

**Exploring the Influence of Job Enrichment on Satisfaction of Federal Employees: An  
Empirical Study**

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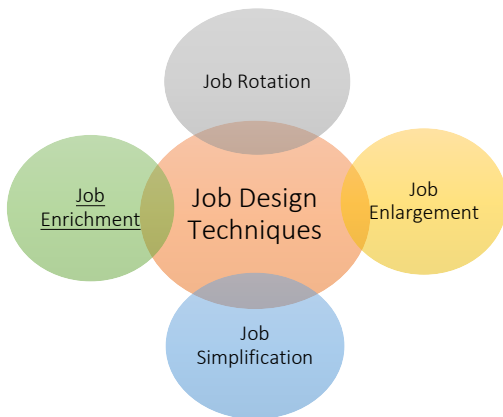
### **ABSTRACT:**

This investigation aimed to determine the influence of job enrichment on the satisfaction of federal employees. The foundational process of job design is a method oftentimes utilized in the public sector to restructure employment practices to suit internal and external market needs. Job enrichment is a form of job design, which describes the process of expanding employees' tasks through dimensions of vertical loading, horizontal expansion, task significance, development, and feedback. To understand the historical significance of the term "enrichment," a survey of the theoretical framework and semantic progression was reviewed. This was accompanied by a thorough assessment of satisfaction, an examination of the principle-agent problem, and concluded with an analysis of employment-related value conflicts. This cross-sectional observational investigation sourced data from the Federal Employee Viewpoint Survey (FEVS) conducted in 2019, which presented descriptive statistics for all 385,000 survey respondents. Data shows that for every unit of enrichment, satisfaction increased by 36.2%, which is supported by the research measure accounting for nearly 80% of the variation of satisfaction in the survey. These findings are significant because they display the changing needs of the workforce and highlight what federal employees value. For enrichment to become sustainable, modern practices must have internal alignment with the corresponding above-mentioned enrichment dimensions.

**Key Words:** Job Design, Enrichment, Satisfaction, Federal Employee Viewpoint Survey (FEVS)

### INTRODUCTION:

To advance the organizational alignment of talent and labor needs, administrators oftentimes restructure employee tasks, duties, and responsibilities. Job restructuring is frequently the response of either conducting a job analysis- identifying information related to crafting job



descriptions/specifications, or an industrial optimization movement that alters the factors of production through knowledge expansion. The summation of the above-outlined methodology is referred to as job design, formally defined as a “maximization principle that alters the content and processes of work assignments...,” by either job rotation, job enlargement, job simplification, or job enrichment (Zareen et al, 2013).

Emphasizing the above-mentioned job design techniques frequently results in various impacts on intrinsic workplace elements such as employee morale, motivation, and satisfaction. Fostering an organizational culture cognizant of these intrinsic elements positively impacts organizational engagement and commitment. There is an evident connection between intrinsic workplace elements and job design techniques, given that the consequences of not mingling the two weaken the organizational productivity, retention, and profit. Ultimately, the internal alignment of a business strategy to the techniques of job design – that fosters a culture cognizant of the influence of intrinsic workplace elements, indicates a strategic and functional workforce.

This report intends to further investigate job enrichment as a technique of job design, aiming to discover its probable influence on the satisfaction of federal employees. While federal employees have vastly differing values, motivating forces, and perceptions of enrichment than

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business sector employees, I assert enrichment practices significantly influence the satisfaction of federal employees. This assertion is provided that job design techniques and interrelated mechanisms highly influence employee expectations, value perceptions, and sense of reasonable rewards.

This investigation requires purposeful background on the interrelated terminology, theoretical areas, and organizational perspectives. The following conversation will detail each foundational root of the investigation, all while serving as the contextual groundwork for understanding.

### Research Question

- How does job enrichment influence job satisfaction?

## LITERATURE REVIEW:

### **Semantic Progression: Defining Job Enrichment Overtime**

The term “enrichment” has endured a long-with-standing history of conceptual evolution. Defining enrichment using a historical lens matters because through an analysis of the associated concepts, an “enrichment” measure can be created that encapsulates all dimensions of the term throughout history. Understanding the historical significance of enrichment will also allow for greater knowledge of interrelated concepts, as discussed below.

Enrichment as a sector of job design commenced with the introduction of Taylorism, the earliest Job Design Theory initiated in the late 19<sup>th</sup> century. Frederick Taylor asserted that by optimizing and simplifying jobs, organizational productivity would flourish. This assertion then birthed the principle of maximum efficiency in which employees’ duties were routinized into ergonomic (repetitious) activities all while human capital was being treated as “disposable parts of a machine.” Organizational enhancement of maximum efficiency was coupled with sub-par relational benefits and was assumed to increase worker motivation (Witzel, 2015). Taylor’s lasting declarations molded theoretical job design processes for decades until enrichment was later formally defined as a concept.

The proceeding journey of enrichment’s semantic development continues to Hygiene Motivational Theory, developed by Frederick Herzberg in 1959. Herzberg’s process homed in on individuals in the workplace, as opposed to communal organizational processes such as Taylorism. Herzberg concluded that workers have a range of higher-level and lower-level workplace needs. For instance, intrinsic factors such as the need to grow psychologically, establish security, and maintain responsibility, are higher-level motivators. The desire for

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extrinsic/external elements such as compensation and policies are lower-level hygiene factors (Chartered Management Institute).

As an extension of the Hygiene-Motivational Theory, Herzberg coined the process of job enrichment, which is simply defined as “modifying jobs so that employees can experience more of the motivator factors...” of achievement, recognition, responsibility, and personal growth (Sachau, 2007). Herzberg proposed that the enrichment of individual employment opportunities may result in increased collective workplace responsibility, autonomy, and learning opportunities (Chartered Management Institute) (Sachau, 2007). Herzberg concluded his analysis of job design by contrasting two subsidiary topics of job design techniques. When considering the technique of job enlargement, horizontal loading, defined as the development of the job duties within a similar scope of difficulty and responsibility is used. This directly contrasts with the technique of job enrichment which uses vertical loading. Vertical loading is defined as the expansion “...of job duties, providing the employee with tasks and responsibilities normally done by a senior employee or supervisor, which often is associated with more freedom” (Choudhary, 2016).

