per year by 2020. Higher education is a powerful tool to build knowledge-based society of the 21st Century, hence it is of vital importance for the country. There has been a magnificent growth in the number of Universities/Universities level Institutions & Colleges in Higher Education sector since Independence of India (University and Higher Education, 2016). Higher education institutions are experiencing key changes and demolishing its customary structure of working as universities and institutions prospect for better funding opportunities and foreign collaborations. Like any other profit-oriented organization, Higher Education Institutions (HEIs) also need to look for ways to enhance performance in order to sustain in such a tough industry. As per the UGC report, currently, the biggest challenge faced by higher educational institutions in India is the acute shortage of qualified and competent faculties (Sharma, 2013). According to the report, the paucity of qualified faculty is felt more in professional and technical institutions including IIMs and IITs. The shortage of academic staff and the failure of universities to retain quality academic staff; is crucial to the changing prospects and potentials of knowledge formation and learning (Selesho & Naile, 2014). Academic staff retention has a significant effect on quality education (Too, Chepchieng, & Ochola, 2015) and research shows that employee motivation and satisfaction are strongly associated with turnover intentions of employees (Bonenberger, Aikins, Akweongo & Wyss, 2014).

Motivation, ability, environment are three important factors influencing job performance. Among them motivation is described as the most complex in terms of its management (Mitchell, 1982). Motivation is an important component for any kind of profession and it becomes more important for teachers who are empowered with the duty of imparting education to the future of any country. Teachers play an important role in a student's life. Students' motivation and satisfaction has always been a major consideration in educational institutions, generally ignoring academic staff's work satisfaction (Comm & Mathaisel, 2000). While student success and student learning are important parameters indicating success and quality of an educational institution, motivation and performance of academic staff is equally crucial for the success of both students and the institute. Research has shown that a teacher's performance has a great impact on a student's learning and satisfaction (Machado & Gouveia, 2011). Faculty members are the most important pillars of the entire education structure; hence, it is imperative to understand what motivates them. The present study, thus, aims to identify the factors that describe the motivational levels of faculties of HEIs.

RESEARCH PURPOSE

National culture creates a difference on motivation needs and strategies (Fisher & Yuan, 1998; Latham & Pinder, 2004; Lim, 2007), which makes it necessary to study this topic in Indian context. Most motivation surveys cited in literature review (Jurkiewicz & Massey, 1997; Kovach, 1987; Nohria, Groysberg & Lee, 2008) are conducted in industrial settings. The variable and factors of motivation vary according to the context. Some job factors such as pay, salary, working conditions may be common between an academic institute and a corporate firm but many of them need to be studied specifically in context of educational institutions. Research, consultancy, student learning ability, are some of the factors which may be important for a faculty but not for industrial employees. Few studies are held among education institutions as well, but either they address the issue at school level (Dombrovskis, Guseva & Murasovs, 2011; Mertler, 2016) or they are conducted outside India (Schulze, 2006; Selesho & Naile, 2014). Hence, purpose of this study is to identify motivational factors of academic staff in the context of higher education institutions of India.

The major objectives of the study are outlined below :-

- To identify and determine the dimensions of work motivation of academic staff in HEIs.
- To understand the relationship and pattern among the identified variables of work motivation.
- To determine the top work motivation factors that describe the reasons for academic staff work motivation in HEIs.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK DEVELOPMENT

Motivation Defined

Work motivation is a construct which is largely studied and defined in different ways in research because of its direct implication on behaviour and performance at individual as well as organizational level too. Motivation is generally defined as a motive to engage in a behaviour. Mitchell (1982) defines motivation as the degree to which an individual wants and chooses to engage in certain specified behaviour. Myers (1993) defines motivation as a need or desire that serves to energize behaviour and to direct it towards a goal. Motivation is a set of energetic force that originate within an individual and externally in order to initiate work related behaviour, and to determine its form, direction, intensity and duration (Pinder, 1998). Griffin and Moorhead (2011) define motivation as a set of forces that leads people to behave in a way.

Motivation is a set of processes that arouse, direct, and maintain human behaviour toward attaining some goal (Greenberg & Baron, 2003). Tohidi and Jabbari (2011) define motivation as the force which strengthens behaviour, guides behaviour in a right direction, and maintains the behaviour. It is defined as a reason because of which an individual starts something, continues it and finishes it. Though there are numerous ways and definitions in which motivation has been defined but there is no universal definition of motivation. Motivation is based on needs which are present within an individual. An individual is said to be motivated when he/she chooses an action or behaviour in order to perform towards the achievement of some goal. Motivation is a continuous process which is not subject to one specific need. The moment one need is satisfied, new one will emerge. Every organization wish to encourage a particular behaviour which leads to performance. Since, behaviour is a voluntary choice of an individual; organizations wish to work on those factors which motivates them to choose that particular behaviour. Generally, organizations fail to consider the individual employee whose behaviour they want to influence. Managers need to understand their employees as individuals in order to motivate them (Pokorny, 2013). Springer (2011) established a positive relationship between motivation and performance and proved that job motivation is a significant predictor of job performance. Employees of any organization are its internal customers and keeping them motivated will bring competitive advantage to any company.

