

Job Satisfaction among Women College Teachers: A Comparative Study between Government and Private Colleges using Herzberg's Two-Factor Theory

¹P. Mala, ²Dr.T.Kannan

¹Research Scholar (Part-Time), PG & Research Department of Commerce, Government Arts College, Paramakudi, Ramanathapuram, Tamilnadu, India.

²Associate Professor and Head, PG & Research Department of Commerce, Government Arts College, Paramakudi, Ramanathapuram, Tamilnadu, India.

DOI: <https://doi.org/10.5281/zenodo.20083262>

Published Date: 08-May-2026

Abstract: This study aims at exploring the job satisfaction of female college teachers working in government and private colleges in the light of Herzberg's Two Factor theory. The purpose of this study is to determine the main factors that affect job satisfaction and to compare the satisfaction between the women teachers in the various institutional places. Motivational factors as well as hygiene factors like salary, job security, promotion opportunities, work-life balance, institutional support, and working conditions were taken into account for analysis. Primary data was collected from 300 female teachers who teach in the college using Structured questionnaire and convenient sampling technique. The data obtained were analysed using statistical tools like descriptive statistics, reliability analysis, Exploratory Factor Analysis (EFA), Independent Sample t-Test, correlation analysis, multiple regression analysis, Structural Equation Modeling (SEM) and Artificial Neural Network (ANN) analysis. The results showed that the job satisfaction of teachers at government colleges is higher than the teachers at private colleges. The hygiene factors were found to be the best predictors of Job Satisfaction followed by motivation factors and institutional support. The results from both SEM and ANN showed that both organizational and motivational dimensions are significant factors affecting women teachers' professional satisfaction. The study suggests that the workplace conditions, the recognition system, financial benefit and the work-life balance of women teachers are important factors in improving their satisfaction and commitment to their profession in higher educational institutions.

Keywords: Herzberg's Two-Factor Theory, Structural Equation Modeling, Artificial Neural Network, Work-Life Balance, Motivation Factors, Hygiene Factors.

1. INTRODUCTION

Employee satisfaction is an essential factor that affects the performance of the employees, organizational commitment, productivity and the well-being of the employees in the educational sector. In the higher education world, teachers are important stakeholders in shaping the learning outcomes and institutional development of students. Thus, it is very important for education administrators and policymakers to know what impacts teachers' job satisfaction. Women college teachers, especially, have a number of professional and personal responsibilities which affect their job satisfaction. Work load, compensation, promotion opportunities, institutional support, work-life balance, and employment stability are important factors influencing their commitment and satisfaction with their jobs. Job satisfaction became more significant as a result of motivational theories such as Herzberg's Two-Factor Theory which states that job satisfaction is a result of motivators and hygiene factors. Achievement, recognition, responsibility, and career growth are positive satisfaction factors, while

salary, institutional policies, job security, and working conditions are hygiene factors that help keep negative feelings at bay. At schools, both aspects are of equal importance to keep educators motivated and successful.

The education sector in India has also witnessed tremendous expansion over the last few years in the form of government and private colleges. Efforts to create uniform salaries, workload, institutional policy, and job security, however, have resulted in an uneven distribution of job satisfaction among faculty members in varying institutional environments. In general, the employment status, salary and promotion prospects of the teachers at government colleges are better than that of private college teachers who have issues such as workload pressure, limited benefits and job insecurity. Comparative studies between government and private institutions are of importance in light of these differences. Educational institutions have been the subject of several studies on teacher satisfaction, but there is limited research on the women college teachers using advanced analytical and modelling techniques like Structural Equation Modeling (SEM) and Artificial Neural Network (ANN). In view of this, the present study tries to make a gap in the study of factors affecting job satisfaction of the teachers among the government and private college women teachers of the study area. The study offers empirical evidence on the significance of motivational and hygiene factors of improving professional satisfaction and adds to the growing body of literature on the well-being of women faculty members in higher education institutions.

2. REVIEW OF LITERATURE

Frederick Herzberg developed two-factor theory of motivation and he found that satisfaction with work is determined by motivational factors like achievement, recognition and advancement whereas dissatisfaction is due to hygiene factors like salary, working conditions, and job security. Research in the field of education and organizational studies has extensively used the theory to study employee satisfaction and professional commitment. Linda Evans (2001) reported that three factors—professional recognition, administrative support, and workload management—are closely linked to teacher job satisfaction, as are opportunities for career advancement. The study highlighted the significance of the institutional climate and management to enable teachers' professional morale and effectiveness.

Supportive work environment, positive institutional relationships, and teacher autonomy are statistically significant to faculty satisfaction and organizational commitment in educational institutions (Michael A. Tschannen-Moran, Anita Woolfolk Hoy, 2007). Renu Arora (2012) studied the issues related to job satisfaction of the college teachers in India and found out that salary structure, promotion opportunities and management of the workload were significant factors that affect the teachers' level of satisfaction. The study also differentiated level of satisfaction between public and private educational institutions.