The journey of the term “enrichment” progresses to the Job Characteristics Model, presented by Oldham and Hackman in 1980. This model indicated that nourishing work characteristics must be designed with high skill variety, task identity, task significance, autonomy, and feedback mechanisms. Implementing these design methods ensures positive workforce engagement, performance, and satisfaction. Oldham and Hackman determined that increasing an individual’s organizational depth through the aforementioned core job dimensions, flourishes the value of relational benefits (Raihan, 2020). Although the term “enrichment” was established before the development of this model, Oldham and Hackman’s discernment of organizational design adds to the significance of the term. Despite the Job Characteristics Model

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remaining a commonly cited piece of literature, it has endured extreme criticism. Discussions arose a decade after its incorporation with claims of low empirical support. Design strategists compared data from the model's inception using the statistical techniques of today and concluded Oldham and Hackman's model to be unsubstantiated (Jacobs, 2013). These shifting interpretations of prior design theories led to the last stage of our journey to uncovering enrichments semantic progression.

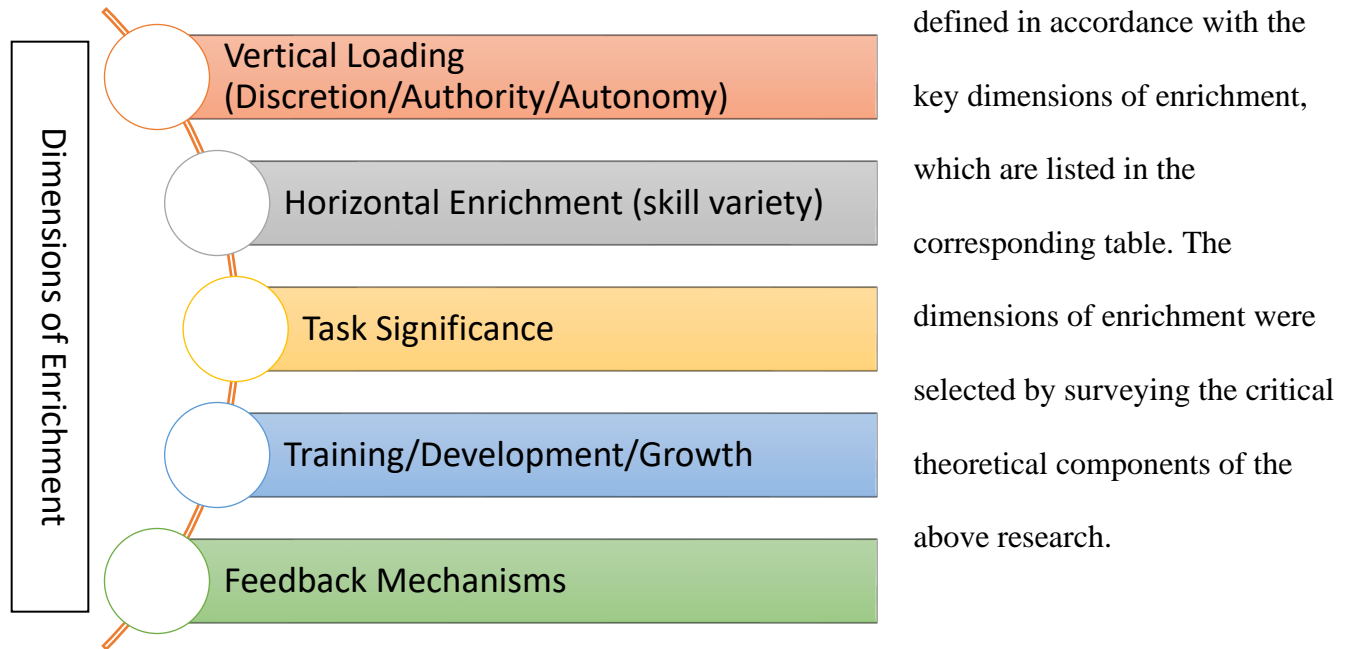
Job Crafting is the most contemporary enrichment formulation. This addition to enrichment devised by Wrzesniewski and Dutton in 2001 opposes previous literature on several enrichment protocols. "Most job-redesign models put the onus on managers to help employees find satisfaction in their work; in reality, leaders rarely have sufficient time to devote to this process" (Harvard Business Review, 2014). This method gives higher autonomy to employees and empowers them to become "job entrepreneurs." Crafting enables workers to play a positive role in redefining their assignments, thus maintaining a bottom-up approach. A bottom-up approach to management allows organizational change to begin with the communications and actions of lower-level employees, which would then be the basis of change among executives. The steps of the employee-initiated process of job crafting are as follows: employees seek to control, the employer transitions to the view of work as a discrete part of a system, and concludes with both parties changing the meaning of work (Ishiyama, 2020). This model transforms enrichment in both term and definition and adds an unconventional perspective on job design processes.

Shown from the above analysis, enrichment is an evolving term with a complex history. Although the direct term "enrichment" was sourced by Herzberg in 1959, its practice and application have shifted throughout time. Understanding the development of enrichment is



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critical in the pursuit of understanding the influence of enrichment on federal employee satisfaction. Considering the above analysis in its entirety, enrichment will be operationally



## Relationship Between Motivation & Satisfaction

The process of enriching jobs may influence intrinsic/relational workplace elements, such as motivation and satisfaction. Contemporary linguistics have used the terms motivation and satisfaction interchangeably. Although related concepts, terminology must be differentiated for a complete comprehension of the dependent variable.

### Motivation

Workplace motivation is defined as a psychological effect of employee satisfaction that causes arousal, direction, and the persistence of voluntary goal-directed actions. “Managers cannot ‘motivates’ employees, but they can create an environment that inspires and supports strong employee motivation” (Ganta, 2014). As motivation is the effect of satisfaction, understanding the schools of motivational theory covers an individual’s predisposition (content

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theories), cognitive process (process theories), and perceived consequences of actions (outcome theories) (Rhee, 2019).

Content theories of motivation are concerned with identifying internal needs and developing methods to achieve those needs, such as instincts and personal contentment. Several transformational content theories include Maslow's Hierarchy of Needs, Alderfer's ERG Theory, Herzberg's Motivator-Hygiene Theory, McClelland's Learned Needs Theory, and the Job Characteristics Model.

Maslow's Hierarchy of Needs (1954) proposes that motivation is contingent on the completion of a hierarchical need. Employee needs which are listed in ascending order of importance are physiological, safety, social, esteem, and self-actualization. Movement among needs is contingent on the successful completion of the prior stage. For instance, research suggests an individual must have safe working conditions, adequate compensation, and job security before they can be motivated by increased job responsibilities, status, and challenging work assignments (Gawel, 1996). Maslow's Hierarchy of Needs signals the importance of employee motivation, which is significant when considering this process, the effect of motivation.