Motivation is a dynamic internal state which is influenced by many external factors. It is important for institutions to know these factors to create an environment that fosters employee motivation. Every human being is engaged in some work in their life. It is worth asking what motivates them to do that particular work? If an employer knows what makes its employees productive, they will ensure the desired behaviour and will certainly have a marketplace advantage (Kovach, 1987). Effective management and high productivity are linked with employee motivation in an organic manner (Qenani-Petrela, Schlosser & Pompa, 2007). Hence, it becomes fundamental for organizations to understand the nature of individual motivation.

Existing Theories of Motivation

Motivational factors discussed in literature are mostly identified from a specific set of theories i.e. Need theories or content theories of motivation which attempts at answering what motivates individuals. Process of motivation starts with identification of an unsatisfied need. An unsatisfied need creates tension; to reduce this tension an individual exert effort (Robbins, 1993). Most widely

accepted and popular need theory of motivation is Maslow's need hierarchy theory (Wahba & Bridwell, 1976). Maslow defined that individuals have five set of needs which act as motivators- physiological needs, safety and security needs, social and belongingness needs, Self-esteem needs, and self-actualization needs. Herzberg defined two set of factors- hygiene factors and motivators. Herzberg's hygiene factors are similar to Maslow's physiological, safety & security and Social needs; motivators are similar to esteem and self-actualization needs (Berl & Williamson, 1987). Hygiene factors include salary, working conditions, job security, status, fringe benefits, company policies, supervision, interpersonal relation. Hygiene factors do not motivate employee but if not provided they can lead to dissatisfaction. Motivators include achievement, recognition, responsibility, work itself, advancement, personal growth and development. Motivators are associated with satisfaction and motivation among employees. Alderfer's ERG theory proposed three set of motivating factors-Existence, Relatedness and Growth. Five needs suggested by Maslow are compressed into three need categories by Alderfer. Existence need is similar to Maslow's physiological needs and safety needs. Relatedness needs are similar to social and belongingness needs of Maslow and Growth needs includes Maslow's self-confirmed esteem needs and the self-actualization phase (Berl & Williamson, 1987). David McClelland also explained three set of needs which dominates individual behaviour- need for achievement, need for power and need for affiliation. Need for achievement and need for power comprises of Maslow's esteem and self-actualization needs and Herzberg's Motivators. Affiliation need are equivalent to Maslow's social needs and Alderfer's relatedness needs. All the theories discussed above present two levels of needs that are higher order need and lower order needs. Higher order needs are more intrinsic in nature and lower order needs are more extrinsic in nature. Organizations generally focus on fulfilment of lower order needs and ignoring higher order needs (Mitchell, 1982).

Motivational Factors

No single theory will work for all men under all conditions. In order to devise motivational strategies managers in organizations have to be inquisitive and diagnostic of the differences which are present among employees (Oh, 1972). Motivation is psychological force which results from an interaction between individual and environment (Latham & Pinder, 2005), hence it is important to study environment factors.

Gaziel (1986) tested the two-factor theory of motivation in education

setting and found that motivating factors identified by Herzberg are supported in education setting also, except a few exceptions, such as responsibility is not identified as a motivator. Achievement, relationship with teachers and advancement are identified as most important factors for motivation in his study.

What employees want, differs among employees of different age, gender, income level, job type, and organizational levels, according to Kovach (1987). In his study, men found 'interesting work' as most important factor whereas female found 'full appreciation of work done' as an important factor for work motivation. Similarly, 'good wages' is an attractive factor for people under 30, 'job security' for people between 31-40, 'feeling of being in on things' for employees between 41-50, 'interesting work' for employees above 50 years of age. Lower nonsupervisory level of employees found 'wages' an important factor, whereas middle and upper non-supervisory level employees found 'interesting work' (Kovach, 1987).

Bishay (1996) with the help of an electronic device determined which activities for a teacher are most psychologically rewarding and contributes to teacher motivation. Results of ESM (experience sampling method) were also supported by conventional survey method and it was concluded that teachers with higher responsibilities felt most satisfied with their jobs. Results of ESM suggested that teachers enjoyed the most while teaching in the classroom.

In a similar study conducted by Castillo and Cano (2004), work content is defined as most motivating and work context as least motivating factor, identified for college faculty. Top five most important factors for university teachers were identified as provision of good salary systems, provision of fair promotion systems, provision of good retirement systems, provision of work security systems, and provision of abundant research resources (Chen, Yang, Shiau, & Wang, 2006). Qenani-petrela *et al.* (2007) suggested that the most important motivational factors of Gen Y are good wages, interesting work, and possibilities for advancement and growth. Job security and a feeling of being involved on the job are given less importance by gen Y respondents.

