

Job Satisfaction among Job Order Civil Engineers in the Department of Public Works and Highways, Isabela Fourth District Engineering Office

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Abstract

The study aimed to examine their job satisfaction using a descriptive survey method with 51 participants and a questionnaire based on the existing literature. The data analysis utilized weighted mean, ANOVA, independent-samples t-tests, and ranking. Respondents were predominantly male (64%), while females accounted for 36%. Most participants were aged 25-29. Regarding educational attainment, the majority had not pursued postgraduate studies. 96% of respondents reported 1 to 5 years of service with the agency and expressed overall job satisfaction with the nature of the work, advancement opportunities, salary and benefits, recognition, work conditions, and supervisor relationships. There was no significant difference in perceptions among respondents based on age, sex, education, or years of service. To enhance job satisfaction among respondents, several measures were proposed: implementing salary adjustments, prioritizing health and safety, continuously implementing structured professional development programs, promoting a performance-based culture, ensuring strong management support, establishing a regular feedback system, implementing flexible policies, and fostering diverse representation in decision-making. Transparent communication and continued tailored communication were also emphasized as vital components. The following recommendations are proposed: (a) Standardize metrics for non-permanent staff; (b) Create a training program for job order staff; (c) Conduct regular skills assessments; (d) Publish criteria for task assignments and rotate undesirable duties; (e) Hold weekly check-ins for resource needs; (f) Implement a monthly suggestion box with acknowledgment; and (g) Maintain a consistent supervisor for job orders to build trust.

Keywords: Job Satisfaction; Career Growth; Labor Force; Civil Engineers; Department of Public Works and Highways (DPWH)

1. Introduction

A job is a crucial aspect of life, as people's lifestyles and social interactions often revolve around their work. Therefore, every organization needs to have a satisfied workforce. It is generally understood that an organization's overall productivity and success rely on the effective and efficient performance of its employees and that this performance is closely linked to employees' job satisfaction. Researchers have identified key factors that contribute to job satisfaction and their impact on performance and productivity.

Job satisfaction is a multifaceted concept that encompasses a range of emotions and circumstances. As the work environment grows increasingly competitive and complex, understanding the significance of job satisfaction and its correlation with employee performance becomes essential. Enhancing job satisfaction can lead to improved productivity and a more engaged workforce (Inayat & Khan, 2021). Analyzing and understanding job satisfaction is vital for revealing the critical factors that influence employee engagement, motivation, and retention. Recognizing these elements is essential for building a strong, committed workforce (Sharma & Raj, 2023).

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Scholars from the West and Asia have shown interest in job satisfaction for many years (Egemen, 2024; Lee et al., 2023; Susanto et al., 2022; Sheikh et al., 2021). Research indicates that intrinsic and extrinsic motivation are significantly correlated with levels of happiness in life and motivation at work (Sidhu, 2024). Employee recognition benefits both individuals and organizations by enhancing well-being, reducing stress, increasing job satisfaction, and fostering loyalty (Ruppel et al., 2024).

1.1. Background of the Study

An organization cannot thrive without its people; they are its lifeblood (De Leon et al., 2022; Agsalud et al., 2021). Depending on the role they have applied for, these individuals are employed by businesses or organizations and given specific responsibilities. Workers are recognized as the cornerstone, the backbone of an organization, and the driving force behind its successful growth (Fabian & Reyes, 2024; Gede & Huluka, 2024). Maintaining employee motivation is crucial for the organization's success (Pillagara et al., 2024).

Satisfaction fosters commitment and drives performance (Long, 2023). Job satisfaction drives positive results for people and companies (Brower, 2023). It is a critical factor in organizational performance, for it boosts motivation, exhibits positive attributes, increases productivity (Jahan et al., 2023; Mainali et al., 2023; Igbokwe, 2024; Modise, 2023), and minimizes negative results (Cabotage & Cariño, 2024). However, job dissatisfaction can lead to a high rate of absenteeism, low productivity, and turnover. The relationship between job satisfaction and perceived performance is significant and influenced by various factors, including working conditions, compensation, pay and promotion opportunities, job security, and development prospects (Campos, 2024; Shrestha, & Bhattarai, 2024; Bansal et al., 2021).

Civil engineers play a crucial role in the development and advancement of any country. Therefore, it is crucial to comprehend the elements that affect their job satisfaction and job performance (Sekhar & Hemalatha, 2024).

In organizational behavior research, job satisfaction is the most variable examined. From job design to supervision, it is a key variable in organizational phenomena study and theory (Agsalud et al., 2021). One crucial element in achieving organizational goals is human resource management (Haryono & Pamungkas, 2021). Numerous scholars had an interest in conducting this variable worldwide. Some studies have investigated job satisfaction among civil engineers in the construction sector (Memon et al., 2023).

