



Exploring the Correlation Between Employee Job Satisfaction and Demographics in Higher Education Institutions: An Evidence-Based Research Study

Nisha Acharya¹, Dr. Chandni Rani^{2*}, Dr. Umesh Solanki³, Dr. Sukhpreet Kaur Thind⁴

¹Research Scholar, TAPMI School of Business, Manipal University Jaipur, Jaipur, Rajasthan

^{2*}Assistant Professor, University School of Business, Chandigarh University, Mohali

³Associate Professor, TAPMI School of Business, Manipal University Jaipur, Jaipur, Rajasthan

⁴Assistant Professor, University School of Business, Chandigarh University, Mohali

Citation: Dr. Chandni Rani, et al (2024), Exploring the Correlation Between Employee Job Satisfaction and Demographics in Higher Education Institutions: An Evidence-Based Research Study, *Educational Administration: Theory and Practice*, 30(5), 10317-10328, Doi: 10.53555/kuey.v30i5.4744

ARTICLE INFO

ABSTRACT

The primary aim of the research is to identify the factors that influence satisfaction in higher education institutions in a developing economy, specifically focusing on demographic factors. The study utilizes a quantitative methodology, collecting 400 responses from higher education institutions in Rajasthan, India through a structured survey. The collected data is then examined using various statistical techniques such as EFA, CFA, Multiple Linear Regression, ANOVA, and t-tests. The findings reveal significant variations in the perception of the impact of monetary benefits on employee satisfaction based on gender. Employee satisfaction in higher education institutions is influenced by both monetary and non-monetary benefits; however, a preference for non-monetary benefits is observed. The study underscores the importance of both types of benefits in enhancing employee satisfaction in higher education institutions. The gender-based differences in the perception of monetary benefits hint at the presence of gender pay gaps, which may mirror those seen in other sectors, within higher education institutions. This research is distinctive for its focus on demographic characteristics when exploring employee satisfaction in higher education institutions in a developing country like India.

Keywords-Employee Satisfaction; Demographic; Academics, Higher Education Institution

1. Introduction

One of the most challenging tasks anticipated by HR managers across any sector is that of maintaining the status quo with satisfaction of its employees. Employee satisfaction not only enables the organization to push itself towards development but also failing in its attainment can result in huge losses. (Singh, 2013) defined employee satisfaction as a collection consisting of different shades of emotion either positive or negative that an employee holds for his/her job. Employee satisfaction often forms a part of their job satisfaction which in turn can be influenced by a series of events occurring in the life of an employee. Vroom, 1994 stated that job satisfaction is nothing but the happiness derived by the employees due to their job. An employee who is eventually satisfied with its workplace surroundings and has a positive feeling toward the job at hand can be an asset to the organization. Over the past years, there have been several studies highlighting the relationship between employee satisfaction and customer satisfaction (Mendoza & Maldonado, 2014). The association between the two is often found to be positive and thus the topic of employee satisfaction must be well researched.

Educational institutions are highly dependent on the performances of their employees, especially the faculty members. (Küskü, 2003) stated that employees in the higher education sector can be broadly categorized into two groups namely the academic staff responsible for the academic activities and the administrative staff who investigate the supporting activities. However, the satisfaction of both the category of employees is what leads its students towards success. The higher education scenario in India is quite expansive with remarkable growth encountered in the past few years (Chaudhary & Bhaskar, 2016). Employment opportunities have

seen a bloom due to the investment of many foreign institutions in India. at present. According to the reports of Statista Research Department, 2020, there are over 51,000 higher educational institutes present in India offering a wide variety of courses. 993 universities are operating in the country and India shows a good amount of potential to develop in the sector in the future. However, the employee satisfaction levels in these upcoming institutions must be appropriately studied. Therefore, this research is an attempt to measure employee satisfaction in the higher academic institutes in the country through empirical evidence and put forward the relationship existing between the demographics of the employees and employee satisfaction.

2. Literature Review

For the research, a detailed literature review has been conducted based on the previous literature available on the topic. The literature review is conducted in sections related to the study and are presented below.

2.1 Employee Satisfaction

Fang et al. (2021), talked about employee satisfaction when considering high-contact services. The objective of the study is to find out the intangible asset value associated with the employee satisfaction parameter in the case of such high-contact services. The hospitality and tourism industries have been considered where employee satisfaction is hypothesized to motivate the employees and increase their retaining power. The data have been collected through Glassdoor.com. The results of the study too indicated the presence of a relationship between employee satisfaction and their motivation to work. This eventually is seen to lead to increased shareholder value. The stock market investors are seen to include the intangible value related to employee satisfaction in the valuation models created.

Wolter et al. (2019), conducted research involving the trajectories of employee satisfaction and determining its effect on the satisfaction of consumers. For the study data are collected from the website called Glassdoor.com where one can receive the reviews left by a wide range of employees about their work. A period from 2011 to 2014 has been considered for the data. The Structural Equation Modelling framework has been used for the analysis of the study and it revealed that when taken from a macro perspective, the trajectories of employee satisfaction have a stronger effect on customer satisfaction if the relationship between customer and employee interaction in the company is high; in case of micro perspective, the trajectories for employee satisfaction have an influence on the customer intentions of patronage for those customers who are frequent in the scene.

