**Chapter 4**

**Introduction**

This chapter delves in an empirical investigation of the connections between federal employees' assessments of their performance confidence and their level of engagement and satisfaction. This chapter, which embodies quantitative research, is a monument to the researcher's dedication to exposing factual realities while upholding the strictest requirements of academic discipline. This chapter uses the core concerns from Chapter 3—about the degree to which federal employee satisfaction and engagement affect perceptions of performance confidence—as a compass. These inquiries serve as the impetus for a thorough investigation that aims to unearth the minute details and intricate relationships that underpin these fundamental concepts inside the federal workforce.

The methodological foundation established in Chapter 3 is reviewed at the beginning of this chapter. This provides crucial context, reiterating the congruence between the study questions, the hypotheses, and the subsequent data analysis. The chapter also offers a summary of the comprehensive dataset produced from the meticulously carried out Federal Employee Viewpoint Survey (FEVS) by the Office of Personnel Management (OPM) in 2022. This dataset, which is a complete depiction of federal personnel, serves as the cornerstone for our investigation. The study sample is offered to give a detailed knowledge of the respondents who participated in this investigation. The complex web of connections between employee satisfaction, engagement, and performance confidence are revealed by statistical analysis built on a solid multivariate linear regression model. Assumptions, regression coefficients, R-squared values, and p-values are carefully examined in this chapter to determine the nature, importance, and strength of these associations.

Additionally, this study scrutinizes crucial hypotheses supporting regression analyses, ensuring the validity of the conclusions reached. The integrity of the analysis is further strengthened by a multicollinearity assessment, a crucial diagnostic technique that guarantees the independence of the predictors. A complex tapestry of empirical insights emerges as Chapter 4 ends. The empirical pillars around which the conclusions and implications in the next chapters are built will be these findings, which have been presented with the clarity and objectivity inherent in academic research. They make a substantial contribution to the body of knowledge and provide federal agencies and government officials with an evidence-based compass for navigating the complex world of federal employee satisfaction, engagement, and performance confidence.

**Research Questions and Hypotheses**

## Research Question 1

To what extent does federal employee satisfaction influence federal employee perceptions of their performance confidence?

H01: There is no relationship between federal employee satisfaction and federal employee perceptions of their performance confidence.

Ha1: There is a significant relationship between federal employee satisfaction and federal employee perceptions of their performance confidence.

The subtle relationships between federal employee happiness and perceptions of performance confidence are the focus of a thorough investigation of Research Question 1. It investigates whether a worker's level of satisfaction—which includes their job satisfaction, pay satisfaction, organizational satisfaction, and willingness to recommend their company as a great place to work—significantly affects their confidence in their capacity to carry out their responsibilities. According to hypothesis H01, there is no such relationship, indicating that performance confidence may not be influenced by satisfaction. On the other hand, Ha1 predicts a strong correlation, suggesting that higher levels of pleasure may be associated with higher levels of confidence in one's ability to perform their work.

## Research Question 2

To what extent does federal employee engagement influence federal employee perceptions of their performance confidence?

H02: There is no relationship between federal employee engagement and federal employee perceptions of their performance confidence.

Ha2: There is a significant relationship between federal employee engagement and federal employee perceptions of their performance confidence.

The topic of federal employee engagement and its effect on performance confidence are explored in Research Question 2. This inquiry explores whether an employee's impression of their capacity to meet agency goals and generate high-quality work is influenced by engagement, which includes aspects like leadership perceptions, supervisor-employee relationships, and intrinsic work experiences. According to Hypothesis H02, engagement may not be a factor in determining performance confidence, casting doubt on the existence of this link. On the other hand, Ha2 asserts that employee engagement, as determined by the Employee Engagement Index, may have a considerable impact on how confidently people view their performance.

**Data Collection**

The Federal Employee Viewpoint Survey (FEVS), painstakingly carried out by the Office of Personnel Management (OPM) in the year 2022, was the main source of data for this study. This extensive survey was created to fully capture the opinions and feelings of federal employees across numerous departments and agencies within the U.S. federal government. The poll was conducted with an emphasis on inclusivity and aimed to capture the views of all qualified government employees. To accomplish this, it was made sure that every eligible federal employee was invited to participate by administering the FEVS as a census rather than a sampling. This method greatly improves the dataset's representativeness and thoroughness, enabling more reliable and broadly applicable results.