Job satisfaction is a prevalent concern in the Philippines (Lopez et al., 2023). A survey conducted by the online job portal Jobstreet by SEEK found that around 85% of Filipino workers expressed positive or neutral job satisfaction (Philstar.com, 2024). However, there hasn't been any study specifically addressing the job satisfaction of job order civil engineers working in the Department of Public Works and Highways (DPWH), particularly at the Isabela 4th District Engineering Office (DEO). The existing knowledge on job satisfaction among job-order civil engineers in government organizations in the Philippines is notably limited. Hence, this study examined the job satisfaction of the job order civil engineers in the DPWH 4th DEO.

Research Questions

- What is the demographic profile of the respondents?
- What is the level of job satisfaction of the respondents?
- Is there a significant difference in the level of job satisfaction of the respondents when grouped according to their demographic profile?
- What measures can be proposed to boost the satisfaction of the respondents?
- What recommendations can be proposed to improve the job satisfaction in DPWH Isabela 4th DEO?

1.2. Research Hypothesis

There is no significant difference in the level of job satisfaction of the respondents when grouped according to their demographic profile.

1.3. Conceptual Framework

The study used the input, process, and output variables as the model. The input variables include the demographic profile of respondents namely sex, age, highest educational attainment, number of years of service, and salary. The process is to determine the job satisfaction of the job order civil engineers in the DPWH 4th DEO. The output variable is the proposed strategy to improve the employee's job satisfaction, resulting in higher performance, productivity, and improvement.

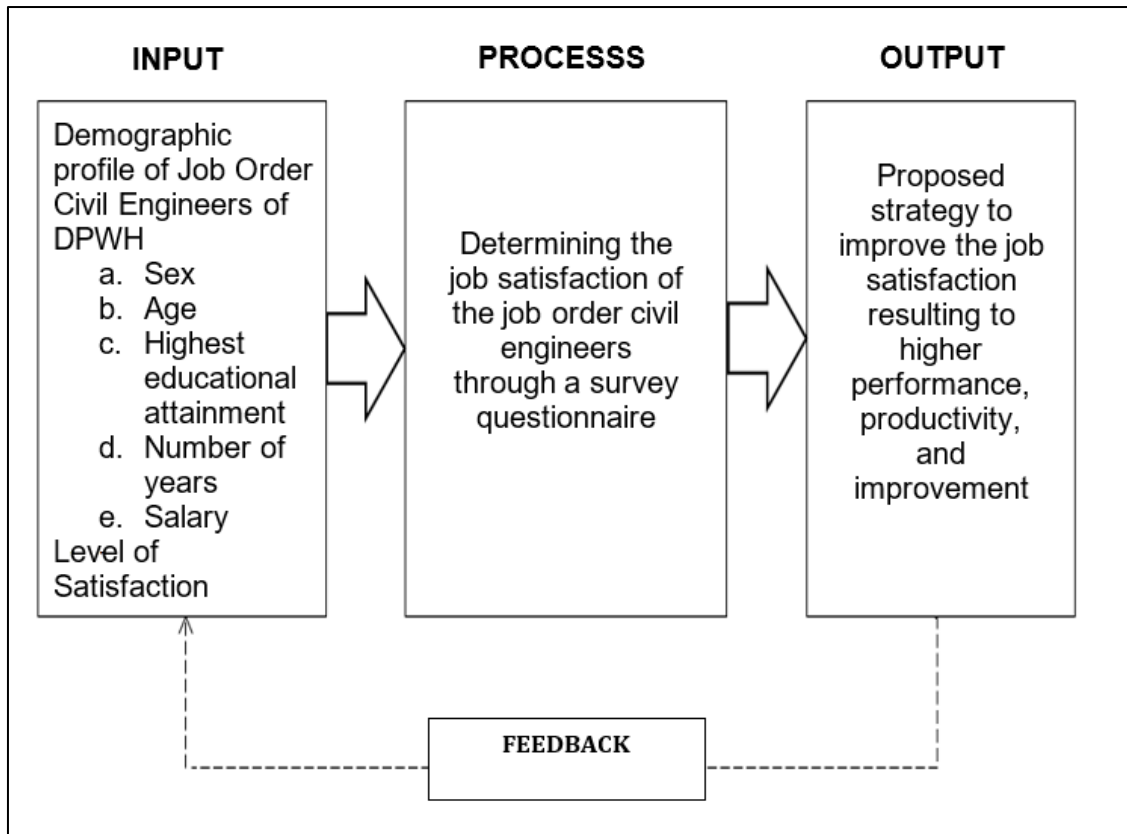


Figure 1 Conceptual Paradigm of the Study

2. Literature Review

Job satisfaction is a critical determinant of employee performance, organizational commitment, productivity, and retention. Studies consistently show that opportunities for professional development, supportive supervision, positive relationships with co-workers, organizational support, employee empowerment, and fair reward systems significantly enhance job satisfaction and improve employee performance (Hollar et al., 2022; Sekhar & Hemalatha, 2024; Caballero et al., 2024; Kerketta & Chauhan, 2023; Ali et al., 2025). Conversely, poor supervisory relationships, inadequate compensation, limited career advancement opportunities, unfavorable working conditions, and insufficient organizational commitment contribute to job dissatisfaction, increased turnover intentions, and reduced productivity (Masindi et al., 2024; Jahan et al., 2023; Mendoza et al., 2024).