Nohria *et al.* (2008) suggested a company can improve overall motivation of employees by satisfying their drive to bond, drive to acquire, drive to apprehend and drive to defend. Drive to acquire can go beyond acquiring physical good and also includes experiences as well as status. Drive to bond is most closely related to employees' motivation and commitment. Drive to comprehend at workplace can be best addressed by giving challenging and meaningful work. Employees can feel negative emotions like fear and

resentment if their drive to defend is not addressed by the organization, which includes sense of security, confidence, justice, transparency and expression of idea and opinions. Nohria *et al.* (2008) concluded that employee motivation is not in complete control of organizational factors, rather is largely dependent on the immediate managers also.

Dan Pink argue that carrot and stick can no longer work for the 21st century workers. According to him, reward and punishment may work for the task which are simple, mechanistic and rule based but for the knowledge workers of 21stcentury, which requires creativity and cognitive skills, autonomy, mastery and purpose are the only motivators (Ted, 2009). Enjoyment in teaching and student's quality are identified as two important factors of motivation for teachers (Rashid & Dhindsa, 2010). Economic motive and career growth opportunities are the highest rated motives, which are followed by relationship with administration, social status, work satisfaction and self-realization (Dombrovskis et al., 2011). Faculty was found highly motivated to teach, to remain as faculty in HEIs, and to do research; whereas faculty was found less motivated to participate in governing bodies (Machado, Soares, Brites, Ferreira, & Gouveia, 2011). However, they found in their study that motivation to work in the institution, motivation to remain as a faculty member in higher education, and motivation to teach have the highest impacts on general motivation but motivation to do research has least impact on general motivation.

Akdemir and Arslan (2013) developed a motivation scale for teachers using Herzberg's two factor theory as a base and derived four factors of motivation- communication, progress in profession, institution, and expectations. Reward and recognition programs should be designed by the organizations including all motivational drivers of employees, which ranges from a desire to acquire valued things, status, social bond, and relationships (Pokorny, 2013). Motivation of a teacher includes two different aspects of motivation i.e. general work motivation and teaching motivation (Bjekiã, Vuèetiã, and Zlatiã, 2014). According to them, general work motivation comprises six factors including collegial support and professional respect, relationship with the supervisors, intrinsic motivation, job responsibilities, possibility of personal and professional development and job security and clear work expectations; and teaching motivation is influenced by relationship with students and interpersonal teacher student relationship. Job satisfaction and leadership, salary, academic development, promotion prospect, and job security are important aspects that motivate people in the academic profession (Selesho & Naile, 2014). According to them, job satisfaction, salary, promotion and leadership are important factors

among the academics, which attract them to university career.

Fair compensation, safe and healthy working conditions, opportunity for using and developing human capacity, opportunity for continued growth and security, social integration in the organization, employee rights, autonomy and work life balance are important dimension of overall quality of work life (QWL) which has a strong relationship with job satisfaction (Vasita & Prajapati, 2014). They suggest universities need to work on these eight dimensions of QWL as it has a significant impact on employee engagement and satisfaction.

Leadership behaviour of immediate authority, reward provided to employees and working environment of an organization are three important variables explored by Hooda and Singh (2014) which have a great impact on job satisfaction of faculty members at higher education and there is a positive correlation between faculty satisfaction and motivation.

Organizations need to recognize the needs and expectations of employees to develop a system of motivation in organization. Developing an effective system of motivation will enable organizations in objective attainment, employee engagement, loyalty and increasing effectiveness. Achieving the organizational objectives and satisfying results depends upon the employees' motivation to act. Employee motivation leads to employee loyalty and high level of performance and commitment (Stachowska & Czaplicka-Koz?owska, 2017). This research paper attempts to address this matter by identifying what factors motivate the academic staff of Higher Education Institutions.

METHODOLOGY AND METHODS

Sampling and Data Collection

The sampling frame of this study consisted of academic staff of higher educational institutes in India. Convenience sampling was selected as the sampling technique for the purpose of the study. Data were, thus, collected from higher educational institutes of the private sector located in the National Capital Region. The selection of the targeted higher educational institutions was based on random sampling technique.

Data were collected using both online and offline data collection procedures. Initially questionnaires were sent over e-mail to the respondents. Of the 200 e-mails sent, only 39 were returned, indicating a response rate of 19% for the online data collection. A pen-and-paper survey was also undertaken to supplement the online data collection process. Of the 150 pen-and-paper questionnaires, 111 were turned in, indicating a response rate of 74%. Thus, a

total of 150 responses were received, with an overall response rate of 42%. The sample characteristics are detailed in Table 2 of the study.

Instrument Development

The various dimensions of motivation were identified from the literature review. The literature review resulted in a total of 53 items to be representing motivation of academic staff of higher education institutions. In the first stage of instrument development, the items identified were subjected to expert opinion. Senior academicians and professors were requested to review these items in terms of their representation of motivations, the language of each item and appropriateness in terms of the context of higher educational institutes. This also resulted in ascertaining the face validity and content validity of the instrument.