Alderfer's ERG Theory (1972) condenses Maslow's Hierarchy of Needs into three categories. The three categories listed in ascending order of importance are the needs of existence, relatedness, and growth. ERG differs from Maslow's Hierarchy of Needs when addressing the progression between the categories. Alderfer suggests the pattern of need progression is fluid, however, if an individual is repeatedly unable to achieve a higher-level need the employee will regress and remain stagnant with lower-level needs (Dinibutun, 2012). For instance, if an employee cannot find fulfillment of work through growth, the employee may

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regress and demand a relatedness need such as increased managerial support or recognition. ERG Theory offers a simplified model of understanding motivation, highlighting the importance of need fulfillment on all organizational levels.

The last content theory pertinent to our discussion is McClelland's Learned Needs Theory. McClelland (1971) suggested that needs can be learned in response to the following domains: the need for achievement, the need for affiliation, and the need for power. Although humans have an intrinsic need to fulfill each learned domain depending on the circumstance (i.e., organizational position), we naturally reside in a specific category (Pardee, 1990). For instance, managers often have a high need for power and are motivated when exercising control of others. Although the need for power is divided into two realms, those who enjoy power for its richness, and those who use power to advance personal interests, both incorporate key attributes of persuasive communication and persistence. This theory will become useful when analyzing control variables for the research, such as managerial status where the needs of management may vastly differ from that of employees.

Process theories of motivation center on explaining how behavior is formed among dynamic motivational variables. Process theories are also comprised of several transformational theories including Vroom's Expectancy Theory, Adams Equity Theory, and Goal Setting Theory.

Vroom's Expectancy Theory (1964) suggests that people are motivated to behave in ways that produce the most desirable combination outcomes. Vroom defined motivation as the decision of effort exertion an employee must consider when accomplishing a specific task, outcome, or goal. Three defining elements of the theory are expectancy, instrumentality, and valence. Expectancy is defined as the belief that work-related effort is tied to an expectation,

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while instrumentality is the belief that performance is connected to an outcome/reward. Lastly, valence regards the award preferences of the individual. Expectancy multiplied with instrumentality, and valence equals complete motivation. By definition, this model recognizes that for individuals to be highly motivated, all three elements must be high in percentage. If any of the aforementioned components equals zero, the overall employee motivation is non-existent (Isaac, 2001).

The last process theory that is relevant to our discussion is Adam's Equity Theory. Adam (1963) suggests that employees socially compare efforts and rewards. The employee referent behaviors involve comparing an employee's current experience to others, which are self-inside, self-outside, other-inside, and other-outside. Employees strive for fairness which highlights how an individual's motivation for behavior can be fueled by feelings of inequity. The emphasis on an individual's perception is a pillar in equity theory regardless of if that perception is found to be true. Inequity perceptions involve "...comparing the individual's ratio with the comparison of the ratio of other" (Al-Zawahreh, 2012). Expanding the concept of workplace equity, organizational justice reflects the extent to which employees perceive distributive, procedural, and interactional fairness at work. Equity theory is critical when separating motivation from satisfaction, where perceptions of either favorable or undesirable inequities may result in a bi-directional movement of motivation and satisfaction.

The last motivational realm is Organizational Behavioral Modification theory, which is a singular theory that seeks to explain how the expectation of consequences can motivate individuals. This theory was authored by B.F. Skinner (1953) and proclaims that behavior followed by a favorable outcome will be repeated while behavior with negative consequences will not. This model follows four contingency methods of shaping behavior which are positive

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reinforcement, negative reinforcement, punishment, and extinction. These methods then have four resulting schedules of reinforcement, which are fixed interval, fixed ratio, variable interval, and variable-ratio schedules (Rhee, 2019). Although the emphasis on behavioral modification will be minimal to the investigation, understanding how consequences influence motivating factors will remain useful when interpreting survey data from the perspective of the employee.

### Satisfaction

With a preliminary understanding of motivational concepts and theories, we can now analyze satisfaction in the context of this investigation. Satisfaction refers to an employee's attitude resulting from specific job design elements, including individual and group employment expectations. Job satisfaction is an affective or emotional response to a position that is not unitary, meaning satisfaction can span multiple areas at once. For this investigation, satisfaction

Organizational Decisions

Information Presentation

Recognition

Organizational Policies

Advancement

Organizational Training

Compensation

will be operationally defined using a facets measure that accumulates a variety of interrelated topics. The facets measure is shown in the corresponding diagram, which presumes satisfaction is not an overall singular measure, but rather a stockpile of organizational decisions, information presentation, recognition, policies, advancement, etc.

Understanding the consequences of low workplace satisfaction further displays its importance. Frequent outcomes of low workplace satisfaction

negatively impact productivity, turnover, customer retention, absenteeism, and profit. From this result, it is evident that employee satisfaction must be considered a fundamental element of each

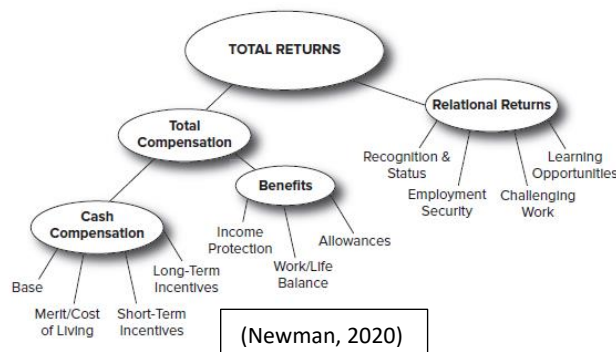
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organizational structure. Provided that the United States is a leader in service industries, human capital must be regarded as central for retaining, attracting, and sourcing qualified applicants.

As evidenced by the above analysis of both motivation and satisfaction, we now can meaningfully weave the concepts and explore their connection. Motivation refers to the reasons an employee performs a particular job, explained by utilizing numerous content, process, and outcome-based motivational theories. Satisfaction refers to an employee's contentment achieved through either value attainment/alignment or other personable approaches. Motivation and satisfaction, although related, can be mutually exclusive. For instance, a worker can be highly motivated to work to appease financial responsibility but can be severely dissatisfied with the organizations-person value alignment (Mishra, 2013) (Kamdron, 2007).

## Rewards: Differing Perspectives

There can be significant differences in how employees and employers perceive enrichment. Discussing enrichment through the lens of compensation and benefits will be useful in our journey of discovering the disconnect between workforce perspectives. To begin, there are several forms of compensation, all of which begin with total returns, which is the sum of total compensation and relational returns. The total compensation realm is divided into cash



compensation and benefits. The relational return realm consists of the non-financial, intrinsic psychological employee influences provided by an organization. These returns impact employee behaviors and include elements such as

recognition of status, employment security, challenging work, and the production of learning opportunities (DeVaro, 2010).