Demographic and organizational factors influence employees' job satisfaction. Age, educational attainment, sex, length of service, income, and organizational support significantly affect employees' perceptions of their work environment and motivation. While some studies found that demographic variables significantly influence job satisfaction, others reported that they have minimal effect, suggesting that workplace conditions and management practices play a more substantial role in determining employee satisfaction (Agsalud et al., 2021; Alqallab, 2021; Campos, 2024; Cabotage & Cariño, 2024). Moreover, employee engagement, work motivation, supervisor support, and organizational resources positively contribute to higher job satisfaction, stronger organizational commitment, and improved project and organizational outcomes (Cadiz & Fernando, 2025; Ramirez & Ong, 2025; Setiawan, 2023; Shuxia et al., 2025).

Career growth as an important aspect of employee satisfaction, describing it as employees' perception that their organization provides opportunities for professional development, promotion, skill enhancement, and appropriate compensation, all of which contribute to fulfilling career aspirations (Asamaowei et al., 2023). In addition, the literature provides contextual information on the Department of Public Works and Highways (DPWH) and the Isabela Fourth District Engineering Office, highlighting its organizational history, jurisdiction, infrastructure responsibilities, and development. The characteristics of the construction labor force, noting the industry's male-dominated nature, the participation of women, and the prevalence of non-regular and project-based employment in the Philippine construction sector (PSA, 2022; Villena, 2021).

3. Methods

3.1. Research Design

The study utilized the descriptive survey study method. According to Singh (2023), descriptive research methodological approach that seeks to depict the characteristics of a phenomenon or subject under investigation. It is used to describe the demographic profile of the respondents and to describe the tabulated data. Dangal (2021) said that a survey study design is used to means for gathering information about the characteristics, actions, or opinions of a large group of people.

3.2. Study Site and Participants

The study was conducted in DPWH 4th DEO, comprising five (5) groups: Construction Section, Planning and Design Section, Quality Assurance Section, Maintenance Section, and Procurement Unit. The study participants were job orders who had rendered at least 1 year of service to the agency.

3.3. Population, Sample Size, and Sampling Method

The population of the study is fifty-one (51) participants, with the breakdown as follows: Construction Section – 12, Planning and Design Section – 20, Quality Assurance Section – 13, Maintenance Section – 3, and Procurement Unit - 3. With a few participants involved in the study, total enumeration was applied.

3.4. Research Instrument

The primary instrument used in the study is a researcher-constructed questionnaire based on the related literature. The questionnaire consisted of three (3) parts, namely: Part 1 – demographic profile; Part 2- job satisfaction; and Part 3–proposed measures to boost the satisfaction of the respondents. The Cronbach's alpha tool was used to ensure the reliability of the questionnaire. The instrument obtained reliability scores of 0.907, 0.990, 0.754, 0.925, 0.890, and 0.959 for work itself, the advancement, salary and benefits, opportunity, work relationship, work condition, and supervisor, respectively, indicating that the instrument is both valid and reliable.

3.5. Data Analysis

- Frequency and percentage were used to determine the demographic profile of the participants.
- Mean was used to determine the level of job satisfaction of the respondents and interpreted using the following scale:

Scale	Range	Interpretation
5	4.50-5.00	Highly satisfied
4	3.50-4.49	Satisfied
3	2.50-3.49	Neither satisfied nor dissatisfied
2	1.50-2.59	Dissatisfied
1	1.0-1.49	Highly dissatisfied

- One way Analysis of Variance (ANOVA) was used to employed whether there is significant difference in the level of job satisfaction when grouped according to their age.
- Independent Sample T-test was used to employed whether there is significant difference in the level of job satisfaction when grouped according to their sex, highest educational attainment, and number of years of service.

4. Results

4.1. Part 1 Demographic Profile of Respondents

Table 1 Demographic Profile of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office

Sex	Frequency	Percentage
Male	32	64
Female	18	36
Total	50	100
Age	Frequency	Percentage
Below 25 y/o	6	12
25 – 29 y/o	42	84
30 y/o and above	2	4
Total	50	100
Highest Educational Attainment		
College Graduate	39	78
Postgraduate	11	22
Total	50	100
Number of Years in the Agency	Frequency	Percentage
1-5	48	96
Above 5	2	4
Total	50	100

Table 1 shows the demographic profile of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office. Questionnaires are distributed to fifty-one (51) respondents. However, 1 questionnaire was returned invalid. Thus, only 50 respondents are considered in the study. Out of fifty (50) respondents, 32 are male (64%), and 18 are female (36%). In terms of age, 6 belong to those below 25 years old (12%), 42 belong to 25 to 29 years old (84%), and 2 belong to 30 years old and above. In terms of highest educational attainment, 39 of the respondents are college graduates, and only 11 respondents have postgraduate study. In terms of the number of years in the agency, 48 belong to 1 to 5 years (96%), and 2 belong to above 5 years (4%).

4.2. Part 2. Level of Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office

The level of job satisfaction among job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, is broken down into categories based on work itself, advancement, salary and benefits, job opportunities, work recognition, work condition, and supervisor.