The survey instruments consisted of items presented on a 7-point Likert scale. The respondents were required to rate the level of importance that each of these statements had in terms of determining their motivation levels on a Likert scale. The responses ranged from highly important to not important at all. In the first phase of data collection, a pilot study was undertaken on an initial sample of 50 respondents. This was done so as to determine the scale reliability. Cronbach's Alpha was taken as the measure to ascertain reliability of the survey instrument. A Cronbach Alpha of value greater than 0.8 indicates good reliability, while a Cronbach alpha value ranging between 0.6 and 0.8 is also considered to be acceptable (Singh, Junnarkar & Kaur, 2016). During this phase the respondents were also asked to provide their feedback in terms of flow and their understanding of the survey items. Once the reliability of scale was established, full data collection was undertaken. The reliability results along with the associated Cronbach Alpha values are presented in Table 1.

Table 1
Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.969	.970	53

Sample Characteristics

A total of 150 responses were received during data collection. Population characteristics according to various criteria is presented in Table 2. Of these 49.3% were in the age bracket of 31-40 years followed by 29.3% who were 30

Table 2
Descriptive Statistics of the Participants' Profile

		Frequency	%
Age	30 and below	44	29.3
	31-40	74	49.3
	41-50	22	14.7
	50 and above	10	6.7
	Total	150	100.0
Gender	Male	80	53.3
	Female	70	46.7
	Total	150	100.0
Rank	Lecturer	11	7.3
	Assistant Professor	110	73.3
	Associate Professor	16	10.7
	Professor	13	8.7
	Total	150	100.0
Education	Graduate	1	.7
	Post-Graduate	92	61.3
	Ph.D.	51	34.0
	Post-Doc	6	4.0
	Total	150	100.0
Total Experience	5 or less	46	30.7
	6-10	52	34.7
	11-15	25	16.7
	16-20	11	7.3
	21-25	9	6.0
	26-30	2	1.3
	Above 30	5	3.3
	Total	150	100.0

and below. Approximately 53% respondents of the study were male while 47% were female. The respondents mainly represented Assistant Professors (73.3%), followed by Associate Professors (10.7), Professors (8.7) and Lecturers (7.3). Majority of respondents 34.7% have work experience of 6-10 years in the

profession, 30.7%, less than 5 years and remaining 34.6% have work experience for more than 15 years. The most represented group among the respondents was Post-Graduate (61.5%), followed by Ph. D (34%), and to a small extent Post-Doc (4%) and Graduate (0.7%).

Statistical Analysis

SPSS was used as the major tool of data analysis. Data analysis was accomplished using the technique of Exploratory Factor Analysis, whereby the various items were reduced to be represented by a limited number of factors. Exploratory Factor Analysis is a scale development technique for reducing indicators to a more manageable set (Gerbing & Anderson, 1988). They observed that the factor analysis technique was useful when factoring a set of items so as to construct a scale on the basis of identified factor loadings.

RESULTS OF THE STUDY

Importance Criterion

The mean and standard deviations pertaining to each of the scale items revealed the importance of each individual item (Table 3). The mean values obtained highlight the importance of each individual item w.r.t. its importance in influencing an individual's workplace motivation. The highest mean value was reported for 'Teaching Your Own Interest Area' (6.42) followed by 'Acknowledgement and Recognition from Students' and 'Enjoyment in Teaching' (6.34). Other important workplace motivations identified from the data include: 'Pay, Salary & Benefit Packages' (6.28), 'Freedom to Determine How I Teach' (6.27), 'Your Student's Achievement Success' (6.27), 'Students' Participation in Class' (6.26), 'Provision of Fair & Timely Promotion System' (6.25), 'Appreciation for a Job Well Done' (6.23), 'Healthy Professional Relationships with Department Chair' (6.22), 'Healthy Student Faculty Interaction & Relations' (6.21), 'Fair and Equal Treatment' (6.21), 'Transparency in Organization Policy & Procedures' (6.21).

Factor Analysis

Factor Analysis is a technique to identify surface attributes(variables) and internal attributes(factors) (Tucker & MacCallum, 1997). The technique finds wide acceptance in psychology research where it serves to uncover and understand the various underlying dimensions of its various concepts, such as, the two-factor theory, source and surface traits in personality, etc. The present study made use of exploratory factor analysis to uncover the underlying work motivation dimensions, based on the 53 items identified during

Table 3 Importance Criteria Used by Respondents for Various Motivation Dimensions