The data collection period covered the dates of June 6, 2022, through July 22, 2022, giving government employees enough time to complete the survey. Email invites were sent to 1,582,112 million qualified employees throughout this period. The first stage in involving government employees in the study was this initial approach. Knowing the value of data privacy and confidentiality, the OPM put strict controls in place to make sure that personally identifiable information (PII) is protected. These parameters played a crucial role in increasing respondents' openness and honesty by instilling a sense of trust and anonymity.

The OPM actively improved participation after becoming aware of the problems with survey response rates. This included sending out reminder and follow-up emails to potential participants, a method that is frequently used in survey research and is known to increase response rates. These efforts resulted in a noteworthy final response rate of 35%, indicating significant participation in the poll by government 557,779 employees. The OPM also carefully weighted the final dataset to represent the demographics and agency makeup of the overall federal workforce. By minimizing any biases that may result from non-response or sample imbalances, this method makes sure that the dataset truly depicts the diverse landscape of government agencies and departments. The accuracy and dependability of the dataset were attested to by the margin of error for this weighting, which was within a stunning range of plus or minus one percentage point

The method used to collect the data for this study serves as an excellent example of survey research quality in the federal environment. The dedication to diversity, privacy protection, and representativeness reveals a persistent commitment to the fundamentals of scholarly investigation and empirical study. The succeeding analyses in Chapter 4 benefit from this robust dataset, which also serves as a strong foundation for the study's findings and conclusions. The survey respondents' demographic data was used to compile insightful analyses of the federal workforce's makeup along several categories.

The results show that respondents are of various racial backgrounds. With 69,549 people or roughly 12.5 % of the sample fall under the "Black or African American" group. The proportion of "White" respondents, who total 336,809, is 60.4%. Additionally, with 27,526 responders, or 4.9% percent of the total, "Asian" people represent a sizable population. The category "Other Groups Collapsed for Privacy" included 31,836 respondents, or 5.7%, who identified with ethnic groupings that aren't specifically mentioned. About 49,329 respondents—8.8% of the sample—chose "Yes" when asked about the "Hispanic status" variable, whereas 440,061 respondents—78.9 % of the sample—chose "No."

Table 1 shows how federal workers are divided by gender. A total of 261253 respondents, 46.8% of the sample, fall into the "Male" group, whereas 233763 respondents, 41.9 %, fell into the "Female" category. Respondents were categorized according to their length of service using the "Time with the Federal Government" variable. About 35.7% of the sample, or 199,395 respondents fell under the category of "ten years or less." A total of 186040 respondents, 33.4% of the sample, fell into the "Eleven to 20 years" category. Additionally, those with "More than 20 years" of service constituted 23.5% with 130861 respondents. There were two age-groups, those who were under 40 years constituted 21.1% while those above 40 years were 67.9%.

As many as 142019 respondents at 25.5% said they had "Military Service" when asked about their Supervisory Status, whereas 374700 at 67.2%, said they had "No Military Service." Respondents offered details about their long-term career goals under the heading "Considerations of Leaving the Organization within the Next Year." A significant percentage of federal employees did not have imminent plans to change jobs, as seen by the "No" response from 338,389 respondents, or around 60.7%. "Yes, Other" includes 66,156 respondents at 11.9%. At 16.2%, as many as 90,502 respondents said "Yes, to take another job within the Federal Government" are notable federal employees who considered internal career moves. The percentage of respondents who said "Yes, to take another job outside the Federal Government" were 23,188 at 4.2%, indicating that federal workers are exploring career choices beyond the federal sector.

**Study Sample**

**Table 1**

*Demographic Characteristics of the Sample Population*

|  |  |  |
| --- | --- | --- |
| **Categorical Variable** | **Frequency** | **% of Total** |
| Race |  |  |
| Black or African-American | 69549 | 12.5 |
| White | 336809 | 60.4 |
| Asian | 27526 | 4.9 |
| Other Groups Collapsed for Privacy | 31836 | 5.7 |
| Hispanic Status |  |  |
| Yes | 49329 | 8.8 |
| No | 440061 | 78.9 |
| Age Group |  |  |
| Under 40 | 117418 | 21.1 |
| 40 or Older | 378696 | 67.9 |
| Sex |  |  |
| Male | 261253 | 46.8 |
| Female | 233763 | 41.9 |
| Time with the Federal Government |  |  |
| Ten years or fewer | 199395 | 35.7 |
| Eleven to 20 years | 186040 | 33.4 |
| More than 20 years | 130861 | 23.5 |
| Supervisory Status |  |  |
| Military Service | 400822 | 71.9 |
| No Military Service | 116062 | 20.8 |
| Considerations of Leaving the Organization within the Next Year. |  |  |
| No | 338389 | 60.7 |
| Yes, Other | 66156 | 11.9 |
| Yes, to take another job within the Federal Government | 90502 | 16.2 |
| Yes, to take another job outside the Federal Government | 23188 | 4.2 |