4.2.1. Work Itself

Table 2 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of work itself

Table 2 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of work itself

Work itself	Mean	Interpretation
1. I feel valued and appreciated at my workplace	3.98	Satisfied
2. I find great fulfillment in tackling challenges at work	4.04	Satisfied
3. The nature and description of the work inspire me	3.90	Satisfied
4. I find great meaning and purpose in the work that I do	4.00	Satisfied
5. I have had great learning experiences with my work	4.06	Satisfied
Overall Mean	4.00	Satisfied

As shown in Table 2, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of work itself in all aspects as follows: I have had great learning experiences with my work (Mean=4.06), I find great fulfillment in tackling challenges at work (Mean=4.04), I find great meaning and purpose in the work that I do (Mean=4.00), I feel valued and appreciated at my workplace (Mean=3.98), and The nature and description of the work inspire me (Mean=3.90). With an overall mean of 4.00, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of work itself.

4.2.2. Advancement

Table 3 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of advancement

Table 3 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of advancement

Advancement	Mean	Interpretation
1. It empowers me to generate fresh and unique ideas	4.00	Satisfied
2. I am motivated by the support of my administrator and supervisor to pursue higher level of achievement	3.98	Satisfied
3. Achieving progress and fostering improvement	4.08	Satisfied
4. I have opportunities to lead committee work	3.70	Satisfied
5. I am pleased with my achievements	3.86	Satisfied
Overall Mean	3.92	Satisfied

As shown in Table 3, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of advancement in all aspects as follows: Achieving progress and fostering improvement (Mean=4.08), It empowers me to generate fresh and unique ideas (Mean=4.00), I am motivated by the support of my administrator and supervisor to pursue higher level of achievement (Mean=3.98), I am pleased with my achievements (Mean=3.86), and I have opportunities to lead committee work (Mean=3.70). With an overall mean of 3.92, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of advancement.

4.2.3. Salary and Benefits

Table 4 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of salary and benefits.

Table 4 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of salary and benefits

Salary and Benefits	Mean	Interpretation
1. I feel I am being paid a fair salary for the work I do.	3.54	Satisfied
2. The salary and benefits we receive are comparable to those offered by other organizations.	3.42	Neither Satisfied nor Dissatisfied
3. The benefits packages that I receive from the organization are on par and comparable with those of my co-workers.	3.50	Satisfied
4. I appreciate the current reward structure and believe it fosters motivation and engagement.	3.60	Satisfied
5. I am happy and content with the salary and benefits that I receive.	3.54	Satisfied
Overall Mean	3.52	Satisfied

As shown in Table 4, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of salary and benefits in all aspects except for The salary and benefits we receive are comparable to those offered by other organizations (Mean=3.4) as follows: I appreciate the current reward structure and believe it fosters motivation and engagement (Mean=3.60), I feel I am being paid a fair salary for the work I do (Mean=3.54), I am happy and content with the salary and benefits that I receive (Mean=3.54), and The benefits packages that I receive from the organization are on par and comparable with those of my co-workers (Mean=3.50). With an overall mean of 3.52, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of salary and benefits.

4.2.4. Job Opportunities

Table 5 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of job opportunities.

Table 5 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of job opportunities

Job Opportunities	Mean	Interpretation
1. I have valuable opportunities to participate in training sessions and seminars that enhance my skills and knowledge.	3.26	Neither Satisfied nor Dissatisfied
2. I have exciting opportunities to transition into a regular employment role.	3.56	Satisfied
3. I envision myself working as a regular employee.	4.06	Satisfied
4. I have the confidence to excel in my field and attract more opportunities.	4.06	Satisfied
5. I intend to pursue more job opportunities to enhance my career.	4.16	Satisfied
Overall Mean	3.82	Satisfied

As shown in Table 5, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of job opportunities in all aspects except for I have valuable opportunities to participate in training sessions and seminars that enhance my skills and knowledge (Mean=3.26) as follows: I intend to pursue more job opportunities to enhance my career (Mean=4.16), I envision myself working as a regular employee (Mean=4.06), I have the confidence to excel in my field and attract more opportunities (Mean=4.06), and I have exciting opportunities to transition into a regular employment role (Mean=3.56). With an overall mean of 3.82, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of job opportunities.

4.2.5. Work Recognition

Table 6 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of work recognition.

Table 6 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of Work Recognition

Work Recognition	Mean	Interpretation
1. I am consistently acknowledged for the valuable contributions I make in my work.	3.86	Satisfied
2. I feel comfortable and accepted among my colleagues at work.	4.02	Satisfied
3. I receive a fair amount of reward based on my work quality.	3.82	Satisfied
4. I feel motivated whenever my employer acknowledges all my efforts.	4.02	Satisfied
5. I appreciate all the recognition I receive from my colleagues and employer.	4.08	Satisfied
Overall Mean	3.96	Satisfied

As shown in Table 6, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of work recognition in all aspects as follows: I appreciate all the recognition I receive from my colleagues and employer (Mean=4.08), I feel comfortable and accepted among my colleagues at work (Mean=4.02), I feel motivated whenever my employer acknowledges all my efforts (Mean=4.02), I am consistently acknowledged for the valuable contributions I make in my work (Mean=3.86), and I receive a fair amount of reward based on my work quality (Mean=3.82). With an overall mean of 3.96, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of work recognition.

