

# The impact of job satisfaction on administrative creativity in the Yemeni telecommunications sector



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**Abstract** This study aimed to analyze the impact of job satisfaction on administrative creativity in the Yemeni telecommunications sector. The researchers employed the descriptive-analytical method and used a questionnaire as a tool for collecting field data. The study population comprised 4,266 individuals, and a stratified random sample of 352 participants was selected. The results indicated that the level of job satisfaction in the Yemeni telecommunications sector, from the employees' perspective, was moderate, with a mean score of 4.34, a standard deviation of 0.88, and a percentage of 62%. Conversely, the level of administrative creativity was high, with a mean score of 4.83, a standard deviation of 0.71, and a percentage of 69%. Furthermore, the findings revealed a statistically significant effect at the level of ( $\alpha \leq 0.05$ ) of job satisfaction and its various dimensions (relationships with colleagues and supervisors, satisfaction with wages, work environment, and health insurance) on administrative creativity.

**Keywords:** work environment, empowerment, innovation, motivation, telecom sector

## 1. Introduction

The telecommunications sector in Yemen faces growing challenges due to rapid technological advancements, increasing competition, and shifting customer expectations at both local and international levels. As a cornerstone of the national economy, this sector plays a vital role in driving economic growth and providing diverse employment opportunities. However, the pressures arising from the dynamic business environment necessitate the adoption of innovative management strategies to ensure sustainability and enhance competitiveness.

Within this context, managerial creativity emerges as a pivotal factor in achieving institutional leadership and improving organizational performance. Defined as the ability to generate novel ideas and solutions to enhance processes and achieve objectives effectively, managerial creativity depends heavily on fostering employee capabilities and motivating them to innovate. Research has shown that such creativity thrives in a supportive work environment that promotes job satisfaction—one of the primary drivers of innovation and performance (Abdulhaleem & Nasser, 2019).

Job satisfaction, in turn, plays a critical role in shaping employees' motivation and creative output. Satisfied employees—both psychologically and professionally—are more likely to contribute meaningfully to institutional goals, thereby enhancing the organization's competitive edge (Saifi & Meziane, 2019). However, in Yemen's telecommunications sector, several factors have contributed to a decline in performance, including limited training programs, economic instability, and the ongoing conflict. Reports from 2022 and 2023 highlight a noticeable deterioration in service quality, particularly in telecommunications and internet provision, which has been linked to low levels of employee satisfaction (Al-Bishiri, 2021; Rajeh, 2022).

Interviews conducted with sector professionals further revealed that job satisfaction among employees does not exceed 65%, underscoring the urgent need to improve the work environment and strengthen the connection between satisfaction and creativity. While previous studies ...have examined job satisfaction and managerial creativity independently or in different contexts (Ismail, 2014; Mahdi et al., 2021; Güven et al., 2021; Sheikh & Naseeb, 2017; Noaman, 2017; Masouda & Huda, 2017; Shtiewi, 2016), the relationship between these two dimensions within Yemen's telecommunications sector remains underexplored.

Accordingly, this study seeks to address this gap by analyzing the impact of job satisfaction on managerial creativity in Yemen's telecommunications sector. It aims to develop a practical model that enhances institutional performance and supports the sector in overcoming current challenges. In pursuit of this objective, the study addresses the following key questions: To what extent does job satisfaction influence managerial creativity? Which dimensions of satisfaction contribute most significantly to creative performance? And how can organizations leverage this relationship to foster innovation and resilience?

## 2. The Main Research Question and Study Objectives

This study seeks to explore the impact of job satisfaction on managerial creativity within Yemen's telecommunications sector. The central research question guiding this investigation is:



What is the impact of job satisfaction on managerial creativity in Yemen's telecommunications sector?

To address this overarching question, the study examines the following aspects:

- The overall level of job satisfaction among employees in the telecommunications sector.
- The extent of managerial creativity demonstrated within the sector.
- The influence of specific dimensions of job satisfaction—namely relationships with colleagues and supervisors, satisfaction with salary and bonuses, the work environment, and health insurance—on managerial creativity.

Based on these inquiries, the study aims to achieve the following objectives:

- To assess the level of job satisfaction among employees in Yemen's telecommunications sector.
- To evaluate the degree of managerial creativity within the sector.
- To analyze the impact of job satisfaction dimensions on managerial creativity, providing insights into which factors most significantly contribute to creative performance.

### 2.1. Hypotheses of the study

Main Hypothesis: There is no statistically significant effect of job satisfaction on managerial creativity. Four subhypotheses emerge from this main hypothesis as follows:

3.1 First Hypothesis: There is no statistically significant effect of the relationship between supervisors and colleagues on managerial creativity.

3.2 Second Hypothesis: There is no statistically significant effect of salary satisfaction on managerial creativity.

3.3 Third Hypothesis: There is no statistically significant effect of the work environment on managerial creativity.

3.4 Fourth Hypothesis: There is no statistically significant effect of health insurance on managerial creativity.

## 3. Methodology

The study adopted a descriptive analytical approach to examine the impact of job satisfaction on administrative creativity, aiming to understand and analyze the relationships between variables and provide conclusions that support organizational development in Yemen's telecommunications sector.