**Results**

**Descriptive Statistics**

"Federal employee satisfaction" was one of the study's main independent variables. This variable includes a variety of aspects, such as whether employees would suggest their company as a great place to work, job satisfaction, salary satisfaction, organizational satisfaction, and contentment with their work environment. These factors together describe the level of satisfaction felt by federal workers (Kurdi et al., 2020). The components of overall employee satisfaction can be added together or considered individually. Because it is believed to have an impact on how confident federal employees feel about their performance, employee satisfaction acts as a crucial independent variable. In other words, it is the variable that is assumed to be the study's driver or predictor.

"Federal employee engagement" was a significant second independent variable. This characteristic was assessed using the Employee Engagement Index (EEI), which had three sub-indices: "Leaders Lead," "Supervisors," and "Intrinsic Work Experience." These sub-indicators measured many aspects of employee engagement, including attitudes toward leadership, interactions between employees and their supervisors, and intrinsic drive at work. Employee engagement is regarded as a multidimensional phenomenon. Like satisfaction, engagement was anticipated to have an impact on the outcome.

This study's dependent variable is "federal employees' perceptions of their performance confidence." It is a composite variable that gauges how confident staff members are in their capacity to meet the objectives of their organizations and deliver high-quality work. This variable was made up of answers to survey questions about employees' perceptions of their performance potential (Wang et al., 2019). It reflects how workers feel about their ability and effectiveness at work. The research questions in the study aim to determine how much employee engagement and satisfaction, which are independent factors, affect employees' assessments of their performance confidence, a dependent variable. The hypotheses specifically examined whether there is a substantial association between satisfaction and performance confidence (Research Question 1) and whether engagement and performance confidence have a comparable relationship (Research Question 2).

As potential drivers or predictors of federal employee perceptions of their performance confidence was the dependent variable and reflects employees' self-assessed confidence in their job performance. As shown in Table 2 below, the variable, "employee satisfaction," measures how satisfied federal employees are with several aspects of their working environment. There were 50643 respondents for this category with 1 as the minimum reported degree of satisfaction. On the other hand, the maximum satisfaction score was 20, indicating that some employees expressed the greatest degree of contentment. Federal employees generally had a satisfaction score of 14.26, which indicates that they are fairly satisfied with their workplace. The moderate amount of variability in satisfaction scores is indicated by the standard deviation of 4.133. A slightly right-skewed distribution with a skewness of 0.741 suggests that more respondents typically had higher satisfaction scores. The distribution is less peaked and heavier-tailed than a normal distribution, according to the kurtosis of 0.36.

Another important variable was "employee engagement," which measured how actively interested and devoted government employees were in their jobs and organizations. There were 50643 respondents for this variable with a minimum score of 1 and maximum engagement score of 20. The average engagement score for federal workers is 10.31, which indicates a moderate level of engagement. The standard deviation of 1.221 indicates that engagement scores were more stable than satisfaction levels. The distribution is slightly left-skewed, as indicated by the skewness of -0.19, which implies that more respondents had lower engagement scores. The distribution appears to be less peaked and heavier-tailed than a normal distribution, according to the kurtosis of -0.15.

The third factor, employee perception, focuses on federal employees' self-assessed confidence in their capacity to meet the objectives of their agencies and create high-quality work. There were 50643 respondents for this variable. The perception score minimum was 1 indicating that some employees reported having very little confidence in their ability to execute. The highest perception score was 20, meaning that other people expressed the greatest degree of confidence. The average impression score for federal employees was 16.56, which is considered to be a high level of perceived confidence in job performance. The perception ratings exhibit a high degree of variability, as indicated by the standard deviation of 12.422 (Cronk, 2020). A nearly symmetrical distribution with little skewness is shown by the distribution's skewness of -0.01. The kurtosis of 0.793 denotes a positive kurtosis distribution, which has a heavier peak and heavier tails than a normal distribution.

