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PhD in Strategic Leadership and Administrative Studies

Job Satisfaction Dynamics: Analyzing Herzberg’s Motivator and Hygiene Scores in a Non-Profit Life Sciences Organization

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JOB SATISFACTION DYNAMICS

Dedication and Acknowledgements

Dedication

To my daughters, **Mya and Alexis** – your love, light, and unwavering belief in me have been my greatest source of strength. This work is more than pages and research. It is a reflection of the perseverance, curiosity, and hope I strive to live by and pass on to you. I hope you always chase your dreams with boldness, knowing that you are capable of anything your heart desires. You are, and will always be, my proudest accomplishments and the most beautiful chapters of my life.

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To my **mother** – though you are no longer here, your presence has never left me. You were my first and most enduring role model, the one who showed me how to build a life filled with love, purpose, and resilience. You taught me how to balance family and career with grace, and how to lead with both strength and compassion. This dissertation is a tribute to the values you instilled in me and the example you set. I carry you with me in everything I do, and I hope I have made you proud.

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Committee Member: Marc Marchese

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Readers: Dr. Marc Long and Dr. Jeffrey Cartmell

Thank you for taking the time to read my dissertation. Your interest, curiosity, and engagement mean more than words can express. I am deeply grateful for your attention and reflection. It is my hope that this work has sparked thought, offered insight, or inspired further exploration. Your presence as a reader gives this research life beyond its pages

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Job Satisfaction Dynamics: Analyzing Herzberg's Motivator and Hygiene Scores in a Non-Profit Life Sciences Organization

Chapter 1 The Problem and Its Setting

Introduction

Fulfillment. Gratification. Happiness. Meaning. Job satisfaction is called many things. Achieving strategic priorities and objectives is also a significant goal for organizations, making employee engagement crucial for their success. Through job satisfaction, organizations can ensure improved productivity and performance, as reflected in employees' increased motivation and effort. Studies show that both intrinsic and extrinsic factors influence job satisfaction in organizations, with extrinsic motivators being the most common in organizations that reward employees with financial benefits for performance (Aljumah, 2023). Intrinsic job motivators are internal influencers that meaningfully contribute to employees' sense of purpose in their organizational activities. Extrinsic job motivators are mainly performance-linked incentives, such as salary increases and promotions, which motivate employees to remain committed to their work. For non-profit organizations, job satisfaction is closely tied to intrinsic motivators that help employees feel connected to the organization's mission and objectives (Egbert, 2023). Organizations strive to ensure employees are satisfied, as this guarantees sustainable productivity through consistent performance while reducing the risk of employee turnover. Balancing intrinsic and extrinsic motivations is critical for maintaining high levels of job satisfaction within organizations.

For every organization, understanding the factors that contribute to job satisfaction and motivation is crucial for achieving optimal business performance. Even more important is recognizing the relationship between job satisfaction and motivation. Non-profit organizations differ in the motivational approaches used to enhance employees' satisfaction. Unlike for-profit organizations, which can implement both intrinsic and extrinsic motivators to enhance job satisfaction, non-profit organizations typically operate with limited financial resources. This often affects the use of extrinsic motivators to improve job satisfaction and could also be detrimental to the overall organizational performance. This dissertation examined the relationship between job satisfaction and motivation in the context of non-profit life science organizations, aiming to identify the intrinsic motivations and extrinsic factors that effectively enhance job satisfaction in these organizations. In the study of the relationship between job satisfaction and motivation, this study employed Herzberg's Two-Factor Theory. This motivational theory attributes job satisfaction to intrinsic motivators and extrinsic hygiene factors. In the context of non-profit organizations, this dissertation addressed the effectiveness of Herzberg's motivation theory in identifying and implementing motivation factors linked to job satisfaction.

This study aimed to identify the unique motivational and hygiene factors that affect job satisfaction among employees across different categories in a multi-state non-profit organization. Employees of non-profit organizations were categorized as either exempt or non-exempt; exempt employees are not entitled to overtime pay. In contrast, non-exempt employees are entitled to overtime pay. By understanding the unique factors that influence job engagement among non-profit employees, non-profit organizations can implement effective strategies to enhance job satisfaction for all employees.

The significance of this study lies in its contribution to the body of research on the factors influencing job satisfaction among exempt and non-exempt employees in non-profit organizations. Understanding the unique intrinsic motivations and extrinsic hygiene factors becomes useful for non-profit organizations with limited financial resources. Using Herzberg's motivational theory to enhance job satisfaction, this research is significant for non-profit and other organizations struggling with job engagement and productivity.

Organizational leaders and managers can apply motivational theories, such as Herzberg's Two-Factor theory, to design strategic frameworks guided by motivators and hygiene factors that increase job satisfaction and reduce the risk of employee turnover. This study was also unique in its focus on non-profit organizations, as there has been limited research on strategies to enhance job satisfaction in this sector. More importantly, this research will benefit the Human Resources field by identifying the relationship between motivational antecedents and job satisfaction. This study focused on non-profit organizations in Pennsylvania and New Jersey, which have distinct natures and characteristics, and on the economic environment for motivational systems, which is unique to each state and its regulations. Therefore, assessing employees' satisfaction levels in these sectors is crucial for understanding the nature of intrinsic and extrinsic motivation under conditions of scarce resources. The findings of this study are thus useful for non-profit organizations in developing policies that focus on job satisfaction, emphasizing intrinsic motivators and extrinsic hygiene factors.

This dissertation is organized into the following major sections: introduction, literature review, methodology, results analysis, discussion, and conclusion. The introduction provides an overview of the research question and the study's theoretical framework. The literature review explores the studies on job satisfaction and motivation. The methodology section covers research

design, including data collection and analysis techniques. Analysis of results provides for an in-depth review of the study findings. The discussion section interprets the findings and how the outcome can be applied to organizational job satisfaction. The conclusion section summarizes the study findings.

Theoretical Framework

The theoretical framework for this study is grounded in Herzberg's Two-Factor Theory, which improved the understanding of job satisfaction and motivation in the workplace. Herzberg's Two-Factor Theory distinguishes between motivators and hygiene factors as determinants of job satisfaction. Motivators are the intrinsic factors that contribute to job satisfaction, including achievement, recognition, and the nature of the work (Herzberg, 1966). In contrast, hygiene factors such as salary, company policies, and working conditions are extrinsic elements that can cause job dissatisfaction if not adequately addressed (Herzberg, 1966). This theory states that while hygiene factors can prevent dissatisfaction, motivators can enhance job satisfaction and motivation (Herzberg, 1966).

The theoretical approach helped provide meaningful data about organizational behavior for non-profit life sciences organizations operating under conditions of resource scarcity in Pennsylvania and New Jersey. A lack of adequate funding in these contexts amplifies the significance of external pressures that support the concept of internal motivation. In the quantitative analysis of how Herzberg's motivator and hygiene factors affected exempt and non-exempt staff members, the researcher used the Job Satisfaction Survey (JSS), developed by Spector in 1985, to assess respondents' job satisfaction. The two-factor theory helps professionals and researchers create interventions that eliminate the factors leading to

dissatisfaction while establishing the factors that bring satisfaction through the development of satisfying job content.

According to Herzberg's study, achieving satisfaction by preventing dissatisfaction is impossible. This is relevant to moving beyond mere maintenance levels of Human Resource Development (HRD) and creating programs that foster employee growth and engagement (Herzberg, 1966). Many organizations continue to adopt Herzberg's motivational theory because it remains relevant for guiding motivational efforts in current environments. Thus, the researcher provided working definitions of job satisfaction assessment in their investigations and elaborated on theories concerning employee motivation. This framework helps organizations understand the intrinsic and extrinsic factors that non-profit organizations should consider when developing Human Resources policies.

HERZBERG'S TWO FACTOR THEORY

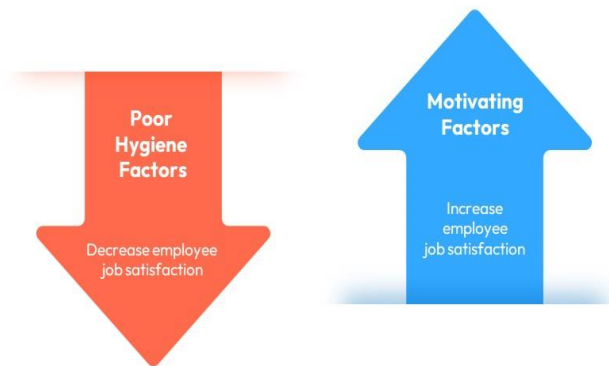


Figure 1 Herzberg's Two-Factor Theory Diagram Mavink. (n.d.).

Conceptual Framework

The conceptual framework for this study combined Herzberg's Two-Factor Theory with the Job Satisfaction Survey (JSS) developed by Spector (1985) to examine how employment status (exempt vs. non-exempt) affects job satisfaction among employees in the life sciences sector. The JSS is a widely used tool that measures job satisfaction across nine key areas: meaningful work, recognition, responsibility, growth, achievement, advancement, salary, company policies, and supervision. By combining Herzberg's Two-Factor Theory with the JSS, this study sought to understand how employment status influences job satisfaction among exempt and non-exempt workers in the life sciences sector. This approach thoroughly examined both intrinsic and extrinsic factors influencing satisfaction (Spector, 1985). Extrinsic factors include pay, promotion opportunities, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, and communication, while the intrinsic factor involves the nature of the work itself (Spector, 1985). Merging Herzberg's insights with empirical data from the JSS offers a solid framework for understanding job satisfaction dynamics. The results of this study can inform targeted strategies to enhance satisfaction and retention within the industry, ultimately leading to improved organizational performance and employee well-being. Herzberg's Two-Factor Theory distinguishes between motivators, such as achievement and recognition, which foster job satisfaction, and hygiene factors, including salary and working conditions, which can cause dissatisfaction if not adequately addressed.

The Job Satisfaction Survey (JSS) measured job satisfaction across nine facets: pay, promotion, supervision, and coworkers. By examining how these demographic variables influenced job satisfaction through the lens of Herzberg's theory, this study aimed to understand the factors contributing to job satisfaction in the life sciences industry.

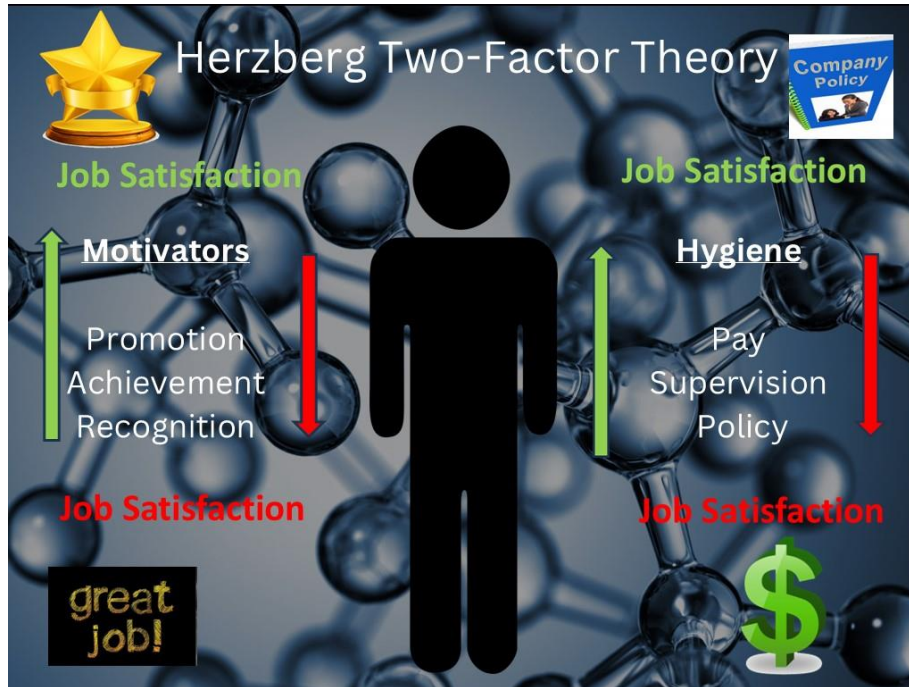


Figure 2. *Conceptual Framework*

Purpose Statement

The purpose of this quantitative study was to test Herzberg's Two-Factor Theory to examine the differences in job satisfaction between exempt vs. non-exempt employees at a non-profit life sciences organization in Pennsylvania and New Jersey. The independent variable, employment status, will be defined as employees' classification as exempt (not entitled to overtime pay) or non-exempt (entitled to overtime pay) under the Fair Labor Standards Act (FLSA). The dependent variable, job satisfaction, was defined as the level of contentment employees feel about their work, influenced by various motivators and hygiene factors as per Herzberg's Two-Factor Theory.

Research Question

What is the difference in job satisfaction, i.e. motivator and hygiene score, between exempt and non-exempt employees within a non-profit life sciences organization in Pennsylvania and New Jersey?

Sub-Problems

1. What is the job satisfaction, i.e. motivator and hygiene factor score of exempt employees at a non-profit life sciences organization in Pennsylvania and New Jersey?
2. What is the job satisfaction i.e. motivator and hygiene factor score of non-exempt employees at a non-profit life sciences organization in Pennsylvania?
3. What is the difference in job satisfaction i.e. motivator and hygiene factor scores among exempt and non-exempt employees in a non-profit life sciences organization in Pennsylvania and New Jersey?

Hypothesis

(H₀): There is no significant difference in job satisfaction i.e. motivator and hygiene factor scores among exempt and non-exempt employees within a non-profit life sciences organization in Pennsylvania and New Jersey.

(H₁): There is a significant difference in job satisfaction i.e. motivator and hygiene factor score among exempt and non-exempt employees within a non-profit life sciences organization in Pennsylvania and New Jersey.

Definition of Terms

1. Job Satisfaction - Job satisfaction refers to the extent to which employees feel content and fulfilled with their job roles, responsibilities, and work environment. It encompasses various factors such as pay, promotion opportunities, work conditions, and interpersonal relationships (Locke, 1976). Job satisfaction will be measured using the Job Satisfaction Survey (JSS). See Chapter Three, Instrumentation, for additional information.
2. Exempt Employees - Exempt employees are those who are exempt from overtime pay requirements under the Fair Labor Standards Act (FLSA), typically due to their job duties

and salary level (U.S. Department of Labor, 2021). In this study, exempt employees are those paid on a salaried basis and not eligible for overtime pay.

3. Non-Exempt Employees - Non-exempt employees are entitled to overtime pay for hours worked beyond the standard forty-hour workweek (U.S. Department of Labor, 2021). In this study, non-exempt employees will be defined as those paid on an hourly basis and eligible for overtime pay.
4. Non-Profit Organization - An entity that operates for purposes other than generating profit, where no part of the organization's income is distributed to its members, directors, or officers (Encyclopedia Britannica, 2025). In this study, a non-profit organization is defined as a private organization that serves the public's interests and is separate from government.
5. Life-Sciences Organization - An entity involved in the research, development, and manufacturing of products and technologies that improve the lives of organisms (Scilife, 2025). In this study, a life sciences organization is defined as an organization focused on orthopedics, wound care, and plastic and reconstructive surgery.
6. Pennsylvania - A state located in the Mid-Atlantic, Northeastern, Appalachian, or Great Lakes regions of the United States (Encyclopedia Britannica, 2025).
7. New Jersey - A state located in the Mid-Atlantic and Northeast regions of the United States (Encyclopedia Britannica, 2025).

Delimitations

This study was delimited to non-profit life sciences organizations in New Jersey and Pennsylvania. It focused exclusively on the life sciences sector, excluding other industries. The research included exempt and non-exempt employees, omitting other classifications such as

contract and per-diem workers. It excluded employees with less than ninety (90) days of service and employees on leave of absence. Guided by Herzberg's Two-Factor Theory, the research did not incorporate other theories of job satisfaction or motivation. Job satisfaction was measured using the Job Satisfaction Survey (JSS), and no other job satisfaction measurement tools were utilized. Data collection was conducted within a specific time frame and did not account for changes in job satisfaction over a more extended period.

Assumptions

This study assumed that participants would provide honest and accurate responses to the Job Satisfaction Survey (JSS), reflecting their true feelings and experiences as well as demographic variables. The JSS was considered a valid and reliable instrument for measuring job satisfaction across various demographic groups within the life sciences sector. The study presumed that the sample of exempt and non-exempt employees from the life sciences organization in Pennsylvania and New Jersey was representative of the broader population within this industry and region. Furthermore, it was assumed that Herzberg's Two-Factor Theory was an appropriate theoretical framework for understanding the factors influencing job satisfaction in this context. Finally, it was believed that the data collection period was sufficient to capture a representative snapshot of participants' job satisfaction levels.

Significance of the Study

The significance of this study lies in its potential to enhance our understanding of the factors influencing job satisfaction among exempt and non-exempt employees in a life sciences organization. By examining the impact of demographic variables such as age, gender, and education level, this research uncovered meaningful patterns in how different groups perceive their work environment and what drives their job satisfaction. It was anticipated that older

employees may report higher levels of satisfaction due to increased job stability and better alignment with their career expectations. At the same time, younger workers might prioritize opportunities for growth and work-life balance. Gender differences may also emerge, with women potentially placing greater emphasis on inclusivity, supportive leadership, and flexibility, whereas men might focus more on advancement and compensation. Additionally, individuals with higher levels of education may have higher expectations for intellectual engagement and career progression, which could influence their overall satisfaction. This knowledge will enable organizations in the life sciences sector to develop targeted strategies that improve employee satisfaction, retention, and overall productivity. Additionally, by applying Herzberg's Two-Factor Theory, the study contributed to the existing body of literature on job satisfaction and motivation, offering a perspective on the relative importance of motivators and hygiene factors. The findings will inform Human Resources practices and policies, leading to a more engaged and satisfied workforce, which is crucial for the success and competitiveness of organizations in a rapidly evolving field.

Chapter 2

Literature Review

Introduction

This study examined the job satisfaction of exempt and non-exempt employees at a non-profit life sciences organization in Pennsylvania and New Jersey. The literature reviewed in preparation for this research study centered around Herzberg's Two-Factor Theory. It is a valuable tool for studying job satisfaction because it concentrates on the factors that motivate and those that cause dissatisfaction. According to the theory, job satisfaction and dissatisfaction are distinct concepts, as different factors influence them. The level of workers' satisfaction and commitment also depends on internal factors, such as achievement and recognition, as well as the nature of the work assigned to them. Thus, the pay, organizational policies, physical environment, and quality of supervision, as extrinsic factors, help reduce employee dissatisfaction but do not enhance motivation. First, there is evidence that employee dissatisfaction arises from the lack of hygiene factors; however, these factors are insufficient to create satisfaction (Abraham & Prasetyo, 2021). The latter is one of the pillars that enable organizations to develop Human Resource Management strategies that meet employees' basic needs, along with a high level of commitment.

Various industries use the model as the basis for raising employees' motivation and productivity because it is effective. The study's results support the theory of motivation, suggesting that intrinsically motivated employees are more committed and perform better than those who are satisfied with the availability of hygiene factors. Based on the study by Abraham and Prasetyo (2021) on educational macroeconomics, it can be argued that Herzberg was correct in his dual-factor theory, as teachers are motivated by rewards and accomplishments in their work, as well as by working conditions and wages. Ongoing empirical support for Herzberg's

theory underscores its relevance in guiding contemporary leadership practices and improving employee retention.

According to Herzberg's two-factor theory, organizations can shift from monetary-based motivation approaches to focusing on the environment that engages employees. The comprehensive theoretical framework enables managers to improve employee satisfaction by aligning job roles with workers' needs. On the other hand, hygiene factors do not become sources of dissatisfaction. It remains relevant in the field due to the numerous scholarly discourses and practical applications across different theoretical areas, which make it the basis of studies in workforce management (Sanjeev, M.A., & Surya, A.V., 2016).

