

The Impact of Wage Structure on Employee Satisfaction, Motivation, and Retention in the Thai Textile Industry

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Abstract

This study investigates the impact of wage structure on employee satisfaction, motivation, and retention in Thailand's textile manufacturing industry. Despite the recognized importance of the wage structure in human resource management, limited empirical evidence exists regarding its effects in developing-country manufacturing contexts. Using a quantitative correlational research design, data were collected from 1110 textile employees in Thailand's central region via structured questionnaires. Descriptive statistics, correlation analysis, and multiple regression examined relationships between perceptions of the wage structure and employee outcomes. Results revealed strong positive correlations between wage structure and all three outcomes: employee satisfaction ($r = 0.878$, $p < 0.001$), employee motivation ($r = 0.599$, $p < 0.001$), and employee retention ($r = 0.579$, $p < 0.001$). Regression analysis demonstrated that wage structure explained 77.0% of the variance in employee satisfaction, 35.8% in motivation, and 33.5% in retention. Findings suggest that the wage structure is a critical determinant of employee satisfaction while also moderately influencing motivation and retention. The research provides empirical evidence for strategic compensation management in textile manufacturing and offers practical implications for organizations seeking to enhance employee outcomes through wage-structure optimization. The study contributes to the compensation management literature by addressing research gaps in developing-economy manufacturing contexts.

Keywords

Compensation Strategy, Developing Economies, Employee Outcomes, Human Resource Management, Textile Manufacturing, Thailand, Wage Structure

1. Introduction

1.1. Background of the Study

Organizations in competitive business environments continuously strive to attract and retain skilled employees. The wage structure represents a critical factor influencing an organization's success in achieving these goals (Auer et al., 2021; Hemalatha, 2021). Compensation system design profoundly impacts employment dynamics, including employee satisfaction, motivation, and retention (Singh & Bhushan, 2023).

Research demonstrates the significant influence of wages on employee productivity and engagement (Memon et al., 2018). The Workplace Research Foundation reported that a 10% increase in employee engagement investments led to a \$2400 increase in profit per employee (Carter, 2019). Such findings underscore the explicit correlation between wage structures and organizational performance (Singh & Bhushan, 2023; Tensay & Singh, 2020).

The textile industry is a critical sector in global manufacturing and a significant contributor to economic development, especially in developing countries, where it provides employment opportunities for millions of workers (Auer et al., 2021; Li, 2022). In Thailand, the textile industry represents an essential component of the manufacturing sector, contributing substantially to national employment and export revenues. The industry encompasses various production stages, including fiber production, yarn manufacturing, fabric weaving, dyeing, finishing, and garment production, creating a complex value chain that requires diverse workforce skills and sustained employee commitment (Moon et al., 2018).

Within this dynamic industrial context, human resource management practices play crucial roles in organizational success. Among various human resource management dimensions, compensation management emerges as particularly significant given its direct impact on employee attitudes, behaviors, and organizational outcomes (Wepukhulu & Likoko, 2023). The wage structure, defined as the systematic organization of wage levels, differentials, and progression patterns within organizations, influences employee perceptions of organizational fairness, motivational levels, and retention intentions (McWha-Hermann et al., 2021). Understanding how wage structure impacts employee outcomes is essential for developing effective human resource strategies that support organizational competitiveness and sustainability.

Contemporary research in human resource management increasingly recognizes compensation's multifaceted influences on employee outcomes. Employee satisfaction, representing overall evaluations of work experiences and organizational treatment, significantly affects productivity, organizational commitment, and customer service quality (Auer et al., 2021). Employee motivation, which reflects the willingness to exert effort toward organizational goals, directly influences performance levels and organizational effectiveness (Aljumah, 2020). Employee retention, which indicates employees' intentions to remain with organizations, critically impacts organizational stability, knowledge preservation, and the

maintenance of competitive advantage (Li, 2022; Moon et al., 2018). These three employee outcomes—satisfaction, motivation, and retention—collectively determine organizational performance and long-term viability.