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Implementing enrichment through job design often results in a relational compensation stream of extrinsic or intrinsic rewards. Extrinsic rewards are financial or social rewards presented in response to a job design initiative. Despite the modern emphasis on extrinsic rewards, they can be drastic and eventually become demotivating. Monetary rewards have a transitional and temporary satisfactory effect. Once satisfied overtime time, extrinsic rewards lose personal value, and humans transition to another unattained need. Intrinsic rewards are the self-granted, psychological rewards that produce a greater sense of self-determination. To establish an effective intrinsic rewards system, managers must lead for meaningfulness, choice, competence, and progress.

The use of rewards invokes differing responses between employers and employees. To ensure the understandability of the differing perspectives of rewards, the agency dilemma will be used to simplify abstract frameworks. The agency dilemma is a conceptual guide that explains the clashing of two parties' motivations and interests. There are "...inherent difficulties involved in motivating one party (the agent) to act in the best interests of another party (the principal) rather than their own interest" (HR Zone). In the context of different perspectives on rewards, the dilemma refers to the following scenario. From the agent's perspective, the principal may either be in pursuit of cost savings or truly be invested in the nourishment of the employee's intrinsic values by enriching the workplace. The agent from the principles perspective of enrichment could either be in pursuit of leveraging total compensation or truly value the enrichment activities. The use of extrinsic and intrinsic rewards further complicates the analysis of the agency dilemma. Misalignment between an agent's preferred reward and the relational benefits offered by the principle may result in dissatisfied employees.

### Value Conflicts

A common challenge impeding the development of enrichment through job design are conflicting values. There are values conflicts between employees, employers, and society. A particular type of value, personal values will be analyzed within the scope of federal employees. Personal values are the standards that have meaning to individuals, and eventually, significantly impact collective organizational culture. To begin this analysis, values will be addressed on an individual basis and then expanded to address the organizational and societal perspectives.

Schwartz's Value Theory authored by Shalom Schwartz, proposes several basic universal values. The theory stands that those values form a circular structure that is based on the motivations they inspire. Schwartz determined a variety of core values that motivate individuals through power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. In addition, Schwartz holds the following six features of values are universal: values are beliefs linked to effects, values are motivational constructs, values are bigger than specific actions or situations, values serve as standards, values are ordered by relative importance, and the relative importance of multiple values guide actions (Schwartz, 2012). Mentioning Schwartz's Value Theory is useful in this investigation for understanding that values are irremovable from individuals, and no amount of relational job design would satisfy or motivate those who intrinsically uphold a differing belief system.

Adding to the conversation, when values clash repeatedly for both the agent and principle, a value conflict is often the result. Value conflicts result in reduced fulfillment of actions and organizational instability. The three main types of value conflicts are intrapersonal, interpersonal, and individual-organizational based. Intrapersonal value conflict is disagreement from within an individual when internal values clash. This differs from interpersonal value



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conflict which is a dispute among several people. The most relevant value conflict in my investigation is individual organization based, which is when there is a conflict between the employee with management practices or value alignment. Individual organization value conflict symbolizes either a mismatched value congruence or an unaligned person-culture fit (Graaf, 2014).

The overarching value conflict in my theoretical research is between employees and society. According to the Network Association of Schools of Public Policy-Affairs and Administration (NASPAA), public service calls for accountability and transparency, competence with efficiency/objectivity, strong adherence to ethical values, and overt demonstration of respect, equity, and fairness (Molina, 2012). This becomes critical when recognizing that 20% of the workforce resides in the public sector, with nearly 64% of that statistic comprising local government employment (Brock, 2001). It is reasonable to presume some mismatched value congruence/unalignment would be prevalent among public employees' expectations, which oftentimes contrast societies' expectations. In conclusion, the societal expectations of public employees play a contributing factor in assessing a worker's overall satisfaction and personal value alignment/agreement.

### CONTEMPORARY RESEARCH:

In addition to the theoretical framework established above, some interrelated studies provide further context to my investigation. A recent study published by the Institute for Advanced Research in Business and Economics (INARBE), revealed that public employees are substantially more satisfied than their private counterparts. This was solidified when reviewing the differences in working conditions, job demands, and resources. Although satisfaction in the study was operationalized differently, the result of public employees being across the board more satisfied in any condition is quite revealing (INARBE, 2021). This study provides a basis for understanding the stability of public employee satisfaction and adds value to the comprehension of how job demands and "...resources simultaneously play a mediating role in explaining the relationship between the employment sector and satisfaction" (INARBE, 2021).

In a study conducted by the US Bureau of Labor Statistics, researchers Mohr and Zoghi formulated two hypotheses about the relationship between enrichment and satisfaction. The "motivational" hypothesis states enrichment directly satisfies employees psychologically and socially, while the "intensification" hypothesis stated job enrichment directly reduces employee satisfaction. The findings of this experimental research show strong favor for the motivational hypothesis. Specifically, "suggestion programs, job rotation, information sharing, teams, quality circles, and classroom training all are positively associated with job satisfaction" (BLS, 2006). The research conducted by the Bureau of Labor Statistics adds value to my investigation by providing an established framework that connects enrichment to satisfaction, which adds contextual awareness. Research remains needed in investigating the connectivity of enrichment to satisfaction of federal employees, however, the above research will be used to structure the hypothesis.

### EVALUATION OF CURRENT KNOWLEDGE:

The current state of knowledge on my research variables carries both strengths and limitations. In addressing the strengths, both variables of my investigation are frequently cited and readily available with basic search protocols. These variables are highly researched and result in mountainous pathways of literature. Despite this, there is a lack of research that empirically compares the variables without automatically assuming a relationship. The terms enrichment and satisfaction are oftentimes preestablished as synonymous before any evaluation. Weaknesses in the current state of knowledge encapsulate a gap in the literature. Specifically, a gap in research into the enrichment and satisfaction practices of federal employees. Current research is experimental and draws samples of participants from either sector. This methodology contrasts with my investigation, which centers only on federal employees through survey data. My research is quite significant given that public employees differ vastly from corporate employees in terms of employment outcomes and values. My investigation will fill the gap in the literature and provide an alternative perspective generalizable to public employees.

### Hypothesis

- Job enrichment will have a positive influence on employee job satisfaction.

### METHODOLOGY:

#### Research Design

This research is a cross-sectional observational study with control variables. This design method measures the independent and dependent variables simultaneously while prohibiting researcher manipulation. This research design method was selected for an assortment of reasons, with the principal being the reliance on data analysis rather than variable control / contingency. With FEVS reflecting a comprehensive snapshot of several variables, this research design appropriately suits my expectations and the investigation requirements.