The unit of analysis comprised employees working in five major telecommunications entities in the Republic of Yemen: the Public Telecommunications Corporation (Yemen Telecom), the Yemeni International Telecommunications Company (Tele Yemen), Yemen Mobile Company, Sabafon Company, and YOU Company. The study population included all employees occupying administrative and operational roles—namely general managers, deputy general managers, department managers, deputy department managers, heads of departments, and staff—across the main centers of these organizations. The total population amounted to 4,266 individuals.

Given the diversity of roles and organizational structures within the sector, a stratified random sampling technique was employed to ensure proportional representation. The sample size was determined using Stephen Thompson's equation, which indicated that a minimum of 352 participants would be statistically sufficient. To enhance representativeness and ensure broader coverage, 450 questionnaires were distributed through both electronic means (social media and SMS) and physical copies. Following data collection, 400 questionnaires were retrieved, of which 48 were excluded due to incomplete or invalid responses. The final sample comprised 352 valid questionnaires, representing a 100% usable response rate.

## 4. Results

To address the main research question regarding the impact of job satisfaction on administrative creativity in Yemen's telecommunications sector, the study first assessed the overall level of job satisfaction from the employees' perspective. The analysis focused on four key dimensions: health insurance, relationships with colleagues and supervisors, the work environment, and salary satisfaction. Descriptive statistics, including means, standard deviations, and satisfaction percentages, were calculated to determine the level of satisfaction across these dimensions.

As shown in Table 1, health insurance ranked highest among the dimensions, with a mean of 4.96, a standard deviation of 1.01, and a satisfaction percentage of 70.86%, indicating a high level of satisfaction. Relationships with colleagues and supervisors followed, with a mean of 4.71 and a satisfaction percentage of 67.95%, also reflecting a high level. The work environment received a moderate rating, with a mean of 4.33 and a satisfaction percentage of 61.86%. In contrast, salary satisfaction was notably low, with a mean of 3.35, a standard deviation of 1.27, and a satisfaction percentage of 47.86%. The overall job satisfaction score was moderate, with a mean of 4.34 and a satisfaction percentage of 62.00%.

These results suggest that while employees expressed high satisfaction with health insurance and interpersonal relationships, their satisfaction with salary and the work environment was considerably lower. The moderate overall satisfaction level highlights the need for targeted improvements in compensation and workplace conditions to enhance employee morale and organizational performance.

**Table 1** Shows the rankings of the dimensions of job satisfaction on the basis of the mean and relative importance.

Dimensional arrangement	The dimension	SMA	standard deviation	percentage	Availability level
2	Relationship with colleagues and superiors	4.71	0.99	67.95%	High
4	Salary Satisfaction	3.35	1.27	47.86%	Weak
3	Work environment	4.33	1.08	61.86%	Middle
1	health insurance	4.96	1.01	70.86%	High
Overall average of dimensions (Job Satisfaction)		4.34	0.88	62.00%	Middle

Continuing the analysis of job satisfaction dimensions, the study examined employee perceptions of relationships with colleagues and supervisors. This dimension received a high overall rating, with a mean of 4.71, a standard deviation of 0.99, and a satisfaction percentage of 67.29%, indicating a strong interpersonal climate within the telecommunications sector. As shown in Table 2, the highest-rated item was “The relationship between employees and their supervisors and colleagues is characterized by cooperation and respect,” with a mean of 4.84 and a satisfaction percentage of 69.14%. Similarly, the item “Employees enjoy strong camaraderie and sincere love among themselves” also scored 4.84 (69.14%), reflecting a positive and cohesive work environment. The lowest-rated item was “Senior management takes into account the human aspects of work,” which received a mean of 4.43 and a satisfaction percentage of 63.29%, suggesting that while peer relationships are strong, managerial sensitivity to personal and emotional needs may require improvement.

**Table 2** Shows the means and standard deviations of the study sample's responses to the items of the dimension: relationships with colleagues and supervisors.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
3	Employees have good relationships with their supervisors.	4.73	1.13	67.57%	High
4	Senior management takes into account the human aspects of work.	4.43	1.30	63.29%	Middle
2	The employees enjoy strong camaraderie and sincere love among themselves.	4.84	1.16	69.14%	High
1	The relationship between employees and their supervisors and colleagues is characterized by cooperation and respect.	4.84	1.06	69.14%	High
Overall average of dimension items		4.71	0.99	67.29%	عالی

These findings emphasize the importance of interpersonal relationships in fostering job satisfaction. While peer interactions are notably strong, enhancing managerial empathy and attention to human aspects could further improve the organizational climate. The study also examined employee satisfaction with salary and rewards, which emerged as the lowest-rated dimension of job satisfaction.

As shown in Table 3, the overall mean was 3.35, with a satisfaction percentage of 47.86%, indicating a general perception of inadequacy in financial compensation across the telecommunications sector.