Motivator Factors

Internal or intrinsic factors lead to better performance and higher worker commitment. Job satisfaction increases with the fulfillment of four core psychological needs: achievement, recognition, responsibility, and the opportunity for growth. Intrinsic motivators involve satisfaction that comes from within. Hence, the employees will be committed in the long run. These objectives also aim to establish meaningful relationships with employees and enhance their performance and motivation toward their career paths. In the case of personal success responsibility, the employees have more ownership and accountability. This approach to acquiring responsibility enables employees to develop new projects independently and search for solutions to issues that will help the organization achieve its goals and objectives (Manzoor, F., Wei, L., & Asif, M., 2012).

Intrinsic motivation fosters creativity and high organizational commitment, thereby strengthening human capital. Regular institutional recognition and professional development activities indicate that employees are more satisfied and committed to their jobs, as revealed by

Miah and Hasan (2022). Colleagues motivate employees by formally recognizing their work or providing informal feedback. The opportunities to be a mentor and to take on challenging tasks that come with increased skill level led to higher motivation and lower turnover among workers. Staff development programs enable staff members to enhance their capabilities, thereby increasing their commitment to their jobs.

Organizational factors promote innovation and process improvement among employees. When managers value employees and offer them intellectual stimulation in the workplace, they are more likely to try other ways to improve their performance and seek out new ideas for their organizations. Thant (2022) concluded that autonomy and recognition have a positive effect on job satisfaction and an adverse impact on turnover intention among public sector employees. Managers who create an environment that provides people with opportunities to exercise autonomy, master their tasks, and find purpose in their actions will free up their workforce. In the case of intrinsic motivation, employee engagement, job satisfaction, and organizational success are long-term.

Hygiene Factors

One of the most significant categories of job factors arising from the work environment is hygiene factors, as they not only create satisfaction but also preserve it. Organizational policies, workplace safety and quality, supervision quality, and compensation systems are essential characteristics of a work environment. It is a fact that employees become dissatisfied and stressed when organizational factors are not taken into account, leading to low productivity and increased turnover. Motivational theory is a practical tool that enhances productivity and reduces employee turnover (Oliveira et al., 2023). Hygiene factors significantly impact an organization,

and an employee's lack of these factors can reduce their performance, regardless of their intrinsic motivation.

One hygiene factor is adequate supervision, which helps maintain employee morale and ensure retention. If supervisors provide direction without negative criticism and ensure equality, they establish stability and respect, thereby reducing employee discontent. The literature suggests that poor communication is linked to inadequate supervision and insufficient managerial support, leading to high workplace discontent, particularly in organizations with well-defined formal structures (Lee et al., 2022). Firms that implement sound management strategies ensure that managers appreciate the workforce, hence improving the commitment and dedication of employees. Organizations should view leadership programs as essential for enhancing supervisory skills.

Wages and tenure of employment influence employees. This means that for employees to be satisfied, pay is not enough; however, if the pay is unsatisfactory, they will be dissatisfied and angry with their job. Research in the healthcare and education sectors reveals that employees who believe there is inequity in their organization's reward allocation, particularly if their job satisfaction depends on the importance of their job or their overall life satisfaction, tend to have lower job satisfaction. These factors include short-term contracts and limited opportunities for promotion, which, in turn, lead to increased stress levels and reduced employee motivation. Organizations should address these issues by offering competitive remuneration and promotional policies for a productive workforce (Mohrenweiser, J., & Pfeifer, C., 2023).

This is why the minimum expectation of job satisfaction entails offering a secure and comfortable workplace. Any workplace health risk can lead to numerous health complications among employees and ultimately cause them to leave work prematurely. Research on non-profit

organizations reveals that inadequate safety policies, including those related to ergonomics, mental health, and anti-harassment, significantly contribute to employee turnover (Chachar et al., 2022). That is why organizations that incorporate these elements experience improved employee health while simultaneously enhancing operations.

Definition and Importance of Job Satisfaction

Organizational commitment is an overall evaluation of employees' current working environment and the type of employment and job they hold. Job satisfaction, therefore, refers to the extent to which an employee has a positive attitude towards the job, accomplishments, and organizational remuneration, including wages and other employee benefits. When employees recognize and understand the significance of their work, they experience high job satisfaction, which, in turn, boosts their commitment and motivation in the workplace. According to Mehrad (2020), studies have found that job satisfaction has a positive impact on employees' mental health, reduces stress, and enhances their job commitment. Job satisfaction, at the other end of the continuum, is the opposite of job dissatisfaction, which can lead to burnout, causing workers to be less engaged and to lose interest in working for the organization. This is because organizational effectiveness has a significant relationship with job satisfaction, which in turn affects employees' behavioral and psychological outcomes. Organizational job satisfaction has remained one of the most extensively researched areas in Human Resource Management practice and organizational behavior theories and studies, due to its significant impact on both employees and organizations.

Employee satisfaction was found to be positively related to organizational success and stability. Satisfied employees perform their company responsibilities well, provide better customer service, and may even go the extra mile. Education research suggests that higher

employee satisfaction contributes to a more positive workplace environment, fostering collaboration and reducing turnover (Singh & Bhattacharjee, 2019). In this respect, employee satisfaction helps organizations attract high-quality workers, which in turn reduces the costs associated with recruitment and training. From the above-discussed benefits of job satisfaction, it is evident that organizations cannot afford to overlook job satisfaction as a strategic factor in their development and market competitiveness.

Employee satisfaction, therefore, refers to workers' satisfaction with their intrinsic and extrinsic motivations, ensuring that their needs are met. The former is people-driven, forcing people to innovate and become interested. At the same time, organizations must motivate employees extrinsically to achieve optimal performance. Studies among non-profit organizations reveal that organizations with an appropriate balance of these elements create conditions that enhance employee engagement and organizational productivity (Chachar et al., 2022). Therefore, job satisfaction is crucial for organizational performance, highlighting the need for continuous workplace improvement.

Measurement Tools for Job Satisfaction

The measurement of job satisfaction has remained a significant focus in academic research, as it provides essential information on employee attitudes and relationships within an organization. The author found that researchers have developed many assessment instruments to measure job satisfaction; however, the JSS is the most widely used and valid. The JSS is remarkable in that it assesses several facets of job satisfaction that help determine a broad picture of general pay satisfaction, the supervisory role, the organizational climate, and worker participation (Spector, 1985). Several organizational investigations support the generalizability of the Job Satisfaction Survey across multiple studies, which helps inform executive and policy-

making decisions for workplace improvement (Chen et al., 2022). With the help of the JSS, the organization can systematically assess employee perceptions and identify satisfaction patterns that may be strategically important for improving employee engagement. Another is that this measure has become common as it has been established to be effective in academic and real-life settings.

The psychometric characteristics of the JSS are satisfactory, allowing the instrument to provide accurate measures of job satisfaction for different types of employees. Researchers consider this instrument reliable and valid across various employment fields and cultures (Fugar et al., 2019). The JSS demonstrates strong internal consistency, with Cronbach's alpha typically exceeding 0.80 (Karaferis, Aletras, & Niakas, 2022). Additionally, the tool exhibits excellent test-retest reliability, with coefficients often above 0.90 (van Saane et al., 2003; Karaferis, Aletras, & Niakas, 2022). Criterion-related validity studies have demonstrated significant correlations between JSS scores and various employee perceptions and behaviors, including job performance, organizational commitment, and turnover intentions (Mathieu et al., 2016; Ramalho Luz, de Paula, & de Oliveira, 2018). Concurrent validity findings further support the JSS's effectiveness, showing consistent results across different demographic groups and employment sectors (Nanjundeswaraswamy, 2019; Bowling & Zelazny, 2021). The tool is beneficial for assessment because it distinguishes between workplace characteristics and job aspects. This study also demonstrates that the distinction between intrinsic and extrinsic motivators enables Human Resources professionals to develop effective strategies to enhance morale and reduce organizational turnover. Therefore, it is suitable for use in healthcare facilities, schools, colleges, factories, and other non-profit organizations. Subgroups aim to

enhance the JSS by applying it in new areas and making it more relevant to workplaces.

Researchers use the JSS more frequently than other measures due to its strong structural validity.

The JSS has several uses, as it involves assessing employee satisfaction within specific organizations. At the same time, it helps organizations compare their outcomes with those of other organizations in the same industry. The JSS assists organizations in raising awareness about sector-specific problems through comparative analysis, which also helps them identify successful practices for managing the situation and adopt suitable styles and strategies (Isaacs et al., 2020). Through benchmarking activities, organizations can develop competitive labor market positions to attract and retain top talent. With the help of JSS, they can make informed decisions based on their employees' feedback patterns, which is quite advantageous for achieving their objectives. Using records to track changes is a valuable way to assess the impact of new policies introduced by managers in the workplace. Organizations must continue to enhance workplace wellness testing, as the importance of workplace wellness continues to rise, to maintain a healthy workforce. It is used in current studies for research purposes and is retained as an essential tool that fosters the development of sound Human Resource Management practices.

Development of the Job Satisfaction Survey

The changes that have occurred in the construction and administration of the JSS demonstrate how authors have progressed the process of organizational research measurement. The survey developers specifically intended to create this instrument to fill the gap left by the lack of a universal, validated measurement tool that would enable the evaluation of different facets of job satisfaction across other occupations. The study was conducted in two parts: the first involved determining the dimensions of job attitudes through exploratory analysis, and the second involved collecting employee feedback to perform a statistical validation of the survey

structure. These changes to the JSS were made multiple times, and they helped measure other aspects of satisfaction besides employee autonomy, supervisory relations, and pay. Several papers suggest that a survey is an effective instrument that can withstand changing conditions. Therefore, it is one of the primary methods for assessing employees' satisfaction levels (Fugar et al., 2019). The following outlines a logical flow to justify the use of data-driven techniques in the development process, enabling the achievement of accurate research outcomes.

The researcher assessed the reliability and validity of the JSS through several testing phases, using both exploratory and confirmatory factor analyses. The validity analysis confirmed that the survey encompassed all aspects of job satisfaction related to both intrinsic and extrinsic motivation, without being influenced by extraneous factors. The studies conducted at the academic institution helped validate the JSS's factorial structure. They established that it effectively measured job satisfaction in various environments (Mustafa et al., 2019). To control for changes in employees' perceptions, research teams were able to feed their new findings back into the refinement process from longitudinal studies. The JSS has remained credible due to the methodological approaches used in its development, which have also enabled its application in various research and organizations.

The JSS is valuable across various sectors, including health, education, and manufacturing, as it utilizes its findings to inform Human Resources policies. The JSS has played a significant role in identifying the factors that contribute to work satisfaction in healthcare services, which in turn inform specific measures for preventing health issues and employee turnover (Shaikh et al., 2019). This is due to revisions that have aligned the survey format with the needs of today's workforce. Thus, the introduced amendments to the

methodological approach of the JSS enhance the method's future applicability for evaluating and improving job satisfaction across various types of organizations.

Validation of the Job Satisfaction Survey

In developing the JSS, multiple validity tests from the development of valid assessment instruments have been incorporated. The cross-sectional research groups employed Confirmatory Factor Analysis (CFA) to establish construct validity and reliability, as well as structural equation modeling to assess the survey's internal reliability. The instrument is valid because it assesses job satisfaction using a testing method applicable across all employment sectors and cultural settings. Merhad (2020) provides additional support for the JSS's factor structure through a confirmatory factor analysis of survey responses from faculty members. The study on the JSS shows that it is stable across contexts and is, hence, useful in practice and research.

Based on findings from various studies, this survey provides relevant information for healthcare practitioners and educators. The JSS demonstrates its ability to assess various aspects of job satisfaction and, simultaneously, respond to clients in the workplace, as stated by Spector (1985). From the analysis of various research undertaken in different organizations and environments, it is evident that JSS can be used to measure job satisfaction according to the nature of the industry, as postulated by Lee et al., 2022. These findings have helped confirm the JSS's measurement capability for the hypothesis in this study, specifically regarding its use as an overall measure of job satisfaction.

The validation method enhances the credibility of the JSS and enables its use across various employee samples. In survey usability improvement, it is possible to make small changes to the survey implementation that are unlikely to affect its measurement (Thant & Chang, 2020). Organizational academics and Human Resources practitioners have widely used it since the

scientific community established it as possessing good psychometric characteristics. By using this tool's structure, managers will be able to make informed decisions based on verified information. This tool is so reliable that any organization's change process rate should be considered an asset to both Human Resources and the organization's change process.

Application of the Job Satisfaction Survey

The purpose of the JSS is to act as a snapshot survey and a management tool for assessing workplace conditions and planning Human Resources activities. When it comes to identifying organizational development and making changes within an organization's employees, many organizations across sectors use the JSS to assess the workforce's attitudes. In response to employees' opinions on the fundamental elements of the workplace, this survey will provide the information organizations need to enhance their operations (Jerab, 2025).

Several studies conducted in the healthcare and education sectors show that through the JSS, managers can identify the causes of job dissatisfaction and take appropriate measures to address them, thereby enhancing employee satisfaction (Isaacs et al., 2020). The JSS tool enables organizations to develop an effective strategy for approaching Human Resource Management from the employee's perspective. Managers can then use the findings of JSS to determine whether organizational policies align with employees' expectations, thereby enhancing productivity within the organization.

The JSS is, therefore, handy in today's employment world and can be applied by both public and private employers. Various studies conducted in financial services have shown that it is possible to perform better and offer improved employee retention after deploying the JSS survey outcomes for planning, as supported by Shaikh et al. (2019). With such a structure, managers can reflect on job satisfaction factors, including compensation, supervision, and the

working environment, to determine employees' wellness. This structure can also be used to compare the satisfaction levels of different organizational departments and industries, as the instrument's structure is uniform. The JSS is a valuable tool for organizational change because it enables the evaluation of changes in working performance and the impact of implemented policies and interventions.

Integrating JSS findings with Human Resources policies can go a long way toward improving workforce commitment and reducing turnover. The literature suggests that when organizations rely on the JSS results to enhance the work climate, favorable changes in turnover and general job satisfaction are evident (Singh & Bhattacharjee, 2019). The survey data is also a more efficient and direct means of communication between managers and staff, thereby increasing trust in the workplace. This paper explains how various organizations can improve workers' working conditions through systematic measures. This paper will demonstrate a relationship between what is taught in class and what is practiced in organizations, made possible by JSS as a reliable enabler.

Further Considerations on Measurement

Advancements in job satisfaction assessment have prompted researchers to adopt a mixed-method approach to capture its various facets. Modern work environments necessitate moving beyond traditional survey tools and scale measurements. Quantitative data helps determine statistical significance based on trends, while qualitative data provides deeper insights into each context (Koncar et al., 2021). Researchers employ a dual method that provides both numerical results and a detailed description of feelings, the organizational culture, and the self. When such techniques are used, organizations gain a broader understanding of their employees' well-being and levels of contentment. Research in organizations has now shifted to a paradigm

where mixed-method designs are preferred, as these approaches provide a critical means of enhancing the study of job satisfaction.

The combination of quantitative and qualitative research approaches enables the researcher to quantify data and identify factors influencing employee motivation in their study. Employees can convey their satisfaction or dissatisfaction through a survey, but it fails to reveal the reasons behind their attitudes. Focus groups and interviews enable researchers to identify topics often overlooked in surveys, such as perceptions of fairness, the value of teamwork, and cultural factors (Lee et al., 2022). Research has shown that institutions can gain a more comprehensive understanding of faculty job satisfaction by combining survey data with workers' feedback. Using these research methods enables one to identify the valid factors that influence satisfaction levels in organizations. It also enables organizations to establish policies that meet the basic needs of their employees and institutions.

Multiple data sources facilitate the analysis of the concept of job satisfaction. Quantitative information is ideal for comparing the employees' impressions of their work environment with the actual environment. As highlighted in healthcare research, workload and supervision are among the factors likely to be reported during interviews, even though the survey has a mean score (Miah & Hasan, 2022). This study also provides preliminary evidence that scholars and practitioners who use both quantitative and qualitative methods develop more specific solutions to workplace problems. The quantitative approach supplements job satisfaction research by providing the organization with a broader perspective and enhanced organizational insight.

The mixed-methods research approach enables organizations and scholars to continue conducting job satisfaction research that can be applied to various industries and work cultures.

A study of employees in non-profit organizations reveals that they are highly motivated by the organization's mission. Therefore, collecting qualitative data is more suitable than collecting quantitative data. The study demonstrated that qualitative data can be utilized to elucidate the impact of both internal and external factors on employee engagement (Thant, 2022).

Methodological advancement enables the organization to implement data-driven solutions that also align with the challenges employees face in the workplace. As demonstrated in this paper, through mixed-methods research, organizations can get more accurate measures of job satisfaction that will enhance organizational Practice.

The Role of Technological Innovations in Measurement

Technological advancements have enhanced the measurement of job satisfaction as organizations have improved their capacity to gather, store, and analyze data effectively. Web-based surveys, combined with data mining tools such as sentiment analysis and big data, enable the capture of both general and specific data on employee perceptions and organizational climate. Tracking job satisfaction in real-time through such advancements enables an organization to identify emerging trends in its development and act on them instantly. Cognitive tools enhance data quality, allowing the researchers to identify various factors affecting worker health, as noted by Lee et al. (2022). Advancements in technology have transformed the traditional system of engagement, in which surveys are conducted periodically, and feedback is provided at that time, into the current system, in which feedback can be received more frequently.

The use of AI and machine learning in job satisfaction assessments also helps predict the workforce and enhance workforce planning. Machine learning techniques identify trends of satisfaction and dissatisfaction that characterize the employees and those that lead to satisfaction

and dissatisfaction. By applying predictive analytics, various workforce trends have been forecasted to help organizations avoid worsening dissatisfaction (Ibrahim et al., 2023). Automating data analysis minimizes bias in results and reduces the time required to draw conclusions, which is essential in any business. Using statistics has also helped organizations improve the implementation of new technologies, thereby retaining employees and boosting staff morale.

The collection and processing of employee feedback were changed due to the implementation of mobile applications and cloud solutions. Mobile devices enhance employee engagement by enabling them to use survey instruments compatible with their devices. According to research on non-profit organizations, cloud-based systems facilitate effective communication between HR professionals and employees, leading to better outcomes from interventions (Raj, 2024). Real-time access to data on job satisfaction can assist Human Resources in developing and implementing effective policies by enabling them to take responsive action. In this case, new technologies enhance the measurement of job satisfaction and improve Human Resource Management.

Implications of Measurement for Policy Development

Questionnaires are practical tools for gathering crucial information that can help improve the organization's Human Resource Management policies and strategic planning. Information on job satisfaction helps managers develop policies to address the felt needs that lead to dissatisfaction and to promote those that lead to satisfaction effectively. Organizations can use empirical research to develop policies that address employees' needs through targeted interventions. Employer feedback to inform specific interventions makes an organization's Human Resources policies realistic rather than rigid. Measuring organizations helps create a

system in which the methods within an organization can be continually improved. This is because the application of data-based policies leads to the efficient operation of the organization, employee engagement, and sustainable growth (Gandrita, D.M., 2023).

The policy-based approach to analyzing employee satisfaction patterns enables organizations to develop a system for addressing new issues as they arise. According to the study by Isaacs et al. (2020), organizations can identify dissatisfaction early enough and boost morale by systematically tracking job satisfaction indicators. JSS is a valid technique for assessing employees' attitudes toward various factors within the company. Such instruments enable companies to use predictive analytics to anticipate future occurrences of workforce-related problems before they become critical. In this case, the organization implements measures to prevent all the issues mentioned above from arising among employees. The effectiveness of measurement instruments promotes best practices in Human Resource Management by enabling comparisons with other industries. The information gathered may help organizations develop a workforce policy that meets international standards, thereby enhancing the business's competitiveness in the current economy.