There are threats to internal validity that arise with the selection of a cross-sectional observational research design. First, because this is a cross-sectional design, temporal precedence cannot be established since the independent and dependent variables are measured at the same point in time. Second, the study cannot control for unobserved variables that may be related to both the independent and control variables, increasing the potential for biased regression coefficients

My findings will reflect both descriptive and summary statistics, which prohibit temporal proximity. Research utilizing already established data sets provide limited knowledge of the sequence in which the variables operate. Despite lacking this causal inference, my research has high generalizability to all United States public employees. All federal agencies and departments had equal opportunities to participate in the survey through a representative sample that was clustered by the agency. This comprehensive survey has maintained a high response rate since its establishment in 2002. In addition, FEVS captures key demographic information of each respondent, which nourishes data despite the lack of inferential determinations.

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The population for my research as briefly noted above, are all public employees in the United States. This is an appropriate population given that the research question, concept, and hypothesis encapsulate a segment of that populace. With the incorporation of enrichment practices (IV), the population specializes in the sample of all federal employees. I did not collect data on the sample, but rather used established archived data sets and assessed its predetermined sample measures. I used FEVS to gather sample data, which was originally acquired through a representative sample clustered by agency, as mentioned above. This sampling method ensures that every individual in the population has an equal chance of being selected, thus eliminating sampling bias.

Among the discussion of measurement, the reliability and validity of the research must be considered. Reliability concerns the extent to which a test or measure yields the same results in forthcoming trials or if the investigation continues. I achieved this consistency by sourcing reputable archived datasets and examining the associated measures of reliability presented. Given my reliance on previously collected data to determine connections between the variables, I am limited in my ability to specify which consistency measure(s) were used. However, the Office of Personnel Management conducts FEVS, which is a reputable federal reporting agency. Additionally, FEVS also has high consistency in the questions asked in each reporting cycle, which improves construct reliability. Similar to reliability measures, my specific validity approach is dependent on the data set acquired through the FEVS. Given the individual-based nature of the survey, there will be at a minimum convergent/construct validity, which is when the researcher specifies two concepts that are related, creates a measure of each concept, and examines the correlation of the relationship.

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I demonstrated reliability and validity through evidence and arguments by referring to the level of measurement. The level of measurement indicates the type of information contained and considers mathematical principles to present a baseline for comparisons. I constructed an ordinal-level measure where comparisons of data will be on a scale. This is particularly important when analyzing satisfaction, where individuals may not self-identify as being fully on either end of the satisfied spectrum. For example, higher marks may correspond to a strong-satisfied employee, whereas a moderate mark may equate to a relatively satisfied employee. This process is modeled through the following scales which will also identify the ranging levels of respondent-identified enrichment practices.

### Data Measurement & Analysis

The data software system used to implement the above methodology was STATA, a statistical software that simplifies data manipulations and visualizations. All survey questions were listed in STATA in a numerical interval fashion and were placed into a query. Respondents had the option to list responses on a range between 1 and 5, which accounts for the proceeding discussion on scales. The regression of the variables was presented both before and after control variables were held constant. This multi-variable regression was then followed up with an array of descriptive and summary statistics, which were then analyzed in the findings section of this investigation. The proceeding discussion outlines the process in which enrichment, satisfaction, and interrelated control variables were addressed.

### Enrichment (IV)

Operational definitions are essential for ensuring the consistency of research methods, as well as formalizing a measure of how to define and interpret the topic. The IV is enrichment, which is operationally defined as a job design technique

- 1) Vertical Loading  
(Discretion/Authority/Autonomy)
- 2) Horizontal Enrichment (Skill Variety)
- 3) Task Significance
- 4) Training/Development
- 5) Growth

utilizing vertical loading, having a direct impact on employee's higher-level needs attainment through learning opportunities, skill variety, task identity/significance, and feedback. This definition showcases the dimensions of job enrichment, which are shown in the above corresponding table.

By using the dimensions of enrichment as a metric of analysis, I analyzed FEVS and identified ten survey questions corresponding to the dimensions. The survey questions are listed below as well as the corresponding enrichment dimensions.

#### Enrichment Dimensions and Survey Question Selections

1. Vertical loading (discretion/authority/autonomy)
  - Q30. Employees have a feeling of personal empowerment with respect to work processes.
  - Q43. My supervisor provides me with opportunities to demonstrate my leadership skills.
2. Horizontal enrichment (skill variety)
  - Q3. I feel encouraged to come up with new and better ways of doing things.
  - Q11. My talents are used well in the workplace.
3. Task significance
  - Q4. My work gives me a feeling of personal accomplishment.
  - Q13. The work I do is important.

### 4. Training/development/growth

- Q1. I am given a real opportunity to improve my skills in my organization.
- Q47. Supervisors in my work unit support employee development.

### 5. Feedback

- Q19. In my most recent performance appraisal, I understood what I had to do to be rated at different performance levels (for example, Fully Successful, Outstanding).
- Q46. My supervisor provides me with constructive suggestions to improve my job performance.

To ensure the selected survey questions all have similar directional trends and are correlated, I ran an alpha test. Being that all these questions are measuring enrichment, they must all be correlated to proceed in the investigation and create an aggregate measure. The alpha test results in a numerical digit between 0 and 1 where closer proximity to 1 indicates a higher connectivity/correlational trend of the measure. My alpha test resulted in a score of 0.9186, meaning all ten enrichment questions converge strongly on the latent construct of enrichment. The next stage of my investigation was developing a scale of my measure of enrichment. This scale is utilized by STATA as a marker of how individual survey respondents responded to each of the above ten questions. This scale was inputted into a database on the STATA software and resulted in descriptive statistics.

The following figure displays the enrichment measure survey question statistics. The top of the chart shows the individual question statistics, while the bottom represents the entire enrichment measure. Individual enrichment questions ranged between 585,857 to 612,335 survey respondents. The mean of the survey questions also vary and range from 3.28 and 4.37. The question standard deviation is more closely aligned, and ranges from 0.78 to 1.14. Given that each respondent measured their responses on a scale ranging from 1-to 5, each question coinciding with the survey has a minimum of 1 and a maximum of 5. Moving to the bottom of



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the chart, the complete enrichment measure is comprised of 538,882 survey respondents. These respondents have a mean of 38.11 and a standard deviation of 8.43. Combining all ten survey questions result in a collective minimum of 10 and a maximum of 50.

