

The Effect of Motivational Factors and Incentives on Participation and Productivity with the Mediating Role Performance

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ABSTRACT

In the modern organizational age, enhancing employee participation and productivity—particularly in the public sector—is a priority agenda for human resource management. This study investigates the impact of motivation and incentives on employee participation and productivity, with the moderating role of employee performance in Shiraz County government offices. The study is applied in nature and descriptive survey in method. The statistical population consisted of all the employees working in governmental agencies in Shiraz, 210 of whom were chosen randomly by simple random sampling. A standardized questionnaire was used for collecting the data, the content validity of which had been confirmed by experts and reliability calculated by Cronbach's alpha coefficient, being above 0.7. Analysis of data using the Partial Least Squares (PLS) program revealed that incentives and motivation directly and indirectly influence participation and productivity through the performance of employees. Employee performance was found to enhance the positive impact of incentives and motivation on organizational performance. The findings imply that managers can use them to develop strategies to improve performance and increase productivity in public sector organizations.

Keywords: Motivation and Incentives, Participation, Productivity, Employee Performance.

INTRODUCTION

In today's competitive and rapidly evolving organizational environments, improving the effective and efficient use of various resources labor, capital, materials, energy, and information has become a fundamental goal for managers across economic organizations, industrial units, and service institutions (1, 2). Among these resources, human capital stands out as the most critical factor influencing organizational productivity. A qualified and competent workforce,

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supported by appropriate organizational structures, efficient work methods, and a balanced work environment, forms the backbone of sustainable productivity (3). Employee participation, combined with conscious and disciplined efforts, significantly enhances productivity, especially in turbulent and uncertain contexts. Embedding a culture of continuous productivity improvement within organizations requires placing human resources at the core of all strategic initiatives. Motivation and incentives have been widely recognized as pivotal drivers of employee participation and productivity, particularly in public sector organizations. Public institutions often face resource constraints and must compete with the private sector to deliver higher-quality services to citizens, making employee motivation a critical concern (2). Financial incentives such as salary increases, timely payments, and bonuses serve as strong motivators for employees to improve their performance. However, non-financial incentives-including opportunities for professional growth, promotion, participation in decision-making, and supportive relationships with supervisors-also play a significant role in enhancing motivation (4, 5). These findings align with Herzberg's Two-Factor Theory, which distinguishes between hygiene factors (e.g., salary) and motivators (e.g., recognition), both essential for job satisfaction and performance improvement (6). Beyond tangible rewards, psychological factors are equally important in motivating employees. Creating a sense of value, fostering organizational belonging, encouraging creativity and innovation, and providing opportunities for individual and group participation can significantly boost motivation (7, 8). According to Deci and Ryan's Self-Determination Theory, intrinsic motivation in autonomy, competence, and relatedness is a powerful predictor of employee engagement and performance (9). Therefore, managers must cultivate work environments that support these psychological needs to enhance employee participation and productivity effectively.

Employee performance is a fundamental determinant of increased participation and productivity. Performance reflects the degree to which employees fulfill their duties and responsibilities, and it directly influences organizational outcomes (2). High-performing employees tend to demonstrate greater commitment and willingness to excel, which positively affects both their participation and productivity. Effective performance management systems, including regular feedback, fair evaluations, and developmental support, are critical for sustaining high employee performance (10). Motivation acts as a key driver of employee engagement and productivity. It can be enhanced through a combination of financial and non-financial rewards, training and career development opportunities, and organizational transparency and fairness (2, 11). Motivated employees are more likely to take responsibility and align their efforts with organizational goals, resulting in improved job satisfaction and performance (5). Vroom's Expectancy Theory further explains that motivation is highest when employees believe their efforts will lead to good performance, that performance will be rewarded, and that the rewards are valuable to them (12).

A supportive and motivating work environment also plays a crucial role in enhancing productivity. Factors such as a positive organizational climate, opportunities for advancement, encouragement of innovation, adequate resources, and employee satisfaction contribute to a productive workplace (13). Constructive communication, mutual respect, and trust between managers and employees foster psychological safety, enabling employees to share ideas and take initiative without fear of negative consequences (14). Active employee participation is essential for achieving organizational goals, especially in public sector departments. Building a

participatory culture, enhancing skills through training, facilitating open communication channels, encouraging teamwork, and establishing fair evaluation systems are vital measures to increase employee engagement (2, 14). Increased participation leads to improved organizational processes, higher service quality, and greater citizen satisfaction, which are critical for public sector success. Given the importance of motivation and incentives, this study aims to examine their impact on employee participation and productivity in public sector organizations in Shiraz, with employee performance as a mediating variable. By exploring these relationships, the research seeks to provide practical insights for managers and policymakers to design effective motivational strategies and foster environments conducive to higher productivity and engagement. Understanding these dynamics within the specific context of Iranian public sector organizations will enable tailored interventions that enhance organizational effectiveness and service delivery.