In an attempt to study the relationship between employee satisfaction and customer satisfaction, Kurdi et al. (2020), conducted empirical research in the service sector in Jordan. A total of 425 primary responses collected have been analyzed using the Partial Least Squares method. The results of the study showed that the five variables considered namely employee loyalty, commitment, retention, communication, and rewards support the positive correlation existing between employee satisfaction of customer satisfaction.

The relationship between total quality management and employee satisfaction along with the performance of the hotel has been well-researched by (Amin et al., 2017). The major goal of the study was to set up a structural relationship between the three. In 25 hotels that fall under the four- and five-star categories, 625 questionnaires were distributed amongst random employees including managers. The results showed that the parameters of leadership and customer focus play a major role in nature to enhance the relationship between employee satisfaction and the performance of the hotel. Moreover, highly satisfied employees tend to support their coworkers. They are loyal and work towards the enhancement of the hotel performance.

2.2 Employee Satisfaction in Educational Institutes

The intention of Torlak & Kuzey, 2019 has been to find out the significant links connecting leadership, employee job satisfaction, and performance in the case of private institutes operating in Pakistan. The primary source of data for the study has been a survey based on e-mails and interviews among 189 employees in private education institutes in Pakistan. These data have been analyzed using statistical tools like Pearson correlation, t-tests, and Regression. The employee's job satisfaction and performance are seen to be influenced by the factors of inspirational motivation, intellectual stimulation, individualized consideration, and management by exception with idealized influence.

Nazir & Islam (2017), conducted a study amongst Indian higher educational institutes to determine the relationship existing among various aspects of employee satisfaction. The engagement of employees along with their performance, perceived support from the organization, and affective commitment have been considered. A total of 410 responses collected from the employees of higher education institutes with the help of a questionnaire have been analyzed using Structural Equation Modelling. The study provided strategies that can influence higher education institutes to retain their employees through the significant impact of perceived support from the organization has on the performance and commitment of the employees.

Al-Sada et al. (2017) In their attempt to determine the influence of organizational culture along with that of leadership style on employee satisfaction conducted a study focusing on the educational sector in Qatar. The study takes into consideration the important role played by organizational culture and leadership style on that of the employees' satisfaction which eventually leads to creating motivation for them to work. 364 employees in the education sector of Qatar have been considered for the study through primary data collected with a questionnaire. Application of statistical methods like factor analysis and regression showed that there are indeed positive relationships between the supportive culture in an organization of the satisfaction of its employees. Supportive leadership, and directive leadership are seen to impact job satisfaction which results in motivating the employees to work.

The past literature deals with the concept of employee satisfaction across a wide range of educational institutes. However, those focusing specifically on higher academic institutes are comparatively lower. These institutes offer a wide variety of courses and hence the employees associated with them are quite high in number. They are required to be strategically maintained for the proper functioning of the institute. Moreover, with greater number of universities and other higher educational institutes emerging in India, it becomes crucial to address the aspect of employee satisfaction concerning higher academic institutes.

2.3 Demographic Characteristics Influencing Employee Satisfaction

Bhardwaj et al. (2020) analyzed the banking industry to find out the factors influencing the satisfaction of the employees. The level of employee satisfaction is categorized from higher level to lower level and its impact is measured through factors such as remuneration, job security, good relations with other employees, and promotions along with the demographic variables of the respondents. 40 bank employees are considered for the study from whom the responses are collected through a questionnaire and by observation. The demographics of the bankers including their age, sex, education, and work experience are found to influence the level of job satisfaction after being thoroughly analyzed.

For measuring the impact of socio-economic factors of respondents on the employee's job satisfaction, Dhamija et al. (2019) conducted an empirical study consisting of 300 bank employees. The employees are from different cadres in the industry and the results have been interpreted using various descriptive statistics, regression analyses, and the chi-square tests for the socio-demographic part. The variables considered for the study include gender, age, job title, work experience, and salary. All the five socio-demographic variables considered are found to have a significant impact on the satisfaction level of the bank employees. The results have been found to support the previous similar studies conducted such as that of Coomber & Louise Barriball, 2007 and Penson, 2016

Haiyan et al. (2018) conducted a detailed literature review to identify the factors influencing the satisfaction of employees in the hospitality and tourism sectors. A total of 53 papers are thoroughly investigated for the research. There are a total of four themes that influence job satisfaction among employees including individual factors, factors corresponding to the organization, social and family-related factors, and lastly psychological factors. In the case of the individual factors which include the demographics along with the skills possessed by these employees and other life interests. Li & Tse (1998), found that employees with clarity in their role and skills can find satisfaction in their job. One's self-efficacy, personal fulfillment, creativity, and emotional intelligence do positively relate to job satisfaction (Bufquin et al., 2017). The Big Five personality traits, self-esteem, and locus of control influence job satisfaction positively as reported by (Back et al., 2011).