4.2.6. Work Condition

Table 7 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of work condition.

Table 7 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of Work Condition

Work Condition	Mean	Interpretation
1. Provision of necessary equipment and resources for my work	4.00	Satisfied
2. Strong support system from the management	3.78	Satisfied
3. Flexible and sensible rules and regulations in the working system	3.90	Satisfied
4. Fulfillment of a healthy and safe workplace	4.04	Satisfied
5. Comfortable and conducive working environment	4.10	Satisfied
Overall Mean	3.96	Satisfied

As shown in Table 7, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of work recognition in all aspects as follows: Comfortable and conducive working environment (mean=4.10), Fulfillment of a healthy and safe workplace (Mean=4.04), Provision of necessary equipment and resources for my work (Mean=4.00), Flexible and sensible rules and regulations in the working system (Mean=3.90), and Strong support system from the management (Mean=3.78). With an overall mean of 3.96, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of work condition.

4.2.7. Supervisor

Table 8 shows the level of job satisfaction of the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of supervisor.

Table 8 Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office, in terms of Supervisor

Supervisor	Mean	Interpretation
1. Promote a strong relationship with the subordinates	4.08	Satisfied
2. Demonstrate the significance of fairness in all aspects	4.04	Satisfied
3. Exhibit commendable leadership	4.06	Satisfied
4. Establish a supportive management	4.04	Satisfied
5. Perform and integrate innovation at work	4.08	Satisfied
Overall Mean	4.06	Satisfied

As shown in Table 8, the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office are satisfied in terms of supervisor in all aspects as follows: Promote a strong relationship with the subordinates (Mean=4.08), Perform and integrate innovation at work (Mean=4.08), Exhibit commendable leadership (Mean=4.06), Exhibit commendable leadership (mean=4.06), Establish a supportive management (Mean=4.04), and Demonstrate the significance of fairness in all aspects (Mean=4.04). With an overall mean of 4.06, this implies that the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office, are satisfied in terms of their supervisor.

4.2.8. Job Satisfaction Summary

Table 9 presents a summary of the level of safety compliance among the job order civil engineers of the DPWH Isabela 4th DEO.

Table 9 Summary of the Level of Job Satisfaction of the Job Order Civil Engineers in the DPWH, Isabela Fourth District Engineering Office

Job Satisfaction	Mean	Interpretation
1. Work itself	4.00	Satisfied
2. Advancement	3.92	Satisfied
Job Satisfaction (cont'd)	Mean	Interpretation
3. Salary and benefits	3.52	Satisfied
4. Job opportunities	3.82	Satisfied
5. Work recognition	3.96	Satisfied
6. Work condition	3.96	Satisfied
7. Supervisor	4.06	Satisfied
Overall Mean	3.87	Satisfied

As shown in Table 9, the summary of the level of job satisfaction among the job order civil engineers in the DPWH, Isabela Fourth District Engineering Office is satisfied in all aspects as follows: Supervisor (Mean=4.06), Work itself (Mean=4.00), Work recognition (Mean=3.96), Work condition (Mean=3.96), Advancement (Mean=3.92), and Job opportunities (Mean=3.82). With an overall mean of 3.87, this implies that the summary of the level of job satisfaction among civil engineers in the DPWH Isabela Fourth District Engineering Office is satisfied.

4.3. Part 3. Test of Significant Difference in the Perceptions of the Respondents when grouped according to their Demographic Profile

4.3.1. Sex

Table 10 presents the differences in perceptions of job satisfaction among job order civil engineers of the DPWH Isabela 4th DEO, grouped by their demographic profile in terms of sex.

Table 10 Difference in the Perceptions of the Respondents of Job Satisfaction among Job Order Civil Engineers of the DPWH Isabela 4th DEO, grouped by their Demographic Profile in terms of Sex

Sex groups	N	M	SD	df	t _{0.05}	P _{0.05}	t-value
Female	14	3.79	0.71	48	2.01	0.45	0.76
Male	35	3.95	0.67				

Using the Independent sample t-Test to determine the differences in perceptions by sex groups, results show no significant difference on respondents' perceptions of job satisfaction across sex groups at the 0.05 level of significance.

4.3.2. Age

Table 11 presents the differences in perceptions of job satisfaction among job order civil engineers of the DPWH Isabela 4th DEO, grouped by their demographic profile in terms of age.

Table 11 Difference in the Perceptions of the Respondents of Job Satisfaction among Job Order Civil Engineers of the DPWH Isabela 4th DEO, grouped by their Demographic Profile in terms of age

Age groups	N	M	SD	Df	F	P-value
Below 25 y/o	6	4.49	0.34	49	2.90	0.06
25 – 29 y/o	42	3.82	0.69			
30 y/o and above	2	3.66	0.36			

Using the one-way analysis of variance (ANOVA) to determine the differences in the perceptions by age group. The results revealed no statistically significant effect of age group on job satisfaction perceptions, $F(2, 49)=2.90$, $p=.06$, $\alpha=0.05$.