P. K. Sahoo (2015) noted that women teachers face additional problems related to work-life balance and family responsibilities that has a significant impact on their satisfaction in professional life and emotional well-being. The study recommended that the flexible work policies and institutional support are needed for enhancing the job satisfaction level of female teachers. M.S. Kumari (2018) found that the recognition, interpersonal relationship and supportive management positively affects women faculty member's employee satisfaction in Higher education Institutions. The study emphasized that an organization's culture plays a critical role in keeping faculty members committed and in place. Vijayalakshmi A (2021) compared the job satisfaction of government and private college teachers and concluded that teachers working in government college showed a higher level of satisfaction as they had better job security, better salary advantage, and promotion policy as compared to the private college teachers. The teachers from private colleges voiced concerns about workload pressure and career growth prospects.

In recent years, many studies have focused on the multidimensionality of job satisfaction using more sophisticated analytical tools such as Structural Equation Modeling (SEM). Few studies however have combined the use of Artificial Neural Network (ANN) analysis to determine the most influential predictors of the job satisfaction amongst women teachers in higher educational institutions.

Objectives of the Study

- ❖ To examine the level of job satisfaction among women college teachers in government and private colleges.
- ❖ To identify the major motivational and hygiene factors influencing job satisfaction among women teachers.
- ❖ To compare the satisfaction levels of women teachers working in government and private colleges.

- ❖ To analyze the relationship between motivation factors, hygiene factors, work-life balance, institutional support, and job satisfaction.
- ❖ To determine the most influential predictors affecting job satisfaction among women college teachers using SEM and ANN analysis.

Hypotheses of the Study

H1: Motivation factors have a significant positive influence on job satisfaction among women college teachers.

H2: Hygiene factors have a significant positive influence on job satisfaction among women college teachers.

H3: Work-life balance has a significant positive influence on job satisfaction among women college teachers.

H4: Institutional support has a significant positive influence on job satisfaction among women college teachers.

H5: There is a significant difference in job satisfaction levels between government and private college women teachers.

H6: Motivation factors, hygiene factors, work-life balance, and institutional support jointly predict job satisfaction among women college teachers.

Research Gap

Though there are many studies that have dealt with job satisfaction in educational institutes, a limited number of studies have examined job satisfaction of women teachers specifically working in government and private colleges. Previous studies mostly focused on overall faculty satisfaction and neglected to address gender-specific issues like work-life balance, institutional support, and recognition in the work place. In addition, previous studies tended to use traditional statistical methods, and only few studies used advanced statistical methods like Structural Equation Modeling (SEM) and Artificial Neural Network (ANN) analysis to find the best predictor of job satisfaction. Hence the present study tries to fill this gap by comparing the job satisfaction of women teachers in Government and private colleges by applying SEM and ANN techniques with the help of Herzberg Two factor theory.

3. RESEARCH METHODOLOGY

For the present study, descriptive and analytical research design was used, which examines the job satisfaction of the women college teachers of government and private colleges. The study basically relied on Herzberg's Two-Factor Theory, analyzing the effect of the motivational and hygiene factors on professional satisfaction. Study was conducted using both primary as well as secondary data. Data were collected using a structured questionnaire with statements for the different motivation, hygiene, work-life balance, institutional support and overall job satisfaction factors in Likert scale. Secondary data were gathered from journals, books, research articles, conference proceedings and online academic databases in the field of teacher job satisfaction and higher education.

The focus of the study was on the female college teachers working in government and private colleges. The sampling technique was convenient method and 300 questionnaires were sent to the women faculty members of various higher education institutions. All the questionnaires sent were valid and received for analysis at the end of the day. The questionnaire included demographic information and statements for the various dimensions that can affect job satisfaction. Cronbach's Alpha reliability analysis and Exploratory Factor Analysis (EFA) were used to ensure the reliability and validity of the data. The data was analyzed using percentage analysis, mean, standard deviation, Independent Sample t-Test, correlation analysis and multiple regression analysis to compare satisfaction levels of government and private college teachers. Moreover, the relationship of motivation factors, hygiene factors, institutional support, work-life balance to job satisfaction was examined using Structural Equation Modeling (SEM). Artificial Neural Network (ANN) analysis was also employed to find the most influential predictors influencing job satisfaction among women teachers. The collected data were analyzed by SPSS software and SmartPLS software packages and the results were interpreted systematically to obtain the study objectives.

4. ANALYSIS AND INTERPRETATION

The data collected from the female teachers in government and private colleges were statistically analyzed systematically with the help of suitable statistical tools. The analysis was done to gain insight into the demographic characteristics of the respondents and to test the reliability of the measurement scales used for the study. The descriptive statistics used include frequency and percentage analysis for summarizing the demographic details and reliability analysis was conducted to

examine the internal consistency of the variables related to job satisfaction based on Herzberg's Two-Factor Theory using Cronbach's Alpha.