It is quite evident that demographics have been a part of several studies but are often coupled with other factors influencing the process as well. This paper thus, to bridge the gap would solely focus on the demographics of the employees in higher academic institutes in India to determine employee satisfaction. This study would cover the demographic associations related to employee satisfaction in a detailed manner and would provide interesting insights into the same. Therefore, the hypotheses constructed for the study are-

H₀₁: There is a difference in the levels of employee satisfaction based on the gender of the employee in a higher academic institute.

H₀₂: Employee satisfaction in higher academic institutes is dependent on the age of the individual

H₀₃: The marital status of an employee in a higher academic institute can determine the levels of employee satisfaction

H₀₄: There exists a difference in the employee satisfaction levels in a higher academic institute based on the qualification of the employees

H₀₅: Employee satisfaction in higher academic institutes is dependent on the working tenure of the individual

2.4 Theoretical Framework

Fredrick Herzberg, a prominent figure in the field of motivation theory, is well-known for his pioneering work on workplace motivation (Bassette-Jones & Loyds 2005). He introduced the fundamental concepts of intrinsic and extrinsic motivation, also known as hygiene and motivational factors, which play a crucial role in explaining what drives individuals in the workplace (Herzberg, Mauser et al., 1959). By recognizing the distinctions between these factors, scholars can gain insight into the primary sources of dissatisfaction. Herzberg categorized extrinsic factors, such as salary, interpersonal relationships, and organizational policies, as hygiene factors that impact the work environment. On the other hand, motivational factors like recognition, achievements, job responsibilities, additional tasks, and opportunities for advancement contribute to satisfaction. In an earlier study, Herzberg conducted research to examine job satisfaction by asking individuals to describe situations that evoked positive or negative feelings about their work and the reasons behind those feelings.

3. Methods

This section deals with providing detailed information about the research design adopted for conducting the study.

3.1 Research Design:

The study employed a quantitative approach, using a cross-sectional survey design to investigate the factors influencing job satisfaction among faculty members in private Higher Education Institutions (HEIs) located in Jaipur. The research encompassed educators from a variety of private higher educational establishments within Jaipur, Rajasthan. From a total of 253 private HEIs in Jaipur, 15 were selected for the study through a convenient sampling method. The sample selection within these Higher Education Institutions (HEIs) was done using a stratified random sampling technique, where staff members were grouped by gender (Male and Female) and individuals were randomly selected from each group. A total of 400 faculty members (208 male and 192 female, comprising 52% male and 48% female) were chosen from different higher academic institutions in Jaipur. The sample size of 400 exceeds the minimum requirement of 384, as recommended by Krejcie and Morgan (1970) based on the principle that larger sample sizes result in lower margins of error.

3.2 Questionnaire Design:

The tool was created by drawing from existing literature on job satisfaction and adjusted from a variety of job satisfaction surveys typically used in different fields to fit the context of Higher Education Institutions (HEI). The sources referenced in this research include the Minnesota Satisfaction Survey (MSQ), the Job Description Index Questionnaire, the Job Diagnostics Survey (Hackman & Oldham, 1975), and the work by Morgeson and Humphrey (2006). The questionnaire consisted of three sections focusing on participants' demographic details, compensation packages (monetary and non-monetary benefits), and job satisfaction metrics. The compensation package included 34 components, while job satisfaction had 5 components. Each component was assessed using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Employees were required to indicate their level of agreement with statements related to job satisfaction. A higher score on the scale indicates concurrence with the statements regarding job fulfillment, while a lower score indicates disagreement.

3.3 Techniques Used:

Stratified random sampling was utilized to select the sample from higher educational institutes in Jaipur. Data analysis was conducted using SPSS, incorporating statistical tools such as Confirmatory and Exploratory factor analysis, and multiple linear regression.

3.4 Data Analysis:

Statistical methods, both descriptive and inferential, were employed to analyze the data. To meet the established goals, an exploratory factor analysis (EFA) was carried out using the principal component extraction method, varimax rotation, and Kaiser normalization. The evaluation of scree plots, parallel analysis, and the eigenvalues-greater-than-one rule was utilized to ensure the credibility and interpretability of variables derived from the EFA results. Field (2013) and Kaiser and Rice (1974) assessed the interpretability of these variables using the Kaiser Meyer-Olkin (KMO) measure of sample adequacy ($KMO > 0.7$) and Bartlett's test of sphericity ($p < 0.01$). Factors were identified based on the rotated factor loadings exceeding the threshold of 0.4 while excluding others. The analysis of the data was performed using IBM SPSS version 25.

4. Results

The final responses selected for inclusion in the data collection process were analyzed using Statistical Packages for Social Sciences (SPSS).