The highest-rated item was “Senior management adopts seniority and competence criteria in the employee promotion system,” with a mean of 3.64 and a satisfaction percentage of 52%. Despite being the highest within this dimension, the score still reflects a shortfall in applying merit-based promotion practices, possibly due to the influence of non-professional criteria such as political or security considerations. The lowest-rated item was “Employees receive benefits and incentives comparable to those received by their peers in other companies,” which scored 3.10 (44.29%), highlighting a perceived gap in competitive compensation.

These findings suggest that salary structures and reward systems do not adequately reflect employees’ qualifications or the economic realities they face, leading to dissatisfaction. This aligns with Maslow’s hierarchy of needs, which emphasizes the importance of fulfilling basic financial needs to achieve satisfaction. Supporting this, Peter Drucker likened wages to vitamins—essential for employee motivation and performance.

Employee satisfaction with the work environment in Yemen’s telecommunications sector was found to be moderate. As shown in Table 4, the overall mean was 4.33, with a satisfaction percentage of 61.86%. Item scores ranged from 3.93 to 4.56, indicating variability in workplace conditions and perceptions. Employee satisfaction with the work environment in Yemen’s telecommunications sector was found to be moderate. As shown in Table 4, the overall mean was 4.33, with a standard deviation of 1.08 and a satisfaction percentage of 61.86%. Item scores ranged from 3.93 to 4.56, reflecting variability in workplace conditions and perceptions.



**Table 3** Shows the means and standard deviations of the study sample's responses to the items of the dimension: Satisfaction with Salary and Rewards.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
2	Employees receive satisfactory incentives for outstanding performance.	3.63	1.44	51.86%	Middle
1	Senior management adopts the criteria of seniority and efficiency in its employee promotion system.	3.64	1.45	52.00%	Middle
4	The salary that employees receive is commensurate with their qualifications and job experience.	3.24	1.46	46.29%	Weak
5	The incentive and reward system is fair.	3.17	1.44	45.29%	Weak
3	Workers receive wages similar to those of their colleagues in similar jobs.	3.32	1.50	47.43%	Weak
6	Employees receive benefits and incentives similar to those received by their colleagues in other companies operating in the same field.	3.10	1.48	44.29%	Weak
Overall average of dimension items		3.35	1.27	47.86%	Weak

The highest-rated item was “Working conditions, including lighting, ventilation, cleanliness, and rest areas, are appropriate to the type of work,” which scored a mean of 4.56 and a satisfaction percentage of 65.14%. This suggests that while some basic facilities are available, they may not fully meet the operational demands of the sector. Other items, such as the provision of safety elements (mean = 4.41) and managerial support for task completion (mean = 4.43), also received moderate ratings. The lowest-rated item was “Top management provides a stimulating creative climate in the internal work environment,” with a mean of 3.93 and a satisfaction percentage of 56.14%, indicating a lack of strategic emphasis on fostering innovation through environmental support.

**Table 4** Shows the means and standard deviations of the study sample's responses to the items of the work environment dimension.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
2	Top management provides the capabilities that help get the job done.	4.43	1.18	63.29%	Middle
1	Working conditions, including lighting, ventilation, cleanliness and rest, are appropriate to the type of work.	4.56	1.23	65.14%	Middle
3	Workers are provided with safety elements from occupational hazards in the work environment.	4.41	1.24	63.00%	Middle
4	Top management provides a stimulating creative climate in the internal work environment.	3.93	1.28	56.14%	Middle
Overall average of dimension items		4.33	1.08	61.86%	Middle

Employee satisfaction with the work environment in Yemen’s telecommunications sector was found to be moderate. As shown in Table 4, the overall mean was 4.33, with a standard deviation of 1.08 and a satisfaction percentage of 61.86%. Item scores ranged from 3.93 to 4.56, reflecting variability in workplace conditions and perceptions. The highest-rated item was “Working conditions, including lighting, ventilation, cleanliness, and rest areas, are appropriate to the type of work,” which scored a mean of 4.56 and a satisfaction percentage of 65.14%. This suggests that while some basic facilities are available, they may not fully meet the operational demands of the sector.

Other items, such as the provision of safety elements (mean = 4.41) and managerial support for task completion (mean = 4.43), also received moderate ratings. The lowest-rated item was “Top management provides a stimulating creative climate in the internal work environment,” with a mean of 3.93 and a satisfaction percentage of 56.14%, indicating a lack of strategic emphasis on fostering innovation through environmental support. Employee satisfaction with health insurance in Yemen’s telecommunications sector was relatively high. As shown in Table 5, the overall mean was 4.96, with a standard deviation of 1.01 and a satisfaction percentage of 70.86%, indicating a generally positive perception of the health benefits provided.

The highest-rated item was “Health insurance is one of the incentives for job retention,” which scored a mean of 5.31 and a satisfaction percentage of 75.86%. This reflects its role as a key motivator for continued employment and enhanced job satisfaction. In contrast, the lowest-rated item was “Health insurance is similar to what employees in competing companies receive,” with a mean of 4.25 and a satisfaction percentage of 60.71%, suggesting that while internal coverage is appreciated, it may lag behind industry standards. Other items, such as coverage for employees and their families and the availability of treatment options, also received favorable ratings.