Demographic Profile of Respondents

The background of the women teachers included in the study is obtained from the demographic characteristics of the respondents. Various variables like age, marital status, qualification, teaching experience, income per month, type of institution were taken into consideration for analysis. The profile analysis assists in comprehending the variety of respondents and the distribution of institutional respondents among government and private colleges.

Table 1: Demographic Profile of Women Teachers

S.No	Demographic Variable	Category	Frequency	Percentage
1	Age	Below 30 Years	48	16.0
		31 – 40 Years	112	37.3
		41 – 50 Years	96	32.0
		Above 50 Years	44	14.7
2	Marital Status	Married	214	71.3
		Unmarried	72	24.0
		Others	14	4.7
3	Educational Qualification	Post Graduate	58	19.3
		M.Phil.	96	32.0
		Ph.D.	146	48.7
4	Teaching Experience	Below 5 Years	62	20.7
		5 – 10 Years	98	32.7
		11 – 15 Years	84	28.0
		Above 15 Years	56	18.6
5	Type of Institution	Government College	150	50.0
		Private College	150	50.0
6	Monthly Income	Below ₹30,000	74	24.7
		₹30,001 – ₹50,000	118	39.3
		Above ₹50,000	108	36.0

Source: Primary Data

From the above table, it can be inferred that most of the respondents were in the age group of 31-40 years. The majority of the female teachers were married and held Doctor's degrees. Many of the respondents had 5 to 10 years of teaching experience. For comparative analysis, the representation of the teachers was kept equal in Government v/s private college. The distribution of income indicates that there are a considerable number of respondents with a monthly income between ₹30,001 and ₹50,000.

Reliability Analysis

Reliability analysis was done to determine the internal consistency and stability of the measurement scale employed in the study.

Table 2: Cronbach's Alpha Reliability Results

S.No	Variables	Number of Items	Cronbach's Alpha
1	Motivation Factors	8	0.891
2	Hygiene Factors	9	0.914
3	Work-Life Balance	5	0.856
4	Institutional Support	4	0.838
5	Job Satisfaction	7	0.927
6	Overall Scale Reliability	33	0.903

Source: Primary Data

The Cronbach's Alpha coefficient was used to assess reliability of the constructs related to the motivation factors, hygiene factors and overall job satisfaction. If the Cronbach's Alpha is greater than 0,70 the reliability and consistency of the items in a questionnaire is good. Results of the reliability obtained from the above table show that all constructs have Cronbach's Alpha value more than 0.80, meaning that the scale items had high internal consistency. The overall reliability score is 0.903 which shows that the questionnaire employed in the study is highly reliable in measuring job satisfaction among the women college teachers. Thus, the data obtained was deemed to be appropriate for further statistical analysis including Factor analysis, Comparative analysis, Regression, SEM and ANN.

Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was used to determine the underlying factors affecting the job satisfaction for women college teachers. The analysis was done to break down the large number of variables into meaningful factors in the light of Herzberg's Two Factor theory. The appropriateness of data for factor analysis was determined by Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's test of sphericity before the factor analysis. The Principal Component Analysis method with Varimax Rotation was used to determine the factors.

Table 3: KMO and Bartlett's Test

Particulars	Value
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	0.892
Bartlett's Test Approx. Chi-Square	3245.671
Degrees of Freedom	276
Significance Value	0.000

Source: Primary Data

The KMO value is 0.892, which is very good in conducting a factor analysis. The Bartlett's Test significance value is less than 0.05, meaning that the variables are highly correlated and appropriate for factor extraction. Therefore, the data can be used for Exploratory Factor Analysis.

Table 4: Rotated Component Matrix

Variables	Factor 1 Professional Growth	Factor 2 Financial & Security Benefits	Factor 3 Work Environment	Factor 4 Recognition & Support
Promotion Opportunities	0.812			
Career Advancement	0.798			
Professional Development	0.774			
Achievement Motivation	0.742			
Salary Satisfaction		0.845		
Job Security		0.821		
Fringe Benefits		0.786		
Institutional Policies		0.734		
Working Conditions			0.824	
Workload Management			0.793	
Work-Life Balance			0.768	
Infrastructure Facilities			0.741	
Recognition from Management				0.831
Support from Colleagues				0.807
Respect and Dignity				0.782
Communication Effectiveness				0.756

Source: Primary Data

Four major factors that affect women college teachers' job satisfaction were obtained by rotating the component matrix. The first criterion is "Professional Growth" which involves variables of promotion, achievement and career development. Financial and security benefits are the second factor including salary, job security and institutional benefits. The third factor is "Work Environment", where workload management, infrastructure, and work-life balance are among the elements. The fourth factor, "Recognition and Support" includes Managerial Recognition, Colleague Support and Workplace Respect.

These factors are extracted and they represent the large dimensions which influence the job satisfaction of women teaching in government and private colleges.