Applying policies to assess internal workforce performance contributes to organizational success, as evidenced by high retention and productivity rates. According to Koncar et al. (2021), the implementation of explicit measures of satisfaction in workplace interventions helps improve worker commitment and reduce turnover rates. Empirical data should be considered when developing policies, as their effectiveness is best measured empirically. Managers who obtain accurate job satisfaction information receive the information they need for improving training, pay practices, and organizational climates. Using measurement findings to inform the formulation of employee benefits and career development programs that an organization may

wish to provide is possible. This is because an organization's policy enhances its capacity to meet the needs of its employees.

The implementation of measurement-based interventions helps link job satisfaction theories to practice in organizations and informs the development of the company's policy. Herzberg's Two-Factor Theory is one of the theories that suggests extrinsic and intrinsic rewards are the most effective ways to motivate employees. The data obtained from the instruments enhances the postulated hypotheses. At the same time, organizational practice uses such results to formulate strategies for job enhancement and hygiene factors (Dugguh & Dennis, 2014). Comparing outcomes and theories enables organizations to maintain their workplace practices based on psychological and organizational theory. Such data makes theoretical models more usable in different workplace environments. It can, therefore, be agreed that measurement-based policies are effective instruments that ensure the welfare of employees is considered, as well as the achievement of the organization's set objectives.

The policies developed by organizations that use validated measurement instruments are responsive, prospective, and proactive. The continuous accumulation of data and subsequent analysis is also equally beneficial, as the measured satisfaction levels directly relate to the policies. According to Thant and Chang (2020), organizations that employ job satisfaction to evaluate their policies facilitate improved workforce adaptability and economic flexibility. The cyclic process of developing a policy leads to a more flexible workplace policy that involves the staff and, at the same time, achieves the highest operating capacity. It can also be used to assess what has been learned in class and, as a diagnostic tool, see how the theories learned in class apply to real-life situations in Human Resource Management. Employers that develop strict

policies handle workforce challenges effectively, retain talent, and achieve high levels of employee satisfaction.

Advances in Statistical Techniques

Advancements in statistical methods have made research on job satisfaction more reliable for scholars. The analysis, conducted using simple regression and correlation to capture the nature of job-satisfaction-influencing factors, is, however, limited in its ability to capture the whole picture. This is why Structural Equation Modeling (SEM), multivariate analysis, and machine learning approaches enable the researcher to determine the interconnection between endogenous and exogenous variables that define job satisfaction. Through these approaches, scientists can gain insights into latent constructs and test the effects of mediation, moderation, and nonlinear relationships among workplace variables (Miah & Hasan, 2022). Favorable statistics have been observed to enhance the understanding of how motivational factors impact various organizational environments. Applying machine learning methods in statistical analysis enhances the research's predictive capability in job satisfaction. Researchers commonly use artificial intelligence to identify the underlying structure of large datasets, thereby improving the accuracy of the models. The healthcare industry utilizes advanced statistical methods to identify relationships between employee satisfaction and retention strategies, enabling organizations to develop effective retention plans (Shaikh et al., 2019). This is because previous studies on job satisfaction have been made possible by improvements in computing power and big data analysis, which facilitate real-time analysis of satisfaction trends.

The evaluation of employee satisfaction levels also utilizes Bayesian statistics, a statistical method that incorporates prior information into the results. The use of the JSS in various industries is supported by statistical validation procedures that enhance the measurement

instrument (Ibrahim et al., 2023). Employee motivation benefits from the progressive development of statistical methods that link theories to employees' real-world workplace practices. The future development of job satisfaction research highly depends on the progress made in this field.

Future Directions in Measurement Research

The proposed research directions for measurement aim to enhance the understanding of job satisfaction by applying modern technologies and advanced research methods. Research on change management involves using complex equations and models to analyze larger samples of job satisfaction data. While surveys can help guide decision-making, tracking minor fluctuations in employees' attitudes or short-term engagement trends is challenging. AI, Natural Language Processing, and sentiment analysis can help businesses better understand both qualitative and quantitative data. The tools also enhance employee sentiment tracking over time, allowing companies to respond to dissatisfaction as it develops (Mustafa et al., 2019). Expert business intelligence systems help organizations develop strategic Human Resource Management to improve workplace health.

Using the latest machine learning and big data analytics tools, the current job satisfaction trend can be accurately forecast in today's world. The techniques yield improved data sets that capture employees' experiences across various organizations. In the literature, numerous studies highlight the suitability of predictive modeling (Ibrahim et al., 2023), enabling organizations to identify employees who require support and develop preventive strategies. Using Heart Rate Variability (HRV) and stress parameters in conjunction with biometrics in job satisfaction surveys provides a deeper understanding of employees' emotional states. This is because

interdisciplinary research enables the accumulation of knowledge on the effects of workplace satisfaction on people's welfare.

Continuity of innovation is essential in measurement research due to the ongoing nature of the field. Besides data from workplace communication platforms, other sources, such as emails and feedback forums, also contribute to enhancing the measurement domain (Koncar et al., 2021). In this regard, these techniques will help improve the accuracy of job satisfaction strategies in organizations. The research will help scholars and practitioners improve measurement accuracy, thereby enhancing the characteristics of job satisfaction evaluation in organizational research and policy decision-making.

Integration of Qualitative Feedback

Using qualitative feedback alongside quantitative surveys is a good way to measure job satisfaction, as it provides workers with real-life experiences. It is also more comprehensive than quantitative data because it allows for a deeper explanation of why an employee may be content with their job or dissatisfied. Therefore, using this approach, organizations can move beyond the coefficients to identify other factors and thinking styles that affect job satisfaction. This is indeed the case, as Oliveira et al. (2023) note that closed surveys, interviews, and focus groups allow researchers to uncover latent themes that may be overlooked in quantitative analysis. The use of qualitative approaches in research is advantageous for employees, as it allows them to explain their perspectives on workplace policies, leadership style, and organizational culture, which, in turn, informs job satisfaction studies.

The current literature review continues to support the idea that both qualitative and quantitative data collection methods should be employed to enhance the reliability of assessing job satisfaction. Several university-based research studies have demonstrated that qualitative

evaluation methods can help an organization identify areas of low employee engagement that may not be readily apparent using quantitative indicators (Cui, 2024). On the one hand, quantitative survey data may show high satisfaction. However, employees are dissatisfied with career advancement, recognition, and interpersonal relations. This understanding enables managers to develop specific strategies that meet employees' needs. Qualitative data, therefore, is crucial in supporting quantitative data, as it explains the statistical anomalies that may be observed in quantitative analysis.

Combining structured questionnaires with qualitative information also helps organizations gain a deeper understanding of job satisfaction issues, which in turn assists in formulating effective Human Resources policies. The evaluation of employees' stories leads to the improvement of organizational strategies that can be applied to encourage workers and, at the same time, reduce attrition while promoting employee health. Qualitative data are essential for internal organizational decision-making, as they reveal effective developmental patterns that can guide strategic planning and employee development initiatives (Ibrahim et al., 2023). This is also because qualitative feedback is necessary to gain a broader view of employee satisfaction, which will help organizations develop significant and sustainable remedies.

Cross-Sector Comparisons in Measurement

Comparing job satisfaction across different sectors provides valuable insights into the motivational elements influenced by working conditions. Job satisfaction is a universal concept applicable across all organizations; however, the factors affecting it vary by sector. From the analysis of the research questions and hypotheses, manufacturing employees' job satisfaction depends, on the one hand, on production performance and, on the other hand, on workplace safety and job security. The level of satisfaction in the service sector depends on the interaction

between employees and customers, as well as the degree of emotional requirements (Ozsoy, 2019). Due to varying levels of satisfaction and dissatisfaction across industries, this must be done accurately in line with the applied measures.

Several studies present various trends in employees' motivations and occupational satisfaction, enabling researchers to identify key aspects of the working environment. Studies on healthcare staff satisfaction focus on intrinsic motivators, such as patient treatment quality and professional independence, rather than corporate financial rewards and career growth opportunities (Hasani, 2020). The differences in satisfaction levels across industries show that broader measurement instruments are not helpful. The current assessment tools used by the organizations should be compatible with the working environment and performance measures of the chosen industry sector.

Gathering data across industries provides insight into the approaches that can enhance employee satisfaction in different organizations. Comparing the satisfaction of employees in non-profit organizations and corporations, the former are generally more satisfied with mission-oriented work. At the same time, the latter focuses on career advancement and more substantial and frequent monetary rewards (Thant & Chang, 2020). The collected data support the development of the JSS to fit the workplace conditions. Employment sector-based studies on job satisfaction enable organizations to develop better ways to manage their employees, and inter-sector data helps improve employees' overall well-being.

Exempt vs. Non-Exempt Employees

The FLSA regulations directly affect an organization through its Human Resources department, and the policies regarding exempt and non-exempt employees influence job satisfaction, performance, and engagement levels. Understanding the differences in intrinsic and

extrinsic motivators between exempt and non-exempt employees is essential for developing effective management and engagement strategies. Exempt employees, who are typically salaried and not eligible for overtime, may be more driven by intrinsic motivators such as autonomy, purpose, and opportunities for professional growth. In contrast, non-exempt employees, who are hourly and eligible for overtime, may place greater emphasis on extrinsic motivators, such as fair compensation, job security, and benefits. By exploring these distinctions, this research can provide valuable insights into how job classification influences motivational drivers, ultimately helping organizations tailor their reward systems, communication strategies, and development programs to better align with the needs and expectations of different employee groups.

Software engineers in the tech industry are exempt from earning overtime pay; however, they are fortunate to work under flexible arrangements and receive wages based solely on productivity. Non-exempt retail cashiers are paid hourly and receive overtime, but they work under strict schedules and have limited opportunities for promotions. These two categories present different perspectives on employees' concerns regarding equity, self-determination, and potential career advancement (Singh & Bhattacharjee, 2019). Amazon and other companies have been accused of pressuring warehouse workers to work overtime. However, they do not offer the same flexibility as corporate employees. The employees are dissatisfied with their jobs, leading to a high turnover rate among non-exempt staff and low morale.

The classification system also affects employees' motivation and psychological states. While marketing executives and other exempt employees can control their tasks and work on them individually, call center representatives and other non-exempt employees work on their functions daily with little initiative. Ibrahim et al. (2023) state that call center workers are dissatisfied with their jobs due to scripted and supervisory control. This has been a nightmare for organizations as

they strive to address them, which has led to the frustrations observed among lower-level employees. The participation of many non-exempt staff members is reduced because they lack distinct career ladders to follow within their organizations.

Some employers exploit the overtime pay exemption by working them for more hours than legally permitted without additional pay, which can be seen as both a violation of a worker's rights and an unethical practice (Haskin, 2022). According to Hee et al. (2019), junior lawyers in law firms often work over 70 hours per week. They are not compensated for overtime, reflecting a common issue among exempt employees who are not entitled to pay under the Fair Labor Standards Act (FLSA). This situation creates stress, making employees less satisfied with their jobs and contributing to high turnover rates. Workload parameters must be established, and exempt employees are prohibited from working more hours than the employer requires.

Thus, eliminating such unequal scenarios requires remunerated structures. There is also low employee turnover, and employee satisfaction is enhanced by improving the pay structure for Costco's non-exempt employees (Raj, 2024). Like European firms, organizations should allocate several hours per week for employees to work from home, thereby enhancing work-life balance. Employment status should be defined when formulating policies to ensure a fair and healthy work environment for employees within an organization.

Impact on Job Satisfaction

Employment status influences job satisfaction by affecting key aspects of the work environment, including autonomy, remuneration, and promotion opportunities. This is because exempt employees are paid fixed wages, meaning they will be content with their jobs due to flexible working hours and self-scheduling. Because exempt employees have the discretion to choose their tasks, they perform challenging and meaningful work with minimal supervision,

leading to internal motivation and a strong commitment to their job. Non-exempt employees tend to feel less satisfied because their arrangements deprive them of hourly wages, prescribe strict working schedules, and offer fewer opportunities for promotion and supervision (Singh & Bhattacharjee, 2019). Perceived work environment control is the most critical factor in determining workers' job satisfaction (Srivastava, 2008).

The compensation disparity between exempt and non-exempt employees exacerbates differences in workplace satisfaction. Exempt employees typically earn significantly more than non-exempt employees in their base salaries and other forms of remuneration, including bonuses, stock options, and professional development programs. The financial aspect of the reward system is also substantial, as exempt employees have few complaints about their remuneration. Non-exempt employees typically earn low wages and receive fewer performance incentives, which can leave them dissatisfied in areas with a high cost of living, as highlighted by Shaikh et al. (2019). Therefore, organizations must implement proper pay structures and treat non-exempt employees fairly to reduce dissatisfaction.

Advancement opportunities within the field distinguish exempt employees from non-exempt employees. Exempt employees have a clear promotion structure that provides opportunities to assume higher positions and training that makes their roles secure and fulfilling. Some organizational factors hinder the growth of non-exempt employees' career paths, contributing to decreased workplace motivation (Ibrahim et al., 2023). Organizations with career advancement policies and provisions for mentorship and internal employee mobility will help maintain a balance between exempt and non-exempt staff. These are some of the fundamental differences that need to be addressed to achieve satisfaction levels for both exempt and non-exempt employees.

Recent and foundational research highlights the importance of understanding how compensation and job satisfaction differ across employment classifications. Igalens and Roussel (1999) conducted a seminal study that demonstrated how compensation packages significantly influence work motivation and job satisfaction, with notable differences between exempt and non-exempt employees. Their findings suggest that exempt employees may prioritize long-term benefits and intrinsic rewards, while non-exempt employees are more responsive to direct financial compensation and overtime opportunities. Building on this, Bhargava, Sharma, and Singh (2021) provided more recent empirical evidence showing that employee perceptions of HR practices, including compensation fairness and recognition, are strongly linked to job satisfaction. Although their study did not focus exclusively on exempt versus non-exempt classifications, it reinforces the idea that compensation structures and perceived equity play a critical role in shaping employee attitudes.

Measurement Approaches in Employment Contexts

Researchers have refined the distinction between exempt and non-exempt employees to better evaluate their distinct employment statuses. Other conventional measures of job satisfaction did not distinguish between the two worker categories. Therefore, researchers have developed instruments that assess facets such as workers' independence and their expectations of fairness in pay. Researchers extended the JSS to create items relevant to work schedule control and supervisory relations. According to Ibrahim et al. (2023), the research community has supported these methodological enhancements because they provide insight into employees' emotional states. This is because organizations can develop and design specific job satisfaction instruments to help them identify constraints faced by non-exempt employees, particularly in terms of policies, compared to those faced by exempt employees.

The job satisfaction analysis of employment status indicates how workers in different categories are treated and how their careers are advanced in organizations. The studies also show that non-exempt staff members have lower job security beliefs and fewer promotional opportunities, which are directly related to their satisfaction. To address these issues, researchers incorporate employment-based factors into satisfaction measurements, including benefit entitlement, work distribution, and appraisal procedures (Thant & Chang, 2020). With the help of such specific measurement methods, organizations obtain objective information to form justified personnel management.

Evaluation techniques have evolved to support diagnosis and assist organizations in creating targeted employment interventions for specific statuses. The improvements in statistical analysis and cross-sectional studies have further positioned these tools to enable organizations to overcome the deterioration of dissatisfaction, according to Raj (2024). Thus, enhancing job satisfaction entails the use of innovative measurement techniques applicable to both exempt and non-exempt employees.

Disparities in Compensation and Work Conditions

The wages and working conditions of exempt and non-exempt employees differ in their impact on the job satisfaction of these two groups. The distinction between exempt and non-exempt employees is crucial for job satisfaction, as it affects differences in compensation structures and work-life balance. Exempt employees, who are typically salaried and not eligible for overtime pay, often experience higher job satisfaction when their compensation packages include individualized pay and benefits tailored to their roles (Grady et al., 2019). Conversely, non-exempt employees, who are hourly and eligible for overtime, may face challenges with job satisfaction if their compensation does not adequately reflect their workload or if their pay

structure lacks flexibility (Grady et al., 2019). Additionally, management changes that alter these classifications can significantly impact employee satisfaction, as changes to job security and compensation can affect motivation and overall job contentment (Jerrentrup et al., 2018).

Exempt employees enjoy better wages and reasonable remuneration, including bonuses, and have the flexibility to choose their working hours. The exemption of some employees increases their job satisfaction, allowing them better to manage their work and stress at the workplace. Meanwhile, non-exempt employees are required to work according to the timeline, are paid comparatively lower wages, and have limited choices about their working hours. These disparities are alleged to result in significant differences in perceptions of organizational justice, as employees categorized as non-exempt are likely to experience feelings of job injustice and a sense of worthlessness in the workplace (Hee et al., 2019). These employment classifications establish a more formal organizational structure, allowing non-exempt workers to hold only specific positions with limited mobility.

These organizational disparities suggest that turnover rates will be high and that employees' morale and productivity will be low. Singh & Bhattacharjee (2019) have found that non-exempt employees who perceive a compensation injustice have lower work interest and organizational commitment. This paper argues that organizations should adopt policies to ensure equal pay, thereby mitigating disparities between exempt and non-exempt employees. Employers can minimize discontent by implementing performance-based wages, clear career progression paths, and greater flexibility for non-exempt employees. Employer organizations that wish to eradicate wage and work condition disparities will consequently have a motivated and efficient workforce (Ibrahim et al., 2023). This paper also demonstrates that establishing reasonable remuneration policies will promote workplace environments where all workers are treated

equally, thereby eradicating bitterness among them and providing equal opportunities. Raj (2024) has noted that organizational stability and job satisfaction tend to increase when pay and working conditions are equitable.

The Role of Supervisory Practices

Supervisory strategies are crucial in determining employees' satisfaction levels, particularly among exempt and non-exempt employees. Supervisors play a vital role in shaping organizational leadership by fostering a positive rapport with employees. A manager who provides constructive criticism, encouragement, and compliments can significantly improve the quality of employees' work. When employees receive feedback, they can experience meaningful motivation, which in turn increases job satisfaction and organizational commitment. A study conducted in educational institutions found that positive supervisor behaviors lead to job satisfaction, primarily due to effective leadership development programs (Ihensekien & Joel, 2023).

Exempt employees require more supervision from their managers and supervisors, as they are given limited independent work and receive considerable supervision. According to the literature, non-exempt employees who can work with fair and accessible supervisors who are receptive to enhancing their professional growth are more likely to be satisfied with their jobs (Singh & Bhattacharjee, 2019). This is because subordinates are most dissatisfied with supervisors who provide little encouragement or are too controlling and demanding. In essence, how supervisors address communication and career development programs, as well as employee advocacy, impacts employees' morale and engagement. A lack of autonomy, restrictive working structures, and a lack of power characterize the work environment when supervisors foster a trusting relationship and encourage inclusion.

Managers who organize their management processes around the needs of different worker groups help employees feel valued and empowered to act. This suggests that supervisors who establish role clarity and implement human capital management through professional development and employee recognition programs enhance retention and job satisfaction levels in healthcare organizations (Hee et al., 2019). Leadership is vital in shaping employees' attitudes because it closely relates to the management of morale and productivity within the company, as well as to workers' long-term loyalty to their jobs. Employment status can be considered a factor regulated by supervisory practices in terms of job satisfaction.

Strategies for Enhancing Satisfaction Across Employment Statuses

Organizations must provide distinct strategies for both exempt and non-exempt employees to enhance job satisfaction. Consequently, these staff members have different employment experiences due to the variations in autonomy, remuneration, and promotional opportunities within their workplace. It is therefore essential for organizations to have a strategic plan to address these disparities, rather than relying solely on extrinsic motivation. Employment classification can, thus, be defined as the management of Human Resources engagement, employment, and retention through the proper alignment of policies, according to Shaikh & Shaikh (2019). The study aimed to determine whether it is possible to identify and address challenges affecting various employee groups within organizations, thereby creating a fair work environment.