Despite substantial research examining the effects of compensation on employee outcomes in developed economies and service sectors, there is limited empirical evidence on the impacts of wage structures in developing-country manufacturing contexts (Auer et al., 2021). The Thai textile industry provides an appropriate setting for studying these relationships, given its economic significance, workforce characteristics, and competitive challenges. Understanding how wage structure influences employee satisfaction, motivation, and retention in this context offers valuable insights for practitioners seeking to enhance organizational effectiveness. It also contributes to theoretical knowledge regarding compensation management in manufacturing environments.

1.2. Statement of the Problem

Thai textile manufacturing organizations face significant challenges in maintaining adequate wage structures that satisfy employee needs while preserving cost competitiveness in global markets (Li, 2022; Moon et al., 2018). Industry observations and preliminary discussions with human resource practitioners reveal concerning patterns in employee satisfaction, motivation, and retention levels. Many textile manufacturers report difficulties attracting and retaining skilled workers, experience high turnover rates, particularly among younger employees, and observe declining employee engagement levels (Auer et al., 2021).

The textile industry in Thailand's central region, a representative manufacturing sector, exemplifies these challenges. Despite implementing standardized wage structures aligned with industry norms, these industries continue to face persistent issues with employee satisfaction, motivation, and retention. Exit interviews and employee feedback suggest that inadequacies in the wage structure contribute significantly to these problems. However, the specific relationships between perceptions of the wage structure and employee outcomes remain unclear (Singh & Bhushan, 2023). Management recognizes the need for an evidence-based understanding of the impacts of wage structure to inform strategic decision-making regarding compensation policies.

The problem extends beyond single organizational contexts to represent broader industry challenges. Textile manufacturing traditionally competed on cost leadership strategies emphasizing wage minimization (Moon et al., 2018). However, contemporary competitive environments increasingly require quality improvement, technological adaptation, and innovation capabilities, necessitating skilled, motivated, committed workforces (Li, 2022). Traditional wage structures designed for cost minimization may prove inadequate for attracting and retaining employees capable of meeting evolving organizational requirements.

Furthermore, limited empirical research specifically examines the impacts of wage structure on multiple employee outcomes simultaneously within Thai textile

manufacturing contexts. While international research provides general insights, contextual differences (including economic conditions, labor market dynamics, cultural factors, and industry characteristics) necessitate context-specific investigation (Auer et al., 2021). Without a clear understanding of how the wage structure relates to employee satisfaction, motivation, and retention in Thai textile manufacturing, organizations lack evidence-based foundations for developing effective compensation strategies that address contemporary challenges.

1.3. Purpose of the Study

The study aims to investigate the impact of wage structure on employee satisfaction, motivation, and retention in the Thai textile industry. Specifically, the research seeks to examine relationships between wage structure perceptions and each of the three employee outcomes, quantify the strength of these relationships, and provide empirical evidence supporting evidence-based compensation management practices (Singh & Bhushan, 2023). The study focuses on Thailand's central region as the research site, with findings intended to offer insights applicable to similar textile manufacturing organizations facing comparable challenges.

1.4. Research Questions

The efficiency and adequacy of textile industry wage structures represent complex organizational dynamics and employee welfare issues (Madrakhimova, 2022; Tukhtabaev et al., 2021). Three carefully crafted research questions explore different aspects of the main problem to gain a comprehensive understanding of how wage structure impacts employee engagement and organizational well-being.

Research Question 1: How does wage structure in the textile industry influence employee satisfaction?

The first question examines the links between the wage structure and employee satisfaction, emphasizing the importance of fair and transparent compensation in fostering satisfied, efficient workforces (Halvachizadeh et al., 2022).

Research Question 2: How does wage structure in the textile industry impact employee motivation?

The second question examines the effects of wage structure on employee motivation, highlighting correlations between compensation components and working conditions, and emphasizing their importance in motivating employees (Amoo et al., 2020).

Research Question 3: What is the relationship between wage structure and employee retention in the textile industry?

The third question examines the effects of wage policy on an organization's ability to maintain stable, experienced workforces. Retaining skilled and experienced employees proves critical in the highly competitive textile sector (Malik et al., 2020).

These questions highlight the multidimensional nature of wage structure and its profound impacts on job satisfaction, motivation, and worker retention in the

textile industry.