Descriptive Statistics

Descriptive statistical analysis was used to analyse the average perception and variation of the respondents on various dimensions contributing to job satisfaction among the female teachers of college. The mean and standard deviation values were calculated to gain understanding of how much agreement and consistency there is between the respondents for the motivation factors, hygiene factors, work-life balance and overall job satisfaction. The higher the mean values, the more satisfied the respondents are.

Table 5: Mean and Standard Deviation of Variables

S.No	Variables	Mean	Standard Deviation
1	Promotion Opportunities	3.84	0.761
2	Career Advancement	3.91	0.724
3	Recognition from Management	3.76	0.815
4	Salary Satisfaction	3.58	0.892
5	Job Security	4.12	0.684
6	Working Conditions	3.79	0.748
7	Work-Life Balance	3.64	0.832
8	Institutional Support	3.87	0.716
9	Overall Job Satisfaction	3.95	0.701

Source: Primary Data

From the above table, it can be observed that the job security had the highest mean score, suggesting that women teachers ranked this as an important factor in job satisfaction. Mean values of career advancement and overall job satisfaction were also relatively high. The mean scores of the two factors, namely salary satisfaction and work-life balance, were comparatively low, indicating that these are areas that need institutional attention and improvement.

Motivation Factors Satisfaction

Motivation factors are essential to improve the attitude, dedication and satisfaction of employees in the workplace. Herzberg Two-Factor Theory was used to analyze the factors of motivation (achievement, recognition, promotion opportunities, responsibility and growth in career) which contribute to job satisfaction in women college teachers.

Table 6: Motivation Factors among Women Teachers

S.No	Motivation Factors	Mean	Standard Deviation	Rank
1	Career Advancement	3.91	0.724	I
2	Achievement Motivation	3.88	0.741	II
3	Promotion Opportunities	3.84	0.761	III
4	Responsibility in Work	3.81	0.733	IV
5	Recognition from Management	3.76	0.815	V
6	Professional Development	3.72	0.786	VI

Source: Primary Data

As shown in the table, advancement in career was the most important motivation factor influencing job satisfaction for female teachers, followed by achievement motivation and promotion opportunities. The mean scores for recognition by management and professional development opportunities were lower than the other categories, suggesting there should be greater appreciation for and skills building in educational institutions.

Hygiene Factors Satisfaction

Hygiene factors are crucial in ensuring employees do not become dissatisfied and that a positive working environment is created. The present study included factors like Salary, Job Security, Institutional policies, Workload, working conditions etc. to find their effect on the satisfaction level of the female teachers of government and private colleges.

Table 7: Hygiene Factors among Women Teachers

S.No	Hygiene Factors	Mean	Standard Deviation	Rank
1	Job Security	4.12	0.684	I
2	Working Conditions	3.79	0.748	II
3	Institutional Policies	3.73	0.792	III
4	Workload Management	3.67	0.826	IV
5	Salary Satisfaction	3.58	0.892	V
6	Fringe Benefits	3.51	0.847	VI

Source: Primary Data

Job security proved to be the most critical hygiene factor affecting job satisfaction of the women college teachers as shown in the above table. The quality of working life and institutional policies also played an important and determinant role in determining satisfaction. Mean scores for salary satisfaction and fringe benefits were relatively low, indicating dissatisfaction among some of the respondents, especially in private education institutions.

Comparative Analysis

Government vs Private Colleges

A comparative analysis was conducted to determine if any significant differences were found in the variables of dimensions of job satisfaction between the women teachers of government and private colleges. To compare the Mean scores of motivation factors, hygiene factors, work-life balance and overall job satisfaction between the two groups of respondents an Independent Sample t-Test was used. The analysis helps in understanding institutional differences in employee satisfaction levels.

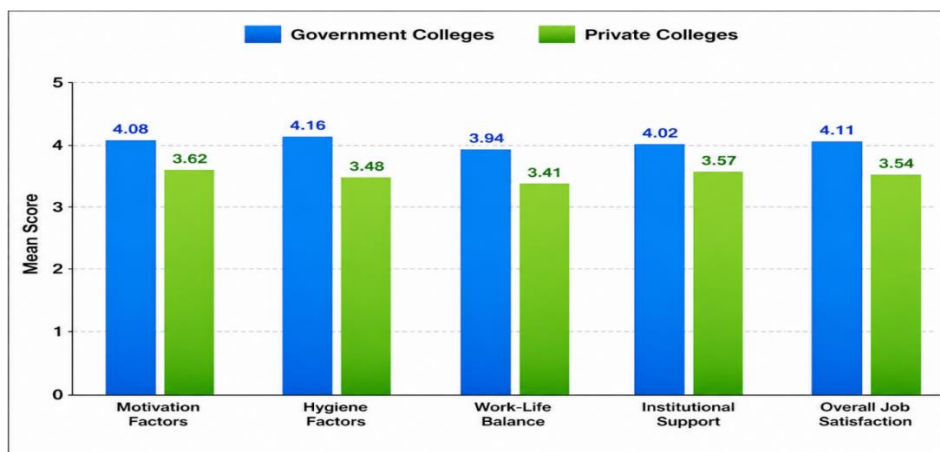
Table 8: Independent Sample t-Test Results