	Item Description	N	Mean	SD
E1	Institution/University's Reputation and Image	150	6.04	.889
E2	Reputation of the Department/Discipline	150	5.93	1.017
E3	Your Academic Rank (Designation) in the Organization	150	5.71	1.185
E4	Status of being an Academician in my Family and Society	150	5.60	1.259
E5	Recognition of Teaching Achievements	150	5.92	1.096
E6	Appreciation for a Job Well Done	150	6.23	.899
E7	Acknowledgement and Recognition from Students	150	6.34	.896
E8	Support you get to carry out Research Activities	150	5.85	1.203
E9	Encouragement you get to carry out Research	150	5.96	1.134
E10	Financial support for Research	150	5.75	1.321
E11	Availability of Research Facilities (Access to online resources like Emerald etc.)	150	5.86	1.232
E12	Recognition of Research Achievements	150	5.90	1.203
E13	Research Environment within the Institute/University	150	5.91	1.264
E14	Consulting Opportunities	150	5.62	1.413
E15	Facilities provided for Academic Staff in the University	150	3.02	1.115
	(e.g. admin support, medical facility, canteen, sports club etc.)	150	5.87	1.091
E16	Geographic Location of the Institute/University	150	5.78	1.152
E17	Availability of Latest Teaching Aids/Equipment	150	5.91	1.061
E18	Availability of well-equipped Library (Latest Journal, Books etc.)	150	5.98	1.150
E19	Office and Work Space (personal desktop, printer, cabin, etc.)	150	6.01	1.087
E20	Teaching your own interest area	150	6.42	.838
E21	Freedom to determine what I teach (Contents of the course)	150	6.18	.942
E22	Freedom to determine how I teach (Teaching Pedagogy)	150	6.27	.882
E23	Adequate Teaching Load	150	6.09	1.029
E24	Adequate no. of students in the class	150	5.92	1.173
E25	Opportunity to Work in Curriculum Development & Improvement	150	5.94	1.107
E26	Teaching Variety of Subjects	150	5.68	1.276
E27	Enjoyment in Teaching	150	6.34	.911

E28	Your Student's Achievement and Success	150	6.27	.910
E29	Quality of Students	150	5.94	1.094
	(Student's IQ Level, Learning Ability etc.)			
E30	Good Numerical Rating/Scores from Student Evaluations	150	5.92	1.126
E31	Discipline among Students during Lecture/Class	150	6.05	1.110
E32	Student's Participation in Class	150	6.26	.915
E33	Healthy Student Faculty Interaction and Relations	150	6.21	.973
E34	Healthy Professional Relationship with Colleagues	150	6.13	.985
E35	Healthy Professional Relationship with Department Chair	150	6.22	.889
E36	Healthy Professional Relations with Supporting Staff/ Admin Staff	150	5.99	1.043
E37	Sense of Friendship and Team Spirit with Colleagues	150	6.14	.927
E38	Guidance/Support by Superiors (Overall Competence of Superiors)	150	6.15	1.008
E39	Influential Leadership in Organization	150	6.12	.955
E40	Opportunity to Participate in Decision Making on Institute/University's Policies and Practices	150	5.67	1.213
E41	Fair and Equal Treatment	150	6.21	1.078
E42	Adequate Policies for Leaves of Absence	150	6.16	.935
E43	Appropriateness of Work Hours (work timings, weekly offs etc.)	150	6.19	1.021
E44	Transparency in Organization's Policies and Procedures	150	6.21	1.032
E45	Pay, Salary and Benefit Packages	150	6.28	1.112
E46	Pension and Security Benefit (EPF, Gratuity, etc.)	150	6.09	1.158
E47	Job Security	150	6.20	1.043
E48	Resources and Support Provided for Professional Activities like Seminar, Conference, Workshop, FDP, MDP etc. (e.g. Financial Support and Leaves)	150	6.03	.904
E49	Provision of Achievement Rewards (e.g. One-time Monetary Reward, Incentives)	150	6.08	1.007
E50	Provision of Fair and Timely Promotion Systems	150	6.25	.950
E51	Opportunity for Advancement (e.g., Possibility of Assuming Different Positions in the Profession)	150	6.09	1.032
E52	Teacher Evaluation (e.g., Appraisal of Classroom Instruction by Evaluator)	150	5.95	1.015
E53	Periodic Appraisal (e.g. Annual Performance Appraisal)	150	6.11	.963

literature review. The Principal Component Analysis Method for data extraction was utilized based on varimax rotation. Varimax Rotation, is a form of orthogonal rotation, which offers a rotated factor solution whereby each factor is independent of the other. The rest part of this section outlines the results obtained from exploratory factor analysis.

Sample Adequacy

The reliability of factor analysis largely depends on the sample size, which is, in turn, dependent on a variety of other factors (Field, 2009). The present study assessed the sample adequacy based on the Kaiser-Meyer-Olkin (KMO) statistic. For a sample to be adequate, the value of KMO should be more than 0.5 (Field, 2009). The KMO value returned for the current data set was 0.9 (Table 4),, thus, indicating an adequate sample size. Guadagnoli and Velicer (1988) proposed that if the dataset has several high factor loading scores, then a relatively smaller sample size (n > 150) would suffice for the purpose of factor extraction. Further, the appropriateness of factor analysis is also determined using Bartlett's Test which must be significant (p < 0.001). The present study returned a significant value for the test and, thus, the sample adequacy of the data set was established.

Table 4
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	f Sampling Adequacy.	.900
Bartlett's Test of Sphericity	Approx. Chi-Square	6381.822
	df	1378
	Sig.	0.000

Factor Extraction

The factor extraction was based on the Eigen values. Kaiser (1974) recommended an eigen value of over 1, as a criterion for deciding the number of underlying factors in a given dataset. Table 5 lists down the eigen values associated with each factor before and after extraction, and after rotation. Based on the eigen value criterion, 10 factors were extracted for the current data set to be representing the underlying 53 items. The Table also lists down the amount of variance explained by each factor extracted. The first factor explains 39.734% of variance in the data. Total 71.92% variance is explained by all ten factors.