4.3.3. Highest Educational Attainment

Table 12 presents the differences in perceptions of job satisfaction among job order civil engineers of the DPWH Isabela 4th DEO, grouped by their demographic profile in terms of highest educational attainment.

Table 12 Difference in the Perceptions of the Respondents of Job Satisfaction among Job Order Civil Engineers of the DPWH Isabela 4th DEO, grouped by their Demographic Profile in terms of Highest Educational Attainment

Highest educational attainment groups	N	M	SD	df	t _{0.05}	P _{0.05}	t-value
College Graduate	39	3.95	0.69	48	2.01	0.24	1.19
Post Graduate	11	3.68	0.64				

Using the Independent sample t-Test to determine the differences in the perceptions by highest educational attainment groups, results show no significant difference on respondents' perceptions of job satisfaction when grouped by highest educational attainment at the 0.05 level of significance.

4.3.4. Number of Years of Service

Table 13 presents the differences in perceptions of job satisfaction among job order civil engineers of the DPWH Isabela 4th DEO, grouped by their demographic profile in terms of number of years of service.

Table 13 Difference in the Perceptions of the Respondents of Job Satisfaction among Job Order Civil Engineers of the DPWH Isabela 4th DEO, grouped by their Demographic Profile in terms of Number of Years of Service

Number of years of service groups	N	M	SD	df	t _{0.05}	P _{0.05}	t-value
1 – 5	48	3.91	0.69	48	2.01	0.48	0.71
Above 5	2	3.56	0.18				

Using the Independent sample t-Test to determine the differences in perceptions by number of years of service groups, results show no significant difference on respondents' perceptions of job satisfaction across number of years of service groups at the 0.05 level of significance.

4.4. Part 4. Proposed Measures to Boost the Satisfaction of the Respondents

The proposed measures to boost the satisfaction of the respondents are the following: Establish a regular feedback system; Ensure diverse representation in decision-making; Implement a flexible policy; Continue tailoring communication; Implement salary adjustment, Provide transparent communication; Foster a continuous implementation of structured professional development programs; Prioritize health and safety of the employees as a priority; Establish a strong management support; and Promote a performance-based culture.

Table 14 Proposed Measures to Boost the Satisfaction of the Respondents

Proposed measures	No. of Responses	Rank
1. Implement salary adjustment	37	1
2. Health and safety of the employees as a priority	30	2
3. Continuous implementation of structured professional development programs	25	3
4. Promote a performance-based culture	24	4
5. Establishment of a strong management support	23	5
6. Establish a regular feedback system	19	6
7. Implement a flexible policy	18	7
8. Ensure diverse representation in decision-making	17	8
9. Provide transparent communication	14	9
10. Continue tailoring communication	14	9

Out of the ten (10) proposed measures to boost the satisfaction of the respondents, Implement salary adjustment ranked first, followed by Health and safety of the employees as a priority at second, Continuous implementation of structured professional development programs at third, Promote a performance-based culture ranked at fourth. Establishment of a strong management support ranked fifth. Establish a regular feedback system ranked six, followed by Implement a flexible policy at seventh, and Ensure diverse representation in decision-making ranked eighth. While Provide transparent communication, and Continue tailoring communication tied at ninth among the proposed measures to boost the satisfaction of the respondents.

5. Conclusion

The study presents several key findings regarding job satisfaction among job order civil engineers in the Isabela Fourth District Engineering Office of the Department of Public Works and Highways (DPWH):

- Male respondents outnumbered female respondents. Most respondents
- were between 25 and 29 years old. In terms of educational attainment, most have not pursued post-graduate studies. In terms of the number of years in the agency, the majority are 1 to 5 years.
- Respondents were satisfied with their jobs in all factors such as job itself,

- advancement, salary and benefits, opportunities, work recognition, work condition, and in terms of their supervisor.
- There is no significant difference in the perception of the respondents when
- grouped according to their demographic profile in terms of age, sex, educational attainment, and number of years of service.