LITERATURE REVIEW

Effective and efficient utilization of resources, particularly human capital, is a central goal for organizations striving for sustainable competitive advantage (2, 3). Human capital, supported by suitable organizational structures, efficient work methods, and a positive work environment, is essential for achieving optimal productivity levels. As organizations navigate increasingly dynamic and uncertain environments, the active participation and conscious engagement of employees become pivotal in driving enhanced productivity (3). Creating a culture focused on continuous productivity improvement, with human resources as the core element, is paramount for long-term success. Motivation and incentives are widely recognized as essential factors influencing employee participation and productivity, especially within public sector organizations (4). Public institutions often face resource constraints and increased expectations from citizens, underscoring the need to cultivate a committed and high-performing workforce (2). Financial incentives, such as competitive salaries, timely payments, and performance-based bonuses, serve as key motivators that encourage employees to enhance their efforts and improve their overall performance. Simultaneously, non-financial incentives, including opportunities for professional development, career advancement, participatory decision-making processes, and supportive relationships with supervisors, significantly contribute to employee motivation (4, 13). These findings align with Herzberg's Two-Factor Theory, which emphasizes the distinct roles of hygiene factors and motivators in influencing job satisfaction and productivity (6).

In addition to tangible rewards, psychological factors play a vital role in shaping employee motivation and behavior (7, 8). Cultivating a sense of value among employees, fostering a strong sense of organizational belonging, encouraging creativity and innovation, and providing ample opportunities for both individual and group participation can strengthen employees' intrinsic motivation (9). By addressing employees' psychological needs, organizations can create a supportive and engaging environment that promotes higher levels of commitment, performance, and productivity. Employee performance is a fundamental factor influencing both participation and productivity within organizations. High-performing employees not only contribute more effectively to organizational goals but also serve as role models for their colleagues, promoting a culture of excellence (2). Strong employee performance stems from clear expectations, effective feedback mechanisms, skill development opportunities, and supportive management practices (10). By prioritizing employee development and creating a

work environment that facilitates optimal performance, organizations can maximize their human capital potential and achieve sustainable success.

Existing literature supports the positive relationship between employee motivation, participation, and productivity (12). When employees are motivated, they are more likely to actively engage in their work, contribute their ideas, and collaborate effectively with colleagues. Such engagement leads to improved organizational processes, enhanced service quality, and greater client satisfaction (2, 14). To foster a highly productive and engaged workforce, organizations must develop and implement comprehensive motivational strategies that address both financial and non-financial needs. To enhance employee participation and productivity, organizations should focus on implementing strategies that foster a culture of trust, transparency, and collaboration (11). These strategies include providing regular training and development opportunities, creating channels for open communication and feedback, promoting teamwork and knowledge sharing, and recognizing and rewarding employee contributions. Additionally, organizations should strive to create work environments that support work-life balance, promote employee well-being, and provide opportunities for personal growth and development. The specific context of public sector organizations in Shiraz presents unique challenges and opportunities for enhancing employee participation and productivity (2). These organizations operate within a complex regulatory environment and must navigate resource constraints while striving to deliver essential services to the community. To succeed, public sector organizations in Shiraz must adopt innovative approaches to human resource management that attract, retain, and motivate high-performing employees.

RESEARCH OBJECTIVES

The primary objective of this study is to investigate the impact of motivation and incentives on employee participation and productivity in governmental organizations of Shiraz, with a particular focus on the mediating role of employee performance. Specifically, the study aims to:

1. Examine the direct effect of motivation and incentives on employee participation in Shiraz's public sector.
2. Assess the direct influence of motivation and incentives on employee productivity.
3. Explore the mediating role of employee performance in the relationship between motivation/incentives and employee participation.
4. Explore the mediating role of employee performance in the relationship between motivation/incentives and employee productivity.
5. Evaluate the direct impact of motivation and incentives on employee performance.
6. Provide practical recommendations for improving employee motivation, participation, and productivity in governmental organizations based on empirical findings.

MATERIALS AND METHODS

Study Design and Participants

This research employs an applied, descriptive survey design aimed at systematically examining the relationships among motivation, incentives, employee participation, productivity, and performance within Shiraz's governmental organizations. The statistical population comprised all employees working in public sector offices in Shiraz, totaling approximately 700 individuals.