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| --- | --- | --- | --- |
| **Table 2** | | | |
| *Parameters* |  |  |  |
|  | **Employee satisfaction** | **Employee Engagement** | **Employee Perception** |
|  |  |  |  |
| Minimum | 1 | 1 | 1 |
| Maximum | 20 | 20 | 20 |
| Mean | 14.26 | 10.31 | 16.56 |
| Standard Deviation | 4.133 | 1.221 | 12.422 |
| Skewness | 0.741 | -0.19 | -0.01 |
| Kurtosis | 0.36 | -0.15 | 0.793 |

**Reliability Test**

Tables 3, 4, and 5 show the reliability tests for the measures of employee engagement, employee satisfaction, and employee satisfaction. From Table 3, all the items have a Cronbach’s alpha greater than 0.7 thus they fitting for the measure of employee engagement. In Table 4, all the items have a Cronbach’s alpha of more than 0.7 thus fitting for employee satisfaction scale. Last, in Table 5 employee perception scale contain items with Cronbach’s alpha greater than 0.7 thus fitting the scale.

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| --- | --- | --- | --- | --- |
| **Table 3** | | | | |
| *Employee Engagement* | | | | |
|  | **Scale Mean if Item Deleted** | **Scale Variance if Item Deleted** | **Corrected Item-Total Correlation** | **Cronbach's Alpha if Item Deleted** |
| I feel encouraged to come up with new and better ways of doing things | 47.84 | 91.286 | 0.757 | 0.931 |
| My work gives me a feeling of personal accomplishment | 47.67 | 93.912 | 0.698 | 0.933 |
| I know what is expected of me on the job | 47.50 | 96.623 | 0.655 | 0.934 |
| My talents are used well in the workplace | 47.93 | 91.595 | 0.743 | 0.932 |
| I know how my work relates to the agency's goals | 47.41 | 97.713 | 0.633 | 0.935 |
| Supervisors in my work unit support employee development | 47.47 | 93.315 | 0.753 | 0.931 |
| My supervisor listens to what I have to say | 47.32 | 94.201 | 0.747 | 0.932 |
| My supervisor treats me with respect | 47.20 | 95.845 | 0.722 | 0.933 |
| I have trust and confidence in my supervisor | 47.42 | 92.194 | 0.763 | 0.931 |
| Overall, how good a job does you feel is being done by your immediate supervisor? | 47.33 | 94.013 | 0.730 | 0.932 |
| In my organization, senior leaders generate high levels of motivation and commitment in the workforce | 48.27 | 91.415 | 0.686 | 0.934 |
| Managers communicate the goals of the organization | 47.89 | 93.389 | 0.691 | 0.933 |
| I have a high level of respect for my organization's senior leaders | 47.92 | 92.764 | 0.667 | 0.934 |

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| --- | --- | --- | --- | --- |
| **Table 4** | | | | |
| *Employee Satisfaction* | | | | |
|  | **Scale Mean if Item Deleted** | **Scale Variance if Item Deleted** | **Corrected Item-Total Correlation** | **Cronbach's Alpha if Item Deleted** |
| Considering everything, how satisfied are you with your job? | 10.81 | 8.446 | 0.808 | 0.791 |
| Considering everything, how satisfied are you with your pay? | 11.12 | 9.684 | 0.489 | 0.922 |
| Considering everything, how satisfied are you with your organization? | 10.94 | 8.220 | 0.836 | 0.779 |
| I recommend my organization as a good place to work | 10.79 | 8.673 | 0.766 | 0.808 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 5** | | | | |
| *Employee Perception* | | | | |
|  | **Scale Mean if Item Deleted** | **Scale Variance if Item Deleted** | **Corrected Item-Total Correlation** | **Cronbach's Alpha if Item Deleted** |
| Employees in my work unit contribute positively to my agency's performance | 8.48 | 2.364 | 0.827 | 0.863 |
| Employees in my work unit produce high-quality work | 8.54 | 2.306 | 0.842 | 0.849 |
| Employees in my work unit adapt to changing priorities | 8.58 | 2.220 | 0.789 | 0.897 |

**Assumption Analysis**

Assumption analysis in linear regression is essential to model validity and reliability. It underpins reliable statistical analysis. This section discusses the importance of assumption analysis, setting the stage for a full examination of linear regression's key assumptions. The regression findings' veracity depends on assumption analysis (Alita et al., 2021). A popular statistical method, linear regression, establishes correlations between independent and dependent variables to reveal predictive and explanatory patterns. Several assumptions must be met for these relationships to hold for the model's conclusions to be reliable.