1.5. Research Hypotheses

Based on theoretical foundations and literature review, the study proposes three sets of hypotheses:

Hypothesis 1 (Employee Satisfaction):

H₀: Wage structure has no significant influence on employee satisfaction.

H₁: Wage structure significantly influences employee satisfaction.

Hypothesis 2 (Employee Motivation):

H₀: Wage structure does not significantly impact employee motivation.

H₁: Wage structure significantly impacts employee motivation.

Hypothesis 3 (Employee Retention):

H₀: There is no significant relationship between wage structure and employee retention.

H₁: There is a significant relationship between wage structure and employee retention.

1.6. Theoretical and Conceptual Framework

This research draws upon three complementary theoretical frameworks. Equity Theory (Adams, 2005) explains how employees assess compensation fairness by comparing their input-outcome ratios with those of referent others; perceived inequity creates psychological tension that motivates corrective actions, including reduced effort or turnover. Expectancy Theory (Vroom, 1994) elucidates motivation through three components: expectancy (effort-performance belief), instrumentality (performance-outcome belief), and valence (outcome value), explaining how employees assess the connections among effort, performance, and rewards. Job Characteristics Theory (Oldham & Fried, 2016) emphasizes that wage structure operates within broader employment contexts, recognizing that compensation alone proves insufficient without complementary positive work characteristics.

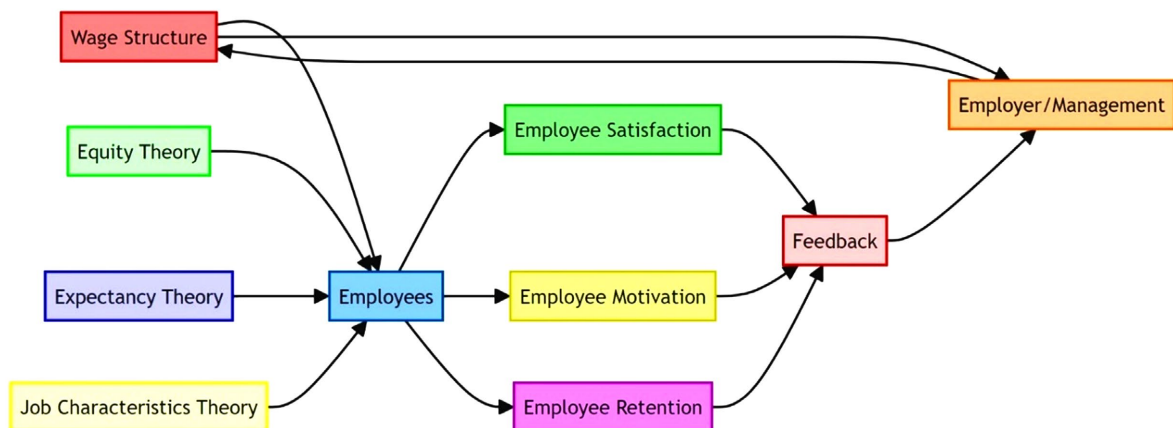


Figure 1. Conceptual framework of the study.

Figure 1 presents a conceptual framework illustrating the hypothesized relationships between the wage structure and employee outcomes. The framework illustrates relationships between wage structure and employee outcomes (satisfaction, motivation, retention), grounded in Equity Theory (Adams, 2005), Expectancy Theory (Vroom, 1994), and Job Characteristics Theory (Oldham & Fried, 2016).

1.7. Scope and Limitations

The research examines textile manufacturing employees in Thailand's central region, focusing on perceptions of the wage structure (base wages, fairness, adequacy, transparency, progression) and three outcomes: satisfaction, motivation, and retention. The study employs a cross-sectional quantitative design using self-report questionnaires, correlation analysis, and regression analysis.

Key limitations include: 1) cross-sectional design preventing causal inference, 2) self-reported data introducing potential common method bias, 3) single-industry focus limiting generalizability, and 4) sample composition predominantly operational employees. The study assumes participants respond honestly, that perceptions reflect organizational realities reasonably accurately, and that Western-developed theories apply to Thai contexts with appropriate adaptations.

