

Influence of Compensation on Job Satisfaction: A Study of Public and Private Sector Employees in the Solar Energy Sector of Uttar Pradesh

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ABSTRACT

The study investigates the influence of compensation on job satisfaction among employees in the solar energy sector of Uttar Pradesh, encompassing both public and private sector companies. A descriptive and analytical research design was employed and data were collected from 120 employees (60 from public and 60 from private sector companies) through a structured questionnaire based on a five-point Likert scale. Statistical tools such as Cronbach's Alpha, Correlation Analysis, and Independent Sample t-Test were used to test the reliability, relationships, and differences among variables. The findings revealed a positive relationship between compensation and job satisfaction, indicating that fair and competitive compensation enhances employee job satisfaction levels. However, differences were observed between public and private sector employees regarding their job satisfaction in context to their compensation practices wherein private sector employees reported higher job satisfaction than those of public sector employees. The findings emphasize the importance of fair and performance-based compensation practices in enhancing employee satisfaction and retention within the solar energy sector of Uttar Pradesh.

Keywords: Compensation, Job Satisfaction, Public and Private Sector Employees, Solar Energy Sector, Uttar Pradesh

INTRODUCTION

A vital element of India's renewable energy policy, the solar energy sector plays a crucial role for attaining the country's sustainable development objectives. India has proven itself as an expert in solar power generation in response to the rising global focus on limiting carbon emissions and dependency on fossil fuels. Within the National boundary, Uttar Pradesh has geographic advantage, huge population and expanding consumption of electricity which has made it as an essential element within the National paradigm. The State Government progressive policies and initiative regarding solar energy such as Uttar Pradesh Solar Energy Policy and many other policies boost up both public and private sector organizations to take active part in the state and are being urged to engage in the production, installation, and distribution of solar energy of the state. As a result, the solar energy sector currently contributes substantially to the state's economic expansion and job creation. As solar energy organizations expand their roots in the State, human resource management becomes a vital aspect for retaining performance and innovation. Job Satisfaction is one of the most important elements impacting employee behaviour and company success. Satisfied employees generally show higher levels of productivity, creativity, and organizational dedication whereas unsatisfied employees often end up in absenteeism, low morale, and low productivity. Therefore, in relation to the workforce of solar energy sector where technical skills, innovation, and reliability are key aspect, maintaining a satisfied workforce is very much crucial for achieving efficiency and long-term sustainability.

One of the most important factors for employee's job satisfaction is Compensation, which includes not only monetary benefits but also allowances, incentives, and other forms of reward. Through a equitable and inspiring remuneration plan., better performance is encouraged, turnover is decreased, and employee morale is raised. A well-designed pay plan lowers attrition, increases employee engagement, and cultivates loyalty. Whereas an unfair pay plan system may create low employee morale and lower productivity and workforce instability. Compensation is an important tool for attracting and retaining talent in the solar energy sector, having intense competition among the qualified workers in the solar energy sector. While in general, private sector businesses organization often offer performance-linked compensation and incentive-based compensation systems and on the other hand, public sector businesses organization are usually characterized by stability, employment security, and uniform pay scales. Hence, employee job satisfaction may be profoundly affected by these differences in compensation structure.

Similarly, disparities in compensation across public and private sector companies in the solar energy sector could lead to different opinions about how satisfied workers are with their jobs. raising significant concerns regarding the efficacy, sufficiency, and equity of compensation in solar energy sector.

[A] Problem Statement: Companies find it hard to maintain stable levels of employee retention and job satisfaction, particularly in the midst of Uttar Pradesh's solar energy industry's rapid growth. Differences in the compensation structure across both public and private sector solar energy companies operating within the solar energy sector of Uttar Pradesh may have distinct impact on how employees perceive equity, fairness, and motivation. In general, employees in the private sector companies may place a stronger priority on higher compensation and career advancement, while those in the public sector companies may place a greater value on stability and social benefits. Employee productivity and dedication may suffer as an outcome of these discrepancies in job satisfaction in any sector and likely the same goes for solar energy sector.

With regard to previous studies undertaken by various researchers focusing on compensation and job satisfaction of employees across various sectors including renewable energy sector, it was found that the solar energy sector of Uttar Pradesh has got negligible attention with no empirical and comparative study between public and private sector companies working in solar energy sector of Uttar Pradesh, thereby with no focus on how compensation impacts the job satisfaction of employees working within the specified sector. Hence, making it difficult for the policy-makers to develop compensation systems plan that effectively enhance employee satisfaction and help to improvise organizational outcomes. Therefore, there is a clear need to explore how compensation influences job satisfaction of employees working in both public and private sector solar energy companies and to identify the key components that contribute to higher satisfaction levels among employees within the sector.