4.1 Description of Respondents

The responses collected through primary data collection consist of 52 percent females and 48 percent of males. The majority of the respondents fall in the age group of 31 to 40 years (56%); followed by 33% of respondents below the age group of 30 years. The percentage of married respondents (62%) is higher than those of unmarried (38%) in the population chosen for the study. As can be expected the educational qualifications amongst the employees in a higher academic institution ought to be higher- the number of respondents with a PhD consists of 36.8% and those consisting of postgraduates are the highest with 54.8%. Moving on to the next important demographic i.e., the working tenure of the respondents, it is seen that 45.3% have an experience of 1 to 5 years in the profession while 19.5 % are less than a year older in the job. This reveals the number of recruits is comparatively higher and the necessity to conduct an employee satisfaction study becomes even more evident. Table 1 below show a detailed frequency count for every demographic category.

Demographic Variable		Frequency	Percentage
Gender	<i>Male</i>	192	48.0
	<i>Female</i>	208	52.0
Age (years)	<i>Below 30</i>	132	33.0
	<i>31-40</i>	224	56.0
	<i>41-50</i>	41	10.2
	<i>Above 51</i>	3	0.8
Marital Status	<i>Married</i>	248	62.0
	<i>Unmarried</i>	152	38.0
Level of Educational	<i>Graduate</i>	23	5.8
	<i>Post Graduate</i>	219	54.8
	<i>PhD</i>	147	36.8
	<i>Others</i>	11	2.8
Working Tenure	<i>Less than a year</i>	78	19.5
	<i>1-5 years</i>	181	45.3
	<i>5-10 years</i>	112	28.0
	<i>More than 10 years</i>	29	7.2

Table 1- Demographic Representation of the Respondents

4.2 Data Processing

The analysis of the data has been conducted in three parts. Firstly, the employee satisfaction derivatives including Monetary and Non- Monetary benefits have been extracted using the Exploratory Factor Analysis (EFA). This process enables to identification of the factors truly corresponding to the assigned variables. The process is then further continued to confirm the results and determine the model fit of the data corresponding to these variables using Confirmatory Factor Analysis (CFA). The two processes help in identifying and confirming the factor structure associated with the study. In the second stage, these three factors contributing to the parameter of employee satisfaction are examined using t-test for gender, marital status, and One-Way ANOVA for age, educational qualification, and work tenure to find out the existing relationship among them. Thirdly, Multiple Linear Regression is used to find the impact of monetary and non-monetary benefits on employee satisfaction with the presence of the above-mentioned demographics. Table 2 below represents the descriptive statistics for the variables associated with employee satisfaction.

Variables	Items	Mean	Std. Deviation
<i>Monetary</i>	M1 My salary is in accordance with the guidelines of the regulatory body concerned	3.15	1.19
	M2 My salary is Equivalent to the salaries for similar designations in other institutions	3.39	1.13
	M3 My current salary motivates me to put more efforts	3.63	1.21
	M4 I become more productive when there is an increase in salary	4.50	0.610
	M5 Incentives are paid in my institute for good performance	3.79	1.22
	M6 My performance gets affected positively when I get incentives	4.25	0.716
	M7 I get more variety of allowances in my organization	4.03	0.930
	M8 I get extra pay for additional lectures in my organisation	3.29	1.37
	M9 My institution give reimbursement of on duty expenses	3.52	1.09

<i>Non-Monetary</i>	M10	Professional Development Allowances are provided to me for attending workshops, seminars and conferences	4.05	1.06
	M11	My organization provides opportunities for promotions	3.68	1.08
	M12	Timely promotion will enhance my job satisfaction	4.10	0.841
	M13	Timely promotions enhance my job performance in the organization	4.27	0.843
	M14	I am satisfied with the regular and systematic financial policies regarding the increment and other monetary benefits provided by my organization	3.35	1.18
	NM15	I have a freedom to perform my assigned duty as per my best competency	3.15	1.10
	NM16	There is a well-organized training program in my organization	3.66	1.11
	NM17	Training affects my performance in a positive way in my organization	4.20	0.786
	NM18	Employee receive development opportunities in my organization	3.87	0.922
	NM19	Superiors in my organization finalise the work plans with due consideration of the employees concerned	3.75	0.989
	NM20	Employee feel free to contact the concern authorities in my organization	3.71	1.17
	NM21	My organization has positive atmosphere at work (good superior - subordinate relationships)	3.87	1.02
	NM22	My organization recognized and reward their employees for their good work	3.78	1.03
	NM23	I am satisfied with the reward and recognition program existing in my organization	3.61	1.05
	NM24	Reward and Recognition enhances my performance and I feel committed towards my organisation	4.11	0.787
	NM25	Employees are involved in Decision-Making Process in my organization	3.66	1.03
	NM26	I will feel valued and satisfied when I will be involved in Decision Making Process	4.10	0.875
	NM27	Employees feel free in taking help from their colleagues in my organization	4.14	0.733
	NM28	Employees receive regular feedback about their work performance.	3.95	0.911
	NM29	My organization provides the basic amenities required for the faculty members	4.05	0.881
	NM30	Basic amenities assist me in improving my performance	4.45	0.681
	NM31	My organization has proper leave policies for their employees	4.11	1.07
	NM32	Leave benefits provided in my organization enhances my performance	4.35	0.705
	NM33	My organization organized different program for the well-being (Health) of their employees	3.63	1.02
	NM34	I am satisfied with non-monetary benefits provided in my organization	3.62	0.917
<i>Employee Satisfaction</i>	JS35	I enjoy my work at my work place	4.01	0.815
	JS36	I enjoy to work with my colleagues at my workplace	4.15	0.683
	JS37	I am satisfied with the increment provided in my organization	3.37	1.22
	JS38	The benefits we received are as good as provided in other organizations	4.02	0.893
	JS39	Overall I am satisfied with my current job	4.41	0.569