Another way to enhance the freedom of non-exempt workers is to redistribute their tasks, thereby granting them more autonomy in decision-making. Employees authorized to make decisions are more satisfied with their jobs because they feel they have a stake in the company. They can help eliminate the motivation differential between the two types of employees since the

former is motivated by a higher wage rate. In contrast, the latter is motivated by bonuses. Promotion-based incentives are practical and efficient, increasing employee satisfaction (as indicated in the literature review) and advancing careers (Thant & Chang, 2020). When an organization rewards all its worker groups, employees are motivated, and turnover is low.

Flexible scheduling is a work practice that is favorable for all employee categories. Mehrad (2024) noted that, based on various studies, flexible work schedules improve employees' health and their ability to cope with workplace stress. Providing adequate training is one of the most effective ways to enhance staff professionalism, productivity, and value. These strategies help organizations develop a work culture supporting equity, productivity, and stability. Organizations committed to improving the employee satisfaction index will foster and enhance their performance and long-term success (Mehrad, A., 2024).

Job Satisfaction and Unique Challenges in Non-Profit Organizations

Several challenges negatively affect workplace satisfaction in life sciences non-profit organizations. These organizations encounter financial challenges because they have both a mission with specific objectives and profit objectives that must be balanced simultaneously. A lack of funds forces organizations to impose spending constraints. This is because they cannot afford to pay higher wages to workers or invest in their promotion and education. Based on the study's findings, non-profit employees are highly intrinsically motivated because they support the organization's values and mission, as stated by Chachar et al. (2022). The organizational purpose usually provides sufficient incentive to counterbalance the inclination to change for higher wages, and therefore, there is excellent organizational commitment.

Resource constraints lead to serious operational problems, primarily associated with the workforce and staff. Employee burnout is a significant problem in many non-profit organizations

because they often face staff shortages and high productivity expectations. Employees are expected to work not only on their jobs but also to fulfill other responsibilities. This also suggests that non-profit workers are more likely to experience job stress and exhaustion, and as a result, are less satisfied with their jobs (Cui, 2024). Companies that face such scenarios have developed stress prevention measures that include promoting work-life balance, prioritizing mental health, and implementing recognition-based cultural programs.

Also, employees of non-profit organizations should focus on non-financial incentives, such as the potential for promotion, recognition, and involvement in organizational decision-making. A study shows significant improvements in staff satisfaction when organizations offer opportunities for professional development and access to mentorship and leadership (Hasani, 2020). By establishing mission-based organizational cultures, non-profit managers can enhance their employees' engagement and commitment. These are some of the workforce challenges that must be addressed to ensure sustainable organizational success, as they affect worker motivation.

Research on Employee Motivation in Non-Profit Sectors

Different studies indicate that extrinsic motivators are essential for explaining employees' job satisfaction in non-profit organizations. According to the survey results, non-profit employees actively choose their professional positions as they find significant meaning in them. To conclude, self-orientation, as a type of motivation, accepts lower monetary incentives as sufficient rewards, suggesting that intrinsic motivation is more effective than extrinsic motivation. Nkomo (2024) states that meaningful work enhances commitment, resilience, and job satisfaction. This aspect of the workplace determines the level of responsibility that an employee has. Thus, organizations need to cultivate intrinsic motivation.

Some strategies that an organization operating under the non-profit status and with limited funding can use to increase employee job satisfaction include the following. In this case, sharing information, involving employees in organizational decisions, and providing appropriate workplace conditions motivates workers. According to the study, a positive correlation exists between employee engagement and job satisfaction when staff members feel involved in decision-making (Thant & Chang, 2020). Employee motivation increases when people can progress in their careers and remain loyal to an organization.

Social impact and community engagement are other key motivational factors for employees within non-profit organizations. This is because employees' work has a positive impact on society and brings them great satisfaction, thereby increasing their commitment to their workplaces (Hasani, 2020). Firms that hold value-based missions and leadership and train workers can remain motivated despite challenging financial conditions. The study also confirmed the need to use motivation techniques to enhance the workers' morale and the non-profit organization's success.

Innovative Practices in Non-Profit Organizations

Innovative practices are among the fundamental approaches that non-profit organizations adopt to enhance job satisfaction through adaptation processes that aim to overcome the challenges of resource scarcity. Due to the financial and human resource limitations, such organizations are always looking for ways to maximize efficiency with minimal time investment without further taxing employees. Combining work flexibility with skills swapping is possible, as is fostering creativity, motivation, and productivity in non-profit organizations and creating partnerships with various sectors. The investigations reveal that individuals are more satisfied when they understand that their organization is resourceful in compensating for a lack of funds

(Hasani, 2020). Thus, innovation capabilities enhance operational capabilities, improve staff's perception of leadership, and help achieve sustainable organizational goals in the long run.

Engaging with relevant communities and volunteers can help meet staffing needs, allowing organizational employees to focus on essential tasks rather than spending time on administrative work. According to Cui (2024), non-profit organizations that engage volunteers tend to lead to high levels of workers' satisfaction because volunteer workers perceive that they are not alone in achieving the organization's set goals. Working closely in the workplace fosters group work, which can help avoid burnout and enhance staff morale. Partnerships with academic institutions and corporate sponsors help non-profit organizations secure the resources, training, and funding they need.

The rise of non-profit organizations, the increased use of digital means, and the implementation of data-driven decision-making systems. In their study, Ibrahim et al. (2023) found that the extent of technology utilization to support the working processes of non-profit organizations and facilitate remote work increases employee satisfaction. Digital platforms are also of great importance to nonprofit organizations, as they reduce administrative work and encourage the sharing of information to support organizational improvement. Cultural changes in non-profit organizations promote an enabling culture for forming strategic technology partnerships. These measures make processes sustainable over the long term and enhance employee motivation, thereby positively impacting the organization's efficiency.

Regional Context

The Pennsylvania Context

Pennsylvania has a strong foundation of non-profit life sciences organizations that conduct complex research and are highly regarded by the community. Another sector is

represented by the number of research institutions in Pennsylvania; universities and biotechnology companies have created a knowledge-based economy. Thus, this well-developed environment is beneficial for partnerships among the academic, business, and government sectors, as well as for non-profit organizations, as it facilitates the sharing of information and materials. Strong and extensive research networks and academic connections enhance employees' job satisfaction by increasing the likelihood of professional development and mental stimulation, as Hee et al. (2019) postulated. Collaboration in research improves research quality and helps retain more employees, as organizations often offer training.

Pennsylvania's economic development level establishes the initial conditions for non-profit employees to be satisfied with their jobs. This is because sectors such as health and education, as well as technological firms, are among the most established in the state, with consistent cash flow and employment opportunities. Another benefit of an institution's economic stability is that it is desirable in non-profit organizations, as it reduces the unpredictability of funding; hence, there are fewer cases of employment insecurity. This research indicates that financial stability in a region is directly proportional to employee satisfaction, especially in sectors that rely on grant funding and public support (Ibrahim et al., 2023). Non-profit organizations in Pennsylvania can obtain funds for their operations and long-term projects, offering better compensation and enhancing employee motivation.

The policies in the state of Pennsylvania are favorable to creating an environment conducive to the needs of non-profit employees. The state supports such programs with grants, worker training, and special tax exemptions for non-profit organizations. This aligns with research findings that clarify that when governmental support is emphasized, employees feel their performance is adequate because their jobs are secure. The organizations are forward-

looking (Raj, 2024). It is a non-profit life sciences organization operating under the laws of the state of Pennsylvania to safeguard its employees and promote positive change within the organization. Thus, opportunities to participate in research and economic stability, with the necessary support from the state, will contribute to increased perceived job satisfaction among employees in non-profit organizations.

The New Jersey Context

New Jersey's non-profit life sciences sector operates in a competitive, innovation-driven environment; therefore, employee satisfaction is achieved through various factors that define the region. New Jersey has many pharmaceutical companies, biotech firms, and research institutions, making the state's professional environment quite vibrant. The ideas in this cluster include creating a knowledge-sharing culture that enables better innovation through collaborative structures, thereby improving the job satisfaction of workers engaged in mission-related activities. The prominent healthcare facilities enable non-profit organizations to stay informed about the latest medical research and innovations. Thus, the staff can engage in meaningful work, which is a crucial source of motivation in any organization. Competition poses two challenges for organizations: first, it becomes difficult to retain qualified staff; second, they must constantly adapt to ongoing regulatory changes (Schepers, C., Schnell, R., & Vroom, B., 2023).

The New Jersey government supports the life sciences through favorable policies, including funding research and development programs and fostering public-private partnerships. These measures create a safe environment for non-profit organizations to thrive, as they meet all industry requirements. There is a significant improvement in employee satisfaction when a reasonable and appropriate regulatory framework is in place, as it reduces the workload. At the same time, there are opportunities for growth among professionals (Raj, 2024). This focus on

innovation makes New Jersey a suitable location, as it ensures organizations adopt new technologies that enhance their operations. Technology, artificial intelligence, data analysis, and processing help improve overall employee engagement by automating routine, repetitive tasks, allowing employees to focus on more intellectual work.

The qualified staff of the state plays a vital role in developing the workplace environment for non-profit organizations. New Jersey's population comprises individuals with diverse cultural backgrounds, which contributes to successful collaboration among multiple teams. Workplace diversity fosters an environment that welcomes everyone, promoting a healthy atmosphere that enhances job satisfaction and organizational commitment, as noted by Chachar et al. (2022). New Jersey has numerous educational facilities, and its employees can constantly upgrade their knowledge and skills in the up-to-date industry. Investments in continuous education and other workforce development practices help nonprofits create and sustain employee commitment, satisfy their career needs, and foster a learning culture.

The advantages that New Jersey non-profit organizations reap do not exempt them from operational costs, the scarcity of funds, or the call for accountability for results. High living costs in the state put pressure on employees' pay; therefore, organizations must provide reasonable wages and good employee benefits to retain their staff. Thant (2022) notes that organizations offering comprehensive packages, including flexible working arrangements and wellness plans, tend to have higher employee satisfaction and lower turnover rates. Non-profit organizations must develop Human Resource Management policies and practices that ensure the recruitment and retention of the best talent while working with limited financial resources. Non-profit organizations that align their business strategies with New Jersey's inherent strengths will develop a flexible workforce that remains motivated in this innovative region. The New Jersey

environment illustrates how specific components of local culture, combined with regulatory frameworks and industrial structures, impact employees' satisfaction in certain types of work settings.

Comparative Analysis of Regional Factors

The analysis of regional factors in Pennsylvania and New Jersey reveals similarities and differences that impact the employee job satisfaction of non-profit organizations. The states achieve this through sound institutions, well-established research societies, and broad networks within the community that enable workers to assess the organization's development prospects and stability. These are why the distinct regulatory environments, economic situations, and competition levels between these areas lead to different patterns of job satisfaction among employees. New Jersey has a high concentration of biotechnology industries and research organizations that support performance and growth. At the same time, Pennsylvania maintains its life sciences industry by strengthening public-private partnerships that ensure a steady supply of the workforce (Ihensekien & Joel, 2023). This is because the various characteristics of workplaces require each region to develop motivational strategies that enable employees to remain focused on their tasks. To ensure that Human Resources policies are sound, leaders must consider these contextual factors, as they determine how to manage both extrinsic and intrinsic motivation effectively.

Competition forces companies in New Jersey to maintain a high work rate, which requires workers to perform at a high level while simultaneously training to become more competent. From a work environment perspective, creativity is encouraged, but it should be done in a way that does not lead to worker exhaustion. This is because the life sciences sector in Pennsylvania emphasizes job security and career development; therefore, workers are not under

much pressure, as their employers tend to retain them for extended periods. Similarly, in his research, Raj (2024) noted that employees in a competitive market, such as New Jersey, exhibit high job involvement and low turnover intention due to job stress. Organizations in New Jersey should implement work-life balance programs to address employee dissatisfaction and improve overall employee well-being. It is, therefore, evident that job security is the most significant aspect of employee retention for organizations located in Pennsylvania and not for organizations located in New Jersey. By accounting for regional market differences, organizations can better enhance employee well-being and align their strategies with their objectives.

Gaps in Literature

This study aims to address two critical gaps in the existing literature on employee motivation and job satisfaction. First, while Herzberg's Two-Factor Theory has been widely validated across sectors, there is a lack of empirical research examining how intrinsic (motivator) and extrinsic (hygiene) factors vary between exempt and non-exempt employees within the same organizational context—particularly in non-profit environments where financial incentives may be constrained (Raj, 2024; Shaikh et al., 2019). Second, existing studies often treat intrinsic and extrinsic motivators as independent constructs, without exploring their interaction or how they are moderated by factors such as employment classification, regional economic conditions, or organizational mission (Ihensekien & Joel, 2023). This study aimed to address these gaps by examining the differences in job satisfaction, as measured through motivator and hygiene factor scores, between exempt and non-exempt employees in a non-profit life sciences organization operating in Pennsylvania and New Jersey. The question guides the research: What is the difference in job satisfaction, specifically in terms of motivator and hygiene scores, between exempt and non-exempt employees within a non-profit life sciences organization in

Pennsylvania and New Jersey? To address this, the study tests the null hypothesis (H_0): There is no significant difference in job satisfaction, specifically in motivator and hygiene factor scores, between exempt and non-exempt employees. The alternative hypothesis (H_1) suggests that a significant difference does exist. By addressing these gaps, the study aims to contribute to the theoretical refinement of Herzberg's model in contemporary organizational contexts and offer practical insights for tailoring human resource strategies to different employment classifications within mission-driven organizations.

Chapter 3

Methodology

Research Design

The purpose of this quantitative study, which employs a cross-sectional survey, was to examine differences in job satisfaction between exempt and non-exempt employees at a non-profit life sciences organization in Pennsylvania and New Jersey. The independent variable was the participants' employment status, defined as whether they were exempt (not entitled to overtime pay) or non-exempt (entitled to overtime pay) under the Fair Labor Standards Act (FLSA). The dependent variable was job satisfaction, which was defined as the level of contentment employees feel about their work, influenced by various motivators and hygiene factors as per Herzberg's Two-Factor Theory.

Sample

The population studied in this survey consisted of a sample of exempt and non-exempt employees from a non-profit life sciences organization in Pennsylvania and New Jersey. The current population of exempt and non-exempt employees is as follows: In Pennsylvania, there were 62 exempt employees and 263 non-exempt employees. In New Jersey, 171 were exempt, and 370 were non-exempt. A single-stage sampling design was used for this population.

Inclusion Criteria

The inclusion criteria for this research study were exempt and non-exempt active, full-time, and part-time employees of the non-profit life sciences organization in Pennsylvania and New Jersey who had been employed for a minimum of ninety (90) days.

Exclusion Criteria

The exclusion criteria for this research study included newly hired exempt and nonexempt employees with less than ninety (90) days of service, as well as temporary and

contract employees. Employees on leave of absence were also excluded. To be eligible, employees needed to be actively working at one of the two locations. Actively working means that the employees were not on any form of leave, such as medical, personal, or vacation leave, and were performing their job duties at the time of the study.

Recruitment

Participants were selected through voluntary participation using the non-profit life sciences organization's email system as the recruitment tool. The researcher sent an email sharing the survey link. The recruitment email is in Appendix A, and the Informed Consent is in Appendix B.

Instrumentation

Spector's (1985) Job Satisfaction Survey (JSS) was used to measure job satisfaction among exempt and non-exempt employees. The JSS contained thirty-six (36) items designed to measure employees' overall job satisfaction. The questionnaire was based on Herzberg's Two-Factor Theory, which differentiates workplace factors into motivators and hygiene factors. Responses were measured on a six-point Likert scale, with 1 being Disagree Very Much and 6 being Agree Very Much (Spector, 1985). See Appendix C.

In alignment with Herzberg's Two-Factor Theory, the survey questions were categorized into two distinct groups: motivator factors and hygiene factors. The following questions were classified as motivators: 2, 3, 5, 8, 9, 11, 12, 14, 17, 18, 20, 21, 23, 26, 27, 30, 32, 33, 35, and 36. The hygiene factor questions were: 1, 4, 6, 7, 10, 13, 15, 16, 19, 22, 24, 25, 28, 29, 31, and 34.

The thirty-six (36) items were scored on a six-point scale, and individual scores ranged from one (1) to six (6). The total score of the JSS ranged from thirty-six (36) to two hundred and

sixteen (216) (Spector, 1985). The higher the score, the more satisfied the employee, whereas the lower the score, the more dissatisfied.

Negatively framed items were reverse scored by subtracting the raw score from 7 to ensure consistent interpretation (Spector, 2023). Reverse-coded items included questions 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, and 36. Responses were then summed within each subscale to produce subscale scores, which were used to compute the overall job satisfaction score.

Scores below one hundred and eight (108) represent job dissatisfaction. Scores between one hundred and eight (108) and one hundred and forty-four (144) show neutral to moderate job satisfaction. Scores above one hundred and forty-four (144) are very high levels of job satisfaction.

Subscales

The JSS was broken down into individual subscale totals, enabling further analysis of the various factors that can significantly impact employee satisfaction. The nine (9) subscales of the JSS are:

1. Employees' Level of Pay (Questions 1, 10, 19, and 28)
2. Promotion (Questions 2, 11, 20, and 29)
3. Supervision (Questions 3, 12, 21, and 30)
4. Fringe Benefits (Questions 4, 13, 22, and 31)
5. Contingent Rewards (Questions 5, 14, 23, and 32)
6. Operating conditions (Questions 6, 15, 24, and 33)
7. Co-Workers (Questions 7, 16, 24, and 34)
8. Nature of Work (Questions 8, 17, 25, and 35)

9. Communication (Questions 9, 18, 26, and 36)

Scores on each subscale range from four (4) to twenty-four (24). The minimum score for each subscale is four (4), while the maximum is twenty-four (24). Scores between four (4) and twelve (12) represent dissatisfaction, scores between thirteen (13) and eighteen (18) represent neutral to moderate job satisfaction, and scores between nineteen (19) and twenty-four (24) represent very high levels of job satisfaction (Spector, 1985).

Reliability and Validity

High internal validity and reliability have been demonstrated for the JSS. Spector (1985) reported acceptable to strong reliability for the overall scale (.91 Cronbach's alpha). For the subscales, .60 to .82. It has been validated across various occupational groups in terms of construct validity and criterion-related validity in predicting work-related outcomes, including turnover intention, performance, and organizational commitment (Spector, 2022). The JSS has been psychometrically established and aligns with Herzberg's Two-Factor theory, making it a suitable instrument for measuring job satisfaction among exempt and non-exempt employees in this study. The total and subscale scores are relevant to differences in job satisfaction levels, which were examined in the study as it investigates workplace dynamics in a non-profit life sciences setting in Pennsylvania and New Jersey.

The following demographic information was collected on the survey: age, gender, race, and the highest level of education. The following additional demographic information regarding employment was also included: exempt/non-exempt status, salary, tenure, and state work location. See Appendix E.

Data Collection/Procedure

Before this project began, the researcher submitted the request for approval to Marywood University's External Review Committee (ERC). Permission was obtained from the CEO of the non-profit life sciences organization. Research activities did not commence until the researcher, Maria Szydlowski, provided evidence of final approval from Marywood University's ERC. See Appendix E.