| Question                               | Respondents | Mean  | Standard Deviation | Minimum | Maximum |
|--|-------------|-------|--------------------|---------|---------|
| <u>INDIVIDUAL QUESTION STATISTICS</u>  |             |       |                    |         |         |
| Q 30                                   | 585,857     | 3.28  | 1.16               | 1       | 5       |
| Q 43                                   | 592,721     | 3.90  | 1.14               | 1       | 5       |
| Q 3                                    | 609,335     | 3.62  | 1.19               | 1       | 5       |
| Q 11                                   | 605,029     | 3.52  | 1.19               | 1       | 5       |
| Q 4                                    | 612,601     | 3.88  | 1.08               | 1       | 5       |
| Q 13                                   | 610,335     | 4.37  | 0.78               | 1       | 5       |
| Q 1                                    | 611,219     | 3.72  | 1.12               | 1       | 5       |
| Q 47                                   | 587,801     | 3.89  | 1.13               | 1       | 5       |
| Q 19                                   | 601,212     | 3.83  | 1.14               | 1       | 5       |
| Q 46                                   | 592,663     | 3.79  | 1.16               | 1       | 5       |
| <u>COLLECTIVE MEASURE OF QUESTIONS</u> |             |       |                    |         |         |
| Enrichment Measure                     | 538,882     | 38.11 | 8.43               | 10      | 50      |

### Satisfaction (DV)

The DV is federal employee satisfaction, operationally defined as an employee's attitude resulting from specific job design elements, including individual and group employment expectations, salary, recognition, organizational values, and the willingness to notate the organization as a favorable place of employment. This facets measure assumes worker satisfaction is an accumulation of items, such as recognition, policy comprehension, promotional opportunities, pay, etc. rather than just incorporating a simple measure of summarizing the statistic. By using the elemental facet measure of satisfaction, I analyzed FEVS and identified six corresponding survey questions which are outlined below.

### Facet Satisfaction Survey Question Selection

- Q63 → How satisfied are you with your involvement in decisions that affect your work?
- Q64 → How satisfied are you with the information you receive from management on what is going on in your organization?
- Q65 → How satisfied are you with the recognition you receive for doing a good job?
- Q66 → How satisfied are you with the policies and practices of your senior leaders?
- Q67 → How satisfied are you with your opportunity to get a better job in your organization?
- Q68 → How satisfied are you with the training you receive for your present job?
- Q70 → Considering everything, how satisfied are you with your pay?

Similar to the process of enrichment, the next stage of my investigation was developing a scale of my measure of satisfaction. This scale is utilized by STATA as a marker of how individual survey respondents answered each of the above six survey questions. The alpha score, which represents how connected all seven-satisfaction questions converge is 0.93, which models a strong question coherence. This scale was then inputted into a database on the STATA software, which provided descriptive statistics. Having created these two scales of enrichment and job satisfaction, their bivariate correlation shows a strong positive correlation of 0.82 between enrichment and satisfaction.

### Control Variables

The subsequent stage of this investigation is creating a multivariable regression withstanding control variables. To truly discover the impact of enrichment practices on federal employee satisfaction, control variables must be accounted for in both question selection and demographics. In regard to control question selection, FEVS incorporates questions that can give the effect of satisfied workers but ultimately reason to other items. By conducting a thorough analysis of survey questions, the twenty selected control questions recognizing employee attitudes were marked and are listed below.

### Control Survey Question Selection

- Q2 → I have enough information to do my job well.
- Q5 → My work gives me a feeling of personal accomplishment.
- Q6 → I know what is expected of me on the job
- Q9 → I have sufficient resources (for example, people, materials, budget) to get my job done.
- Q 10 → My workload is reasonable.
- Q14 → Physical conditions (for example, noise level, temperature, lighting, cleanliness in the workplace) allow employees to perform their jobs well.
- Q20 → The people I work with cooperate to get the job done
- Q21 → My work unit is able to recruit people with the right skills.
- Q26 → Employees in my work unit share job knowledge with each other.
- Q29 → My work unit has the job-relevant knowledge and skills necessary to accomplish organizational goals.
- Q35 → Employees are protected from health and safety hazards on the job.
- Q42 → My supervisor supports my need to balance work and other life issues
- Q45 → My supervisor is committed to a workforce representative of all segments of society.
- Q49 → My supervisor treats me with respect.
- Q51 → I have trust and confidence in my supervisor.
- Q52 → Overall, how good a job do you feel is being done by your immediate supervisor?
- Q54 → My organization's senior leaders maintain high standards of honesty and integrity.
- Q56 → Managers communicate the goals of the organization.
- Q61 → I have a high level of respect for my organization's senior leaders.

The regression model also controls for key demographical information pertaining to the supervisory status and the sex of the respondent. Supervisory status and sex were determined to be the most crucial demographical components; Managerial status may diminish enrichment opportunities and have a significant impact on satisfaction, while controlling the sex of the respondent is a general practice due to different physiological traits which may impact respondent perception.

## FINDINGS:

With the investigation's enrichment scale, satisfaction scale, and control variables being determined, we can now give light to a complete multivariable regression model. This ultimate regression was based on 385,067 survey responses. The coefficient for the job enrichment scale is 0.362 and the p-value is  $P < 0.001$ , all of which indicate a positive and statistically significant relationship between job enrichment and job satisfaction. For every unit increase in enrichment, satisfaction increases by 0.36 points.

Regression Model Statistics (OLS)

| Regression Model  |                   |                    |             |
|---|-------------------|--------------------|-------------|
| Question  | Regression Output | Standard Deviation | P >  t      |
| <b>Satisfaction (IV)</b>  |                   |                    |             |
| <b>Enrichment</b>   | <b>.3618534</b>   | <b>.00146229</b>   | <b>0.00</b> |
| <b>Q 2:</b> Enough Information to do Job Well                   | .2570102          | .0073007           | 0.00        |
| <b>Q 5:</b> Feeling of Personal Accomplishment                  | -0.1287708        | .0069748           | 0.00        |
| <b>Q 6:</b> Understand Expectations                             | -0.1778154        | .0075127           | 0.00        |
| <b>Q 9:</b> Sufficient Resources to do Job                      | .3071587          | .0053543           | 0.00        |
| <b>Q 10:</b> Workload is Reasonable                             | .3587621          | .0053913           | 0.00        |
| <b>Q 14:</b> Physical Conditions allow to Perform Well          | .1351077          | .0049845           | 0.00        |
| <b>Q 20:</b> Workplace Cooperation                              | -0.0121838        | .0066935           | 0.07        |
| <b>Q 21:</b> Inability to Recruit Skilled People                | .392816           | .0054035           | 0.00        |
| <b>Q 26:</b> Employees Share Knowledge                          | .1095251          | .0066736           | 0.00        |
| <b>Q 29:</b> Work Unit has Knowledge/Skills to Accomplish Goals | -0.449576         | .0072547           | 0.00        |
| <b>Q 35:</b> Employees Protected from Hazards                   | .2371593          | .0064986           | 0.00        |
| <b>Q 42:</b> Supervisor Support Work/Life Balance               | -0.0976783        | .0077507           | 0.00        |
| <b>Q 45:</b> Supervisor Committed to Representation             | -0.1179732        | .0082773           | 0.00        |
| <b>Q 49:</b> Supervisor Treats Employees with Respect           | -0.15984          | .009956            | 0.00        |
| <b>Q 51:</b> I have Trust in Supervisor                         | 0.75412           | .0103381           | 0.00        |
| <b>Q 52:</b> Satisfaction with Supervisors Work                 | .0976594          | .0094382           | 0.00        |
| <b>Q 54:</b> Senior Leads are Honest; Integrity                 | .5837687          | .0071894           | 0.00        |