Table 2- Descriptive Analysis of the Variables

4.2.1 Exploratory Factor Analysis

The main goal of conducting factor analysis is to determine the interrelationships existing among a large number of variables considered and to eventually define these variables based on their underlying factors (Hair et al., 2006). The major findings from conducting EFA are associated with determining the sampling adequacy which is provided through Bartlett's test of Sphericity and the Kaiser-Meyer-Olkins's (KMO) test. The significant value generated through Bartlett's test indicates that the correlation existing amongst the considered items is indeed statistically significant and is adequate for the process of EFA. Here, Bartlett's test of Sphericity generates a p-value of < 0.01 with 741 degrees of freedom. This indicates that a p-value of less than 0.05 indicates a significant correlation among the items. Moving on to the KMO test measuring the sampling adequacy of the process, it is found that the overall value corresponding to it generated here is 0.847. KMO values greater than 0.6 as suggested by Tabachnick & Fidell, 2007 fall within acceptable range.

This states that the samples are adequate in nature. The extraction method implemented for the factor analysis part used here is the principal axis method as it is one of the most widely used and effective methods of extraction. This sets up as an ideal choice for the present condition as the underlying dimensions used for the measurement of employee satisfaction have already been identified. The rotation implemented for conducting the exploratory factor analysis here is that of varimax which is an orthogonal rotation. This helps in maximizing the variance summation required for arriving at the factor loadings (Hair et al., 2006). Based on the criteria laid down for conducting exploratory factor analysis, it is seen that a total of three factors are generated from the considered items based on the factor loadings. The three factors are found to generate a cumulative variance of 38.0%. The factors hence, have been segregated into three variables namely Monetary benefits, non-monetary benefits, and Employee Satisfaction.

4.2.2 Confirmatory Factor Analysis

Once the EFA is conducted, the factors are then tested using confirmatory factor analysis to see how well they measure the data structure. The process of CFA starts with Reliability testing conducted amongst the factors to find out its Cronbach's alpha value. Here the value is found to be 0.842 which is way above the threshold level of 0.7 as stated by Hair et al., 2006. The second assumption in CFA is to determine the Average Variance Extracted (AVE) for the factors identified. If the AVE for the calculated factors ranges above 0.4 as mentioned by Fornell & Larcker, 1981, the validity of the scale is met as per the requirements of conducting CFA. The formula corresponding to the calculation of AVE is as follows-

$$AVE = \sum \lambda^2 / n$$

where, λ = standardized factor loading; n = total number of items

Variables	AVE
Monetary Benefits	0.508
Non-Monetary Benefits	0.492
Employee Satisfaction	0.465

Table 3- AVE for the Variables

Table 4- Factor Loadings for CFA

Factor	Indicator	Estimate	SE	Z	P
Monetary	M1	0.7998	0.0920	8.70	< .001
	M2	0.6014	0.0918	6.55	< .001
	M3	0.6457	0.0979	6.60	< .001
	M4	0.1243	0.0530	2.35	0.019
	M5	0.7760	0.0943	8.22	< .001
	M6	0.2238	0.0613	3.65	< .001
	M7	0.2559	0.0800	3.20	0.001
	M8	0.8262	0.1076	7.68	< .001
	M9	0.5769	0.0884	6.52	< .001
	M10	0.5840	0.0856	6.83	< .001
	M11	0.6781	0.0837	8.10	< .001
	M12	0.3788	0.0701	5.41	< .001
	M13	0.3543	0.0706	5.02	< .001
	M14	0.7093	0.0932	7.61	< .001
Non-Monetary	NM15	0.5803	0.0857	6.77	< .001
	NM16	0.7716	0.0811	9.51	< .001
	NM17	0.3463	0.0632	5.48	< .001
	NM18	0.6012	0.0688	8.74	< .001
	NM19	0.5805	0.0758	7.65	< .001
	NM20	0.7879	0.0866	9.10	< .001
	NM21	0.6291	0.0771	8.16	< .001