**Table 5** Shows the means and standard deviations of the study sample's responses to the items of the health insurance dimension.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
4	Senior management provides adequate health insurance to its employees and their dependents.	4.95	1.29	70.71%	High
2	Health insurance contributes to job security for workers.	5.19	1.21	74.14%	High
1	Health insurance is one of the incentives and motivations to stick with the job.	5.31	1.10	75.86%	High
3	The health insurance benefit encourages employees to put in more effort to be creative and excel in their performance.	5.11	1.14	73.00%	High
5	The health insurance that employees receive is similar to that of their colleagues who work in competing companies.	4.25	1.44	60.71%	Middle
	Overall average of dimension items	4.96	1.01	70.86%	High

These findings indicate that health insurance contributes significantly to employees' sense of job security and motivation, even though comparative gaps remain. This dimension stands out as a strength within the broader context of job satisfaction, which remains moderate overall due to disparities across other dimensions. The study also explored the level of managerial creativity from the perspective of employees in Yemen's telecommunications sector, beginning with the dimension of mental flexibility. As shown in Table 6, this dimension received a high overall rating, with a mean of 4.98, a standard deviation of 0.73, and a satisfaction percentage of 71.14%, indicating that employees demonstrate strong cognitive adaptability and problem-solving capabilities.

The highest-rated item was "Workers deal with the problems they face in a variety of ways," which scored a mean of 5.10 and a satisfaction percentage of 72.86%. This reflects a proactive approach to addressing challenges and suggests that employees are equipped with diverse strategies for navigating operational issues. Other items, such as seeking new methods (mean = 5.06) and possessing multiple skills (mean = 5.03), further reinforce the presence of mental agility. The lowest-rated item was "Employees adapt to new decisions at work," with a mean of 4.76 and a satisfaction percentage of 68.00%, indicating some hesitation in embracing change—possibly due to uncertainty or lack of clarity in decision-making processes.

**Table 6** Shows the means and standard deviations of the study sample's responses to the item of the dimension: mental flexibility.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
3	Workers have multiple skills that enable them to work in multiple jobs.	5.03	0.94	71.86%	High
2	Workers seek new, more effective ways to accomplish their assigned tasks.	5.06	0.86	72.29%	High
1	Workers deal with the problems they face in a variety of ways.	5.10	0.83	72.86%	High
4	Employees have high flexibility to transfer or acquire any new idea.	4.94	0.99	70.57%	High
5	Employees adapt to new decisions at work.	4.76	1.01	68.00%	High
	Overall average of dimension items	4.98	0.73	71.14%	High

These findings suggest that mental flexibility is a well-developed trait among employees in the sector, contributing positively to managerial creativity. They also imply that organizations are making efforts to issue clear and strategically aligned decisions, which may help mitigate resistance and enhance adaptability over time.

As part of the assessment of managerial creativity, the study examined the dimension of intellectual fluency among employees in Yemen's telecommunications sector. Results indicate consistently high ratings across all items, with an overall mean of 5.00, a standard deviation of 0.83, and a satisfaction percentage of 71.43%, as shown in Table 7.

The highest-rated items were "Employees have the ability to spontaneously and easily provide alternatives to improve and develop work" and "Workers have a great ability to provide multiple and quick solutions to any problem that arises at work within a short period of time," both scoring a mean of 5.03 and a satisfaction percentage of 71.86%. These results reflect a high level of adaptability and proactive engagement in enhancing operational efficiency. The lowest-rated item was "Workers try to discover weaknesses and shortcomings and work to address them," with a mean of 4.93 and a satisfaction percentage of 70.43%, indicating a steady commitment to self-assessment and continuous improvement.



**Table 7** Shows the means and standard deviations of the study sample's responses to the item of the dimension: intellectual fluency.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
2	The workers have a great ability to provide multiple and quick solutions to any problem that arises at work within a short period of time.	5.03	0.96	71.86%	High
1	Employees have the ability to spontaneously and easily provide alternatives to improve and develop work.	5.03	0.94	71.86%	High
3	Employees quickly provide ideas, alternatives and solutions to improve work processes.	5.01	0.89	71.57%	High
4	Workers try to discover weaknesses and shortcomings and work to address them.	4.93	0.91	70.43%	High
Overall average of dimension items		5.00	0.83	71.43%	High

These findings highlight employees’ cognitive agility and their capacity to generate diverse, actionable ideas that support organizational innovation and growth. Intellectual fluency appears to be a key contributor to the sector’s creative performance, reinforcing the importance of fostering ideation and flexibility in managerial roles.

The study also assessed employees’ problem-solving and perception abilities as part of managerial creativity. As shown in Table 8, employees in Yemen’s telecommunications sector demonstrated a high level of competence in this dimension, with item means ranging from 4.73 to 5.06 and satisfaction percentages between 67.57% and 72.29%. The overall mean was 4.88, with a standard deviation of 0.81 and a satisfaction percentage of 69.71%.