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|   |          |          |      |
|---|----------|----------|------|
| <b>Q 56: Managers Communicate Goals</b>     | .6961928 | .0065153 | 0.00 |
| <b>Q 61: Respect towards Senior Leaders</b> | .8373535 | .0068691 | 0.00 |
| Supervisory Status                          | .7892659 | .0117703 | 0.00 |
| Sex   | .0849707 | .0096552 | 0.00 |

With respect to the above-listed control variables, as someone perceives or comprehends the element, satisfaction either increases or decreases by the designated coefficient. For instance, as respondents feel they have full information to perform their job well (Q2), their satisfaction increases by 0.257 points. We are confident in this finding given that there is less than 1 in 1,000 chance the result is wrong, as reflected through the  $P > |t|$  statistic. Another control variable asks whether the respondent considers their supervisor as committed to creating a workforce representative of all segments of society (Q45), in which we find the more committed the supervisor, the less satisfied the employee evidenced by the coefficient of -0.12 points. This question is also statistically significant as represented by the regression model. Both of the demographical control variables resulted in positive regressions, with the supervisory status being stronger. As the supervisory status of the employee is understood, satisfaction increases by nearly 80% with a deviation of 0.012. In conclusion, a control variable that references workplace cooperation (Q 20) is the only variable in the investigation that has we have confidence in the results. For every unit increase in workplace cooperation, satisfaction decreases by -0.012 points. There is a 7 out of 1,000 probability that this control variable is reflecting incorrect results. This variable, however, does not limit the statistical significance of this investigation.

| . regress satisfaction enrichment q2 q5 q6 q9 q10 q14 q20 q21 q26 q29 q35 q42 q45 q49 q51 q52 q54 q56 q61 dsuper dsex |            |         |            |               |   |          |  |  |  |
|---|------------|---------|------------|---------------|---|----------|--|--|--|
| Source  | SS         | df      | MS         | Number of obs | = | 385,067  |  |  |  |
| Model   | 12597294.5 | 22      | 572604.296 | F(22, 385044) | = | 67142.99 |  |  |  |
| Residual  | 3283706.24 | 385,044 | 8.52813248 | Prob > F      | = | 0.0000   |  |  |  |
|   |            |         |            | R-squared     | = | 0.7932   |  |  |  |
|   |            |         |            | Adj R-squared | = | 0.7932   |  |  |  |
| Total   | 15881000.8 | 385,066 | 41.2422825 | Root MSE      | = | 2.9203   |  |  |  |

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The overall regression model is statistically significant, with an F statistic of 47143 ( $p < 0.001$ ), as shown in the below table. The R-square for the model indicates that all variables utilized in this research explain nearly 80% of the variation in job satisfaction in the survey.

### Summary Statistics

| Question  | Respondents | Mean  | Standard Deviation | Minimum | Maximum |
|---|-------------|-------|--------------------|---------|---------|
| <b>Enrichment</b>   | 538,882     | 38.12 | 8.44               | 10      | 50      |
| <b>Satisfaction</b>   | 573,018     | 23.75 | 6.47               | 7       | 35      |
|   |             |       |                    |         |         |
| <b>Q 2:</b> Enough Information to do Job Well                   | 611,571     | 3.78  | 1.01               | 1       | 5       |
| <b>Q 5:</b> Feeling of Personal Accomplishment                  | 612,232     | 4.16  | .092               | 1       | 5       |
| <b>Q 6:</b> Understand Expectations                             | 612,111     | 4.04  | .959               | 1       | 5       |
| <b>Q 9:</b> Sufficient Resources to do Job                      | 608,706     | 3.15  | 1.28               | 1       | 5       |
| <b>Q 10:</b> Workload is Reasonable                             | 609,883     | 3.38  | 1.19               | 1       | 5       |
| <b>Q 14:</b> Physical Conditions allow to Perform Well          | 610,747     | 3.68  | 1.18               | 1       | 5       |
| <b>Q 20:</b> Workplace Cooperation                              | 611,563     | 4.00  | .993               | 1       | 5       |
| <b>Q 21:</b> Inability to Recruit Skilled People                | 587,463     | 3.16  | 1.18               | 1       | 5       |
| <b>Q 26:</b> Employees Share Knowledge                          | 605,075     | 3.92  | 1.00               | 1       | 5       |
| <b>Q 29:</b> Work Unit has Knowledge/Skills to Accomplish Goals | 602,007     | 4.06  | .909               | 1       | 5       |
| <b>Q 35:</b> Employees Protected from Hazards                   | 590,760     | 3.91  | .978               | 1       | 5       |
| <b>Q 42:</b> Supervisor Support Work/Life Balance               | 593,388     | 4.18  | 1.02               | 1       | 5       |

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|   |         |      |      |   |   |
|---|---------|------|------|---|---|
| <b>Q 45:</b> Supervisor Committed to Representation   | 552,306 | 3.99 | 1.04 | 1 | 5 |
| <b>Q 49:</b> Supervisor Treats Employees with Respect | 593,280 | 4.25 | .973 | 1 | 5 |
| <b>Q 51:</b> I have Trust in Supervisor               | 594,262 | 3.96 | 1.18 | 1 | 5 |
| <b>Q 52:</b> Satisfaction with Supervisors Work       | 594,144 | 4.08 | 1.09 | 1 | 5 |
| <b>Q 54:</b> Senior Leads are Honest; Integrity       | 553,779 | 4.47 | 1.21 | 1 | 5 |
| <b>Q 56:</b> Managers Communicate Goals               | 580,748 | 3.64 | 1.10 | 1 | 5 |
| <b>Q 61:</b> Respect towards Senior Leaders           | 579,632 | 3.53 | 1.22 | 1 | 5 |
| Supervisory Status                                    | 540,209 | .198 | .398 | 1 | 5 |
| Sex   | 519,432 | .562 | .496 | 1 | 5 |

The summary statistics for the investigation are presented in the above table. Key statistics highlighting the independent and dependent variables are shown in the first stanza of the table. Enrichment results consisted of 583,882 respondents, with a mean of 38, and an average dispersion of 8.44. As previously noted, the enrichment scale was an ordinal measure of 10 through 50, which was the sum of the respondent's selection. Satisfaction results consisted of 573,018 respondents, with a mean of 24, and an average dispersion of 6.47. The satisfaction scale is also an ordinal measure, but spans 7 through 35, which is the sum of the respondent's selections.