Table 4- Factor Loadings for CFA

Factor	Indicator	Estimate	SE	Z	P
	NM22	0.5776	0.0799	7.23	< .001
	NM23	0.7827	0.0753	10.40	< .001
	NM24	0.3927	0.0622	6.31	< .001
	NM25	0.5618	0.0801	7.01	< .001
	NM26	0.3366	0.0698	4.82	< .001
	NM27	0.4117	0.0568	7.25	< .001
	NM28	0.5295	0.0700	7.56	< .001
	NM29	0.5483	0.0666	8.23	< .001
	NM30	0.2114	0.0565	3.74	< .001
	NM31	0.4106	0.0874	4.70	< .001
	NM32	0.0937	0.0596	1.57	0.116
	NM33	0.6143	0.0778	7.90	< .001
	NM34	0.6325	0.0673	9.40	< .001
	Employee Satisfaction				
	JS35	0.3199	0.0690	4.63	< .001
	JS36	0.2613	0.0587	4.45	< .001
	JS37	0.8548	0.0933	9.16	< .001
	JS38	0.6608	0.0668	9.89	< .001
	JS39	0.3899	0.0431	9.04	< .001

The estimates reveal that all the factors corresponding to the respective three factors are significant.

4.2.3 Demographic Association

As the above analyses suggest the fit of the data structure, the hypotheses laid down for the study are now being analyzed using t-tests and One-way ANOVA. The two tests enable comparison of means of a dependent variable in an interval or ratio scale among different categories of a variable measured in a nominal or ordinal scale. The results of the analysis are represented below.

Dependent Variable	Gender			Marital Status		
	Statistic	df.	p	Statistic	df.	P
Monetary	-2.341	398	0.021	1.640	398	0.103
Non-Monetary	0.216	398	0.829	0.924	398	0.357
Employee Satisfaction	-0.935	398	0.351	0.500	398	0.618

Table 5- Summary of the t-test Conducted

Dependent Variable	Age		Education Level		Work Tenure	
	F	p	F	p	F	p
Monetary	0.825	0.583	0.567	0.644	1.53	0.225
Non-Monetary	0.492	0.705	0.077	0.971	1.52	0.229
Employee Satisfaction	0.403	0.758	0.005	0.999	1.13	0.350

Table 6 – Summary of One-Way ANOVA Conducted

The statistical analysis involved here generates certain interesting insights. It is seen that when looking for significant *p*-values that are less than 0.05, only the demographic of gender concerning monetary benefits associated with employee satisfaction is seen to show a value of 0.021. This means that there is a statistically significant difference in the mean scores of the level of agreement associated with the monetary benefits between male employees in a higher educational institute and female employees in a higher educational institute. However, in the case of other demographic variables as well no such significant association is seen.

4.2.4 Regression Analysis

The exploratory factor analysis determined three factors arising out of the items considered for the study. After the confirmatory factor analysis conducted on the three factors identified, it was found that the items corresponding to each of these factors significantly load on the respective variables. The three factors include Monetary Benefits, Non-Monetary Benefits, and Employee Satisfaction. As the two variables of Monetary and Non-Monetary benefits influence the Employee Satisfaction and the path diagram in Figure 1 too confirms an association between two of them, here a multiple linear regression would be conducted to determine the significant impact of either of these variables on the employee satisfaction.

Table 7- Model Fit Measures

Model	R	R ²	Adjusted R ²	Overall Model Test			
				F	df1	df2	P
1	0.772	0.596	0.557	15.4	9	390	< .001

Table8- Model Coefficients - Employee Satisfaction

Predictor	Estimate	SE	t	P
Intercept	0.5394	0.2978	1.8113	0.072
Non-Monetary	0.6468	0.0776	8.3393	< .001
Monetary	0.2215	0.0733	3.0210	0.003
Gender:				
Male – Female	0.0367	0.0707	0.5184	0.605
Age:				
41 – 50 years – 31 – 40 years	0.2631	0.1603	1.6412	0.103
51 years and above – 31 – 40 years	-0.1356	0.2881	-0.4708	0.639
Below 30 years – 31 – 40 years	-0.1096	0.0880	-1.2457	0.215
Marital Status:				
Unmarried – Married	0.1263	0.0762	1.6592	0.099
Qualification:				
Others – Graduate	-0.0124	0.2169	-0.0573	0.954
PhD – Graduate	-0.0137	0.1553	-0.0881	0.930
Post Graduate – Graduate	0.0488	0.1435	0.3404	0.734
Working Tenure:				
5-10 years – 1-5 years	0.1595	0.1012	1.5754	0.117
Less than a year – 1-5 years	0.0544	0.0805	0.6751	0.501
More than 10 years – 1-5 years	0.1041	0.1486	0.7002	0.485

Tables 7 & 8 show the results of the Multiple Linear Regression conducted on Employee Satisfaction. The model fit indices generate a p-value of less than 0.05 indicating a statistically significant model. Moving on to the adjusted R² value it can be interpreted that the two variables along with the demographic variables considered as factors can cause a 55.7% variance in Employee Satisfaction. The next table gives a detailed review of the parameters considered in the study and their contribution to the model. Both the independent variables are seen to significantly contribute towards Employee Satisfaction as the p-values are less than 0.05 whereas the impact of Non-Monetary Benefits is seen to be higher than the Monetary Benefits. Although none of the demographic variables show a significant association in the model, the variable of marital status

is found to adhere when a confidence interval of 90 percent is considered. As the confidence interval for the study is set at 95 percent, the result can be considered here. Overall, it can be estimated that for a unit change in either of the independent variables can generate a variance of 55.7% in the dependent variable.