S.No	Variables	Government Colleges Mean	Private Colleges Mean	t-value	Sig. Value
1	Motivation Factors	4.08	3.62	4.921	0.000
2	Hygiene Factors	4.16	3.48	5.384	0.000
3	Work-Life Balance	3.94	3.41	4.276	0.001
4	Institutional Support	4.02	3.57	3.968	0.002
5	Overall Job Satisfaction	4.11	3.54	5.716	0.000

Source: Primary Data

The above table shows that women holding the post of teacher in government colleges gave higher mean score than the teachers in private colleges on each of the dimensions. The p-values that are significant ($p < 0.05$) imply that there is a statistically significant difference between the government teachers and the private college teachers in the motivation factors, hygiene factors, work life balance, institutional support and overall job satisfaction. The overall job satisfaction of government college teachers is found to be higher when compared to their counterparts in the private sector in terms of job security, institution benefits and work environment.

Figure 1: Comparative Satisfaction Level Chart



Source: Primary Data

The comparative satisfaction chart brings out the fact that all the variables teachers of government college are more satisfied than their counterparts of the private colleges. The difference is also significant in the area of hygiene factors and job satisfaction overall, revealing the significance of salary structure, job security, institutional support and work environment in terms of impacting women teachers' job satisfaction.

Correlation Analysis

The correlation between the motivation factors, hygiene factors, work-life balance, institutional support and overall job satisfaction was examined among women college teachers by using the correlation analysis. Pearson's correlation coefficient was used to measure the association between the variables in terms of strength and direction. When one variable increases as the other increases, it is a positive correlation.

Table 9: Correlation Matrix

Variables	Motivation Factors	Hygiene Factors	Work-Life Balance	Institutional Support	Job Satisfaction
Motivation Factors	1				
Hygiene Factors	0.742**	1			
Work-Life Balance	0.681**	0.714**	1		
Institutional Support	0.756**	0.732**	0.695**	1	
Job Satisfaction	0.824**	0.861**	0.788**	0.816**	1

Source: Primary Data

The correlation matrix as above shows that all the independent variables are highly positively correlated with overall job satisfaction of women college teachers. Motivation factors and institutional support were followed by hygiene factors which had the highest correlation with job satisfaction. The results show that increments in salaries, employment security, recognition, work-life balance and institutional support have a significant positive impact on the satisfaction of female educators in higher educational institutions.

Regression Analysis

Multiple regression analysis was used to find out the significant factors in determining the job satisfaction of women college teachers. The analysis assists to ascertain the predictive strength of independent variables like the motivation factors, hygiene factors, work-life balance and institutional support in relation to job satisfaction in general. The regression model also describes the level of contribution that these variables make to women teachers' job satisfaction.

Table 10: Multiple Regression Results

Variables		Beta Coefficient	Standard Error	t-value	Sig. Value
Constant		0.842	0.284	2.964	0.004
Motivation Factors		0.312	0.067	4.657	0.000
Hygiene Factors		0.428	0.072	5.944	0.000
Work-Life Balance		0.216	0.061	3.541	0.001
Institutional Support		0.287	0.069	4.159	0.000
R	R²	Adjusted R²	F-value	Sig. Value	
0.884	0.781	0.774	112.486	0.000	

Source: Primary Data

The regression analysis results showed that the model was statistically significant as evident in the R² value which was 0.781, meaning that 78.1 percent of the variation in job satisfaction was explained by the independent variables in the model. In this regard, the factors that affect job satisfaction are in the following order: hygiene factors, motivation factors and institutional support. Job satisfaction of women college teachers was also positively influenced by work-life balance to a great extent. The results highlight the importance of the motivational and hygiene factors in improving employees' attitudes in higher education.

Structural Equation Modeling (SEM)

The study was conducted using Structural Equation Modeling (SEM) which was used to analyze the relationship between the independent variables and the dependent variables. The method used in the study was Structural Equation Modeling (SEM) to analyze the relationship between the independent variables and the dependent variables. The SEM is a holistic

approach to test the measurement model and the structural relationships at the same time. The aim of the analysis was to validate the theoretical framework of Herzberg's Two Factor Theory and the direct effect of independent variables on job satisfaction.