Data collection was conducted through an online survey sent via email to all full-time and part-time employees at the non-profit life sciences organization in Pennsylvania and New Jersey. Qualtrics was utilized to create the survey. The researcher sent an email with the recruitment letter and survey link, asking that, before participating in the study, willing participants agree to the informed consent. This consent was embedded into the first page of the survey instrument. The survey instrument was presented to the exempt and non-exempt employees a minimum of three (3) times throughout a two-week data collection window. The instrument was sent out on Monday for day 1. The second round was sent the following Monday. The third and final round was sent on Friday and remained open until that Sunday. This gave the employees exactly three (3) opportunities and two (2) weeks to complete the online survey instrument.

The records of this study are private and confidential. Qualtrics was used for data collection, and SPSS Version 31 was used for analysis purposes. Participants are not identifiable through any information used in written or presented reports. Access to the research records will be restricted to the researcher and stored on a password-protected and secure server. The records of this study will be kept electronically for at least three (3) years and then destroyed. All study computer records will be deleted after 3 years. This study presented risks that are no greater than those encountered in daily life activities.

Data Analysis

A significance level of 0.05 or less was used to determine if significant relationships exist among the variables. A post hoc power analysis was conducted to determine whether the sample size was sufficient to detect differences among groups based on JSS scores. Using an alpha level of .05, a sample size of 426, and an observed effect size of .41, the achieved statistical power was approximately .98, which exceeds the commonly accepted threshold of .80 for adequate power (Cohen, 1988). This indicates that the analysis was capable of detecting significant differences and relationships, minimizing the risk of Type II error.

1. Sub-problem 1, What is the job satisfaction, i.e. motivator and hygiene factor score of exempt employees at a non-profit life sciences organization in Pennsylvania and New Jersey, will be analyzed using a frequency distribution and other descriptive statistics.
2. Sub-problem 2, What is the job satisfaction i.e. motivator and hygiene factor score of non-exempt employees at a non-profit life sciences organization in Pennsylvania, will be analyzed using frequency distribution and other descriptive statistics.
3. Sub-problem 3, What is the difference in job satisfaction i.e. motivator and hygiene factor scores among exempt and non-exempt employees in a non-profit life sciences organization in Pennsylvania and New Jersey, will be analyzed using an independent samples t-test and other descriptive statistics.

Supplemental Analysis

Demographics were analyzed using the following questions:

Is there a relationship between age and job satisfaction i.e. motivator and hygiene scores will be analyzed using a Pearson correlation.

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Is there a difference between gender and job satisfaction i.e. motivator and hygiene scores will be analyzed using an independent samples t-test.

Is there a difference between race and job satisfaction i.e. motivator and hygiene scores will be analyzed using an independent samples t-test or a One-Way ANOVA depending on the number of respondents in each category.

Is there a difference between level of education and job satisfaction i.e. motivator and hygiene scores will be analyzed using a One-Way ANOVA.

Is there a difference between salary and job satisfaction i.e. motivator and hygiene scores will be analyzed using a Pearson Correlation.

Is there a difference between tenure and job satisfaction i.e. motivator and hygiene scores will be analyzed using a Pearson Correlation.

Chapter 4

Results

Response Rate

The Job Satisfaction Survey was emailed a total of three times to 850 participants. Five hundred and twenty-six in New Jersey and three hundred and twenty-four in Pennsylvania. Of the 526 New Jersey participants, 157 were classified as exempt employees, and 369 were classified as non-exempt employees. In Pennsylvania, sixty-one were classified as exempt employees, and 263 were classified as non-exempt. The survey yielded 506 responses.

Data Cleaning

Raw data were downloaded from Qualtrics and cleaned using Microsoft Excel, with all data cleaning conducted before any analyses. Responses from any participants who did not complete the survey were excluded ($N = 38$), as were responses from those who had worked at the company for less than 3 months or did not indicate their tenure/location ($N = 42$). After data cleaning, there were 239 usable responses from New Jersey participants and 187 from Pennsylvania participants. One hundred of the New Jersey participants were exempt employees, and 139 were non-exempt employees. Forty-six of the Pennsylvania participants were exempt employees, and 141 were non-exempt employees (see Table 1).

String responses to numeric answers were changed to numeric only (e.g., 18 years to 18). Furthermore, any “vague” responses were rounded to the nearest number mentioned for simplicity (e.g., >10 years rounded to 10). Responses to all even-numbered items of the Job Satisfaction Survey (JSS) were reverse-coded as per the instructions outlined by Spector (1985). Sum scores were then created for the total scale and for each of the nine subscales outlined by Spector (1985). Sum scores for total JSS were checked for normality and plotted on a histogram

(see Figure 4). Total JSS was further examined for outliers, and none were identified for the total score (see Figure 5). A few outliers were present in the subscores Level of Pay ($n = 4$) and Supervision ($n = 3$), but they were not omitted because the participants' total JSS scores were within the normal range.

Demographics

The demographic data presented in Table 1 provides a comprehensive overview of the employee population across the two primary locations, New Jersey (NJ) and Pennsylvania (PA). The total number of respondents is 426, with 239 located in NJ and 187 in PA. Regarding employment classification, 146 employees are exempt, while 280 are non-exempt, indicating a workforce primarily composed of non-exempt staff. The gender distribution shows a slight male majority: 229 males, 191 females, and six individuals who preferred not to disclose their gender.

Racial demographics reveal that most participants identify as White ($n = 259$), followed by Black or African American ($n = 57$), Hispanic or Latino ($n = 49$), and Asian ($n = 35$). The age distribution ($n = 424$) indicates a mature workforce, with the largest groups being those aged 35–44 years ($n = 107$), 55+ years ($n = 104$), and 45–54 years ($n = 98$). Younger age groups, such as those aged 18–24 years, are underrepresented ($n = 23$).

Educational attainment ($n = 426$) is varied, with the largest group holding a High School Diploma or GED ($n = 150$), followed closely by those with a Bachelor's Degree ($n = 146$). Tenure data indicate strong employee retention, with 160 individuals having served for over 11 years, suggesting a stable and experienced workforce.

Table 1. *Total Demographic Information*

	Subcategory	NJ	PA	Total
Location	Pennsylvania			187
	New Jersey			239
Exempt Status	Exempt	100	46	146

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	Non-Exempt	139	141	280
Gender	Male	132	97	229
	Female	103	88	191
	Prefer Not to Disclose	4	2	6
Race <i>n</i> = 426	American Indian or Pacific Islander	4	0	4
	Asian	34	1	35
	Black or African American	56	1	57
	Hispanic or Latino	35	14	49
	Native Hawaiian or Alaska Native	0	0	0
	Two or More Races	16	6	22
	White	92	167	259
Age Group <i>n</i> = 424	18–24	9	14	23
	25–34	46	44	90
	35–44	64	43	107
	45–54	55	42	98
	55+	61	43	104
Education Level <i>n</i> = 426	High School Diploma/GED	74	76	150
	Associate's Degree (AA, AS)	39	36	75
	Bachelor's Degree (BA, BS)	87	59	146
	Master's Degree (MA, MS, MBA)	36	16	52
	Doctorate (PhD, EdD)	3	0	3
Tenure (length of service) <i>n</i> = 426	3+ mos.–1 year	37	30	67
	2–5 years	73	53	126
	6–10 years	45	28	73
	11+ years	84	76	160

Table 2 presents a breakdown of employee demographics, segmented by employee status. The gender distribution shows a relatively balanced representation, with males comprising a slightly higher proportion in both exempt (19.72%) and non-exempt (34.03%) positions than females (exempt: 14.08%; non-exempt: 30.75%).

The racial composition indicates that most employees identify as White (exempt: 24.88%; non-exempt: 35.92%). Age distribution is relatively balanced, with the largest groups falling within the 35-44 (25.36%) and 55+ (24.65%) age ranges.

Educational attainment varies significantly between exempt and non-exempt employees. Most exempt employees hold a bachelor’s Degree (17.61%) or higher (Master's/Doctorate, combined 8.22%). In contrast, most non-exempt employees have either a High School Diploma or GED (30.52%) or an Associate’s Degree (13.85%).

Tenure indicates a strong core of long-serving employees, particularly among exempt employees, where 25.59% of respondents have over five years of service. Non-exempt employees also exhibit substantial longevity, with 29.11% of respondents indicating they have over five years of service. However, there is a higher proportion (36.62%) of newer employees with five or fewer years of service.

Table 2. *Exempt/Non-Exempt Demographic Information*

Demographic	Exempt	Non-Exempt
Gender		
Male	84	145
Female	60	131
Prefer not to Disclose	2	4
Race		
American Indian or Other Pacific Islander	1	3
Asian	10	25
Black or African American	8	49
Hispanic or Latino	15	34
Native Hawaiian or Alaska Native	0	0
Two or More Races	6	16

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	White	106	153
Age			
	18-24	1	22
	25-34	22	68
	35-44	41	66
	45-54	38	60
	55+	41	63
Education			
	High School Diploma/GED	20	130
	Associate's Degree (AA, AS)	16	59
	Bachelor's Degree (BA, BS)	75	71
	Master's Degree (MA, MS, MBA)	33	19
	Doctorate (PhD, EdD)	2	1
Tenure (length of service)			
	3mos.-1 yr.	11	56
	2-5 yrs.	26	100
	6-10yrs.	31	42
	11+ yrs.	78	82

Subproblem 1

The job satisfaction information, i.e., motivator and hygiene factor scores, of exempt employees at a non-profit life sciences organization in Pennsylvania and New Jersey, was analyzed using a frequency distribution. Table 3 presents the hygiene scores of participants who classified themselves as exempt employees. The top five scoring questions were “I enjoy my coworkers” (97.5%), “I like the people I work with “(97.95%), “The benefits package we have is equitable (97.26%), “The benefits we receive are as good as most other organizations offer” (92.47%), and “I feel I am being paid a fair amount for the work I do” (73.29%).

Conversely, the bottom five scoring questions were “I am not satisfied with the benefits I receive” (18.49%), “I feel unappreciated by the organization when I think about what they pay me” (20.81%), “There are benefits we do not have which we should have” (24.66%), “Many of our rules and procedures make doing a good job difficult” (25.34%), and “There is too much bickering and fighting at work” (26.71%).

For descriptive statistics by question, please refer to Appendix F. For descriptive statistics by subscale, please refer to Appendix G.

Table 3. Exempt Hygiene Scores

Question	Disagree		Agree		Agree	
	Very Much	Disagree Moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Very Much
I feel I am being paid a fair amount for the work I do.	5 3.42%	8 5.48%	26 17.81%	20 13.69%	46 31.5%	41 32.53%
Raises are too few and far between.	37 25.34%	28 19.18%	23 15.75%	31 21.23%	16 10.96%	11 7.53%
I feel unappreciated by the organization when I think about what they pay me.	49 33.56%	39 26.71%	27 18.49%	17 11.64%	12 8.22%	2 1.37%
I feel satisfied with my chances for salary increases.	8 5.48%	16 10.96%	22 15.07%	34 23.29%	35 23.97%	31 21.23%
I am not satisfied with the benefits I receive.	75 51.37%	34 23.29%	10 6.85%	4 2.74%	12 8.22%	11 7.53%
The benefits we receive are as good as most other organizations offer.	2 1.37%	4 2.74%	5 3.42%	22 15.07%	49 33.56%	64 43.84%
The benefit package we have is equitable.	1 0.68%	0 0.00%	3 2.05%	17 11.64%	63 43.15%	62 42.47%
There are benefits we do not have which we should have.	34 23.29%	41 28.08%	35 23.97%	24 16.44%	7 4.79%	5 3.42%
Many of our rules and procedures make doing a good job difficult.	42 28.77%	35 23.97%	32 21.92%	23 15.75%	8 5.48%	6 4.11%
My efforts to do a good job are seldom blocked by red tape.	20 13.70%	31 21.23%	28 19.18%	21 14.38%	33 22.60%	13 8.90%
I have too much to do at work.	10 6.85%	17 11.64%	43 29.45%	44 30.14%	19 13.01%	13 8.90%
I have too much paperwork.	18 12.33%	29 19.86%	49 33.56%	20 13.70%	23 15.75%	7 4.79%
I like the people I work with.	1 0.68%	0 0.00%	2 1.37%	8 5.48%	43 29.45%	92 63.01%
I find I have to work harder at my job because of the incompetence of people I work with.	32 21.92%	33 22.60%	23 15.75%	38 26.03%	15 10.27%	5 3.42%
I enjoy my coworkers.	0 0.00%	1 0.68%	2 1.37%	18 12.33%	47 32.19%	78 53.42%
There is too much bickering and fighting at work.	44 30.14%	37 25.34%	26 17.81%	26 17.81%	9 6.16%	4 2.74%

Motivator scores from the exempt participants are presented in Table 4. The top five scoring questions were “I feel a sense of pride in doing my job” (100%), “I like doing the things I do at work” (97.26%), “I like my supervisor” (97.26%), “My job is enjoyable” (96.58%), and “My supervisor is quite competent in doing his/her job” (95.89%).

Conversely, the bottom five scoring questions were “I sometimes feel my job is meaningless” (4.80%), “My supervisor is unfair to me” (6.85%), The goals of this organization are not clear to me “ (8.90%), “My supervisor shows too little interest in the feelings of subordinates” (9.59%), and “Work assignments are not fully explained” (19.18%).

Table 4. Exempt Motivator Scores

n= 146						
Question	Disagree Very Much	Disagree Moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree Very Much
There is really too little chance for promotion on my job.	14 9.59%	21 14.38%	21 14.38%	25 17.12%	37 25.34%	28 19.18%
Those who do well on the job stand a fair chance of being promoted.	8 5.48%	18 12.33%	20 13.70%	37 25.34%	40 27.40%	23 15.75%
People get ahead as fast here as they do in other places.	13 8.90%	25 17.12%	39 26.71%	35 23.97%	24 16.44%	10 6.85%
I am satisfied with my chances for promotion.	14 9.59%	26 17.81%	26 17.81%	33 22.60%	23 15.75%	24 16.44%
My supervisor is quite competent in doing his/her job.	1 0.68%	2 1.37%	3 2.05%	11 7.53%	42 28.77%	87 59.59%
My supervisor is unfair to me.	105 71.92%	20 13.70%	11 7.53%	8 5.48%	2 1.37%	0 0.00%
My supervisor shows too little interest in the feelings of subordinates.	89 60.96%	21 14.38%	22 15.07%	8 5.48%	5 3.42%	1 0.68%
I like my supervisor.	1 0.68%	0 0.00%	3 2.05%	8 5.48%	32 21.92%	102 69.86%
When I do a good job, I receive the recognition for it that I should receive.	7 4.79%	7 4.79%	13 8.90%	22 15.07%	57 39.04%	40 27.40%
There are few rewards for those who work here.	37 25.34%	36 24.66%	29 19.86%	26 17.81%	13 8.90%	5 3.42%
I don't feel my efforts are rewarded the way they should be.	30 20.55%	37 25.34%	25 17.12%	36 24.66%	8 5.48%	10 6.85%

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I do not feel the work I do is appreciated.	57 39.04%	38 26.03%	18 12.33%	18 12.33%	10 6.85%	5 3.42%
My job is enjoyable.	0 0.00%	3 2.05%	2 1.37%	18 12.33%	53 36.30%	70 47.95%
I sometimes feel my job is meaningless	109 74.66%	21 14.38%	9 6.16%	4 2.74%	1 0.68%	2 1.37%
I like doing the things I do at work.	2 1.37%	1 0.68%	1 0.68%	16 10.96%	54 36.99%	72 49.32%
I feel a sense of pride in doing my job.	0 0.00%	0 0.00%	0 0.00%	12 8.22%	30 20.55%	104 71.23%
Communications seem good within this organization.	8 5.48%	16 10.96%	27 18.49%	32 21.92%	52 35.62%	11 7.53%
The goals of this organization are not clear to me.	82 56.16%	30 20.55%	21 14.38%	9 6.16%	2 1.37%	2 1.37%
I often feel that I do not know what is going on with the organization.	37 25.34%	52 35.62%	27 18.49%	17 11.64%	10 6.85%	3 2.05%
Work assignments are not fully explained.	50 34.25%	43 29.45%	25 17.12%	20 13.70%	85 48%	0.00%

Subproblem 2

The job satisfaction information, i.e., motivator and hygiene factor scores, of non-exempt employees at a non-profit, life sciences organization in Pennsylvania and New Jersey, was also analyzed using a frequency distribution. Table 5 presents the hygiene scores of participants who classified themselves as non-exempt employees. The top five scoring questions were “I like the people I work with” (93.57%), “I enjoy my coworkers” (92.14%), “The benefits package we have is equitable (87.50%), “The benefits we receive are as good as most other organizations offer” (81.07%), and “Raises are too few and far between” (61.43%).

Conversely, the bottom five scoring questions were “I am not satisfied with the benefits I receive” (23.21%), “Many of our rules and procedures make doing a good job difficult” (27.50%), “I have too much paperwork” (30%), “I have too much to do at work” (39.29%), and “There is too much bickering and fighting at work” (40%).

For descriptive statistics by question, please refer to Appendix F. For descriptive statistics by subscale, please refer to Appendix G.

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Table 5. Non-Exempt Hygiene Scores

n = 280

Question	Disagree Very Much	Disagree Moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree Very Much
I feel I am being paid a fair amount for the work I do.	35 12.5%	45 16.1%	53 18.9%	47 16.8%	72 25.7%	28 10.0%
Raises are too few and far between.	25 8.9%	44 15.7%	39 13.9%	81 28.9%	44 15.7%	47 16.8%
I feel unappreciated by the organization when I think about what they pay me.	42 15.0%	57 20.4%	48 17.1%	66 23.6%	36 12.9%	31 11.1%
I feel satisfied with my chances for salary increases.	39 13.9%	33 11.8%	47 16.8%	78 27.9%	47 16.8%	36 12.9%
I am not satisfied with the benefits I receive.	107 38.2%	65 23.2%	43 15.4%	27 9.6%	19 6.8%	19 6.8%
The benefits we receive are as good as most other organizations offer.	15 5.4%	19 6.8%	19 6.8%	60 21.4%	83 29.6%	84 30.0%
The benefit package we have is equitable.	5 1.8%	7 2.5%	23 8.2%	75 26.8%	83 29.6%	87 31.1%
There are benefits we do not have which we should have.	37 13.2%	49 17.5%	69 24.6%	76 27.1%	29 10.4%	20 7.1%
Many of our rules and procedures make doing a good job difficult.	74 26.4%	62 22.1%	67 23.9%	48 17.1%	21 7.5%	8 2.9%
My efforts to do a good job are seldom blocked by red tape.	57 20.4%	54 19.3%	54 19.3%	43 15.4%	41 14.6%	31 11.1%
I have too much to do at work.	36 12.9%	55 19.6%	79 28.2%	66 23.6%	28 10.0%	16 5.7%
I have too much paperwork.	75 26.8%	63 22.5%	58 20.7%	54 19.3%	18 6.4%	12 4.3%
I like the people I work with.	4 1.4%	4 1.4%	10 3.6%	39 13.9%	106 37.9%	117 41.8%
I find I have to work harder at my job because of the incompetence of people I work with.	62 22.1%	52 18.6%	45 16.1%	71 25.4%	25 8.9%	25 8.9%
I enjoy my coworkers.	2 0.7%	7 2.5%	13 4.6%	50 17.9%	101 36.1%	107 38.2%
There is too much bickering and fighting at work.	76 27.1%	46 16.4%	46 16.4%	67 23.9%	27 9.6%	18 6.4%

Motivator scores from the non-exempt participants are presented in Table 6. The top five scoring questions were “I feel a sense of pride in doing my job” (97.14%), “I like doing the things I do at work” (95.71%), “My job is enjoyable” (94.29%), “I like my supervisor” (93.21%), and “My supervisor is quite competent in doing his/her job” (89.64%).