5. Discussion

The intent of conducting the research has been to find the association existing between the demographic variables of employees in a higher academic institute in an emerging nation on that of their satisfaction at job. The study during its course identified and confirmed the various factors associated with the list of items presented to the respondents. Through EFA and CFA conducted the data structure is seen to be on place for conducting the study. However, it is interesting to note that out of the five hypotheses formulated for the study, only one of them could not be rejected. This of course leads to interesting facts that would help in increasing employee satisfaction in higher academic institutions in the future. There is a gender difference located amongst the employees when it comes to agreeing with the Monetary Benefits leading to Employee Satisfaction. This reveals that the perception of such benefits are not similar amongst the male and female employees. The possible reasons behind it might include the differences in the necessities among the two groups. A striking consideration to make here is the issue of gender pay disparity existing across sectors till date. According to Payscale, 2021, when considering controlled group women make \$0.98 compare to every \$1.00 made by a man. This indicates the presence of pay gap based on gender till date. The higher academic institutes in an emerging country like India might be a victim to such issues and this study might be an initial indication towards it.

The absence of mean differences regarding employee satisfaction and the other two factors associated with it indicate that the conditions for employee satisfaction remain uniform irrespective of their age, education, marital status and work tenure.

5.1 Theoretical Implications

The study determines the contribution of both monetary and non-monetary benefits towards employee satisfaction in higher academic institutes. The estimate corresponding to non-monetary benefits is found to be more than that of monetary benefits. This means that attention to the non-monetary benefits must be made and their role in determining employee satisfaction should be considered with care. The inclusion of demographics in the model increases the adjusted R² value from 0.552 to 0.557. Although the transition is meager and statistically significant references are found, the parameters did show a modulation in the model. The EFA and CFA confirm the items corresponding to each of the factors formulated and show an effective data structure formulation through the study.

5.2 Practical Implications

The results have generated certain strategic viewpoints for HR managers in higher academic institutes to incorporate in the future. Firstly, the gender difference in the mean scores reveals that there is indeed a certain disparity happening with the monetary benefits and thus the HR managers must be focused on conducting a detailed analysis. The determination of issues faced by the employees when conducted from the perspective of gender can help increase employee satisfaction. Moreover, the benefits delivered to the employees must focus on the non-monetary part more as they are seen to influence a good amount of variance in employee satisfaction in higher academic institutes. A well-thought channel of non-monetary benefits provided to these employees can amplify the satisfaction levels to a greater extent.

5.3 Limitations and Scope for Further Research

As the study have been conducted within a limited period of time, the samples collected are just up to the required levels and could not be further collected. The study takes a quantitative approach which restricts the respondents notions to the options provided. Hence, a qualitative approach in the future could help shed some more insights into the matter. A very interesting result related to gender pay disparity have been hinted through the study. A further detailed analysis on the same in the sector of higher academic institutes in an emerging nation would help researchers bridge the gap.

References

1. Al-Sada, M., Al-Esmael, B., & Faisal, M. N. (2017). Influence of organizational culture and leadership style on employee satisfaction, commitment and motivation in the educational sector in Qatar. *EuroMed Journal of Business*, 12(2), 163–188. <https://doi.org/10.1108/EMJB-02-2016-0003>
2. Amin, M., Aldakhil, A. M., Wu, C., Rezaei, S., & Cobanoglu, C. (2017). The structural relationship between TQM, employee satisfaction and hotel performance. *International Journal of Contemporary Hospitality Management*, 29(4), 1256–1278. <https://doi.org/10.1108/IJCHM-11-2015-0659>
3. Back, K. J., Lee, C. K., & Abbott, J. A. (2011). Internal relationship marketing: Korean casino employees' job satisfaction and organizational commitment. *Cornell Hospitality Quarterly*, 52(2), 111–124.