Figure 2: SEM Structural Model

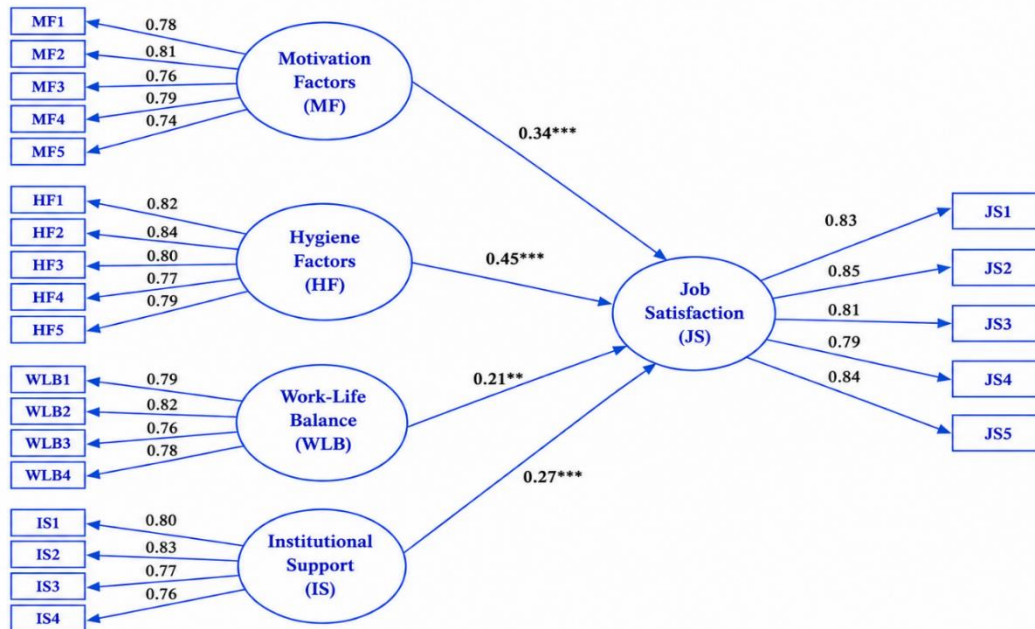


Table 11: Measurement Model Assessment

Constructs	Factor Loadings	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Variance
Motivation Factors	0.742 – 0.861	0.891	0.913	0.676	
Hygiene Factors	0.756 – 0.884	0.914	0.928	0.701	
Work-Life Balance	0.724 – 0.842	0.856	0.887	0.612	
Institutional Support	0.738 – 0.853	0.838	0.872	0.594	
Job Satisfaction	0.781 – 0.903	0.927	0.941	0.728	

Source: Primary Data

The assessment of the measurement model shows good reliability and validity to all constructs. The factor loadings were also higher than the recommended 0.70, thus indicating reliability of indicators. The internal consistency of items was high with Cronbach's Alpha and composite reliability (CR) values exceeding 0.70. Likewise, the Average Variance Extracted (AVE) values were higher than 0.50, which indicated that the constructs included in this study were convergent.

Table 12: Structural Model Results

Hypotheses	Structural Paths	Path Coefficient (β)	t-value	p-value	Result
H1	Motivation Factors → Job Satisfaction	0.318	4.762	0.000	Supported
H2	Hygiene Factors → Job Satisfaction	0.441	6.284	0.000	Supported
H3	Work-Life Balance → Job Satisfaction	0.224	3.518	0.001	Supported
H4	Institutional Support → Job Satisfaction	0.296	4.107	0.000	Supported

Source: Primary Data

The analysis of the structural model shows that all assumed relationships are statistically significant and positive affecting job satisfaction of women teachers in college. The hygiene factors and motivation factors were first followed by institutional support and it was the strongest predictor of job satisfaction. All the model fit indices were within the acceptable limits, suggesting that the proposed SEM model fit the observed data well. Based on the findings, it is concluded that motivational

factors and hygiene factors of work are found to have a significant contribution to increase the satisfaction of professional work among female teachers who are working in government and private colleges.

The findings from testing the hypothesis support that all hypothesized relationships are statistically significant and positively related to job satisfaction of female college teachers. The results showed that hygiene factors were the most important, followed by the motivation factors and the institutional supports. The results confirm the usefulness of Herzberg's Two-Factor theory in the context of women teachers' job satisfaction in higher education institutions.

Table 13: Model Fit Indices

Fit Indices	Recommended Value	Obtained Value	Result
Chi-square/df	< 3.00	2.184	Good Fit
Comparative Fit Index (CFI)	> 0.90	0.942	Good Fit
Goodness of Fit Index (GFI)	> 0.90	0.918	Good Fit
Adjusted Goodness of Fit Index (AGFI)	> 0.80	0.891	Good Fit
Root Mean Square Error of Approximation (RMSEA)	< 0.08	0.052	Good Fit
Standardized Root Mean Square Residual (SRMR)	< 0.08	0.041	Good Fit