The highest-rated item was “Employees take the initiative to offer solutions to problems,” which scored a mean of 5.06 and a satisfaction percentage of 72.29%. This reflects a proactive mindset and a strong sense of ownership in addressing workplace challenges. The lowest-rated item was “Employees solve problems without referring to superiors unless necessary,” with a mean of 4.73 and a satisfaction percentage of 67.57%, indicating a notable degree of self-reliance and confidence in decision-making.

**Table 8** Shows the means and standard deviations of the study sample's responses to the items of the dimension: problem-solving ability and perception ability.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
3	Employees anticipate problems that may hinder performance.	4.83	0.97	69.00%	High
1	Employees take the initiative to provide solutions to problems they encounter in the work environment.	5.06	0.87	72.29%	High
4	Employees solve their problems themselves and only resort to their superiors when necessary.	4.73	1.15	67.57%	High
2	Employees have the skills to analyze problems and choose appropriate alternatives to solve them.	4.89	0.96	69.86%	High
Overall average of dimension items		4.88	0.81	69.71%	High

These findings suggest that employees possess a well-developed ability to perceive issues and generate diverse, effective solutions. This contributes to operational resilience and supports innovation within the sector, reinforcing the importance of empowering employees to act independently and creatively in problem-solving contexts.

The final dimension of managerial creativity assessed in this study was risk acceptance. As shown in Table 9, employees in Yemen’s telecommunications sector demonstrated a moderate level of risk acceptance, with item means ranging from 4.10 to 4.55 and satisfaction percentages between 58.57% and 65.00%. The overall mean was 4.44, with a standard deviation of 0.98 and a satisfaction percentage of 63.43%.

The highest-rated item was “Employees have the courage to undertake creative work and bear its consequences,” which scored a mean of 4.55 and a satisfaction percentage of 65.00%. This reflects a willingness to engage in innovative tasks despite potential challenges. In contrast, the lowest-rated item was “Employees have the audacity to express their opinions freely,” with a mean of 4.10 and a satisfaction percentage of 58.57%, indicating a degree of hesitation in voicing ideas openly.

These results suggest that while employees show readiness to take responsibility for their creative actions, they remain cautious in expressing dissent or unconventional views—likely due to concerns about managerial reactions or institutional constraints. This moderate level of risk acceptance highlights the need for a more supportive organizational climate that encourages bold thinking and psychological safety.



**Table 9** Shows the means and standard deviations of the study sample's responses to the items of the dimension Authenticity.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
1	Employees bring new ideas to the workplace.	5.10	0.86	72.86%	High
4	Top management tries to implement new methods of work to solve any problem facing its employees.	4.47	1.20	63.86%	middle
2	Employees leverage their personal relationships to achieve business goals.	4.97	1.00	71.00%	High
3	Employees use modern technologies to constantly improve their performance.	4.95	0.96	70.71%	High
Overall average of dimension items		4.87	0.78	69.57%	High

The dimension of risk acceptance was evaluated as part of managerial creativity, and results indicate a moderate level among employees in Yemen’s telecommunications sector. As shown in Table 10, item means ranged from 4.10 to 4.55, with satisfaction percentages between 58.57% and 65.00%. The overall mean was 4.44, with a standard deviation of 0.98 and a satisfaction percentage of 63.43%.

The highest-rated item was “Employees have the courage to undertake creative work and bear its consequences,” scoring 4.55 (65.00%), which reflects a willingness to engage in innovative tasks despite potential challenges. Conversely, the lowest-rated item was “Employees have the audacity to express their opinions freely,” with a mean of 4.10 and a satisfaction percentage of 58.57%, suggesting a degree of hesitation in voicing unconventional views. Another item, “Employees take responsibility for the outcomes of their creative ideas,” scored 4.66 (66.57%), indicating a sense of ownership and accountability.

**Table 10** Shows the means and standard deviations of the study sample's responses to the items of the dimension Risk Acceptance.

Dimensional arrangement	Paragraph	SMA	standard deviation	percentage	Availability level
5	Employees have the courage to express their opinions freely and without fear even if they contradict their superiors.	4.10	1.33	58.57%	middle
4	Employees are willing to accept calculated risks in order to achieve important business goals.	4.50	1.15	64.29%	middle
2	Workers are keen to introduce new ways of doing work even though they know the risks involved.	4.55	1.10	65.00%	middle
1	Workers have the courage to do creative work and take responsibility for the results.	4.55	1.08	65.00%	middle
3	Top management allocates sufficient funds to implement and pursue high-risk ideas.	4.51	1.10	64.43%	middle
Overall average of dimension items		4.44	0.98	63.43%	middle

These findings suggest that while employees are prepared to take responsibility for their creative actions, they remain cautious in expressing dissent or unconventional ideas—likely due to concerns about managerial reactions or institutional constraints. This moderate level of risk acceptance underscores the need for a more psychologically safe and supportive organizational climate that encourages bold thinking and open dialogue.

To summarize the findings related to the second research question—“What is the level of administrative creativity from the employees' perspective in the telecommunications sector?”—the study compiled the results of all creativity dimensions. As shown in Table 11, the highest-rated dimension was intellectual fluency, followed closely by mental flexibility, problem-solving and perception ability, originality, and finally risk acceptance, which was rated at a moderate level.