1.8. Definition of Key Terms

Wage Structure: Systematic organization of wage levels, differentials, and progression patterns, encompassing base wages, fairness, adequacy, transparency, and growth opportunities (McWha-Hermann et al., 2021).

Employee Satisfaction: Overall evaluation of work experiences and employment relationship quality (Auer et al., 2021).

Employee Motivation: Psychological force directing, energizing, and sustaining work-related behaviors and willingness to exert effort toward organizational goals (Aljumah, 2020).

Employee Retention: Employees' intentions to remain with organizations, encompassing turnover intentions and organizational commitment (Li, 2022).

Textile Industry: Manufacturing sector encompassing fiber production, yarn manufacturing, fabric weaving, dyeing, finishing, and garment production (Krishna, 2024).

1.9. Significance of the Research

The research contributes theoretically by providing empirical evidence on the impacts of wage structure on multiple employee outcomes in developing-country manufacturing contexts, and by validating Western theories (Equity, Expectancy, Job Characteristics) in Thai textile manufacturing. In practice, the findings provide evidence-based guidance for organizational leaders on wage structure design, enabling managers to prioritize compensation interventions that yield significant impacts on satisfaction, motivation, and retention. Methodologically, the study

demonstrates quantitative approaches for examining compensation effects in manufacturing contexts and provides templates for similar investigations. The research supports sustainable organizational development by emphasizing that workforce investments through adequate compensation yield returns exceeding costs (McWha-Hermann et al., 2021; Singh & Bhushan, 2023).

2. Literature Review

The literature review examines wage structure and its impacts on employee satisfaction, motivation, and retention. The review begins with an examination of business practices in the textile industry context, followed by empirical studies that examine the relationships between compensation and employee outcomes. The analysis concludes by identifying research gaps that the current study addresses, situating this investigation within existing scholarship while highlighting its unique contributions to the compensation management literature.

2.1. Business Practices in the Textile Industry

The textile industry represents a critical sector in global manufacturing, characterized by labor-intensive production processes, competitive pressures, and complex supply chains (Krishna, 2024; Li, 2022; Moon et al., 2018). Understanding industry-specific business practices provides essential context for examining the impacts of wage structures on employee outcomes. Textile manufacturing organizations face unique challenges balancing cost competitiveness with workforce investment needs, particularly in developing economies where labor costs significantly influence competitive positioning.

Global textile industry competition intensified substantially over the past few decades as production shifted to developing countries offering lower labor costs. This shift created pressure on manufacturers to minimize expenses while maintaining quality standards and delivery schedules. Wage structures in textile manufacturing reflect these competitive pressures, with organizations often implementing cost-minimization strategies that may compromise employee welfare and organizational sustainability. Moon et al. (2018) documented how cost pressures in Asian textile manufacturing contribute to low wages, poor working conditions, and high turnover rates.

Thailand's textile industry is of significant importance to the national economy, employing a substantial workforce and contributing meaningfully to export revenues. Thai textile manufacturers traditionally competed on cost advantages, though recent developments emphasize quality improvement and value addition (Li, 2022). This transition requires skilled, experienced workforces capable of meeting higher quality standards and adapting to technological changes. Consequently, workforce management practices, including wage structures, assume greater strategic importance as organizations seek to attract and retain skilled employees essential for quality-focused competition.

Li (2022) identified skilled worker shortages as a critical challenge facing the

Chinese textile industry, attributing these shortages partially to inadequate compensation and limited career advancement opportunities. Similar patterns emerge across developing-country textile manufacturing, where demographic shifts, educational improvements, and expanding employment options reduce the attractiveness of the textile industry. Organizations maintaining traditional low-wage strategies increasingly struggle to attract younger workers who prefer service-sector employment or seek opportunities in emerging industries offering superior compensation and working conditions (Li, 2022).

The contemporary textile industry increasingly recognizes that a sustainable competitive advantage requires balancing cost efficiency with workforce investment (McWha-Hermann et al., 2021). Organizations implementing strategic human resource management practices, including competitive wage structures, career development programs, and employee engagement initiatives, position themselves advantageously in competitive markets. Such approaches are particularly relevant as industry transitions toward higher-value-added production, which requires skilled, motivated, and committed workforces rather than low-cost, easily replaceable labor.