To boost the job satisfaction of the respondents, the following proposed measures were listed: implement salary adjustment, prioritize health and safety, foster a continuous implementation of structured professional development programs, and promote a performance-based culture, establish a strong management support, establish a regular feedback system, implement a flexible policy at seventh, and ensure diverse representation in decision-making. The provision of transparent communication and continued tailored communication were also included.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Agsalud, P., Fernandez, S., Agsalud, A., & Esperon, N. (2021). Job satisfaction level of employees of Pangasinan State University, Philippines. *Journal of Critical Reviews*, 8(1), 184-204.
- [2] Ai, A., Soofi, A. H., Jadul, Jabbar, A., & Shahid, A. (2025). The impact of employee empowerment and job satisfaction on organizational performance. *The Critical Review of Social Sciences Studies*, 3(1), 1918-1927.
- [3] Alqallab, E (2022). Impact of demographic variables on job satisfaction: Empirical study of Zarqa municipality, Jordan. *IOSR Journal of Business and Management (IOSR-JBM)*, 24(9), 33-38. <https://dx.doi.org/10.9790/487X-2409063338>
- [4] Asamaowei, A. F., Amah, E., & Sylva, W. (2023). Career Growth: A review of literature and implications for the civil service in a developing country. *IIARD International Journal of Economics and Business Management*, 9(1), 37-47. <https://doi.org/10.56201/ijebm.v9.no1.2023.pg37.47>
- [5] Bansal, A., Garg, M., & Mangla, T. (2021). Impact of employee benefits on job satisfaction. *ZENITH International Journal of Business Economics & Management Research*, 11(8), 1-13.
- [6] Brower, T. (2023, July 4). Job satisfaction is rising: What's behind the surprising tend. <https://www.forbes.com/sites/tracybrower/2023/06/04/job-satisfaction-is-rising-whats-behind-the-surprising-tend/>
- [7] Caballero, J., Huang, J., Malinis, R., Nunez, V., Rondina, K. & Alvarico, A. (2024). A correlational study on organizational support and job satisfaction among Philippine National Police personnel. *Mediterranean Journal of Basic and Applied Sciences (MJBAS)*, 8(2), 230-242. <https://doi.org/10.46382/MJBAS.2024.8218>
- [8] Cabotage, M. J., & Cariño, C. (2024). Motivation and job satisfaction of part-time instructors at ISPSC. *International Journal of Social Science and Human Research*, 7(5), 3297-3318. <https://doi.org/10.47191/ijsshr/v7-i05-90>
- [9] Cadiz, J. E., & Fernando, E. J. (2025). Work engagement of job order employees at DPWH Isabela Third District Engineering Office: Its impact on project outcome. *International Journal of Research in Engineering, Science and Management*, 8(1), 28-36.
- [10] Campos, J. (2024). Correlation of job satisfaction of poultry farm workers and product compliance sustainability. *Organization and Human Capital Development (ORCADEV)*, 3(1), 96-107. <https://doi.org/10.31098/orcaddev.v3i1.1912>
- [11] Dangal, M. (2021). Survey design – Quantitative research. <https://10.13140/RG.2.2.10886.50242>.

- [12] De Leon, C. M., Rollon, J. J., Corpuz, J., & Desepida, M. C. (2022). Job satisfaction and work values of government employees in selected municipalities of Cavite, Philippines. *International Journal of Social Science and Human Research*, 4(2), 298-306. <https://doi.org/10.54476/ioer-imrjV4I2Jun20224964>
- [13] Egemen, M. (2024). Assessing the individual effects of different job satisfaction facets on the job performance of qualified employees in the unique conditions of the construction industry. *Ain Shams Engineering Journal*, 15 (1), 1-11. <https://doi.org/10.1016/j.asej.2024.102789>
- [14] Fabian, B., & Reyes, M. (2024). Job satisfaction among CEU teaching and non-teaching employees: Basis for a proposed employee retention program. *International Journal of Religion*, 5(6), 1-11. <https://doi.org/10.61707/pwjbn295>
- [15] Gede, D., & Huluka, A. (2024). Effects of employee engagement on organizational performance: Case of public universities in Ethiopia. *Future Business Journal*, 10(32), 1-15. <https://doi.org/10.1186/s43093-024-00315-7>
- [16] Haryono, S., & Pamungkas, Y. (2021). Effect of quality of work life on performance: The role of satisfaction and work discipline. *Advances in Economics, Business and Management Research*, 176, 157-170.
- [17] Hollar, N., Kuchinka, D., & Feinberg, J. (2022). Professional development opportunities and job satisfaction: A systematic review of research. *Journal of International Management Studies*, 22(1), 10-19. <https://doi.org/10.18374/JIMS-22-1.2>
- [18] Igbokwe, P. (2024). Motivation and Job Performance. *International Research Journal of Economics and Management Studies*, (3)3, 58-64. 2024. <https://doi.org/10.56472/25835238/IRJEMS-V3I3P109>
- [19] Inayat, W., & Khan, M. J. (2021). A study of job satisfaction and its effect on the performance of employees working in private sector organizations, Peshawar. *Education Research International*, 2021, 1-9. <https://doi.org/10.1155/2021/1751495>
- [20] Jahan, S., Appiah Kusi, G., Zisa, T. A., & Quarcoo, F. H. (2023). The role of job dissatisfaction on low productivity in Ghanaian sectors: Finding the way forward. *Journal of Business and Management Studies*, 5(1), 127-142. <https://doi.org/10.32996/jbms.2023.5.1.13>
- [21] Kerketta, V., & Chauhan, S. (2023). Impact of reward and recognition on job satisfaction and motivation. *Iconic Research and Engineering Journals*, 6(12), 1245-1253.
- [22] Lee, C., Lee, B., Choi, I., & Kim, J. (2023). Exploring determinants of job satisfaction: A comparison between survey and review data. *SAGE Journals*, 13(4), 1-18. <https://doi.org/10.1177/21582440231216528>
- [23] Long, R. (2023, September). Why employee satisfaction matters more than happiness. <https://resources.workable.com/tutorial/employee-satisfaction-happiness>
- [24] Lopez, C., Ochavo, J., Dela Peret, J. M., Suarez, J. P., Vigonte, F. & Abante, M. (2023). From demographics to policy: Unraveling the relationship of job satisfaction and happiness (IMRAD). *SSRN Electronic Journal*, 1-32. <https://dx.doi.org/10.2139/ssrn.4620302>
- [25] Mainali, D., Shrestha, H. M., & Pokhrel, S. (2023). Factors affecting job satisfaction of civil engineers working in private organizations in Kathmandu Valley. *Kathford Journal of Engineering and Management*, 3(1), 19-33.
- [26] Masindi, T., Onojaefe, D. P., Tengeh, R., Ukpere, W., & Adekanmbi, F. (2024). Influence of job satisfaction and organizational commitment on employee turnover intention in the chemical industry in South Africa. *Annals of Spiru Haret University. Economic Series*, 23(4), 77-92. <https://doi.org/10.26458/2342>
- [27] Memon, A. H., Khahro, S. H., Memon, N. A., Memon, Z. A., & Mustafa, A. (2023). Relationship between job satisfaction and employee performance in the construction industry of Pakistan. *Sustainability*, 15 (1), 8699. <https://doi.org/10.3390/su15118699>
- [28] Mendoza, J., Florencondia, N., & Pacual, L. (2024). Level of work motivation and job satisfaction of planning and design engineers in Department of Public Works and Highways (DPWH) Regional Office IV-A. *Iconic Research and Engineering Journals*, 8(6), 307-316.
- [29] Modise, J. (2023). The impacts of employee workplace empowerment, effective commitment and performance: An organizational systematic review. *International Journal of Innovative Science and Research Technology*, 8(7), 3435-3457.
- [30] Philippine Statistics Authority. (2022). Integrated survey on labor and employment released. <https://psa.gov.ph/statistics/isle/stat-tables/released/2021-2022/Employment>.