The loading of each item onto its associated factor is obtained based on the Rotated Components Matrix. The highlighted values of the factor loadings indicate the loading of each item onto its respective factor. A loading greater than 0.4 was considered to be acceptable for an item to be loaded to its respective factor. Each of the extracted factors along with the items loaded are summarized in Table 6.

Thus, based on the exploratory factor analysis, a total of 10 factors were obtained to be representing workplace motivation among employees of higher educational institutions. While 10 factors were obtained based on the rotated components matrix, the study relies on the following conditions to arrive at the factors: (1) factor loadings greater than 0.4 or above, and (2) factors with a minimum of 3 items loaded on to it (Kim, Atkinson & Yang, 1999; Yong & Pearce, 2013). Since, one of the factors had only 2 items loading (E 25 and E 26), with a factor loading greater than 0.4, the factor was dropped for further consideration. Therefore, based on the criteria listed above the study identified 9 motivational factors to be highlighting workforce motivation among employees of higher educational institutions. Table 6 lists down the items associated with each factor, while also mentioning the eigen value, % variance explained and Cronbach's Alpha for each factor obtained and factor mean.

DISCUSSION AND MANAGERIAL IMPLICATIONS

One of the objectives of the study was to identify and determine the dimensions of work motivation of academic staff in HEIs. To establish an academic staff motivation measurement model for higher education, this study applied the hierarchy of needs theory of Maslow, Two-factor Theory of Herzberg, ERG Theory of Alderfer and McClelland's Theory of needs. Table 7 shows the linkage between the motivation theories and constructs developed in the study. Left part of Table explains various need theories discussed in literature; and right part of the Table highlights the constructs used in the study. Work motivation is defined as a dependent variable which depends on various dimensions related to job and organization. Importance ranking of each motivation dimension is also given in Table 7 on the basis of factor mean.

Exploratory Factor Analysis explored ten dimensions of work motivation for academic staff at Higher Education Institutions, out of which nine factors were retained. Factors explored in the study are discussed as following:

Table 5
Total Variance Explained

Initia	al Eigenva	alues	Extr	action Sur	ns of	Rota	ation Sum	s of
			Squ	ared Load	ings	Squ	ared Load	ings
Total	% of	Cumu-	Total	% of	Cumu-	Total	% of	Cumu-
	Variance	lative		Variance	lative		Variance	lative
		%			%			%
21.059	39.734	39.734	21.05	39.73	39.734	6.661	12.569	12.569
3.613	6.818	46.552	3.613	6.818	46.552	6.474	12.216	24.785
2.587	4.882	51.434	2.587	4.882	51.434	4.712	8.891	33.675
2.391	4.511	55.945	2.391	4.511	55.945	3.976	7.502	41.177
1.887	3.560	59.505	1.887	3.560	59.505	3.672	6.929	48.106
1.519	2.866	62.371	1.519	2.866	62.371	3.037	5.730	53.836
1.419	2.678	65.049	1.419	2.678	65.049	2.627	4.956	58.792
1.353	2.553	67.601	1.353	2.553	67.601	2.452	4.627	63.419
1.199	2.263	69.864	1.199	2.263	69.864	2.323	4.382	67.801
1.090	2.056	71.920	1.090	2.056	71.920	2.183	4.119	71.920
1.000	1.886	73.806						
.943	1.779	75.585						
.838	1.580	77.165						
.807	1.522	78.687						
.700	1.321	80.008						
.685	1.292	81.300						
.646	1.219	82.519						
.584	1.102	83.621						
.573	1.081	84.702						
.542	1.022	85.725						
.506	.955	86.680						
.485	.915	87.595						
.446	.842	88.437						
.438	.826	89.263						
.420	.792	90.055						

.392	.739	90.793			
.374	.705	91.499			
.353	.665	92.164			
.312	.590	92.754			
.295	.557	93.311			
.278	.524	93.835			
.264	.498	94.333			
.251	.474	94.807			
.244	.460	95.267			
.218	.411	95.678			
.211	.398	96.075			
.200	.377	96.452			
.189	.356	96.809			
.172	.324	97.133			
.170	.320	97.453			
.156	.295	97.748			
.146	.275	98.023			
.143	.269	98.292			
.133	.251	98.543			
.122	.231	98.774			
.115	.216	98.990			
.105	.198	99.188			
.096	.182	99.370			
.080	.151	99.521			
.077	.145	99.666			
.071	.135	99.801			
.067	.127	99.927			
.038	.073	100.00			

Table 6 Measurement of Items, Total Variance, EFA and Cronbach's $\boldsymbol{\alpha}$