The overall level of administrative creativity was high, with a mean of 4.83, a standard deviation of 0.71, and a satisfaction percentage of 69.00%. These results reflect employees’ strong ability to generate ideas, adapt to challenges, and improve performance. However, the moderate rating for risk acceptance suggests some reluctance to engage in bold or unconventional actions, likely due to concerns about potential consequences or institutional constraints.

In addition to descriptive analysis, the study examined the impact of job satisfaction on administrative creativity through a series of statistical tests. Contrary to the initial null hypothesis—which posited no statistically significant effect at the 0.05 level—the results revealed meaningful relationships between several dimensions of job satisfaction and administrative creativity. Specifically, the dimensions of relationships with supervisors and colleagues, satisfaction with wages and rewards, and health insurance all demonstrated statistically significant effects. These findings indicate that improvements in these areas are associated with enhanced creative performance among employees.



**Table 11** Shows the means and standard deviations of the average responses of the study sample on the dimensions of the second axis (administrative creativity) and the overall mean of the axis.

Dimensional arrangement	The dimension	SMA	standard deviation	percentage	Availability level
2	Golden Flexibility	4.98	0.73	71.14%	High
1	Intellectual Fluency	5.00	0.83	71.43%	High
3	Ability to perceive and solve problems	4.88	0.81	69.71%	High
4	Authenticity	4.87	0.78	69.57%	High
5	Accepting Risk	4.44	0.98	63.43%	middle
Overall average of the dimensions of (administrative creativity)		4.83	0.71	69.00%	High

Consequently, the null hypothesis was rejected, and the alternative hypothesis was accepted, confirming that job satisfaction plays a critical role in fostering administrative creativity within the Yemeni telecommunications sector. To assess the first sub hypothesis— “There is no statistically significant effect at the level of  $\alpha \leq 0.05$  of the relationship with supervisors and colleagues on managerial creativity in the Yemeni telecommunications sector”—the researcher applied simple linear regression analysis. The independent variable was the quality of relationships with supervisors and colleagues, and the dependent variable was administrative creativity.

As shown in Table 12, the analysis revealed a statistically significant effect. The correlation coefficient was  $R = 0.461$ , and the coefficient of determination  $R^2 = 0.213$ , indicating that 21.3% of the variance in administrative creativity can be explained by interpersonal relationships within the organization. The regression coefficient  $\beta = 0.329$ , with a t-value of 9.722 and a significance level of  $p < 0.001$ , confirms the strength and reliability of this relationship. The F-value of 94.526 further supports the model’s overall significance.

**Table 12** Shows the simple linear regression coefficient between the independent variable (relationship with supervisors and colleagues) and the dependent variable (administrative creativity).

Dependent variable: Administrative creativity							
Independent variable	Model summary		ANOVA test results		) Regression coefficient and test resultsT(		
Satisfaction with wages and rewards	Correlation lab R	The coefficient of determination R2 –	value (F)	Significance level Sig.	Degree of influenceBeta	value (T)	Significance level Sig.
	0.389	0.152	62.585	0.000	0.216	7.911	0.000

These findings confirm a significant positive effect of relationships with supervisors and colleagues on administrative creativity. A 100% improvement in interpersonal relationships is associated with a 32.9% increase in creative performance. Accordingly, the null hypothesis was rejected, and the alternative hypothesis was accepted, affirming that supportive and respectful workplace relationships play a pivotal role in fostering innovation and creativity among employees.

To examine the second sub hypothesis— “There is no statistically significant effect at the level of  $\alpha \leq 0.05$  of job satisfaction regarding wages and rewards on administrative creativity in the Yemeni telecommunications sector”—the researcher applied simple linear regression analysis. The independent variable was job satisfaction related to wages and rewards, and the dependent variable was administrative creativity.

As shown in Table 13, the analysis revealed a statistically significant relationship. The correlation coefficient was  $R = 0.389$ , and the coefficient of determination  $R^2 = 0.152$ , indicating that 15.2% of the variation in administrative creativity can be explained by employees’ satisfaction with their financial compensation. The regression coefficient  $\beta = 0.216$ , with a t-value of 7.911 and a significance level of  $p < 0.001$ , confirms the strength of this effect. The F-value of 62.585 further supports the model’s overall significance.

**Table 13** Shows the simple linear regression coefficient between the independent variable (job satisfaction with wages and rewards) and the dependent variable (administrative creativity).

Dependent variable: Administrative creativity							
Independent variable	Model summary		ANOVA test results		( Regression coefficient and test resultsT)		
Relationship with superiors and colleagues	Correlation lab R	The coefficient of determination R2 –	value (F)	Significance level Sig.	Degree of influenceBeta	value (T)	Significance level Sig.
	0.461	0.213	94,526	0.000	0.329	9.722	0.000



These findings confirm a significant positive effect of wage and reward satisfaction on administrative creativity. A 100% improvement in financial compensation is associated with a 21.6% increase in creative performance. Accordingly, the null hypothesis was rejected, and the alternative hypothesis was accepted. This outcome aligns with the findings of Ben Rejem (2022), who emphasized the role of financial incentives in fostering innovation and enhancing employee performance.