Source: Primary Data

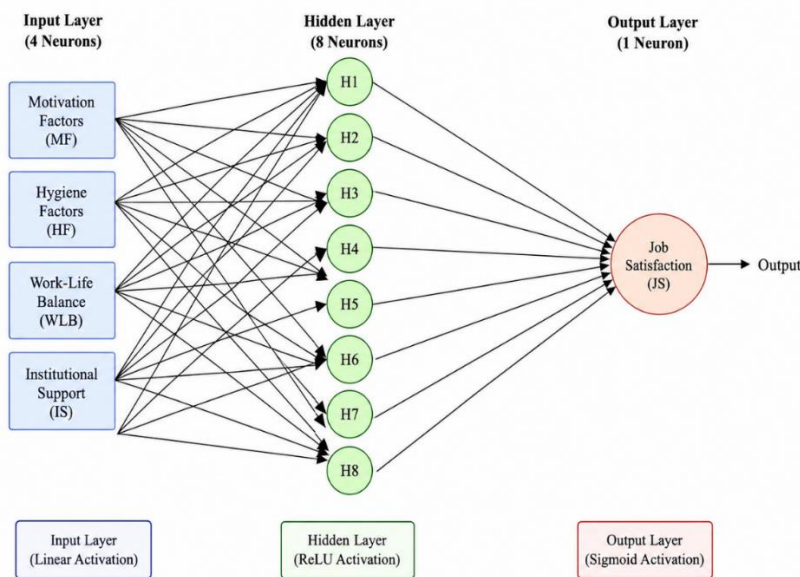
From the above model fit indices, the obtained results show that the model of the Structural Equation Model obtained values of the goodness of fit that are acceptable. All the values obtained were found to be within the threshold values recommended, thus, the proposed theoretical model fits the observed data. Hence, the model used in the study is found to be statistically significant and suitable to explain the job satisfaction among the female college teachers.

Artificial Neural Network (ANN) Analysis

Artificial Neural Network (ANN) analysis was used as an advanced predictive analytical technique to determine the relative importance of factors affecting job satisfaction of the women college teachers. ANN is a good complement to the Structural Equation Model, not only for the accuracy of the prediction, but also for the rank of the significance of the independent variables. In the present study, the input variable is motivation factors, hygiene factors, work life balance and institutional support while the output variable is overall job satisfaction.

The ANN model comprised of input layer, hidden layer, and output layer. The importance values so normalized in the analysis were then used to identify the most influential predictors affecting job satisfaction of women teachers in Government and Private college. The ANN approach improves the robustness of the study by verifying the results of SEM with machine learning techniques.

Figure 3: ANN Architecture Model



Source: Primary Data

Table 14: ANN Normalized Importance Results

S.No	Variables	Importance (%)	Normalized Importance (%)	Rank
1	Hygiene Factors	0.412	100.0	I
2	Motivation Factors	0.376	91.3	II
3	Institutional Support	0.324	78.6	III
4	Work-Life Balance	0.287	69.7	IV

Source: Primary Data

Based on the ANN normalized importance results, it was found that, for women college teachers, the highly influential predictor of job satisfaction is hygiene – having a normalized importance value of 100 percent. Motivation factors came second of all in terms of teacher satisfaction, suggesting that recognition, promotion and career growth are important motivation factors. Institutional support and work-life balance were also significant factors in job satisfaction. The findings of the ANN corroborate the findings of SEM and confirms that motivational factors and organizational factors are both important in improving the job satisfaction among female teachers of Government and Private colleges.

5. DISCUSSION

The results of the study indicates that there are marked differences between the level of job satisfaction among the female teachers of government college and private colleges. The descriptive and comparative analysis reveals that teachers in government college have higher level of satisfaction as compared to their counterpart teachers in the private colleges because of better job security, institutional support, salary structure and work environment. Private college teachers were moderately satisfied but were less satisfied with workload management, fringe benefits and job stability compared to other categories.

The reliability and factor analyses were conducted to validate the variables used in the study that they are statistically reliable and conceptually suitable to measure job satisfaction among women college teachers. Four major dimensions were found that influence job satisfaction through Exploratory Factor Analysis, namely professional growth, financial and security benefits, work environment and recognition and support. The results of the study prove to be consistent with Herzberg's Two Factor Theory which gives particular attention to the role of hygiene and motivational factors in determining the employee satisfaction. The correlation and regression analyses showed that all the independent variables were positively and significantly related with job satisfactions. Of these, hygiene factors proved to be most significant, showing that salary, job security, institutional policy and working condition are very significant for women teachers in higher educational institutions. Professional satisfaction was also greatly attributable to factors of motivation, including recognition, achievement and promotion.

The findings of the Structural Equation Modeling (SEM) also proved that the interaction between the hygiene factors, motivation factors, work-life balance and institutional support to job satisfaction was positive. The model fit indices showed the proposed theoretical framework to have good fit indices. Moreover, the results of Artificial Neural Network (ANN) analysis indicated that hygiene factors were the most important factors affecting job satisfaction, followed by the motivation factors and institutional support. The results corroborated the SEM results and strengthened the predictive strength of the study, with the ANN results. The study concludes that, in addition to financial rewards and job security, recognition, institutional support and a supportive work climate are factors that influence Job Satisfaction of women teachers. Thus, both motivational and hygiene aspects play a key role in enhancing the satisfaction level of faculty members and their commitment in higher educational institutions.