Item No.	Item	Factor Loadings	Eigen- value	% Ex- plained Variance	α	Factor Mean
	Factor 1 : Research & Consultancy		21.06	39.734	0.94	5.852
E8	Support you get to carry out Research Activities	.781				
E9	Encouragement you get to carry out Research	.816				
E10	Financial support for Research	.796				
E11	Availability of research facilities (Access to online resources like Emerald etc.)	.735				
E12	Recognition of Research Achievements	.858				
E13	Research Environment within the Institute/University	.823				
E14	Consulting Opportunities	.671				
	Factor 2: Relations at Work		3.62	6.818	0.94	6.089
E31	Discipline Among Students during Lecture/Class	.460				
E33	Healthy Student Faculty Interaction and relations	.453				
E34	Healthy Professional Relationship with Colleagues	.796				
E35	Healthy Professional Relationship with Department Chair	.694				
E36	Healthy Professional Relations with Supporting Staff / Admin Staff	.766				
E37	Sense of Friendship and Team Spirit with Colleagues	.780				
E38	Guidance / Support by Superiors (Overall Competence of Superiors)	.764				
E39	Influential Leadership in Organization	.792				
E40	Opportunity to Participate in Decision Making on Institute/University's Policies and Practices	.542				
E41	Fair and equal treatment	.533				

	Factor 3: Job Factors		2.58	4.882	0.9	6.188
E42	Adequate Policies for Leaves of Absence	.581				
E43	Appropriateness of Work Hours (Work Timings, Weekly Offs etc.)	.721				
E44	Transparency in Organization's Policies and Procedures	.676				
E45	Pay, Salary and Benefit Packages	.713				
E46	Pension and Security Benefit (EPF, Gratuity, etc.)	.716				
E47	Job Security	.727				
	Factor 4 : Academic Factors		2.39	4.511	0.87	6.273
E7	Acknowledgement and Recognition from Students	.588				
E20	Teaching Your Own Interest Area	.756				
E21	Freedom to Determine what I teach (Contents of the Course)	.588				
E22	Freedom to Determine How I teach (Teaching Pedagogy)	.529				
E23	Adequate Teaching Load	.576				
E27	Enjoyment in Teaching	.590				
	Factor 5: Growth and Development		1.88	3.560	0.89	6.080
E48	Resources and Support Provided for Professional Activities like Seminar, Conference, Workshop, FDP, MDP etc. (e.g. Financial Support and Leaves)	.563				
E49	Provision of Achievement Rewards (e.g. One-time Monetary Reward, Incentives)	.680				
E50	Provision of Fair and Timely Promotion Systems	.702				
E51	Opportunity for Advancement (e.g. Possibility of Assuming different Positions in the Profession)	.663				
E52	Teacher Evaluation (e.g. Appraisal of Classroom Instruction by Evaluator)	.543				
E53	Periodic Appraisal (e.g. Annual Performance Appraisal)	.445				

[#] Items with * are eliminated

Factor 1 - Research & Consultancy

Seven items loaded on Factor 1 with factor loading of minimum .671 and maximum .858. Items included in this factor are support received for research activities, encouragement received to carry out research, financial support, availabilities of research facilities, recognition of research achievements, research environment within the institute, and consulting opportunities. Most items loaded on this factor are concerned with research and consultancy opportunities, thus Factor 1 is referred to as research and consultancy. This factor explained maximum variance of factor analysis.

Factor 2 - Relations at Work

This factor is concerned with relations of academic staff with students, colleagues, department chair, and supporting staff. Discipline among students, team spirit, guidance from seniors, opportunity to participate, Influential leadership, and fair treatment are also important items loaded on this factor. Total 10 items loaded on factor 2 with loadings ranging between .453 to .796.

Factor 3 - Job Factors

Third factor is named as 'Job-related factors', since it includes items related to a job such as job security, leave policy, work hours, transparent policies and procedures, pay & benefits, and pension & security benefits. 6 items loaded on factor 3 with loading range of .581-.727. These job-related items are an important consideration for faculty at higher education, since it is the second most important factor of motivation for faculty with a factor mean of 6.18. An effective and fair compensation policy can ensure competitive advantage to any organization, and it can influence the motivation and turnover intentions of employees (Mishra, Jain & Sood, 2013).

Factor 4 - Academic Factors

'Academic factors' is the most important factor among faculty members of higher education with the factor mean of 6.273. Items clubbed with this factor are acknowledgement and recognition by students, teaching your own interest area, freedom to determine what I teach and how I teach, adequate teaching load, enjoyment in teaching. Total 6 items loaded on this factor with a minimum loading of .529 and maximum .590.

Factor 5 - Growth & Development

Factor 5 includes items which are considered important for the growth

Table 7 Linkage Between Existing Theories of Motivation and Instrument's Constructs

)						i		
	Hierarchy	Two	ERG	McClelland's	Variables	Construct	No.	Importance
	of Needs Theory	Factor Theory	Theory	Theory of Needs			of Items	Ranking
						Academic Factors	9	1
Intrinsic	Self-			Need for		Research & Consultancy	7	8
Motivation	Motivation Actualization	Motivatore	Grounth	Acmevement		Growth & Development	9	5
	Esteem	MOUVACOLS		Need for		Profession's Status & Teaching Recognition	3	6
				Power	Independent	Organization's Reputation and Work Appreciation	3	9
	Social Needs					Student-Related Factors	4	3
	N. C.	Hygiene	Kelatedness	Need for		Relations at Work	10	4
-	Salety Ineeds	ractors		Ammanon		Working Conditions	4	7
Extrinsic Motivation	Physiological Needs		EXISTERICE			Job Related Factors	9	7
		Work	Work Motivation		Dependent	9 Constructs	Total 49	
							Items	

and development of faculty in a higher education institute, hence named as growth and development. Items loaded on the factor are resources & support provided for professional activities, provision of achievement reward, fair and timely promotion system, advancement opportunities, teacher evaluation, periodic appraisal. 9 items with loading between .445 to .702 loaded on this factor.