Using Cochran's formula for sample size determination, a sample of 210 employees was selected via simple random sampling to ensure representativeness and reduce sampling bias. The sample size calculation considered a 95% confidence level, a 5% margin of error, and a population proportion of 0.5, yielding the following formula:

$$n = \frac{(Z^2 \times p \times q)}{d^2} \bigg/ \left(1 + \frac{1}{N} \left(\frac{(Z^2 \times p \times q)}{d^2} - 1 \right) \right)$$

$$Z = 1.96, p = 0.5, q = 0.5, d = 0.05, \text{ and } N = 700.$$

Measures

Data for this study were gathered using a structured questionnaire adapted from Jahan et al. (15), consisting of 19 items systematically organized into four key constructs: Motivation and Incentives (5 items), Employee Participation (5 items), Employee Productivity (5 items), and Employee Performance (4 items). The Motivation and Incentives section (items 1–5) captured both financial and non-financial motivators, while Employee Participation (items 6–10) assessed respondents' active involvement in organizational activities. Employee Productivity (items 11–15) evaluated output and efficiency, and Employee Performance (items 16–19) measured the quality and effectiveness of task execution. Each item was rated on a 5-point Likert scale, ranging from "Strongly Agree" to "Strongly Disagree," providing a balanced and versatile measure that accommodates a range of attitudes and encourages higher response rates by allowing for a neutral option. To further enhance participation and ensure confidentiality, all respondents received an introductory letter outlining the study's purpose and assuring them of their anonymity, thereby fostering honest and unbiased responses.

Data Collection

The questionnaire was distributed in person to the selected employees, ensuring direct engagement and higher response accuracy. Before final deployment, the questionnaire underwent multiple revisions and pilot testing to minimize ambiguity and improve clarity. Content validity was established through expert review by five academic specialists who evaluated the questionnaire for relevance, clarity, and appropriateness of language.

Validity and Reliability

The study's measurement model demonstrates robust validity and reliability, ensuring confidence in the results. Content validity was established through an expert panel review, which guided the refinement of questionnaire items to accurately capture the intended constructs. Convergent validity was confirmed, as all constructs achieved Average Variance Extracted (AVE) values above the recommended 0.5 threshold (ranging from 0.524 to 0.661). Discriminant validity was also satisfied, with cross-loading analyses showing that each item loaded more strongly on its designated construct than on others. Reliability was rigorously assessed using both Cronbach's alpha and Composite Reliability (CR), with alpha values between 0.702 and 0.824 and CR values from 0.777 to 0.885, all exceeding accepted benchmarks. Collectively, these results attest to the sound psychometric properties of the measurement model, providing a solid foundation for subsequent structural analyses.

Statistical Analysis

Data analysis was conducted using SPSS version 26 and Partial Least Squares (PLS) software. Descriptive statistics (mean, median, mode, standard deviation, and variance) were used to summarize demographic characteristics and variable distributions.

Inferential statistics included:

- **One-sample t-tests** to assess the status of variables against theoretical means.
- **Confirmatory Factor Analysis (CFA)** to validate the measurement model.
- **Kolmogorov-Smirnov test** to assess data normality; parametric tests were used for normally distributed data, and non-parametric tests otherwise.
- **Structural Equation Modeling (SEM)** via PLS to test hypotheses and examine direct and mediating relationships among variables.

This rigorous methodological approach ensures the reliability and validity of findings, enabling robust conclusions regarding the interplay of motivation, incentives, employee performance, participation, and productivity in Shiraz's public sector.

RESULTS

Demographic Characteristics of Participants

The study sample consisted of 210 employees from governmental organizations in Shiraz, selected through simple random sampling from a population of approximately 700 employees. **Table 1** presents the demographic profile of respondents. The majority were male (67.8%, n=142) and married (83.7%, n=172). The age distribution showed that most participants were between 31-40 years (37.6%, n=79), followed closely by those aged 41-50 years (35.7%, n=75). Regarding educational qualifications, the majority held bachelor's degrees (57.6%, n=121), with master's degree holders constituting the second largest group (25.7%, n=54). This demographic distribution ensures a comprehensive representation of the public sector workforce in Shiraz.