Conversely, the bottom five scoring questions were “I sometimes feel my job is meaningless” (4.29%), “My supervisor is unfair to me” (10%%), The goals of this organization are not clear to me “ (12.14%), “My supervisor shows too little interest in the feelings of subordinates” (14.64%), and “Work assignments are not fully explained” (21.43%).

Table 6. Non-Exempt Motivator Scores

n = 280						
Question	Disagree Very Much	Disagree Moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree Very Much
There is really too little chance for promotion on my job.	33 11.8%	53 18.9%	57 20.4%	56 20.0%	48 17.1%	33 11.8%
Those who do well on the job stand a fair chance of being promoted.	26 9.3%	36 12.9%	49 17.5%	76 27.1%	55 19.6%	38 13.6%
People get ahead as fast here as they do in other places.	26 9.3%	39 13.9%	89 31.8%	78 27.9%	28 10.0%	20 7.1%
I am satisfied with my chances for promotion.	30 10.7%	41 14.6%	52 18.6%	73 26.1%	50 17.9%	34 12.1%
My supervisor is quite competent in doing his/her job.	7 2.5%	8 2.9%	14 5.0%	32 11.4%	67 23.9%	152 54.3%
My supervisor is unfair to me.	185 66.1%	43 15.4%	24 8.6%	12 4.3%	5 1.8%	11 3.9%
My supervisor shows too little interest in the feelings of subordinates.	135 48.2%	64 22.9%	40 14.3%	25 8.9%	8 2.9%	8 2.9%

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I like my supervisor.	4 1.4%	3 1.1%	12 4.3%	31 11.1%	67 23.9%	163 58.2%
When I do a good job, I receive the recognition for it that I should receive.	22 7.9%	25 8.9%	40 14.3%	64 22.9%	67 23.9%	62 22.1%
There are few rewards for those who work here.	37 13.2%	53 18.9%	54 19.3%	71 25.4%	37 13.2%	28 10.0%
I don't feel my efforts are rewarded the way they should be.	40 14.3%	46 16.4%	56 20.0%	79 28.2%	34 12.1%	25 8.9%
I do not feel the work I do is appreciated.	88 31.4%	58 20.7%	46 16.4%	51 18.2%	26 9.3%	11 3.9%
My job is enjoyable.	3 1.1%	4 1.4%	9 3.2%	62 22.1%	96 34.3%	106 37.9%
I sometimes feel my job is meaningless	187 66.8%	48 17.1%	33 11.8%	10 3.6%	1 0.4%	1 0.4%
I like doing the things I do at work.	1 0.4%	3 1.1%	8 2.9%	37 13.2%	81 28.9%	150 53.6%
I feel a sense of pride in doing my job.	1 0.4%	1 0.4%	6 2.1%	38 13.6%	64 22.9%	170 60.7%
Communications seem good within this organization.	31 11.1%	53 18.9%	47 16.8%	52 18.6%	62 22.1%	35 12.5%
The goals of this organization are not clear to me.	150 53.6%	57 20.4%	39 13.9%	18 6.4%	10 3.6%	6 2.1%
I often feel that I do not know what is going on with the organization.	69 24.6%	64 22.9%	51 18.2%	71 25.4%	19 6.8%	6 2.1%
Work assignments are not fully explained.	99 35.4%	58 20.7%	63 22.5%	43 15.4%	14 5.0%	3 1.1%

For descriptive statistics by question, please refer to Appendix F. For descriptive statistics by subscale, please refer to Appendix G.

Subproblem 3

To test the central hypothesis that there will be a difference in job satisfaction, i.e., motivator and hygiene scores (as measured by the JSS), between exempt and non-exempt employees, an independent samples t-test was conducted. Employee Status (Exempt vs Non-Exempt) was the independent variable, and JSS score was the dependent variable. The analysis results were statistically significant ($t(424) = 4.05, p = .001, d = .41$), indicating a small but significant effect of employee status on JSS. Specifically, the mean of the exempt group was significantly higher ($M = 165.48, SD = 24.3$) than the mean of the non-exempt group ($M = 155.06, SD = 25.68$). The effect size was small to moderate ($d = .41$). Thus, the null hypothesis that there was no difference in job satisfaction between exempt and non-exempt employees was rejected.

The relationship was further explored by splitting the JSS into the motivator and hygiene subscales according to Spector's (1985) scoring instructions. The same relationship was observed between exempt and non-exempt participants for motivator ($t(424) = 2.94, p = .002, d = .3$) and hygiene ($t(424) = 4.95, p = .001, d = .51$), indicating that exempt employees have higher satisfaction across both factors. The larger effect size for hygiene suggests that exempt and non-exempt employees differ most in this area. All t-tests passed equal variance assumptions using Levine's F at $\alpha = .05$.

Supplemental Analysis

Following the initial t-test, the research question "What is the difference in job satisfaction, i.e. motivator and hygiene score, between exempt and non-exempt employees within a non-profit life sciences organization in Pennsylvania and New Jersey" was examined using a 2x2 Factorial Anova. The ANOVA model examined the effects of Employee Status (exempt vs.

non-exempt) and Location (NJ vs. PA) on JSS scores. The hypotheses tested by the model are two-tailed and as follows:

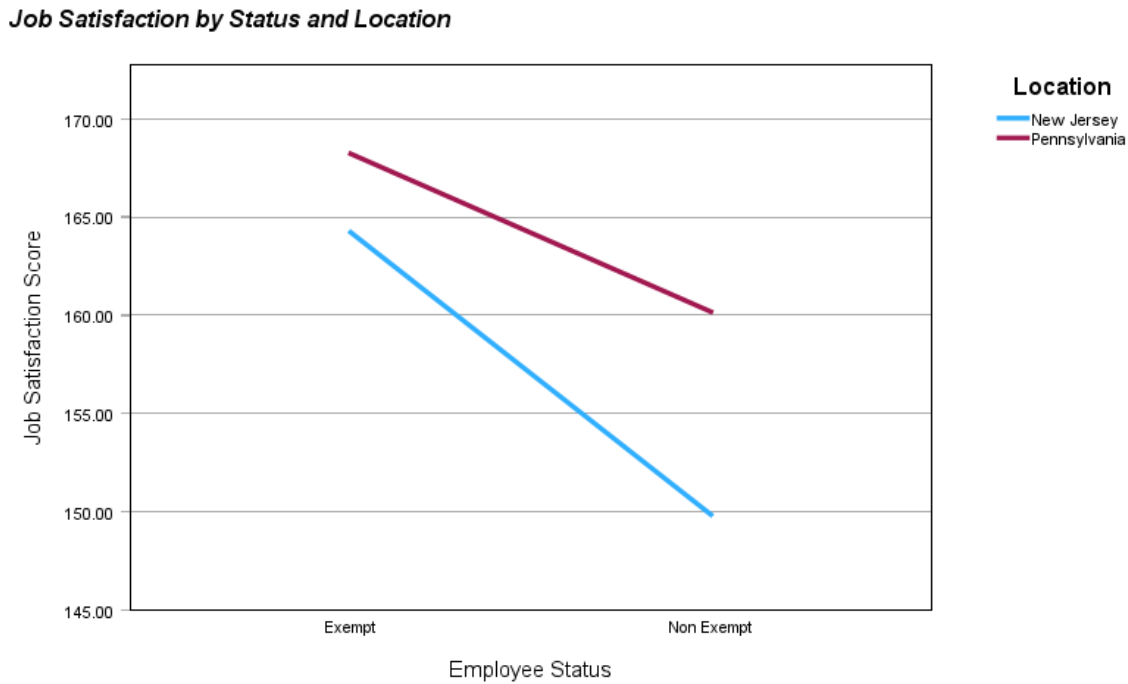
H1: There will be a main effect of Employee Status (Exempt vs Non-Exempt) on JSS score.

H2: There will be a main effect of Location (NJ vs. PA) on JSS score.

H3: There will be an interaction between Employee Status (Exempt vs Non-Exempt) and Location (NJ vs. PA) on JSS score.

The results of the Analysis were statistically significant $F(3, 422) = 9.88, p < .001, \eta^2_p = .07$, indicating the presence of at least one significant effect (see Figure 3). The model passed equal variance assumptions using Levine's F at $\alpha = .05$. The main effect of Employee Status was significant $F(1, 422) = 17.56, p < .001, \eta^2_p = .04$, indicating a small but significant effect of Employee Status on JSS. This supported model H1 and reaffirmed the results of the initial t-test. The main effect of Location was significant, $F(1, 422) = 7.18, p = .008, \eta^2_p = .02$, indicating a small but significant effect of location. The model showed that PA employees were reporting higher job satisfaction. Finally, the interaction between Employee Status was not significant $F(1, 422) = 1.4, p = .237$, indicating no interaction effect on JSS.

Figure 3. *Job Satisfaction by Employee Status and Work Location*



To expand upon the research question above, the 2x2 Factorial ANOVA was expanded into a multiple regression model that aimed to predict total JSS score using the predictor variables of: Employee Status (0 = Exempt, 1 = Non-Exempt), Location (0 = NJ, 1 = PA), Gender (0 = Male, 1 = Female), Age (Years), Tenure (Years), Education (Degree), and Hours Worked.

The resulting model passed assumptions for autocorrelation (Durbin Watson $W = 1.74$) and collinearity (all VIF between 1-1.7) and was significantly predictive of total JSS, $F(7, 385) = 6.67, p < .001$, adjusted $R^2 = .09$, indicating that the model explained roughly 9% of the variance in total JSS. When examining the individual coefficients (See Table 18), however, Gender, Hours Worked, Education, and Tenure were all non-significant at $\alpha = .05$. Employee Status was the strongest predictor, ($b = -11.79, p < .001$), indicating that those employees who were Non-Exempt (eligible for overtime pay) had total JSS scores that were, on average, 11.79 points lower than Exempt (not eligible for overtime pay) employees. Age was a statistically significant

predictor ($b = .41, p < .001$). Thus, for each year an employee ages, the total JSS score was expected to increase by .41 points. Finally, Location was also significant ($b = 7.71, p = .003$). Since NJ was coded as 0, it serves as the baseline for comparison; thus, the significant positive Beta indicated that employees in PA had total JSS scores that were, on average, 7.71 points higher than those of employees in NJ.

Finally, the model was simplified by trimming each non-significant predictor, one at a time, starting with the predictor with the highest p-value, until only significant predictors remained. The resulting model passed assumptions for autocorrelation (Durbin Watson $W = 1.85$) and collinearity (all VIF between 1-1.05) and was significant at predicting total JSS score, $F(3, 418) = 18.7, p < .001$, adjusted $R^2 = .12$, again indicating that the simplified model explained roughly 12% of the variance in total JSS. Notably, the parsimonious model predicted roughly 50% more variability in total JSS compared to the full model. When examining the significant predictors (see Table. 8) of Employee Status ($b = -6.1, p = .001$), Age ($b = .17, p < .001$), and Location ($b = 4.45, p = .001$), all p-values decrease when compared to the significant model, indicating more substantial evidence for statistical significance (See Table 19). Finally, collinearity was reduced, with VIFs below 1.05. Together, the models converge to support the hypothesis that there are differences in job satisfaction scores among non-profit life sciences employees based on Employee Status, Age, and Location.

Table 18. *Full Model Coefficients*

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.

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1 (Constant)	145.58	7.64		19.06	<.001
Status	-11.78	3.01	-.22	-3.92	<.001
Location	7.71	2.54	0.15	3.04	0.003
Gender	3.65	2.5	0.07	1.46	0.145
Age	0.41	0.12	0.2	3.33	<.001
Hours_Week	-.05	0.12	-.02	-.388	0.699
Tenure	.02	0.19	.01	.08	0.937
Education	-.09	1.26	-.00	-.07	0.946

Table 19. *Parsimonious Model*

Coefficient	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
(Constant)	61.98	2.3		26.96	<.001
Age	0.172	0.04	0.18	3.92	<.001
Employee Status	-6.1	1.18	-0.243	-5.16	<.001
Location	4.45	1.12	0.19	3.98	<.001

Finally, to examine the supplementary question of whether there are racial differences in terms of job satisfaction, a one-way ANOVA was conducted with Race as the independent variable and total JSS score as the dependent variable. The model found significant differences in total JSS score based on Race, $F(5, 420) = 5.68, p < .001, \eta^2 = .06$, indicating a moderate significant effect of Race on JSS. Post Hoc Bonferroni tests revealed that this effect was entirely driven by the difference in JSS between White ($M = 163.47, SD = 25.07$) and Black or African American employees ($M = 147.12, SD = 21.18$) ($M_d = 16.35, p < .001$). Notably, the population of Native American/Pacific Islander ($n = 4$) was too small to detect differences despite having a larger raw difference in mean scores compared with White employees ($M_d = 23.72, p = .904$)

than the Black/White racial gap ($M_d = 16.35$), highlighting the need for more representation from these groups for precise results.

To resolve this power issue in the present analysis, all races except White and Black/African American were combined into a single “Other” category. The one-way ANOVA examining the difference in job satisfaction score and Race was repeated with this new variable. The results of the analysis were statistically significant, $F(2, 423) = 13.55, p = .001, \eta^2 = .06$, indicating a small but significant effect of Race on JSS. Post Hoc Bonferroni tests revealed that this effect was driven by the differences in JSS between White ($M = 163.47$ and $SD = 25.07$) and Black/African American employees ($M = 147.12$ and $SD = 21.82$) ($M_d = 16.35, p < .001$), and White and Other ($M = 158.63$ and $SD = 25.67$) ($M_d = 10.27, p < .001$). There was no significant difference between Black or African American and Other employees ($M_d = -6.01, p = .409$).

Descriptive analyses were conducted for each of the sum scores (total and subscales) (see Table 20). The most notable takeaway from the descriptive analysis was that the average total score ($M = 158.63$) is well above the JSS threshold for Highly Satisfied employees (144). This suggests that employee satisfaction is notably high, and the data is centered toward the upper end of the scale, indicating a potential ceiling effect. Despite this, the data passed tests for normality, presenting as a bell-shaped curve with both skewness (-0.12) and Kurtosis (-0.47) within acceptable ranges (± 1). Most subscales also fell within acceptable limits. However, the Nature of Work subscale showed slightly elevated Skewness (-1.16) and Kurtosis (0.88), while the Supervision subscale displayed a more pronounced skewness (-1.66) and kurtosis (2.31), which may warrant further attention. These deviations did not extend to the total scale and are not considered severe enough to compromise the overall normality of the data.

Table 20. *Descriptive Statistics*

	<i>n</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
Age	422	20	88	44.19	12.58
Annual Salary	146	52	500000	122679.83	79324.84
Hours Worked	403	0.50	120	43.16	10.49
Hours Worked _Exempt	154	0	87	42.41	9.18
Hours Worked_ Non-Exempt	261	0	90	40.32	9.77
Rate of Pay	258	1	47	27.55	6.07
Tenure	424	0	37.50	9.68	8.33
Total JSS Score	426	84	216	158.63	25.67
Motivator	426	48	120	91.14	15.32
Hygiene	426	33	96	67.49	11.93
Rewards	426	4	24	16.47	4.83
Supervision	426	4	24	21.05	3.92
Promotion	426	4	24	14.41	4.63
Pay	426	4	24	15.15	5.13
Nature of Work	426	10	24	21.35	2.83
Co-Workers	426	6	24	17.16	3.65
Working Conditions	426	4	24	15.47	3.48
Benefits	426	6	24	18.29	3.87
Communication	426	6	24	17.85	3.93

A multiple linear regression was conducted using total job satisfaction score as the dependent variable and each of the nine JSS subscores as predictors. The purpose of this analysis was to examine which of the subscores were most impactful in determining job satisfaction. As expected, the regression model was significant, $F(9, 416) = 31122.35$, $p < .001$, adjusted $R^2 = 1$, indicating that the model explained 100% of the total job satisfaction. Also, as expected, all coefficients were statistically significant ($p = .001$). When examining the beta coefficients, Pay stands out as the most impactful predictor for Job Satisfaction ($Beta = .2$). Conversely, the lowest subscale score was Nature of Work ($Beta = .1$).

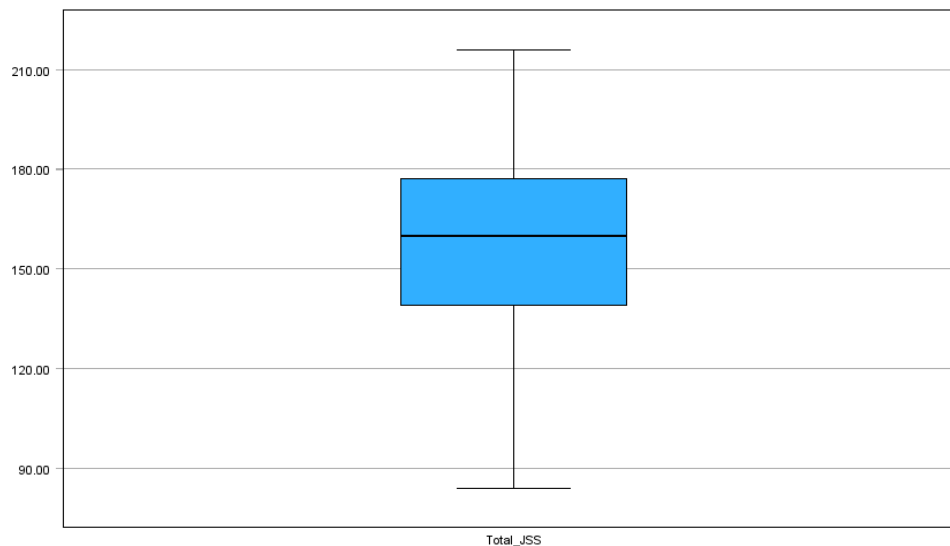
Table 21. *Subscale Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)				0	1		
Communication	1	0	0.15	5.5*e ⁷	<.001	.48	2.07
Working Conditions	1	0	0.14	6.3*e ⁷	<.001	.79	1.27
Coworkers	1	0	0.15	6.0*e ⁷	<.001	.62	1.61
Nature of Work	1	0	0.11	4.8*e ⁷	<.001	.69	1.45
Pay	1	0	0.2	6.6*e ⁷	<.001	.41	2.45
Promo	1	0	0.18	6.9*e ⁷	<.001	.55	1.84
Reward	1	0	0.19	5.8*e ⁷	<.001	.35	2.82
Supervision	1	0	0.15	6.3*e ⁷	<.001	.64	1.56
Benefits	1	0	0.15	6.2*e ⁷	<.001	.64	1.58

To further investigate the relationship between employee status and job satisfaction, Independent Samples T-Tests were conducted to examine potential differences in the two most impactful and the two least impactful subscales between exempt and non-exempt employees. The analysis found that non-exempt employees reported significantly higher Pay ($t(424) = 6.47$,

$p < .001$, $d = .66$) and Rewards ($t(424) = 3.8$, $p < .001$, $d = .39$), the two most impactful predictors of JSS. The effect size for Pay was .66, indicating a moderately significant effect, while the effect size for Rewards was .39, indicating a small but significant effect. However, there was no difference between employee status found for the low impact predictor of Working Conditions ($t(424) = -1.7$, $p = .091$, $d = -.17$). The subscale Nature of Work did not pass equal variance test ($p = .037$) yet was still significant ($t(320.22) = 2.15$, $p = .032$, $d = .21$). The higher effect sizes and lower p values of the critical predictors highlight the impact of these predictors for job satisfaction in the observed overall JSS difference between employee status.

Figure 4. *Distribution of Job Satisfaction Scores*



Reliability Analysis

A reliability analysis was conducted for the JSS through the inter-item correlation method. All 36 items were included (after reverse-coding), resulting in Cronbach's $\alpha = .93$, which is an ideal level of reliability ($>.8$). This is also notably similar to the Cronbach's $\alpha = .91$ reported for the JSS in the literature (Cho, E., & Kim, S., 2015). Reliability analyses were again conducted after splitting the scale into motivator ($\alpha = .9$) and hygiene ($\alpha = .83$) factors, each of which exceeded the $\alpha = .8$ threshold.