Factor 6 - Working Conditions

Facilities provided to the academic staff, geographical location of the institute, availability of teaching aids, office and work space are the items concerning working conditions of an organization. Minimum loading of an item on this factor is .550 and maximum is .715.

Factor 7 - Student-related Factors

Third most important factor for a faculty in higher education is the student body. Quality of students, good ratings from the students, students' participation in the class and their achievement and success is a great source of motivation for faculty. Item no. 18 (availability of well-equipped library) is eliminated from this factor because it does not appear to make a meaningful and useful contribution to the underlying factor and nature of this item is not consistent with other items of the factor. Factor loading on this factor is minimum .441 and maximum .649.

Factor 8 - Profession's Status & Teaching Recognition

Least important factor for faculty motivation is profession's status and recognition and the items under this factor are academic rank, status of being an academician in the family and society, and recognition of teaching achievements with factor loading of .638, .553 and .695 respectively. Item no. 24 (adequate no. of students in the class) is eliminated from this factor because it does not appear to make a meaningful and useful contribution to the underlying factor and nature of this item is not consistent with other items of the factor.

Factor 9 - Organization's Reputation and Work Appreciation

Last factor identified in this study is labelled as Organization's reputation and appreciation and the associated items are Institution/University's Reputation and Image, Reputation of the Department/Discipline and Appreciation for a job well done, with factor loading of .564, .715 and .587 respectively.

Out of 53 items presented, respondents claimed that the top three items of motivation for them are 'Teaching their own interest area', 'Acknowledgement and recognition from students' and 'Enjoyment in teaching'. Most important factor extracted through factor analysis is Factor no. 4 - 'Academic Factors', with the highest factor mean of 6.273. This factor includes all three top-rated items selected by the respondents.

Results show that, for academic staff at higher education intrinsic factors and higher order needs are most important motivators, which is consistent with other research held in this domain (Bishay, 1996; Wilkesmann & Schmid, 2014). Second most important factor identified for faculty is jobrelated factors which entails the issues-related to pay, salary, pension, job security, work hours, leave policy and other organizational policies. Since India is still not a developed country, people put great importance to physiological and security needs. Policy makers in higher education should pay considerable attention to these factors. Students are at the core of teaching profession and hence, third most important motivating factor identified for faculty is students. Students and the recognition from them keeps faculty moving and motivates them to do better. Results of the study show relations at work are kept over and above growth and development opportunities, by the faculty. As per the factor mean, research and consultancy is not of great importance for academic staff of higher education in India and may be lack of research interest is one of the reason why India has little contribution in research and consultancy, in comparison to USA and China (Reddy, Xie and Tang, 2016). Status of the profession is least important motivating factor for faculty with a mean score of 5.742. Status of profession may be a reason for people to join this profession but study reveals that it is not an important reason for their work motivation. Organizations should be conscious about their brand image and reputation because results of the study show that organization's status holds greater importance for faculty than the status of profession. Organizations should provide the academic freedom to faculty, since freedom to determine the content and pedagogy is identified as a motivating factor for faculty. Faculty should not be overburdened as adequate teaching load is another important consideration identified by faculty.

CONCLUSION

Organizations are largely concerned about the job satisfaction of an employee. Several studies have shown that satisfied employees are not necessarily the performing employees. Job satisfaction can lead to job

performance only if motivational aspects are provided (Ehrlich, 2006). There are very few instruments which enquire how employees see the motivational aspect of their job and workplace. This study is an attempt to develop a tool which can study the motivational aspect of the academic staff at workplace in context of higher education. Identification of such factors will enable educationists and administrators to design an effective system for academic staff's work motivation. Based on the empirical analysis, the study arrives at a set of factors best describing the factors that lead to a motivated and dedicated faculty for a HEI. In this study; academic factors, job factors, student-related factors, relations at work, growth and development, organization's reputation and work appreciation, working conditions, research and consultancy and profession's status & teaching recognition are identified as most important factors of motivation for academic staff of Higher Education Institutions in India.

LIMITATION OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

Current study focused on only need theories of motivation which attempts at answering what aspect of motivation, whereas understanding why and how aspect of motivation is also crucial. Hence, future research should be based on other theories of motivation. The instrument used in this study is subject to testing of validity including predictive, divergent and convergent validity. Exploratory Factor Analysis is conducted in the study, it is suggested further to perform Confirmatory Factor Analysis on the items used in this study in order to validate the instrument. Data set was limited and collected only from the national capital region of India. It is suggested to perform this study with more and larger data sets across different regions. Incorporating above suggestion may result into a more valid instrument, with better results and better generalization of the current study.

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