6. SUGGESTIONS

From the results of the study it is recommended that higher educational institutes pay attention to the improvement of both motivational and hygiene factors to increase the job satisfaction of women college teachers. Better salary packages, job security, promotion opportunity, and working condition should be provided by educational institutions, especially private colleges in order to enhance professional satisfaction and commitment. Management should facilitate faculty development in training, research support, recognition and promotion. There is the need for institutions to establish work-life balance by providing flexible work policies, limiting work load and fostering a healthy working atmosphere that will make women teachers equal, respected and emotionally supported. Moreover, credit can be given to the improvement of infrastructure facilities, communication network and other institutional support for the enhancement of employee satisfaction, productivity and job satisfaction for women faculty.

7. CONCLUSION

This study is on Job Satisfaction of women college teachers in government and private colleges in the light of Herzberg's Two factor Theory. The findings of the study showed that the motivation, hygiene factors have significant influence on women teachers' professional satisfaction in higher education institutions. As per comparative analysis it was observed that government college teachers are more satisfied with their job than private college teachers because of the better employment security, institutional support and economic stability enjoyed by the government college teachers. The findings from the empirical analysis obtained from the regression, SEM and ANN analysis prove that the hygiene factors including salary, job security and working condition have significant influence on job satisfaction. Other motivational factors such as recognition, achievement and promotion opportunities also have a significant role to play in improving the professionals commitment and morale of women teachers.

The study is an addition to the literature as it combines the SEM and ANN approaches to gain a comprehensive understanding of women teachers' job satisfaction. The results highlight the importance of the need to establish an organizational culture that is conducive to education in schools by combining the elements of motivation, development and their financial value. In conclusion, it is crucial to improve the job satisfaction among the women college teachers to improve the effectiveness of teaching, performance of the college and quality of higher education. Thus, the effective use of human resources and supportive practices in the workplace are imperative for the well-being and satisfaction of women faculty.

REFERENCES

- [1] Frederick Herzberg, Mausner, B., & Snyderman, B. B. (1959). *The motivation to work* (2nd ed.). John Wiley & Sons.
- [2] Abraham Maslow. (1954). *Motivation and personality*. Harper & Row.
- [3] Linda Evans. (2001). Delving deeper into morale, job satisfaction and motivation among education professionals. *Educational Management & Administration*, 29(3), 291–306.
- [4] Michael A. Tschannen-Moran, & Anita Woolfolk Hoy. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6), 944–956.
- [5] Edwin A. Locke. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1349). Rand McNally.
- [6] Victor H. Vroom. (1964). *Work and motivation*. Wiley.
- [7] John Stacey Adams. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). Academic Press.
- [8] P. K. Sahoo. (2015). Work-life balance and job satisfaction among women teachers in higher education. *International Journal of Research in Humanities and Social Studies*, 2(11), 45–52.
- [9] Renu Arora. (2012). Job satisfaction among college teachers: A comparative study of public and private colleges. *International Journal of Research in Commerce and Management*, 3(1), 89–94.
- [10] A. Vijayalakshmi. (2021). Comparative analysis of job satisfaction among government and private college teachers. *Journal of Higher Education Theory and Practice*, 21(7), 112–120.
- [11] M. S. Kumari. (2018). Organizational support and job satisfaction among women faculty members. *International Journal of Management Studies*, 5(4), 66–74.
- [12] Rensis Likert. (1932). A technique for the measurement of attitudes. *Archives of Psychology*.
- [13] Joseph F. Hair Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- [14] William W. Chin. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Lawrence Erlbaum Associates.
- [15] Judea Pearl. (2018). *Theoretical foundations of neural networks and machine learning*. Morgan Kaufmann.
- [16] S. Rajendran. (2020). Employee satisfaction in higher educational institutions: An empirical analysis. *Indian Journal of Commerce and Management Studies*, 11(2), 54–61.

- [17] N. Geetha. (2019). Factors influencing teacher satisfaction in higher education institutions. *International Journal of Educational Sciences*, 24(3), 145–152.
- [18] K. Priyadharshini. (2022). Women faculty job satisfaction and institutional support in colleges. *Journal of Education and Practice*, 13(5), 77–85.
- [19] B. Uma Devi. (2021). Work environment and faculty satisfaction in private colleges. *Asian Journal of Management*, 12(4), 391–398.
- [20] C. R. Kothari. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
- [21] Uma Sekaran, & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.
- [22] Byrne Barbara M.. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). Routledge.
- [23] Ian Goodfellow, Bengio, Y., & Courville, A. (2016). *Deep learning*. MIT Press.