The assumption of linearity states that independent variables and dependent variables are linearly related. The model posits that independent variable changes affect the dependent variable consistently and proportionally. Deviations from this assumption can reduce model prediction. Second, observation independence is essential. Each dataset data point is assumed to be independent (Alita et al., 2021). Serial correlation in time-series data can distort coefficient estimates and conclusions. The assumption of homoscedasticity states that error variance is constant across all independent variable levels. Heteroscedasticity, or error variance, can affect regression coefficients and hypothesis tests.

The residuals, or disparities between observed and expected values, should follow a normal distribution under the normality of the residual’s assumption. Departures from normalcy might impact confidence intervals and p-values, causing inaccurate inferences. Additionally, multicollinearity—the independence of independent variables—is crucial. Multicollinearity can increase standard errors and make it hard to distinguish each predictor's distinct contribution (Osborne & Waters, 2002). Finally, no or little endogeneity assumes the independent variables are exogenous, meaning the error term does not affect them. Endogeneity can distort regression coefficient causal interpretation.

***Assumption #1***

In the study's dataset, linear regression analysis's first assumption is the dependent variable's nature. The dependent variable must be measured continuously as an interval or ratio variable. Linear regression and the data under study support this condition. The dependent variable, "Employee Perception," fits this condition in this study. Employee perspective is rated from 1 to 20 for work performance confidence (Osborne & Waters, 2002). The constant and meaningful intervals between values make this scale an interval variable. This range measures confidence continuously as respondents express different levels.

The dependent variable "Employee Perception" fits linear regression's goal of establishing correlations between independent variables and a continuous outcome. The study investigates how employee satisfaction and engagement affect employees' ongoing and nuanced job performance confidence (Alita et al., 2021). A continuous dependent variable enables for more sophisticated analysis, revealing subtle fluctuations and predicting patterns in the data. "Employee Perception" provides the continuity and precision needed for effective linear regression analysis, thus allowing an analysis off federal employee performance confidence.

***Assumption #2***

In this research study, the assumption that the independent variable should be continuous matches the data and linear regression. In linear regression, the independent variable, "Employee Engagement," must be measured as a continuous variable, usually interval or ratio data. This assumption fits the study's goals and findings. The Employee Engagement Index (EEI) and its sub-indices measure quantifiable, ongoing employee engagement in this study. The EEI uses structured survey questions to measure involvement from low to high (Alita et al., 2021). Numbers on a scale represent respondents' engagement-related feelings. These numerical replies have meaningful and equal intervals between response categories, therefore they fall within an interval or ratio measurement scale.

These continuous measurements meet linear regression standards. They allow for an examination of numerical engagement levels that affect the dependent variable, "Employee Perceptions." When the independent variable is continuous, linear regression model and assess how incremental engagement changes affect performance judgments (Alita et al., 2021). In this study, the assumption that the independent variable (Employee Engagement) is measured at the continuous level is met allowing linear regression to assess the influence of engagement on performance perceptions.

***Assumption #3***

For linear regression, another assumption—the absence of substantial outliers—fits linear regression analysis must be met. The presence of outliers can significantly affect the outcome of the regression. Figures 1 and 2 shows that there are no significant outliers thus the data meets this assumption of regression analysis.

**Figure 1**

*Scatter plot of employee perception against employee satisfaction*

**Figure 2**

*Scatter plot of employee perception against employee engagement*

***Assumption #4***

In this study, extensive data from federal employees' responses was collected and evaluated, the assumption of residual normality must be tailored to the data and explained for linear regression. The assumption that regression line residuals (errors) are nearly regularly distributed is important for this study. Linear regression assumes that residuals, the differences between observed and predicted values, are normally distributed. This assumption matches the expectation that model errors are centered around zero and bell-shaped, symmetric as shown in Figure 3. To validate this assumption for linear regression Normal Probability-Probability (P-P) plot in Figure 4 illustrates a P-P curve showing the normal distribution. Also, Figure 5 show a normal distribution of the residuals as shown by the Q-Q plot. From the Figures 3, 4, and 5 the assumption of normality is met as shown by the histogram, P-P plot, and Q-Q plot.

**Figure 3**

*Shows histogram of the normal distribution of Standardized Residuals*

**Figure 4**

*Shows normal P-P Plot of Standardized Residuals*

**Figure 5**

*Shows normal Q-Q Plot of Standardized Residuals*

***Assumption #5***

For linear regression, homoscedasticity is an assumption that must be met by the variables. This statistic measures the normal distribution of the residuals. In Figure 6, the scatter plot shows a straight line thus showing normality of the residuals thus meeting this assumption.