- <https://doi.org/10.1177/1938965510370742>
4. Bassette-Jones, N. and C. Loyds (2005). "Does Herzberg motivation theory have staying power?" *The Journal of management development* 24(10): 929-943
 5. Bhardwaj, A., Mishra, S., & Jain, T. K. (2020). An analysis to understanding the job satisfaction of employees in banking industry. *Materials Today: Proceedings*, 37(Part 2), 170–174. <https://doi.org/10.1016/j.matpr.2020.04.783>
 6. Bufquin, D., DiPietro, R., Orłowski, M., & Partlow, C. (2017). The influence of restaurant co-workers' perceived warmth and competence on employees' turnover intentions: The mediating role of job attitudes. *International Journal of Hospitality Management*, 60, 13–22. <https://doi.org/10.1016/j.ijhm.2016.09.008>
 7. Chaudhary, N. S., & Bhaskar, P. (2016). *ISSN : 2349-5677 Volume 2 , Issue 8 , January 2016 TRAINING AND DEVELOPMENT AND JOB SATISFACTION IN EDUCATION ISSN : 2349-5677*. 2(8), 89–99.
 8. Coomber, B., & Louise Barriball, K. (2007). Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies*, 44(2), 297–314. <https://doi.org/10.1016/j.ijnurstu.2006.02.004>
 9. Dhamija, P., Gupta, S., & Bag, S. (2019). Measuring of job satisfaction: the use of quality of work life factors. *Benchmarking*, 26(3), 871–892. <https://doi.org/10.1108/BIJ-06-2018-0155>
 10. Fang, R., Gao, B., & Hu, N. (2021). Intangible asset value of employee satisfaction in high-contact services. *International Journal of Hospitality Management*, 94, 102810. <https://doi.org/10.1016/j.ijhm.2020.102810>
 11. Field, A (2013), *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock “N” Roll* (4th ed.). Sage.
 12. Fornell, C., & Larcker, D. F. (1981). Fornell, C. and Larcker, D.F. (1981), “Evaluating structural equation models with unobservable variables and.pdf. *Journal of Marketing Research*, XVIII(February), 39–50.
 13. Hackman, J. R., & Oldham, G. R. (1975), Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159–170. <https://doi.org/10.1037/h0076546>
 14. Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R. L. (2006). *Multivariate Data Analysis*. In *Pearson Prentice Hall, Upper Saddle River*. (Vol. 6). Pearson Prentice Hall, Upper Saddle River.
 15. Haiyan, K., Xinyu, J., Wilco, C., & Xiaoge, Z. (2018). Job Satisfaction research in the field of hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 1–26.
 16. Hersberg, F., et al. (1959). *The Motivation to Work*. New York, Yiely
 17. Krejcie, R. V., & Morgan, D. W. (1970), Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
 18. Kaiser, H. F., & Rice, J. (1974), *Little Jiffy Mark IV*. *Psychometrica*, 35(4), 401–415. <https://doi.org/10.1007/BF02291817>
 19. Kurdi, B. Al, Alshurideh, M., & Alnaser, A. (2020). The impact of employee satisfaction on customer satisfaction: Theoretical and empirical underpinning. *Management Science Letters*, 10(15), 3561–3570. <https://doi.org/10.5267/j.msl.2020.6.038>
 20. Küskü, F. (2003). Employee satisfaction in higher education: The case of academic and administrative staff in Turkey. *Career Development International*, 8(7), 347–356. <https://doi.org/10.1108/13620430310505304>
 21. Li, L., & Tse, E. (1998). Antecedents and consequences of expatriate satisfaction in the Asian Pacific. *Tourism Management*, 19(2), 135–143. [https://doi.org/10.1016/S0261-5177\(97\)00105-2](https://doi.org/10.1016/S0261-5177(97)00105-2)
 22. Mendoza, M. L., & Maldonado, C. O. (2014). Meta-analytic of the relationship between employee job satisfaction and customer satisfaction. *Suma de Negocios*, 5(11), 4–9. [https://doi.org/10.1016/s2215-910x\(14\)70014-x](https://doi.org/10.1016/s2215-910x(14)70014-x)
 23. Morgeson, F. P., & Humphrey, S. E. (2006), The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321–1339. <https://doi.org/10.1037/0021-9010.91.6.1321>
 24. Nazir, O., & Islam, J. U. (2017). Enhancing organizational commitment and employee performance through employee engagement: An empirical check. *South Asian Journal of Business Studies*, 6(1), 98–114. <https://doi.org/10.1108/SAJBS-04-2016-0036>
 25. Payscale. (2021). *The State of the Gender Pay Gap in 2021*. <https://www.payscale.com/data/gender-pay-gap>
 26. Penson, D. F. (2016). Re: Changes in Burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014: Editorial comment. *Journal of Urology*, 195(5), 1568. <https://doi.org/10.1016/j.juro.2016.02.051>
 27. Singh, J. K. (2013). *a Study of Employees ' Job Satisfaction and Its*. 1(4), 105–111.
 28. Statista Research Department. (2020). *Number of higher education institutions in India 2019 by type* Published by Statista Research Department, Dec 1, 2020 Out of over 51,000 higher education institutions, there were 993 universities in 2019 listed on AISHE portal that are empowered to award d. <https://www.statista.com/statistics/660862/higher-education-institutions-bytype-india/>
 29. Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*, 5th ed. In *Using multivariate*

statistics, 5th ed. Allyn & Bacon/Pearson Education.

30. Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. *International Journal of Productivity and Performance Management*, 68(2), 276–295. <https://doi.org/10.1108/IJPPM-05-2018-0182>
31. Vroom. (1994). *Work and Motivation*. Wiley.
32. Wolter, J. S., Bock, D., Mackey, J., Xu, P., & Smith, J. S. (2019). Employee satisfaction trajectories and their effect on customer satisfaction and repatronage intentions. *Journal of the Academy of Marketing Science*, 47(5), 815–836. <https://doi.org/10.1007/s11747-019-00655-9>