Chapter 5

Discussion

Introduction

This quantitative study examined differences in job satisfaction, specifically, Herzberg's motivator and hygiene scores, between exempt and non-exempt employees within a non-profit life sciences organization with locations in both Pennsylvania and New Jersey. The study used Spector's Job Satisfaction Survey to measure satisfaction using motivation and hygiene scores. The null hypothesis stated that there is no significant difference in job satisfaction, particularly in motivator and hygiene factor scores, between exempt and non-exempt employees within a non-profit life sciences organization in Pennsylvania and New Jersey. The hypothesis was rejected, as employees classified as exempt reported significantly higher job satisfaction than those classified as non-exempt. Although the difference was small, it was noticeable enough to suggest that exempt employees tend to feel more satisfied in their jobs.

In this discussion, possible explanations for these results are explored, implications for practice are considered, and directions for future research on job satisfaction among exempt and non-exempt employees are considered.

Discussion

Employee Status

The hypothesis that job satisfaction varied between exempt and non-exempt employees was accepted. Exempt employees reported significantly higher job satisfaction scores compared to non-exempt employees. This finding aligns with the current literature and suggests that job status itself, rather than job responsibilities alone, is one of the reasons behind the disparate workplace experiences resulting from disparities in autonomy, compensation, and promotions (Singh & Bhattacharjee, 2019).

In the analysis of the underlying factor structure, both motivator and hygiene subscales differed significantly in favor of exempt employees. The fact that the hygiene factors have a greater effect size than the motivator factors indicates that exempt and non-exempt employees have the most significant difference in their experience with organizational policies, working conditions, and interpersonal relationships, which Herzberg (1966) referred to as the hygiene factors. This trend supports Herzberg's Theory, as it reveals that situational factors (hygiene) can more effectively distinguish groups of employees than intrinsic factors (motivators) in cases where comparisons are made between employees of varying ranks within the organization.

Nevertheless, the correlation was more subtle than initially assumed. Regression analysis of the individual subscale contributions showed that Pay was the most influential predictor of overall job satisfaction. Nature of Work is the least influential predictor of overall job satisfaction. This result contradicts the common uses of the Herzberg framework, which categorizes pay as a hygiene factor and the nature of work as a motivating core. At this non-profit life sciences organization, it appears that compensation plays both a hygiene and motivator role, which may be specific to non-profit organizations and/or the field of life sciences, where high pay is regarded as an indicator of professional and organizational appreciation (Abraham & Prasetyo, 2021).

Regional Differences

There were significant geographical differences, with employees in Pennsylvania showing greater job satisfaction compared to those in New Jersey. Pennsylvania employees, with other factors held constant, rated 4.45 points higher than New Jersey employees on the JSS. This result aligns with the theoretical assumptions about the regional economic and cultural variables (Hee et al., 2019). New Jersey has a high intensity of competition and innovation pressure in the

biotechnology setting, and Pennsylvania has a more enticing research environment. Such differences are not limited to mere geographic location, but also include work environment pressures, career stability expectations, and norms of organizational culture. A more pressure-driven, innovation-oriented culture in New Jersey can be a source of stress and uncertainty that reduces job satisfaction, even when job content and pay are held constant. By contrast, a more stable and cooperative research environment in Pennsylvania can lead to establishing a stronger psychological safety and work-life balance, which can result in higher levels of satisfaction with both hygiene and motivator factors.

Regarding Herzberg's Theory, these regional differences suggest that contextual factors, such as organizational culture, competitive pressures, and regional employment dynamics, are considered a meta-level hygiene factor that influences the nature of the employee's experience in the immediate work environment. Multi-location organizations should design region-specific strategies that take into consideration these contextual differences. In New Jersey, organizations achieve this through the application of stress management support, work-life balance programs, and rewards that clearly consider the pressure of operating in a competitive and stressful work environment. An innovation-driven culture should also focus on leadership that encourages internal collaboration and fosters a sense of psychological safety. Organizations can ensure that New Jersey employees experience greater satisfaction in both hygiene and motivator dimensions by ensuring they are buffered against excessive competition forces while upholding performance standards. This supports Herzberg's view that intrinsic motivators, such as meaning and autonomy, continue to influence satisfaction across different regions.

Subscale Insights

The subsequent breakdown of specific subscales, comparing exempt and non-exempt groups, revealed an unexpected trend. Non-exempt workers had significantly greater satisfaction with Pay and Rewards, which are the two subscales with the strongest correlation with overall job satisfaction in the entire sample. Pay was especially impressive as the moderate effect indicates a significant difference between the non-exempt employees, regardless of their overall job satisfaction. This counterintuitive result suggests that non-exempt employees feel more fairly compensated and appreciated for their input, but still experience lower overall contentment compared to those in the exempt category.

In comparison, Working Conditions did not demonstrate a significant difference, and the difference in Nature of Work was small and significant in favor of exempt employees. However, it failed to meet the assumption of equal variance. These trends demonstrate a two-tier dynamic: exempt staff find satisfaction in intrinsic job features and organizational location, regardless of possibly feeling that their compensation is less fair, and non-exempt staff have good hygiene (compensation and rewards) but reduced satisfaction with motivator aspects, such as meaningful work and promotion opportunities.

This paradox presents a direct challenge to simplified applications of the Herzberg theory, suggesting that the relationship between hygiene satisfaction and overall job satisfaction is not linear. Companies should not think that a basic solution to the most influential predictors of satisfaction (Pay and Rewards) will necessarily lead to increased satisfaction among all categories of employees. Instead, this result suggests that various categories of employees may require entirely different types of intervention. Exempt employees may require increased levels of communication and more meaningful work opportunities. In contrast, non-exempt employees

may require extensive access to developmental experiences and organizational leverage, despite already receiving favorable payment rates.

As noted, Pay was found to be the most influential predictor of job satisfaction, while Nature of Work had the least predictive of all subscales. These trends suggest that employees' overall satisfaction ratings depend more on the judgment of tangible outcomes, compensation, recognition, and advancement opportunities than on the inherent nature of the work itself.

The study has significant theoretical consequences on Herzberg's Two-Factor Theory in the nonprofit context. The classic uses of the theory place motivators (achievement, recognition, the work itself, responsibility, and advancement) as the key determiners of satisfaction, while hygiene factors (company policy, supervision, relationships, working conditions, and salary) deter dissatisfaction but are not as active determinants of satisfaction. The current findings, however, propose that there is a more subtle association in which compensation and recognition, which are traditionally considered to be hygiene and motivator factors, respectively, have the most significant impact on the perception of overall levels of satisfaction, and the nature of work per se has a relatively minor impact.

This trend can be attributed to several reasons. First, in a nonprofit life sciences organization where a sense of mission alignment and contribution to science inherently gives meaning to the work, the nature of work can be used as a normative expectation instead of a differentiating variable to which the employees tend to infer an overall satisfaction difference, so change in this dimension does not add as much to the total variance in satisfaction. Second, the nature of work in the scientific field implies that many people working in this organization undertake complex, intellectually stimulating jobs at all levels, thereby diminishing the difference in work experiences. Third, where the salaries of scientific professionals are

frequently overshadowed by those of for-profit biotechnology firms, pay fairness and appreciation can regain renewed importance as an indicator of organizational worth and professional esteem (Abraham & Prasetyo, 2021).

The fact that the role of Communication deserves attention is evident, as in the Herzberg model, communication is typically viewed as a hygiene factor. In nonprofit environments with a culture of mission-driven work and collaboration, successful communication can play a dual role, eliminating dissatisfaction by promoting clarity and coordination (hygiene), as well as fostering meaningful interaction with the organizational mission and coworkers (motivator). This twofold role could be the reason why communication showed a moderate positive influence on overall satisfaction and was equal to Supervision and Coworkers in its predictive power.

Demographic Predictors

Age and Tenure

The significance of age was also a constant and a predictive variable in relation to job satisfaction in all the models. The age variable was statistically significant in the parsimonious regression model. This correlation was observed even after adjustment for employee status and location, indicating that the age effect is more a result of given developmental maturity than of organizational rewards and seniority benefits.

Older employees reported greater job satisfaction, irrespective of their job status and pay level. The trend investigates the conventional assumptions that the contentment of senior employees is primarily based on improved compensation packages or superior roles. It is, rather, an indication that age-related satisfaction involves developmental psychology variables, including shifting priorities at the workplace, improved coping skills, and modified expectations. The older employees seem to develop a specific vision of the work-life balance, organizational

limits, and career satisfaction, thereby increasing their contentment with the status quo (Miah & Hasan, 2022).

Theoretically, this age effect suggests that the factors identified by Herzberg may be weighed differently across different life stages. Younger workers may be more interested in promotion and direct appreciation (motivators), whereas older workers may have a greater understanding of stable working conditions and relationships among coworkers (hygiene factors). Moreover, older employees may exhibit more efficient emotional regulation patterns, enabling them to feel satisfied even with organizational flaws, a form of psychological strength that is acquired with age and experience (Mehrad, 2020).

Organizations can utilize this knowledge to introduce extensive early-career support initiatives, enabling younger employees to develop realistic expectations, coping skills, and career development pathways. This might involve formal mentorship initiatives where younger workers are paired with older employees, as well as openness about the realities and constraints of the organization, and development prospects that enhance psychological maturity and increase job satisfaction. The lack of a tenure effect also suggests that being retained in a company does not necessarily enhance satisfaction; instead, it appears that the developmental transformations that naturally occur as one ages are more significant. Organizations must then explore the possibility that their practices may discriminate against younger employees by providing them with inadequate support, unclear expectations, or limited development opportunities (Ihensekien & Joel, 2023).

The correlation between age and satisfaction also raises significant issues of causal and selection effects. It is unclear whether older workers have more positive attitudes towards the workplace due to their experience or whether dissatisfied workers tend to leave more often,

resulting in an older workforce with, by default, more positive attitudes. Probably, these two mechanisms act together in a complex developmental pattern that involves the differentiation of a person and the selection of organizations (Lee et al., 2022). This implies that organizations should conduct age-specific exit interviews to determine whether younger employees leave due to poor working conditions or because they have unrealistic expectations that often change with experience. Learning these processes would enable organizations to distinguish between retention problems that require environmental enhancements and developmental assistance for younger employees.

Gender and Education

Interestingly, neither gender nor education level was a significant predictor of job satisfaction. Both male and female respondents report an equivalent level of job satisfaction, regardless of location or employee status. Likewise, the lack of education effect indicates that workers with varied educational qualifications, ranging from high school to doctoral degrees, have the same level of job satisfaction, which could be a result of effective organizational practices that appreciate diverse educational paths and contributions.

Nevertheless, the lack of these effects cannot be taken as an indication that gender and education are not important in job satisfaction. These null findings may be indicative of the culture and practices of this specific organization. Companies that have established a fair work environment, considering both gender and educational level, may offset the demographic differences that manifest in less inclusive environments. Future studies should investigate whether these null effects extend to other nonprofit life sciences organizations or whether specific practices within this organization contribute to demographic equity in workplace

experiences. This aligns with Herzberg's concept that intrinsic satisfaction strengthens with personal growth and experience.

Race

The level of satisfaction reported by White employees was significantly higher compared to both Black/African American employees and those of other racial backgrounds. The gaps in racial satisfaction are significantly greater than the disparities regarding employee status or location, which implies that race is the strongest demographic predictor of workplace experience at this organization. The scale of these differences suggests that organizational-level challenges are influencing the experiences of employees of color, which may include unequal access to recognition, career growth opportunities, meaningful work assignments, inclusive communication practices, and psychological safety (Chachar et al., 2022). These disparities negatively impact both performance and equity within the organization, necessitating intervention plans that consider both explicit policies and implicit cultural practices.

The organization should examine the issue of how race affects the employee experience, including hiring and onboarding, development, recognition, and advancement. Based on the findings, intervention strategies may need to be intensive and sustained beyond the regular diversity and inclusion efforts. Companies may also conduct an extensive equity audit that reviews official policies and unofficial cultures, which may produce different experiences among different racial groups. Structured bias training and accountability mechanisms for all supervisors, mentorship programs with special focus on supporting employees of color, periodic climate surveys disaggregated by race, easy-to-access reporting of demographic data in hiring, promotion, and retention measures with clear benchmarks and timelines, and employee resource

groups among underrepresented groups with meaningful organizationally-provided support and resources should be listed as specific interventions.

In addition, organizations could provide various forms of representation on hiring and promotion committees, conduct disaggregated pay equity audits, and offer transparent channels for reporting discrimination or favoritism, along with a strong anti-retaliation system. Company leadership must be committed to accomplishing equity objectives by allocating resources and evaluating performance. The size of the racial satisfaction gap necessitates that organizational leaders demonstrate explicit and consistent organizational investment in equity efforts, extending beyond symbolic and signaling changes to structural and cultural transformations (Mohrenweiser & Pfeifer, 2023). This finding extends Herzberg's framework by showing that recognition and fairness, while extrinsic factors, can also enhance intrinsic satisfaction for diverse employees.

Implications

These results can be utilized as practical recommendations by organizations that want to enhance their employees' job satisfaction. The paradoxical trend (non-exempt employees have greater satisfaction with the strongest predictors (Pay and Rewards) but a lower level of overall satisfaction) implies that companies cannot use compensation strategies only to promote the satisfaction of all groups of employees. Instead, varied strategies are needed: employees who are not in top leadership roles may be best served by having better communication systems, clear links between their work and corporate mission, and clear career progression opportunities, whereas employees who are not in senior positions need to be provided with more access to meaningful projects, access to decision-making, and advancement opportunities even when they already have relatively good compensation terms.

Racial inequality requires organizational action. The existing standard diversity and inclusion initiatives also appear to be ineffective when considering the scope of the difference in satisfaction between employees of color and White employees. Companies need to have highly intensive and sustained interventions such as equity audits, training on bias with accountability, formalized mentorship schemes, climate monitoring, disaggregated by race, open-ended demographic reporting with benchmarks, employee resource group resource allocation, and diverse hiring and promotion, audits of pay equity, secured reporting, and visible leadership commitment. These interventions should be continuous, quantified, and modified according to frequent evaluations of progress (Mohrenweiser & Pfeifer, 2023).

The age-satisfaction relationship indicates that an organization's developmental resources should be directed at early-career employees, who tend to exhibit less satisfaction. Instead of assuming that increased tenure leads to higher satisfaction levels, organizations should introduce systematic mentorship, realistic job previews, clear communication of organizational realities, and career ladders, which enable younger employees to develop the views and coping strategies associated with greater satisfaction levels. Age-specific exit interviews may be used to distinguish between environmental improvements needed, retention issues, and developmental assistance required (Edbert, 2023; Gandrita, 2023; Ibrahim et al., 2023).

Lastly, the regional satisfaction attributes between Pennsylvania and New Jersey sites indicate that multi-location organizations should develop location-based strategies that consider local competitive forces, economic factors, and cultural values. It may be necessary to offer increased stress management provisions, work-life balance programs, and cooperative culture-building initiatives in New Jersey locations that operate in competitive, high-pressure, and innovation-driven environments. This knowledge of these contextual effects enables

organizations to introduce interventions that are relevant to local circumstances, rather than introducing standardized interventions that may not be effective in diverse regional settings (Hee et al., 2019).

The results serve not only to highlight disparities in job satisfaction but also indicate a more profound reevaluation of how job satisfaction is to be understood, especially in modern organizational settings. The study's findings also suggest that the Two-Factor Theory by Herzberg should not be applied strictly in the context of non-profit organizations, where the meaning of work and social climate tend to carry more weight than conventional extrinsic rewards. The fact that communication, which is usually a hygiene factor, can be regarded as a moderately strong predictor of satisfaction, as well as Pay and Rewards, means that the line separating motivators and hygiene factors might be more slippery than Herzberg originally formulated it to be.

Such fluidity appears to be especially evident in mission-driven organizations that prioritize purpose and interpersonal connectedness. Under these circumstances, work conditions and hygiene issues, including communication, can gain motivational qualities by providing an effective interaction with organizational goals and employees. On the other hand, more traditional motivators, such as the nature of the work, may serve as a basis for expectations. In the majority of cases, employees are engaged in inherently meaningful scientific work, making their contribution to variance in satisfaction less significant. It implies that satisfaction builds not just on what the job offers, but also on how employees perceive and feel about their jobs within the context of their organizational mission and social environment.

The age, race, and geography effects only confirm the fact that job satisfaction is not homogeneous and varies based on life stage, social identity, and regional culture. It appears that

demographic groups tend to value Herzberg's factors differently: younger workers may attach more importance to the promotion and recognition stages, while older workers may value more stable conditions and relationships. Additionally, employees from various racial groups may have linearly different access to both hygiene and motivator factors. These trends suggest that no single theoretical framework can fully explain the evolving contextual nature of satisfaction without considering the interaction between individual personal traits and organizational contexts to define workplace experiences.

Practically, these results suggest that organizations should be less concerned with the structural division of motivators and hygiene factors and more inclined towards creating an environment that enables workers to seek purpose, fairness, and affiliation in their day-to-day functioning within the organization. Enhancing communication, how individual efforts serve the interests of the organization, and ensuring fair access to recognition and promotion are elements of satisfaction that seem to have a more enduring impact compared to compensation changes alone. The fact of significant racial inequalities leads to equity-based solutions that go beyond the diversity statements to cover the ways of recognition, progress, and voice that vary systematically with demographic groups.

The correlation between age and satisfaction suggests that younger workers should be supported and mentored through purposeful means to help them develop realistic expectations in the workplace and adopt positive coping strategies. Organizations must not expect satisfaction to increase automatically with years of service or company benefits. However, a developmental diagnosis that enables younger employees to acquire a viewpoint and resilience might be more successful. In totality, the implications reveal that workplace happiness should be conceptualized as a context-specific process of integration of communication, inclusion, purpose, and fair access

to hygiene and motivator factors. A more refined adaptation of Herzberg's model is proposed, one that differs from the traditional ones.

Please refer to Appendix H for a snapshot of the job satisfaction parameters impact and action table.

Limitations

The study's cross-sectional design did not capture seasonal differences, new developments within the organization, or short-term fluctuations in employee attitudes. A longitudinal study would provide a better understanding of the predictability and pattern of change in satisfaction over time (Koncar et al., 2021). The Job Satisfaction Survey correlation analysis yielded a Cronbach's alpha of 0.64, which is below the generally accepted threshold of 0.70, suggesting poor internal consistency and potential measurement issues. This value is relatively low compared to previous studies (Spector, 1985; van Saane et al., 2003; Bowling & Zelanzny, 2021), indicating that the instrument may have specific limitations that could influence the validity of the findings and their interpretation.

There may also be response biases in the results, as employees may give socially desirable answers or avoid answering questions about dissatisfaction due to concerns about confidentiality, regardless of whether the survey is anonymous. The statistical power to identify differences is constrained by the demographic composition of the sample, particularly the underrepresentation of some racial groups, which may not accurately reflect the overall diversity of the life sciences workforce. The population of Native Americans and Pacific Islanders was too small to analyze, underscoring the complex nature of representation in organizational studies (Fugar et al., 2019).

There may be external factors, such as economic conditions and industry trends, that have influenced satisfaction levels; however, these were not controlled for in the analysis. The findings are particularly relevant to non-profit life sciences organizations in Pennsylvania and New Jersey, but may not apply to other industries, organizational types, or geographical areas (Mustafa et al., 2019). The opportunities for extensive application beyond similar situations can be limited by the specific characteristics of mission-oriented organizations and the conditions under which they operate.