[B] Need of Study: This study has significance from an academic and practical viewpoint. By emphasizing on the relationship between compensation and job satisfaction in Uttar Pradesh's solar energy sector which have not got much scholarly attention, it fills a glaring research gap from an academic standpoint. As many studies on compensation and job satisfaction are undertaken in the banking, IT, and manufacturing industries, few have investigated on these parameters in renewable energy sector especially, solar energy sector where organizational issues are unique due to rapid technology advancement and policy changes. This study will provide important insights into how various compensation schemes affect employee attitudes in a high-growth, sustainability-driven economy by comparing companies in the public and private sectors companies in solar energy sector.

From a practical standpoint, the findings will aid human resource managers and policymakers in designing effective compensation structures that balance fairness, motivation, and organizational efficiency that strongly influence employee job satisfaction thereby enhance employee engagement, and improve overall performance as well as identifying sector-specific challenges, through which policy initiatives can be aimed at strengthening workforce management within the solar energy sector.

In conclusion, this research tries to bridge the knowledge gap regarding the influence of compensation on job satisfaction in the solar energy sector of Uttar Pradesh. By conducting a comparative study between public and private companies, the research aims to provide actionable recommendations that can contribute to employee well-being, organizational effectiveness, and the sustainable growth of India's solar energy industry.

[C] Objectives of the study: The study is proposed to have following objectives:

1. To examine the relationship between compensation and job satisfaction among employees in the solar energy sector of Uttar Pradesh.
2. To compare the level of job satisfaction between public and private sector employees in the solar energy sector of Uttar Pradesh.

[D] Hypothesis of the study: To achieve the above objectives of the study, following hypothesis have been formulated:

1. **For Objective 1 :** Relationship between compensation and job satisfaction among employees in the solar energy sector of Uttar Pradesh.
- **H₀₁ (Null Hypothesis) :** Employee job satisfaction and compensation in Uttar Pradesh's solar energy sector do not significantly relate.
- **H₁₁ (Alternate Hypothesis) :** Employee job satisfaction and compensation in Uttar Pradesh's solar energy sector significantly relate.
2. **For Objective 2 :** To compare the level of job satisfaction between public and private sector employees in the solar energy sector of Uttar Pradesh.
- **H₀₂ (Null Hypothesis):** Employees of public and private sector solar energy companies in Uttar Pradesh do not significantly differ in their job satisfaction levels with regard to compensation.
- **H₁₂ (Alternative Hypothesis):** Employees of public and private sector solar energy companies in Uttar Pradesh differ significantly in their job satisfaction levels with regard to compensation.

LITERATURE REVIEW

Following Literature review has been done for the study

1. **Sehgal (2012)**, conducted a comparative study on job satisfaction among public (UCO Bank) and private (Axis Bank) employees in Shimla. Using mean scores and t-tests, the study found that public sector employees had higher overall satisfaction, while private sector employees were more satisfied with salary and compensation.
2. **Khan and Iqbal (2013)**, examined the relationship between compensation and job satisfaction among manufacturing sector employees. Using correlation and regression analysis, they found a positive and significant relationship, indicating that fair and competitive compensation boosts employee satisfaction and motivation.
3. **Agrawal (2018)** examined how salary, incentives, and benefits affect employee satisfaction and retention in the service sector. Using correlation and regression analysis, the study found that effective compensation management significantly enhances job satisfaction, morale, and organizational commitment.
4. **Gupta and Sharma (2019)** analysed the impact of monetary and non-monetary rewards on employee job satisfaction in the Indian renewable energy sector. Using correlation and regression analysis, they found that both financial and non-financial rewards significantly enhance satisfaction, with recognition and career growth having a stronger impact.
5. **Pandey and Asthana (2017)** analysed factors influencing job satisfaction among employees across sectors in India. Using factor and multiple regression analysis, they found that work environment and compensation were the key determinants, followed by career growth and recognition.

6. **Triandani, S. & Ganarsih, R. L. (2023)**, reviewed literature on the role of compensation in employee motivation and job satisfaction. Using a qualitative descriptive approach, they found that both financial and non-financial rewards enhance satisfaction and performance. The study emphasized that fair pay and recognition are vital for motivation and commitment.
7. **Ragul, R., & Arun, A. (2024)**. examined the effect of compensation on employee satisfaction and performance across different organizations. Using correlation and regression analysis, they found a positive and significant relationship, indicating that fair and motivating compensation improves both satisfaction and performance.
8. **Dogra, A. (2024)**. examined the relationship between compensation packages and job satisfaction among healthcare employees. Using correlation and regression analysis, the study found a strong positive relationship, showing that fair and comprehensive compensation enhances employee satisfaction and retention.