Table 1: Demographic Characteristics of Respondents (n=210)

Variable	Category	Frequency	Percentage (%)
Gender	Male	142	67.8
	Female	68	32.2
Marital Status	Married	172	83.7
	Single	36	16.3
Age Group	20-30 years	21	10.1
	31-40 years	79	37.6
	41-50 years	75	35.7
	51-60 years	35	16.6
Education Level	Diploma	9	4.3
	Associate Degree	19	9.0
	Bachelor's Degree	121	57.6
	Master's Degree	54	25.7
	Doctorate	8	3.8

Descriptive Statistics of Research Variables

Table 2 presents the descriptive statistics for the main research variables. The mean scores indicate that participants generally perceived all constructs at moderate to high levels. Employee Participation showed the highest mean score ($M=4.24$, $SD=0.620$), followed by Employee Productivity ($M=4.18$, $SD=0.798$) and Employee Performance ($M=4.13$, $SD=0.953$). Motivation and Incentives had the lowest mean score ($M=3.55$, $SD=0.960$) among the variables, though still above the midpoint of the scale. The standard deviations reflect acceptable variability within responses, with all variables showing minimum values of 2 or 3 and maximum values of 5 on the 5-point Likert scale.

Table 2: Descriptive Statistics of Research Variables

Variable	Mean	Median	Mode	Std. Deviation	Minimum	Maximum
Motivation & Incentives	3.55	4	4	0.960	2	5
Employee Participation	4.24	4	4	0.620	3	5
Employee Productivity	4.18	4	4	0.798	2	5
Employee Performance	4.13	5	4	0.953	2	5

Before hypothesis testing, the measurement model was rigorously evaluated to ensure construct validity and reliability. The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity confirmed sampling adequacy and factorability of data for all constructs (**Table 3**). All KMO values exceeded the recommended threshold of 0.6, ranging from 0.763 to 0.889, and Bartlett's test was significant ($p<0.001$) for all constructs, indicating the appropriateness of factor analysis.

Table 3: Sampling Adequacy and Sphericity Tests

Construct	KMO	Bartlett's Test (p-value)
Motivation & Incentives	0.811	<0.001
Employee Participation	0.763	<0.001
Employee Productivity	0.835	<0.001
Employee Performance	0.889	<0.001

Convergent validity was assessed via Average Variance Extracted (AVE), with all constructs exceeding the recommended threshold of 0.5: Motivation and Incentives (0.524), Employee Productivity (0.660), Employee Performance (0.661), and Employee Participation (0.570). Discriminant validity was verified using cross-loading criteria, confirming that each item loaded more strongly on its intended construct than on others (**Table 4**).

Table 4: Discriminant Validity Assessment (Cross-Loadings)

	1	2	3	4
Motivation & Incentives	0.878			
Employee Productivity	0.585	0.848		
Employee Performance	0.355	0.703	0.813	
Employee Participation	0.689	0.714	0.422	0.755

The reliability of the measurement instrument was assessed using Cronbach's Alpha, Composite Reliability (CR), and Rho_A for each construct. All constructs demonstrated satisfactory reliability, with Cronbach's Alpha values ranging from 0.702 to 0.824, CR values

from 0.777 to 0.885, and Rho_A values from 0.772 to 0.889. These results indicate that the items within each construct are internally consistent and the instrument is reliable for measuring motivation and incentives, employee participation, employee productivity, and employee performance (**Table 5**).

Table 5: Reliability Statistics

Construct	Number of Items	Cronbach's Alpha	Composite Reliability (CR)	Rho_A
Motivation & Incentives	5	0.725	0.801	0.801
Employee Participation	5	0.760	0.843	0.889
Employee Productivity	5	0.702	0.777	0.772
Employee Performance	4	0.824	0.885	0.844

Structural Model Analysis

The structural model was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized relationships. The results revealed several significant findings:

Direct Effects

The findings from the analysis reveal robust and statistically significant direct effects of motivation and incentives on key organizational outcomes within governmental settings. Specifically, higher levels of motivation and incentives are strongly associated with increased employee participation ($\beta = 0.412$, $p < 0.001$), enhanced productivity ($\beta = 0.378$, $p < 0.001$), and improved performance ($\beta = 0.355$, $p < 0.001$). Furthermore, employee performance itself emerges as a critical driver, positively influencing both participation ($\beta = 0.277$, $p < 0.001$) and productivity ($\beta = 0.703$, $p < 0.001$). These results underscore the pivotal role of motivational strategies and performance management in fostering a more engaged and productive workforce.

Beyond these direct relationships, the analysis also highlights the significant mediating role of employee performance. The indirect effects demonstrate that motivation and incentives not only influence participation and productivity directly but also exert additional impact through the enhancement of employee performance. Specifically, employee performance mediates the relationship between motivation/incentives and participation ($\beta = 0.098$, $p < 0.01$), as well as between motivation/incentives and productivity ($\beta = 0.249$, $p < 0.001$). These findings suggest that interventions aimed at boosting motivation and incentives are most effective when they simultaneously cultivate employee performance, thereby amplifying positive organizational outcomes.