To test the third sub hypothesis— “There is no statistically significant effect at the level of  $\alpha \leq 0.05$  of the work environment on administrative creativity in the Yemeni telecommunications sector”—the researcher applied simple linear regression analysis. The independent variable was job satisfaction with the work environment, and the dependent variable was administrative creativity.

As shown in Table 14, the analysis revealed a statistically significant relationship. The correlation coefficient was  $R = 0.369$ , and the coefficient of determination  $R^2 = 0.136$ , indicating that 13.6% of the variation in administrative creativity can be attributed to the quality of the work environment. The regression coefficient  $\beta = 0.242$ , with a t-value of 7.427 and a significance level of  $p < 0.001$ , confirms the strength of this effect. The F-value of 55.166 further supports the model’s overall significance.

**Table 14** Shows the simple linear regression coefficient between the independent variable (job satisfaction with the work environment) and the dependent variable (administrative creativity).

Independent variable	Model summary		ANOVA test results		Regression coefficient and test results(T)		
	Correlation	The coefficient of determination	value	Significance level	Degree of influenceBeta	value	Significance level
health insurance	R	R2 -	(F)	Sig.		(T)	Sig.
	0.417	0.174	73.656	0.000	0.293	8.582	0.000

These findings confirm a significant positive effect of the work environment on administrative creativity. A 100% improvement in workplace conditions is associated with a 24.2% increase in creative performance. Accordingly, the null hypothesis was rejected, and the alternative hypothesis was accepted. This result is consistent with the findings of Ben Rejem (2022), who emphasized the importance of environmental factors in enhancing innovation and employee engagement.

To test the fourth sub hypothesis— “There is no statistically significant effect at the level of  $\alpha \leq 0.05$  of health insurance on administrative creativity in the Yemeni telecommunications sector”—the researcher applied simple linear regression analysis. The independent variable was employee satisfaction with health insurance, and the dependent variable was administrative creativity.

As shown in Table 15, the analysis revealed a statistically significant relationship. The correlation coefficient was  $R = 0.417$ , and the coefficient of determination  $R^2 = 0.174$ , indicating that 17.4% of the variation in administrative creativity can be attributed to the quality and availability of health insurance benefits. The regression coefficient  $\beta = 0.293$ , with a t-value of 8.582 and a significance level of  $p < 0.001$ , confirms the strength of this effect. The F-value of 73.656 further supports the model’s overall significance.

**Table 15** Simple linear regression coefficients between the independent variable (health insurance) and the dependent variable (administrative creativity).

Independent variable	Model summary		ANOVA test results		Regression coefficient and test results(T)		
	Correlation	The coefficient of determination	value	Significance level	Degree of influenceBeta	value	Significance level
Work environment	R	R2 -	(F)	Sig.		(T)	Sig.
	0.369	0.136	55.166	0.000	0.242	7.427	0.000

These findings confirm a significant positive effect of health insurance on administrative creativity. A 100% improvement in health insurance coverage is associated with a 29.3% increase in creative performance. Accordingly, the null hypothesis was rejected, and the alternative hypothesis was accepted. These results affirm that comprehensive health insurance contributes meaningfully to employee well-being and fosters creativity within the organizational context.

To further examine the collective impact of job satisfaction dimensions—namely relationships with supervisors and colleagues, salary satisfaction, work environment, and health insurance—on administrative creativity, the researcher conducted a multiple linear regression analysis. As shown in Table 16, the analysis revealed a moderate positive relationship,



with a correlation coefficient  $R = 0.537$  and a coefficient of determination  $R^2 = 0.288$ . This indicates that 28.8% of the variation in administrative creativity can be explained by the combined influence of job satisfaction dimensions.

The model’s statistical significance was confirmed by an F-value of 35.149 and a p-value of 0.000. Among the four dimensions, three showed statistically significant effects: relationships with supervisors and colleagues ( $\beta = 0.225, t = 5.162, p < 0.001$ ), health insurance ( $\beta = 0.191, t = 5.066, p < 0.001$ ), and satisfaction with wages and bonuses ( $\beta = 0.071, t = 2.041, p = 0.042$ ). In contrast, the work environment did not demonstrate a significant effect when analyzed alongside the other variables ( $\beta = 0.037, t = 0.808, p = 0.420$ ).

**Table 16** Results of multiple linear regression analysis for the effect of the dimensions of the variable (job satisfaction) collectively on administrative creativity.

Summary of models			ANOVA_		Regression coefficients and testing (T)			
Dependent variable	Dimensions of the independent variable ( Job satisfaction)	Correlation coefficient R	The coefficient of determination R2 -	value (F)	Level of significance	value B	value (T)	Significance level
Administrative creativity	Relationship with superiors and colleagues	0.537	0.288	35.149	0.000	0.225	5.162	0.000
	satisfaction with the reward					0.071	2.041	0.042
	Work environment					0.037	0.808	0.420
	health insurance					0.191	5.066	0.000

These findings confirm that job satisfaction—particularly in terms of interpersonal relationships, financial rewards, and health coverage—plays a critical role in enhancing administrative creativity in Yemen’s telecommunications sector. Collectively, improvements in these three dimensions could lead to a 51.7% increase in creative performance, assuming other variables remain constant.