Research Gap

There is not much study on the association between compensation and job satisfaction in the solar energy industry, despite the fact that it has been deeply investigated in various service sector fields like banking, healthcare, manufacturing etc. Although the solar energy sector in Uttar Pradesh has emerged as an important driver of employment generation and sustainable development, little attention has been placed on determining out how satisfied employees are with their jobs. There is not enough information in the literature to figure out how compensation influences solar energy workers' job satisfaction.

Moreover, comparative studies between public and private sector solar companies working in Uttar Pradesh are minimal, even with significant differences in compensation practices and employment conditions. This study therefore seeks to bridge this gap by analysing how compensation influences job satisfaction of employees working in both public and private sector solar energy companies within Uttar Pradesh.

RESEARCH METHODOLOGY

[a] Research Design The present study adopts a descriptive and comparative research design to examine the influence of compensation on job satisfaction among employees in the solar energy sector of Uttar Pradesh. The study compares perceptions of employees working in public and private sector solar companies to identify differences and relationships between compensation and job satisfaction.

[b] Sampling Plan: Since it is not possible to collect data from the entire population of workers working in public and private sector solar energy companies within Uttar Pradesh, the study draws a sample from employees of select companies of both sectors. While the data collected from employees of the companies form the base for data collection, results would be analysed generally on sectoral basis (public and private sector companies) to examine the influence of compensation on job satisfaction of employees working in solar energy sector of Uttar Pradesh.

- **Sampling Units** – Employees working in solar energy sector of Uttar Pradesh
- **Sample Size** – 120 employees (60+60)
- **Sampling Technique** – Convenience Sampling
- **Sample Companies** – Public and private sector companies in solar energy sector of Uttar Pradesh

Important Note: In alignment with the study title, data were collected from employees of select public and private sector solar energy companies operating within Uttar Pradesh. However, to maintain the confidentiality of the participating organizations and to avoid company-specific interpretation, the results are evaluated on a sectoral basis, i.e., a comparison between public and private sector solar energy companies. The names of the companies

are not disclosed in the study and are used solely to define the sampling frame; the analysis focuses on sectoral outcomes rather than company-specific findings.

[c] Data Collection: Data was collected directly from the respondents through a google form containing multiple questions related to compensation and job satisfaction level on a 5 point Likert Scale [Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree]

[d] Data Analysis: Data collected from the respondents was analysed using Spearman rank correlation as well as independent sample t -test in order to derive the relation of compensation on job satisfaction level of employees in the solar energy sector within Uttar Pradesh and additionally to compare the level of job satisfaction between public and private sector employees in the solar energy sector of Uttar Pradesh.

Analysis And Interpretation

This section presents the interpretation of result being derived from the analysis undertaken to examine the influence of compensation on the job satisfaction of employees in solar energy sector of Uttar Pradesh for which data collected from employees of select public and private solar energy companies. The analysis is being carried on using correlation and independent t test with respect to objectives and hypothesis as stated above. The interpretation of results is derived through following steps:

(1) Reliability Analysis: Firstly, the reliability of the questionnaire responses was analysed to check the internal consistency of the responses under which the questionnaire was mainly divided in two segments i.e., Compensation related questions and Job Satisfaction questions.

Table 1: Cronbach Alpha Score

Variable	Cronbach Alpha	Number of Questions
Compensation	.749	6
Job Satisfaction	.716	7

Source: Author Calculation using SPSS

The Cronbach Alpha coefficient for was found good for both the segment responses as .749 and .726 respectively.

(2) Objective Analysis: Secondly, the result of the study was analysed using composite compensation response score and job satisfaction response score from the data collected from employees working in public and private sector companies of the solar energy sector of Uttar Pradesh based on the above framed objective and hypothesis of the study. The above objectives are analysed as under:

Objective 1 : To examine the relationship between compensation and job satisfaction among employees in the solar energy sector of Uttar Pradesh.

Findings: Relation between compensation and job satisfaction among employees in the solar energy sector of Uttar Pradesh was analysed using the compensation score and job satisfaction score of all the respondents through Spearman Rank Correlation.