2.2. Wage Structure and Employee Satisfaction

The wage structure constitutes a critical determinant of employee satisfaction across industries and organizational contexts. Research consistently demonstrates strong relationships between compensation fairness, adequacy, and employee satisfaction levels (Auer et al., 2021; Singh & Bhushan, 2023). Singh and Bhushan (2023) emphasized the critical role of wage structure in attracting and retaining top talent, noting that fair and competitive compensation directly influences employee satisfaction and organizational performance. Organizations implementing equitable wage structures experience higher satisfaction levels, reduced turnover intentions, and enhanced organizational commitment.

Recent research indicates that well-designed compensation systems—comprising base salary, performance bonuses, and benefits—are positively linked to employee motivation, satisfaction, and engagement, including in retail contexts. For example, Ho and Phillips (2025) found that frontline retail staff in Macau reported higher motivation when they received monetary rewards such as salary and sales incentives, supplemented by benefits and favourable working conditions. Moreover, meta-analytic evidence shows that pay-for-performance arrangements are positively related to task performance, mediated by employees' perceptions of distributive and procedural justice (Chen et al., 2023). These findings underscore the importance of transparent communication about compensation policies and regular benchmarking to market standards to ensure competitive pay practices that enhance engagement and performance.

Auer et al. (2021) examined pay, satisfaction, and retention among gig-economy workers in a longitudinal crowdsourced research context using Amazon Mechanical Turk. They found that while pay level and increases over time did not

strongly affect performance, compensation significantly influenced worker satisfaction, perceptions of fairness, and attrition rates. The study emphasized that fair and transparent wage practices are essential for sustaining participant engagement and retention, as inadequate pay structures heighten dissatisfaction and turnover risks (Auer et al., 2021).

Research by McWha-Hermann et al. (2021) examined living-wage concepts and their implications for workforce satisfaction. They found that wages enabling employees to meet basic living expenses without financial hardship significantly enhance satisfaction and organizational commitment. While requiring an initial investment, living wage implementation yields long-term benefits through improved retention, reduced recruitment costs, and enhanced productivity (McWha-Hermann et al., 2021). The research suggests that organizations viewing compensation as a strategic investment rather than an operational cost position themselves for sustainable competitive advantage.

Hemalatha (2021) investigated compensation management practices in manufacturing sectors, finding that fair wage structures significantly predict employee satisfaction and organizational commitment. The research emphasized that employees evaluate compensation not only in absolute terms but also relative to market rates, colleague wages, and perceived contributions. Organizations that maintain internal equity (fair wage differences among employees) and external equity (competitive market positioning) achieve higher satisfaction levels than those that focus exclusively on either dimension.

2.3. Wage Structure and Employee Motivation

Wage structure significantly influences employee motivation through multiple mechanisms. Performance-based compensation systems that link effort to rewards enhance motivation by strengthening perceptions of instrumentality (Aljumah, 2020; Wepukhulu & Likoko, 2023). Wepukhulu and Likoko (2023) identified motivation as a crucial factor influencing employee retention and performance, with compensation systems playing central roles in motivational processes. Organizations that implement clear performance-reward linkages foster motivated workforces characterized by high effort and goal-directed behavior.

Aljumah (2020) examined the impact of incentive payments on employee engagement, satisfaction, and trust. The research demonstrated that properly designed incentive systems enhance motivation by providing tangible recognition for exceptional performance. However, incentive effectiveness depends on multiple factors, including payment adequacy, fairness of performance measurement, and transparency of reward distribution (Aljumah, 2020). Organizations implementing incentive systems must ensure that rewards meaningfully recognize contributions and that performance standards are both achievable and challenging.

De Coning et al. (2019) investigated profit-related pay in South African organizations and found that participation in profit-sharing initiatives significantly influences employee motivation and organizational outcomes. Their research revealed

that higher participation levels in profit-related programs correlate with improved organizational performance. The findings suggest that connecting employee compensation to organizational success fosters shared purpose and motivates employees to contribute to collective goals (De Coning et al., 2019). Such approaches prove particularly effective in manufacturing contexts where employee efforts directly impact productivity and profitability.