Mediating Effects

The results of the mediation analysis provide compelling evidence for the pivotal role of employee performance as a mediator in the relationships between motivation and incentives, and key organizational outcomes. Specifically, the indirect effect of motivation and incentives on employee participation through employee performance was found to be significant ($\beta = 0.098$, $p < 0.01$). This finding indicates that motivation and incentives not only directly enhance

participation but also do so indirectly by first improving employee performance, which in turn fosters greater participation within governmental organizations.

Similarly, employee performance significantly mediates the relationship between motivation and incentives and employee productivity ($\beta = 0.249$, $p < 0.001$). This substantial indirect effect highlights that the pathway from motivation and incentives to increased productivity is strengthened when employee performance is elevated. Together, these findings underscore the importance of targeting employee performance in organizational strategies that efforts to motivate and incentivize staff will yield the greatest benefits when they are designed to also enhance performance, thereby maximizing both participation and productivity across the workforce.

Model Fit Assessment

The structural model demonstrated a good fit with R^2 values of 0.492 for Employee Participation and 0.614 for Employee Productivity, indicating that the model explains 49.2% and 61.4% of the variance in these constructs, respectively. The Q^2 values for both dependent variables exceeded zero (Employee Participation = 0.267, Employee Productivity = 0.389), confirming the model's predictive relevance. These findings collectively support all hypothesized relationships in the research model, highlighting the importance of motivation and incentives in enhancing employee participation and productivity, both directly and indirectly through improved employee performance in Shiraz's governmental organizations.

Discussion

The present study provides compelling evidence for the significant role of motivation and incentives in promoting employee participation and productivity in governmental organizations in Shiraz, with employee performance serving as a crucial mediating factor. These findings are consistent with a robust body of international and Iranian research, underscoring the centrality of human resource management in public sector effectiveness (2, 4, 6, 9). The demographic profile of the predominantly middle-aged, married, and highly educated employees is the contemporary structure of Iran's public sector workforce. This demographic composition is in line with recent studies emphasizing the growing educational attainment and professionalization of public employees in the region (5, 8). From a methodological perspective, the measurement instrument demonstrated excellent psychometric properties. Both convergent and discriminant validity were confirmed (16), and the reliability indices (Cronbach's alpha and composite reliability) exceeded recommended thresholds (17), ensuring the robustness of the findings.

The results of the structural model analysis revealed that motivation and incentives have a direct and positive impact on employee participation ($\beta = 0.412$, $p < 0.001$), productivity ($\beta = 0.378$, $p < 0.001$), and performance ($\beta = 0.355$, $p < 0.001$). Furthermore, employee performance significantly mediates the relationship between motivation/incentives and both participation ($\beta = 0.098$, $p < 0.01$) and productivity ($\beta = 0.249$, $p < 0.001$). These findings align with Herzberg's Two-Factor Theory, which highlights the importance of both hygiene and motivational factors for workplace engagement (6), and with Deci and Ryan's Self-Determination Theory, which emphasizes the role of intrinsic and extrinsic motivators in driving performance (9). The model's explanatory power was substantial, accounting for 49.2%

of the variance in employee participation and 61.4% in productivity. These results are comparable to those reported in similar public sector studies (4, 13, 14), reinforcing the model's validity and its potential applicability in other governmental contexts.

Practically, these findings suggest that public sector managers in Shiraz-and by extension, similar contexts-should adopt comprehensive motivational strategies that integrate both financial and non-financial incentives. Recognition, opportunities for professional development, participative decision-making, and the creation of a supportive work environment are likely to substantially enhance employee engagement and organizational productivity (11, 12). Despite the strengths of this research, several limitations should be acknowledged. The cross-sectional design limits causal inference, and the focus on Shiraz's governmental organizations may restrict generalizability. Future research should employ longitudinal designs, expand to other regions and sectors, and explore additional mediators such as organizational culture or leadership style.

Conclusion

This study demonstrates that motivation and incentives are fundamental drivers of employee participation and productivity in public sector organizations, with employee performance serving as a key mediating factor. The validated measurement and structural models reinforce the reliability of these findings, offering both academic and practical value. For policymakers and managers, the results highlight the importance of comprehensive motivational strategies that blend financial rewards with opportunities for growth, participatory management, and recognition. Such evidence-based approaches are essential for cultivating a committed, high-performing workforce and improving organizational effectiveness in the public sector, especially as demands for accountability and service quality continue to rise.

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