The statistics highlighting control variables are in the following stanzas of the table. The overall amount of survey respondents measured in each of the question control variables fluctuate from 552,306 to 612,232 participants. The mean among the question controls varies from 3.15 to 4.47, with the average dispersion being between .90 and 1.28 percentiles. The

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demographic control variables of supervisory status and sex have a combined average of 529,823 respondents, with a mean of between .20 and .56, and average dispersion of between .40 and .50.



### CONCLUSION:

The increase in satisfaction for every 1 unit increase in enrichment although modest, is substantively meaningful and statistically significant. This conclusion is supported by the significant regression of 0.36, suggesting that enrichment as a technique of job design, is an effective technique that management should implement. The findings are generalizable to the entire federal workforce given that FEVS is a representative-probability sample clustered by agency, covering nearly 95% of the civilian workforce. Despite the significance, confidence, and generalizability, we should interpret the results with caution. Although I was able to control for 20 variables and create a measure accounting for 80% of the variation in satisfaction, several unobserved concepts are unable to be controlled.

### Connecting Theory to Findings

As outlined in Herzberg's hygiene-motivational theory, workers have a range of higher-level and lower-level workplace needs. Enrichment practices as defined in this investigation mostly pertain to both motivators (satisfiers) rather than hygiene factors (dissatisfiers). The dimensions of enrichment review employees' need for recognition, advancement, and growth opportunities. Conversely, the satisfaction measure incorporates some hygiene factors, which seek to measure an employee's satisfaction with pay, policy comprehension, promotional opportunities, and organizational longevity. The data supports Herzberg's framework that generally all public employees become some level of satisfied by engaging in enrichment practices. This conclusion is supported by the initial alpha test conducted that reviewed the connectedness of the enrichment measure as 0.9186, while the connectedness of the satisfaction measure as 0.93.

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The connectivity of satisfaction and motivation can be analyzed using the results of this investigation. As described above, motivation is a psychological effect of employee satisfaction, that cannot be created, but rather supported and influenced. Although the descriptive statistics do not directly measure motivation, it must be recognized that nearly 80% of this investigation accounts for the variations and predictions of satisfaction. Given the interrelatedness of motivation and satisfaction, it can be proposed that workplace satisfaction had some impact on the motivation of workers. This supports the above research surveying content, process, and outcome theories of motivation. Workplace motivation is the accumulation of an individual's predisposition, cognitive processes, and perceived outcome of actions, which are the result of a satisfied workplace in alignment with intrinsic/relational workplace elements.

As addressed in the theoretical framework, there are differing perspectives on how employees and employers perceive enrichment practices. Employees (agents) view enrichment through the lens of intrinsic relational elements, while oftentimes employees perceive employers (principals) to be either in pursuit of cost savings or to be truly engaged in the nourishment of employee needs. This value conflict may account for the low regression coefficient, given that I also controlled for supervisory status, further separating the agent from the principals. The regression of the satisfaction measure to supervisory status was .789, which was the second-highest coefficient. Having supervisory status may have an unforeseen influence on the principal-agent dilemma. Despite this conflict, the data very clearly suggests that enrichment practices influence employee satisfaction, with and without the control of supervisory status.

The review of theoretical knowledge concluded with a discussion of the value conflicts between employees, employers, and society when addressing federal employees. There is a value conflict between all interrelated parties when addressing the values of public service, and the true

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values of the individuals who work in the public sector. As the research presents, it is unreasonable to consider all public employees to present the same values. This exact conflict variation was the purpose of creating scales of both my enrichment and satisfaction measure. Additionally, value conflicts may also be an attributing factor for the relatively low correlation coefficient and the wide-ranging control regression scores. Furthermore, needless to say, from the above discussion, it is evident the findings are consistent with previous research on job enrichment's influence on satisfaction.

### Concluding Statements and Policy Implications

These findings are significant because they display the changing needs of the workforce and highlight what federal employees value. For enrichment to become sustainable, modern practices must have internal alignment with the corresponding above-mentioned enrichment dimensions. Enrichment has been assessed and determined to be a multidisciplinary job design technique that increases the satisfaction of employees, thus having a great organizational impact. This supports the current state of knowledge but adds significant context for understanding the relationship of the variables by not assuming synonymity or an immediate relationship.

Investigating the influence of enrichment on satisfaction gives light to other interrelated workplace factors such as turnover and productivity. As evidenced by the investigation enrichment is a good method to increase satisfaction, which is then linked to turnover. We can enrich jobs to reduce turnover, thus indirectly being a mediating factor in this investigation. Further conclusions suggest that satisfaction is related to performance, so by increasing satisfaction, we can increase workplace productivity. Implementing enrichment in the workplace can be concluded as an overall good policy implementation. By utilizing the practices of change

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management and connecting concepts to job design techniques, organizations can successfully leverage enrichment to its fullest capacity in the workplace.

Enrichment has been proven to work, so managers should take enrichment seriously and deliberately analyze the jobs of subordinates to actively enrich jobs. However, the modern form of enrichment, job crafting, suggests differing future policy implications. Job crafting proposes the onus of enforcing enrichment practices on both the employee and management. This new collaborative action to enrich could be considered as a method to align best practices to the techniques of today. Management must take into consideration setting policies representing enrichment as a collective responsibility or rather the traditional action of management. Adding to the conversation of employee-produced enrichment, one last implication that must be considered is the possibility of too much enrichment. As a society, we expect public employees to be accountable for their actions. However, considering autonomy (a dimension of enrichment), too few limitations on federal employees may result in wasted resources, rule-breaking, or overall distrust in the government. Managers must consider the fine line between successful enrichment and overutilization.

### Future Research

Future research could further analyze the FEVS and determine the remaining 20% of data (survey questions) that account for the variation in satisfaction. This would increase research validity, and better explain the relationship of the variables. Adding on to this, future research could also further investigate satisfaction as a measure. For my research purposes, I interweaved a variety of data elements to create my measure of satisfaction. I intentionally excluded survey question 69 from my investigation, which simply asks respondents to rate their overall

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satisfaction with a single score. Further research can show whether results from this particular survey question would garner the same results as my multifeatured measure of satisfaction.

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