- [31] Pillagara, P., Vicencio, J., Ramos, L., Jocson, J., Tugaff, M., & Baldedara, D. (2024). An investigation of factors influencing faculty job satisfaction in the College of Engineering and Computer Technology at Wesleyan University-Philippines: Applying Herzberg's two-factor theory. *Iconic Research and Engineering (IRE) Journals*, 7(11), 378-385.
- [32] Ramirez, K. B., & Ong, A. K. (2025). Identification of factors affecting government job satisfaction: A macroergonomic perspective from the Philippines. *Proceedings of the International Conference on Applied Innovations in IT (ICAIIT)*, 13(5), 1443-1453
- [33] Ruppel, C., Stranzl, J., Einwiller, S., Hagelstein, J., Wahl, I., & Berger, K. (2024). Employee Appreciation. The value of valuing people. (Communication Insights, Issue 21). Academic Society for Management & Communication.
- [34] Sekhar, A., & Hemalatha, K. (2024). Job satisfaction and job performance of civil engineers working in construction companies. *International Journal of Novel Research and Development*, 9(4), 733-745.
- [35] Sharma, P., & Raj, S. (2023). An analysis of job satisfaction of employees. **Journal of Research in Business and Management*, 11(6), 139-142.
- [36] Sheikh, M. R., Abbas, T., & Qureshi, S. U. (2021). Factors influencing job satisfaction among employees of engineering firms in Pakistan. *Journal of Asian Development Studies*, 10(4), 7-19.
- [37] Shrestha, M., & Bhattarai, S. (2024). A study on job satisfaction among engineers with master's degree in construction management in Kathmandu Valley. *International Journal on Engineering Technology and Infrastructure Development (InJET-InDev)*, 1(1), 89-103.
- [38] Shuxia, C., Arshad, M. A. B., Jingjie, L. (2025). The impact of rewards on job satisfaction: A systematic literature review. *International Journal of Academic Research in Accounting, Finance & Management Sciences*, 15(1), 40-52. <http://dx.doi.org/10.6007/IJARAFMS/v15-i1/24142>
- [39] Sidhu, — Not found in the provided reference list.
- [40] Singh, S. (2023, November 24). What is descriptive research? Definition, methods, types and examples. *Researcher. Life*. <https://researcher.life/blog/article/what-is-descriptive-research-definition-methods-types-and-examples/>.
- [41] Susanto, P., Hoque M. E., Jannat, T., Emely, B., Zona, M.A., & Islam, M. A. (2022). Work-life balance, job satisfaction, and job performance of SMEs employees: The moderating role of family-supportive supervisor behaviors. *Frontiers in Psychology Journals*, 13(1), 1-12. <https://doi.org/10.3389/fpsyg.2022.906876>
- [42] Villena, I. C. (2021). Exploring the case of job orders and contract of service workers in the government. *Institute for Labor Studies*, 1(2), 99-119.