Table 2: Correlation between compensation score and job satisfaction score

Correlations			
		Compensation Score	Job_Satisfaction_Score
		Correlation Coefficient	
		1.000	.679**

Spearman's rho	Compensation Score	Sig. (2-tailed)		.	.000
		N		120	120
	Job Satisfaction Score	Correlation Coefficient		.679**	1.000
		Sig. (2-tailed)		.000	.

****. Correlation is significant at the 0.01 level (2-tailed).**

Source: Author Calculation using SPSS

Interpretation: The Spearman Rank correlation (r) between the compensation score and job satisfaction score for the employees in the solar energy sector of Uttar Pradesh was found as .679 with p value=.000 (Statistically significant). As the p value is less than the significance level, we will reject the Null Hypothesis (H_0) and accept the alternate hypothesis (H_1) stating that Employee job satisfaction and compensation in Uttar Pradesh's solar energy sector significantly relate with each other. In simple words it indicates that there is a strong and statistically significant relation between the variables wherein both the variables move in same trend and direction thereby indicating that a positive trend in compensation policy of solar energy sector will lead to more job satisfaction level of employees within the sector

Objective 2 : : To compare the level of job satisfaction between public and private sector employees in the solar energy sector of Uttar Pradesh.

Findings: To compare the difference in job satisfaction of employees in public and private sector solar energy companies of Uttar Pradesh, the job satisfaction scores of both groups were analysed using an Independent Samples t-Test, which provided the basis for the conclusion regarding sectoral differences in employee satisfaction with respect to compensation

Table 3 a : Group Statistics

Group Statistics						
	Type of sector	N	Mean	Std. Deviation	Std. Error Mean	
Job Satisfaction Score	Public Sector	60	3.4071	.18935	.02444	
	Private Sector	60	3.8857	.25474	.03289	

Source: Author Calculation using SPSS

Table 3 b: Independent t-test

Independent Samples Test								
	Levene's Test for Equality of Variances		t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
								Lower Upper

Job_Satisfaction_Score	Equal variances assumed	6.25	.014	-11.67	118	.000	-.47857	.04098	-.5597	-.3974
	Equal variances not assumed			-11.67	108.94	.000	-.47857	.04098	-.5597	-.3973

Source: Author Calculation using SPSS

Interpretation: Following result were interpreted while comparing means of both groups (public and private sector) companies within the solar energy sector of Uttar Pradesh-

- Levene test value ($F= 6.25$, Significance level=0.14) being less than .05 indicates that variation between the two groups is not equal.
- T- Test value ($t =11.67$, $p=.000$) being less than .05 with degree of freedom of freedom = 108.94 indicates to accept the alternate hypothesis (H_{11}) stating that there is statistical difference in the job satisfaction level of employees in public and private sector solar energy companies within Uttar Pradesh with regard to compensation.
- The mean job satisfaction score of private sector employees (3.8857) is higher than public sector employees (3.407) with mean difference being (-.478) that lies between 95 % confidence level (-.559 to -.397), thereby confirming the reliability and validity of the results

The results reveal that employees in private sector solar energy companies of Uttar Pradesh experience significantly higher job satisfaction compared to those in public sector companies, with respect to compensation-related factors thereby confirming to accept alternate hypothesis (H_{11}), stating that job satisfaction levels of employees in public and private sector companies of solar energy sector of Uttar Pradesh significantly differs

FINDINGS

The results indicate that the compensation policies and practices in solar energy sector of Uttar Pradesh and the job satisfaction level of employees in the solar energy sector of Uttar Pradesh are positively and significantly correlated ($r= .6798$, $p=.000$).

Furthermore, through independent t – test it was observed that the job satisfaction level of employees working in public and private sector solar energy companies of Uttar Pradesh are statistically different wherein job satisfaction level of private sector employees is comparatively higher when compared to that of public sector employees with respect to compensation policies in solar energy sector of Uttar Pradesh. On the whole compensation plays a important role in determining job satisfaction level of employees in solar energy sector nevertheless the sectoral differences in job satisfaction level of employees with relation to compensation exists.

CONCLUSION

The study concludes that in general compensation has a positive influence on the job satisfaction level of employees in the solar energy sector of Uttar Pradesh. Wherein private sector employee revealed higher job satisfaction in comparison to those in public sector companies. Findings of the study highlights the importance of compensation in the solar energy sector as well as would be helpful in providing valuable insights to the policymakers of both, public and private sector companies within the solar energy sector of Uttar Pradesh in framing compensation policies so as to increase employee morale for making them retained within the solar energy sector of Uttar Pradesh

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