The results of this study are consistent with previous research by Shtiewi (2016), Noaman (2017), Al-Sheikh & Abu Nasib (2017), and Mahdi et al. (2021), all of which emphasized the link between employee satisfaction and creative performance. However, they diverge from the findings of Dekkiche (2021), who reported a weaker association in a similar organizational context.

**5. Discussion**

The findings of the current study provide a nuanced understanding of the relationship between job satisfaction and administrative creativity within Yemen’s telecommunications sector. The overall job satisfaction level was moderate ( $M = 4.34, SD = 0.88, 62%$ ), which aligns with previous research by Dekkiche (2021), Mohammed (2013), and Al-Humaid & Al-Hamdani (2020) yet contrasts with the higher satisfaction levels reported by Al-Mubarak & Al-Dhayabi (2022). This moderate rating reflects the sector’s economic and structural challenges, particularly in areas such as compensation and infrastructure.

When examining the dimensions of job satisfaction, the study revealed high satisfaction with interpersonal relationships ( $M = 4.71$ ) and health insurance ( $M = 4.96$ ), moderate satisfaction with the work environment ( $M = 4.33$ ), and low satisfaction with wages and bonuses ( $M = 3.35$ ). These results support the theoretical view that job satisfaction encompasses both tangible and psychological components (Ababsa, 2021; Farraj, 2022) and that deficiencies in any dimension—especially financial compensation—can hinder employees’ motivation to innovate. This duality is consistent with Herzberg’s Two-Factor Theory, which distinguishes between hygiene factors and motivators in shaping employee satisfaction.

The study also found high levels of administrative creativity ( $M = 4.83$ ), particularly in mental flexibility, intellectual fluency, problem-solving, originality, and perception.

These dimensions align with the cognitive traits emphasized in the work of Al-Hadha (2018) and Khasha’i (2021), which conceptualize creativity as a multifaceted construct requiring both internal drive and external support. However, the moderate level of risk acceptance ( $M = 4.44$ ) suggests that employees may be hesitant to pursue novel ideas in environments lacking adequate incentives or recognition. Overall, the findings reinforce the theoretical proposition that job satisfaction is not merely a psychological state but a strategic organizational asset that directly fuels administrative creativity.

This is especially relevant in the Yemeni context, where economic instability and limited institutional support challenge employees’ capacity to innovate. The results are consistent with prior research confirming the positive impact of job satisfaction on creativity (Ismail, 2014; Noaman, 2017; Al-Salmi & Bukhari, 2022; Mohammed, 2023; Mahdi et al., 2021; Güven et al., 2021; Al-Sheikh & Nasib, 2017). Building on these insights, the study underscores the need for integrated organizational



strategies that enhance job satisfaction across its dimensions—particularly compensation, health coverage, and workplace conditions—to foster sustainable creativity and performance in Yemen’s telecommunications sector.

## 6. Conclusions

The findings of this study provide compelling evidence of the relationship between job satisfaction and administrative creativity within Yemen’s telecommunications sector. Employees reported a moderate level of job satisfaction, primarily due to limitations in incentives, promotion systems, and wage structures. In contrast, the sector demonstrated high levels of administrative creativity across key dimensions such as mental flexibility, intellectual fluency, originality, and problem-solving ability, although risk acceptance remained moderate. The results of the main hypothesis test confirmed a statistically significant impact of job satisfaction on administrative creativity, underscoring the importance of a supportive work environment that nurtures innovation and employee engagement. These findings highlight job satisfaction not only as a psychological state but as a strategic organizational asset that directly influences creative performance.

In light of these insights, the study recommends that organizations adopt integrated strategies to enhance job satisfaction and foster creativity. Strengthening communication between employees and supervisors through continuous dialogue can improve responsiveness to employee concerns. Establishing a fair and transparent system for wages and bonuses linked to performance is essential, alongside improvements in health insurance programs to reinforce job security and well-being. Moreover, cultivating an environment that encourages risk-taking and supports the implementation of creative ideas is vital. This includes institutional backing, resource allocation, and recognition of innovative contributions. Performance-based incentive systems and regular evaluations can motivate employees and reinforce a culture of merit and trust. Continuous training programs are also recommended to develop employees’ skills and raise awareness of their strategic role in organizational development, thereby enhancing loyalty and creative engagement.

Overall, the study underscores the importance of addressing both the psychological and structural dimensions of job satisfaction through targeted organizational strategies. Such efforts are essential for sustaining creativity and improving performance in Yemen’s telecommunications sector, particularly in light of the sector’s economic and institutional challenges.

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## Ethical Considerations

This study involved human participants and adhered to the ethical standards and approval procedures mandated by Sana’a University and the Yemeni Ministry of Higher Education. All procedures complied with international research ethics guidelines, and informed consent was obtained from all participants prior to data collection.

## Conflict of Interest

The authors declare no conflicts of interest.

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