Future Research

Future studies should employ longitudinal designs to investigate the impact of changes in employment status on job satisfaction over time, as employees transition from exempt to non-exempt categories or advance within status levels. Such methodology would help distinguish between differences in job satisfaction caused by the nature of the job and selection processes, yielding stronger theoretical knowledge (Shaikh et al., 2019). Mixed-method solutions combining quantitative surveys and qualitative interviews could offer insight into the underlying processes of age-satisfaction relationships and help determine whether these patterns are universal across different organizational cultures, geographical regions, and industries.

The racial differences in satisfaction are also important subjects that need to be explored by combining the intersectional studies to understand the interaction of race with other demographics and organizational variables. The study aims to identify specific organizational practices, policies, and informal systems that contribute to disparities in satisfaction among various racial groups (Gandrita, 2023). Furthermore, research is necessary to investigate the feasibility of implementing targeted procedures to eliminate racial inequality and promote equal working environments. A review of the applicability of these findings to nonprofit and for-profit

organizations, as well as different geographical regions, would make them more practical in other contexts beyond the life sciences.

A systematic study of the mechanisms underlying regional satisfaction differences in Pennsylvania and New Jersey is warranted. Some areas that require study include regulatory variations, cost-of-living influences, local labor markets, regional innovation demands, and cultural variations in workplace practices. Knowledge of these processes would enable organizations to develop better, location-specific strategies (Dugguh & Dennis, 2014). The observation of the correlation between age and satisfaction using the developmental psychology paradigms would aid in identifying whether higher levels of satisfaction are a result of individual maturity, selection, or the interaction between developmental changes and organizational practices that facilitate retention and promotion.

Lastly, there should be a study on the perceived fluidity of motivator and hygiene factors in nonprofit-making organizations. The conclusion that Communication is a moderately strong predictor of satisfaction and other traditional motivators, but the Nature of Work is a weak one, can indicate that the categories of factors identified by Herzberg vary in accordance with the mission, culture, and values of the organization's employees. A qualitative study on the meaning of various job aspects to employees in mission-oriented organizations and how they experience them would help to understand whether some factors develop dual hygiene-motivator roles and the situations when the conventional factor typologies may need revision.

Conclusion

This paper presents intricate, multidimensional combinations of job status, demographic attributes, and job satisfaction within nonprofit life sciences organizations, challenging the traditional ideology regarding workplace stratification and demographic factors. Discovering that

exempt workers indicate greater overall satisfaction, despite non-exempt employees having more satisfaction with the best predictors (Pay and Rewards), suggests that employment satisfaction cannot be attributed solely to compensation and rewards. Rather, settled contentment is the result of a complex interplay of variables, including meaningful work, effective communication, opportunities for career development, and fair organizational practices.

The disproportionate racial differences identified in this analysis between White employees who said they were satisfied with their job, having the highest rate of satisfaction, as compared to the Black/African American employees and other races, form the most pressing practical issue that must be addressed immediately by the organization. These disparities are bigger than the inequalities linked to the job status or location, suggesting systematic injustices in the way workers of various races are subjected to in the workplace. The solutions to such inequalities require long-term and serious intervention, extending beyond diversity programs on the surface, to equity audits, structural policy realignment, and a cultural shift with visible leadership and responsibility.

The regional disparities between Pennsylvania and New Jersey, the age satisfaction relationship, which was very high regardless of tenure, and the variation in contributions between the various subscales of satisfaction all suggest the contextual and developmental nature of workplace satisfaction. Organizations flourish when they realize that satisfaction drivers in different groups of employees, various stages of life, and various regions may not be satisfied using the same strategies. The observation that communication is a moderately strong predictor of satisfaction, as well as Pay and Rewards, but Nature of Work plays a relatively minor role, contradicts the strict application of Herzberg's Theory and indicates that factor typologies can be more dynamic in the context of an organization with a mission.

Ultimately, this study has shown that to enhance job satisfaction, organizations should extend their application of motivation theory to incorporate complex knowledge on the interaction between demographic attributes, organizational settings, and individual growth stages, thereby creating more effective workplace experiences. Companies that prioritize open communication, fairness in recognition and promotion, meaningful work placement, and inclusive procedures for all demographic categories are most likely to achieve the highest levels of employee satisfaction. The findings contribute to the theoretical conceptualization of job satisfaction by demonstrating the contextual nature of Herzberg factors and how traditional hygiene factors can acquire motivational qualities in nonprofit organizations, where mission alignment and collaborative culture are the primary pillars of organizational identity. Further studies and practical applications must address these intricacies to develop more advanced methods for enhancing job satisfaction in diverse organizational settings and among various employee groups.

Appendix A
Recruitment Email

Subject: Invitation to Participate in Research Study

Dear Participant,

I hope this e-mail finds you well. My name is Maria Szydowski, and I am a PhD student at Marywood University. I invite you to participate in an important research study exploring job satisfaction between exempt and non-exempt employees in a non-profit life sciences organization in Pennsylvania and New Jersey. Your insights are invaluable to this research, and we would greatly appreciate your participation.

Participation in this study involves completing a brief online survey, which should take approximately 15 minutes. Your responses will be kept confidential, and data will be analyzed in aggregate to ensure anonymity. Your participation is entirely voluntary, and you may withdraw at any time without any consequences. If you have any questions or need further information about the study, please contact mszydowski@m.marywood.edu or 732-661-4078.

For your participation in this survey, you will be entered into a drawing to win one of five (5) \$100.00 Amazon gift cards if you choose to provide your name at the end of the survey.

To participate, please click the following link to access the survey:

https://marywood.iad1.qualtrics.com/jfe/form/SV_1B1x0rCa5zfDniS. Before you start the survey, you will review and accept the informed consent.

Thank you for considering this invitation. We look forward to your participation.

Sincerely,

Maria Szydowski

Appendix B

Informed Consent Form

Title of the Study: Job Satisfaction Dynamics: Analyzing Herzberg's Motivator and Hygiene Scores in a Non-Profit Life Sciences Organization

Principal Investigator: Maria Szydlowski

Principal Investigator Contact Information: mdszydlowski@m.marywood.edu

Research Advisor: Dr. Alan Levine

Research Advisor Contact Information: levine@maryu.marywoodu.edu

Institution/Department: Marywood University

Invitation for a Research Study

You are invited to participate in a research study about job satisfaction. You were chosen because you are an active full or part-time exempt or non-exempt employee in the non-profit life sciences organization in Pennsylvania and New Jersey who has been employed for a minimum of ninety (90) days.

Purpose:

This research aims to examine job satisfaction between exempt and non-exempt employees in a non-profit life sciences organization in Pennsylvania and New Jersey.

Procedures:

If you agree to participate in this study, you will be asked to complete an online survey that will take approximately 15 minutes.

Risks and Benefits

The risks are no greater than the risks in daily life or activities.

Payment/Rewards

For your participation in this study, you will be entered into a drawing to win one of five (5) \$100.00 Amazon gift cards. To be entered into the drawing, you can include your name at the end of the survey.

Confidentiality:

The records of this study will be kept private. Information used in any written or presented report will not make it possible to identify you. Only the investigator will have access to the research records. No web-based action is perfectly secure. However, reasonable efforts will be made to protect your transmission from third-party access. Records will be retained for a period of three years. Then they will be deleted.

Voluntary Participation:

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relationship with the investigator. It will not affect your relationship with Marywood University. You may withdraw at any time before submitting your responses by exiting the survey or closing the web browser. There will be no penalty for withdrawing. If you choose to withdraw, the information provided up to that point will be deleted.

Contacts and Questions

If you have any questions about this study at any time, contact the principal investigator or advisor. Their contact information appears at the top of this form.

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If you have questions related to the rights of research participants or research-related injuries (where applicable), please contact the Exempt Review Committee at (570) 348-6211 or academicaffairs@marywood.edu

You may save or print a copy of this form for your records.

Statement of Consent

I have read the above information. I have asked questions and have received answers. I consent to participate in this study.

Electronic Consent

By proceeding with this survey, I acknowledge that I have read and understood this form. I consent to participate in this study.

Appendix C

The Job Satisfaction Survey (JSS)

JOB SATISFACTION SURVEY Paul E. Spector Department of Psychology University of South Florida Copyright Paul E. Spector 1994, All rights reserved.		
PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.		Disagree very much Disagree moderately Disagree slightly Agree slightly Agree moderately Agree very much
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6

JOB SATISFACTION DYNAMICS

	<p style="text-align: center;">PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.</p> <p style="text-align: center;">Copyright Paul E. Spector 1994, All rights reserved.</p>	<p style="text-align: center;">Disagree very much Disagree moderately Disagree slightly Agree slightly Agree moderately Agree very much</p>
19	I feel unappreciated by the organization when I think about what they pay me.	1 2 3 4 5 6
20	People get ahead as fast here as they do in other places.	1 2 3 4 5 6
21	My supervisor shows too little interest in the feelings of subordinates.	1 2 3 4 5 6
22	The benefit package we have is equitable.	1 2 3 4 5 6
23	There are few rewards for those who work here.	1 2 3 4 5 6
24	I have too much to do at work.	1 2 3 4 5 6
25	I enjoy my coworkers.	1 2 3 4 5 6
26	I often feel that I do not know what is going on with the organization.	1 2 3 4 5 6
27	I feel a sense of pride in doing my job.	1 2 3 4 5 6
28	I feel satisfied with my chances for salary increases.	1 2 3 4 5 6
29	There are benefits we do not have which we should have.	1 2 3 4 5 6
30	I like my supervisor.	1 2 3 4 5 6
31	I have too much paperwork.	1 2 3 4 5 6
32	I don't feel my efforts are rewarded the way they should be.	1 2 3 4 5 6
33	I am satisfied with my chances for promotion.	1 2 3 4 5 6
34	There is too much bickering and fighting at work.	1 2 3 4 5 6
35	My job is enjoyable.	1 2 3 4 5 6
36	Work assignments are not fully explained.	1 2 3 4 5 6

Appendix D

Demographic Questionnaire

1. What is your work location?
Pennsylvania
New Jersey

2. Are you?
Exempt (Not eligible for overtime pay)
Non-Exempt (Eligible for overtime pay)

3. What is your gender?
Female
Male
Prefer Not to Disclose

4. What is your race?
American Indian or Other Pacific Islander
Asian
Black or African American
Hispanic or Latino
Native Hawaiian or Alaska Native
Two or More Races
White

5. What is your age? _____

6. What is your highest level of education?
High School Diploma/GED
Associates Degree (AA, AS)
Bachelors Degree (BA, BS)
Masters Degree (MA, MS, MBA)
Doctorate (PhD, EdD)

7. How long have you been employed by the organization (in years)? _____

8. If you are a non-exempt employee (receives overtime pay), what is your hourly rate? _____

9. If you are an exempt employee (does not receive overtime pay), what is your annual salary?

10. If you are a non-exempt employee (receives overtime pay), how many hours do you work per week on average? _____

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11. If you are an exempt employee (does not receive overtime pay), how many hours do you work per week on average? _____

Appendix E
Organization Permission Form



125 MAY STREET | EDISON, NJ 08837 | MTFBIOLOGICS.ORG

March 31, 2025

Re: Satisfaction Dynamics: Analyzing Herzberg's Motivator and Hygiene Scores in a Non-Profit Life Sciences Organization

Dear Marywood University Exempt Review Committee:

This letter confirms that as an authorized representative of MTF Biologics, I am aware of Maria Szydowski's (primary research investigator) research project and protocol.

I will allow Maria Szydowski to collect data from my organization by forwarding her e-mail recruitment message to my employees as potential participants.

However, activities may commence only after the investigator provides evidence of final approval from Marywood University's ERC for the proposed project.

If you have any questions, please contact me at Joe_Yaccarino@mtf.org or 732-558-9844.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Yaccarino", is written over a circular stamp or seal. The signature is fluid and cursive.

Joe Yaccarino
President/CEO

Appendix F
Descriptive Statistics by Question

Table 7. Descriptive Statistics for Hygiene Factor Questions Exempt

n=146		
Question	<i>M</i>	<i>SD</i>
I feel I am being paid a fair amount for the work I do.	4.49	1.38
Raises are too few and far between.	2.96	1.59
I feel unappreciated by the organization when I think about what they pay me.	2.38	1.34
I feel satisfied with my chances for salary increases.	4.13	1.47
I am not satisfied with the benefits I receive.	2.16	1.62
The benefits we receive are as good as most other organizations offer.	5.08	1.09
The benefit package we have is equitable.	5.24	0.82
There are benefits we do not have which we should have.	2.62	1.32
Many of our rules and procedures make doing a good job difficult.	2.58	1.40
My efforts to do a good job are seldom blocked by red tape.	3.38	1.57
I have too much to do at work.	3.35	1.30
I have too much paperwork.	3.15	1.37
I like the people I work with.	5.52	0.76
I find I have to work harder at my job because of the incompetence of people I work with.	2.90	1.44
I enjoy my coworkers.	5.36	0.80
There is too much bickering and fighting at work.	2.53	1.38

Table 8. Descriptive Statistics for *Motivator Factor Question Exempt*

n= 146		
Question	<i>M</i>	<i>SD</i>
There is really too little chance for promotion on my job.	3.92	1.61
Those who do well on the job stand a fair chance of being promoted.	4.04	1.42
People get ahead as fast here as they do in other places.	3.42	1.36
I am satisfied with my chances for promotion.	3.66	1.57
My supervisor is quite competent in doing his/her job.	5.41	0.90
My supervisor is unfair to me.	1.51	0.95
My supervisor shows too little interest in the feelings of subordinates.	1.78	1.16
I like my supervisor.	5.58	0.78
When I do a good job, I receive the recognition for it that I should receive.	4.61	1.35
There are few rewards for those who work here.	2.71	1.42
I don't feel my efforts are rewarded the way they should be.	2.90	1.47
I do not feel the work I do is appreciated.	2.32	1.44
My job is enjoyable.	5.27	0.88
I sometimes feel my job is meaningless	1.45	0.94
I like doing the things I do at work.	5.29	0.91

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I feel a sense of pride in doing my job.	5.63	0.63
Communications seem good within this organization.	3.94	1.33
The goals of this organization are not clear to me.	1.80	1.12
I often feel that I do not know what is going on with the organization.	2.45	1.28
Work assignments are not fully explained.	2.27	1.22

Table 9. Descriptive Statistics for Hygiene Factor Questions Non-Exempt

n=146		
Question	M	SD
I feel I am being paid a fair amount for the work I do.	3.57	1.56
Raises are too few and far between.	3.77	1.53
I feel unappreciated by the organization when I think about what they pay me.	3.32	1.56
I feel satisfied with my chances for salary increases.	3.60	1.55
I am not satisfied with the benefits I receive.	2.44	1.56
The benefits we receive are as good as most other organizations offer.	4.53	1.43
The benefit package we have is equitable.	4.73	1.16
There are benefits we do not have which we should have.	3.25	1.40
Many of our rules and procedures make doing a good job difficult.	2.66	1.37
My efforts to do a good job are seldom blocked by red tape.	3.18	1.65
I have too much to do at work.	3.15	1.36
I have too much paperwork.	2.69	1.43
I like the people I work with.	5.11	1.02
I find I have to work harder at my job because of the incompetence of people I work with.	3.07	1.57
I enjoy my coworkers.	5.01	1.04
There is too much bickering and fighting at work.	2.92	1.56

Table 10. Descriptive Statistics for Motivator Factor Question Non- Exempt

n= 280		
Question	M	SD
There is really too little chance for promotion on my job.	3.47	1.54
Those who do well on the job stand a fair chance of being promoted.	3.76	1.49
People get ahead as fast here as they do in other places.	3.37	1.30
I am satisfied with my chances for promotion.	3.62	1.50
My supervisor is quite competent in doing his/her job.	5.14	1.22
My supervisor is unfair to me.	1.72	1.28
My supervisor shows too little interest in the feelings of subordinates.	2.04	1.30
I like my supervisor.	5.30	1.05
When I do a good job, I receive the recognition for it that I should receive.	4.12	1.52
There are few rewards for those who work here.	3.36	1.51
I don't feel my efforts are rewarded the way they should be.	3.34	1.48
I do not feel the work I do is appreciated.	2.65	1.50
My job is enjoyable.	5.01	1.01

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I sometimes feel my job is meaningless	1.55	0.90
I like doing the things I do at work.	5.30	0.92
I feel a sense of pride in doing my job.	5.40	0.87
Communications seem good within this organization.	3.59	1.57
The goals of this organization are not clear to me.	1.92	1.26
I often feel that I do not know what is going on with the organization.	2.73	1.36
Work assignments are not fully explained.	2.37	1.29

Appendix G

Descriptive Statistics by Factor

Table 11. Combined Scores for All Participants Exempt and Non-Exempt

n= 406		
Factor	<i>M</i>	<i>SD</i>
Hygiene	60.83	5.42
Motivator	83.67	9.89

Table 12. Combined Factor Scores for Pennsylvania Participants

Factor	<i>M</i>	<i>SD</i>
Hygiene	61.14	5.36
Motivator	84.57	9.12

Table 13. Combined Factor Scores for New Jersey Participants

Factor	<i>M</i>	<i>SD</i>
Hygiene	61.29	5.48
Motivator	83.00	10.43

Table 14. Factor Scores for Pennsylvania Exempt Participants

Factor	<i>M</i>	<i>SD</i>
Hygiene	62.20	4.63
Motivator	86.02	8.00

Table 15. Factor Scores for Pennsylvania Non-Exempt Participants

Factor	<i>M</i>	<i>SD</i>
Hygiene	60.79	5.54
Motivator	84.09	9.43

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Table 16. Factor Scores for New Jersey Exempt Participants

Factor	<i>M</i>	<i>SD</i>
Hygiene	61.78	5.09
Motivator	84.68	10.07

Table 17. Factor Scores for New Jersey Non-Exempt Participants





Factor	<i>M</i>	<i>SD</i>
Hygiene	59.73	5.60
Motivator	81.79	10.55

Appendix H





Job Satisfaction Parameters Impact and Action Table

Parameter	Impact on Satisfaction	Current Status (Overall)	Notes / Action Needed
Pay	● High	Medium-High (non-exempt higher)	Most impactful predictor; maintain fairness, monitor for equity.
Rewards/Recognition	● High	Medium	Strong predictor; enhance recognition programs for all.
Promotion	● Medium	Low-Medium	Less satisfaction; improve career pathing and mobility.
Supervision	● Medium	High	High satisfaction; maintain strong leadership and feedback.
Benefits	● Medium	High	Most employees satisfied; maintain, monitor for gaps.
Working Conditions	● Low	Medium	Not a strong differentiator; maintain safe, supportive environment.
Co-workers	● Medium	High	Very high satisfaction; maintain team culture.
Nature of Work	● Low	High	Low impact (possibly due to mission-driven context); maintain meaningful work.
Communication	● Medium	Medium	Moderate predictor; improve clarity and transparency.
Employee Status (Exempt/Non-Exempt)	● High	Exempt: Higher Non-Exempt: Lower	Status is the strongest predictor; tailor interventions by group.

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Location (PA/NJ)	 Medium	PA: Higher NJ: Lower	PA employees more satisfied; NJ may need targeted support.
Age	 Medium	Older: Higher Younger: Lower	Satisfaction increases with age; provide mentorship/support for younger employees.
Race	 High	White: Higher Black/Other: Lower	Significant disparities; urgent need for equity and inclusion interventions.
Gender/Education	 N/A	No significant effect	No action needed, but continue monitoring for equity.

Color/Rating Key:

-  High: Strong impact or area of strength
-  Medium: Moderate impact or mixed status
-  Low: Low impact or area for improvement
-  N/A: Not significant in this study

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