**Figure 6**

*Shows the scatter plot employee perception against standardized residuals*

**Assumption #6**

In regression analysis, the Durbin Watson test is used to test for independent observations. A value close to 2 indicates that the observations are independent and thus the assumptions of regression analysis are met with a Durbin-Watson statistic of 2.059 from Table 6.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 6** | | | | | |
| *Model Summary* | | | | | |
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** | **Sig** |
| 1 | .989 | .977 | .977 | 2.618 | 0 |
| a. Predictors: (Constant), Employee Engagement | | | | | |
| b. Dependent Variable: Employee Perceptions | | | | | |

**Hypothesis Testing**

**Research Question 1**

***To what extent does federal employee satisfaction influence federal employee perceptions of their performance confidence?***

The Pearson correlation coefficient between Employee Engagement and Employee Perception is .814, indicating a perfect positive linear relationship between the two variables from Table 7. The p-value for the correlation is very close to zero (p < 0.001), indicating that this correlation is statistically significant. The linear regression model includes only one predictor variable, which is Employee Perception. Based on the results, it is clear that Employee Perception is a highly significant predictor of Employee Engagement. The strong positive relationship with a coefficient of .814 suggests that for every unit increase in Employee Perception, there is a corresponding one-unit increase in Employee Engagement.

Therefore, in the context of Research Question 1, it is reasonable to reject the null hypothesis (H01: There is no relationship between federal employee satisfaction and federal employee perceptions of their performance confidence). The evidence from this analysis suggests that there is indeed a significant relationship between Employee Perception and Employee Engagement, supporting the alternative hypothesis (Ha1: There is a significant relationship between federal employee satisfaction and federal employee perceptions of their performance confidence).

**Research Question 2**

***To what extent does federal employee engagement influence federal employee perceptions of their performance confidence?***

From Table 7, the model summary indicates that the regression model accounts for a significant amount of the variance in Employee Engagement. The p-values for these correlations are extremely small (p < .000), indicating that this correlation is highly significant. Based on the results of the linear regression analysis, the null hypothesis (H02: There is no relationship between federal employee engagement and federal employee perceptions of their performance confidence) is decisively rejected. The highly significant relationship (p < .000) and the strong positive correlation coefficient between Employee engagement and Employee perception suggest a robust and meaningful connection. In practical terms, this implies that as federal employee engagement increases, their perceptions of performance confidence also increase significantly (Alita et al., 2021). This finding has important implications for understanding and enhancing employee engagement within federal agencies.

**Table 7**

*Regression Co-efficient*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* |
| Employee\_Satisfaction | 0.094 | 0.019 | 4.976 | 6.73E-07 |
| Employee\_Engagement | 0.253 | 0.005 | 52.454 | 0 |

**Summary**

This chapter examined the complex linkages between federal employee satisfaction, engagement, and performance confidence in this extensive study. The study carefully examined these characteristics to gain insight into federal labor trends. Research Question 1 examined how federal employee satisfaction affects performance confidence. Research Question 2 examined how federal employee involvement affects performance confidence. The alternative hypotheses for both questions were true showing significant relationships, while the null hypotheses were not true.

The huge dataset from the 2022 OPM Federal Employee Viewpoint Survey (FEVS) was essential for data collecting. With 557,779 federal employee responses, this dataset accurately represented the federal workforce. Federal personnel from different agencies provided diverse insights for the study. Race, Hispanic status, sex, time with the federal government, supervisory status, military service status, and plans to leave the organization within a year were evaluated. Demographic characteristics deepened the analysis, revealing how these factors affect employee satisfaction, engagement, and performance confidence.

The analysis focused on linear regression to answer research questions. Each regression model carefully examined the links between employee happiness engagement and performance confidence. The investigation followed linear regression assumptions including linearity, independence of observations, homoscedasticity, residual normality, and minimal multicollinearity. The results were intriguing and revealed complex federal workforce dynamics. Research Question 1 rejected the null hypothesis, showing a strong link between employee satisfaction and performance confidence. Research Question 2 also rejected the null hypothesis, showing a strong link between employee engagement and performance confidence. These findings showed that federal agencies must promote employee satisfaction and engagement to boost performance confidence.

Overall, this study illuminated the complex nature of federal employee happiness, engagement, and performance confidence. It confirmed substantial links and highlighted federal government agency potential for good change. This study promises better public services, empowered personnel, innovation, well-being, and collaborative governance beyond statistical analysis. This study will help the federal government understand its workforce and improve organizational excellence and employee satisfaction.

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