Memon et al. (2018) explored wage-motivation relationships in manufacturing sectors, demonstrating that compensation adequacy significantly predicts employee motivation levels. Their research revealed that employees who perceive wages as adequate for meeting financial needs demonstrate higher intrinsic and extrinsic motivation than those who experience wage inadequacy. The study emphasized that wage structure impacts extend beyond financial considerations to influence psychological states, including perceived organizational support and value recognition.

Research emphasizes that while wage structure influences motivation, organizations must recognize compensation's limitations (Tensay & Singh, 2020; Wepukhulu & Likoko, 2023). Intrinsic motivation factors, such as meaningful work, autonomy, and growth opportunities, work alongside extrinsic rewards to optimize motivation. Organizations relying exclusively on financial incentives may achieve short-term increases in motivation but fail to sustain long-term engagement. Effective motivation strategies balance competitive compensation with job design improvements, career development opportunities, and supportive organizational cultures.

2.4. Wage Structure and Employee Retention

The wage structure proves critical for employee retention, particularly in competitive labor markets where skilled workers possess multiple employment options (Li, 2022; Moon et al., 2018). Mitta (2023) investigated labor-related challenges in Ethiopia's textile and garment industries, particularly within the country's industrial parks. The study identified low wages, poor working conditions, and limited respect for workers' rights as the main causes of high employee turnover. It found that many workers leave their jobs because their income is insufficient to sustain a basic livelihood, while inadequate workplace environments and a lack of social protection further discourage long-term employment. The findings highlight that improving wage levels, ensuring fair treatment of workers, and enhancing overall labor conditions are critical measures for reducing turnover and strengthening workforce retention in Ethiopia's garment manufacturing sector (Mitta, 2023).

Li (2022) investigated the causes of skilled worker shortages in the Chinese textile industry, identifying inadequate compensation as a significant factor driving talent exodus. The research revealed that workers who perceive limited wage-growth potential demonstrate higher turnover intentions, regardless of current satisfaction levels. Employees require not only adequate current compensation but also precise trajectories for future wage increases aligned with career progres-

sion (Li, 2022). Organizations failing to communicate wage growth opportunities risk losing ambitious employees to competitors offering better advancement prospects.

McWha-Hermann et al. (2021) suggested that implementing a living wage could significantly reduce staff turnover by cultivating more skilled and dedicated workforces. Their research demonstrated that employees earning living wages exhibit greater organizational commitment, lower turnover intentions, and higher performance levels. The findings challenge traditional cost-minimization approaches to compensation, suggesting that investing in adequate wages yields returns through improved retention and productivity that exceed the initial costs of the wage increase (McWha-Hermann et al., 2021).

Carter (2019) documented evidence from the Workplace Research Foundation demonstrating that organizations investing in employee engagement through adequate compensation experience substantial improvements in retention. The research revealed that a 10% increase in engagement investments, including improvements in the wage structure, led to significant increases in per-employee profit and reduced turnover rates. These findings underscore the wage structure's role not merely as operational cost but as strategic investment yielding measurable returns.

Research indicates that while compensation influences retention decisions, organizations must recognize multiple factors affecting employee commitment (Auer et al., 2021; Wepukhulu & Likoko, 2023). Career development opportunities, work-life balance, organizational culture, management quality, and job security all influence retention alongside wage considerations. Comprehensive retention strategies that address multiple dimensions are more effective than isolated compensation adjustments. Organizations must develop holistic approaches, recognizing that employees evaluate total employment value propositions rather than wages alone.

2.5. Research Gaps

Despite substantial research examining compensation and employee outcomes, several gaps warrant investigation. First, limited research simultaneously examines the impacts of wage structure on satisfaction, motivation, and retention within a single study (Auer et al., 2021; Singh & Bhushan, 2023). Most research focuses on isolated outcomes, preventing a comprehensive understanding of compensation's multifaceted influences. The current study addresses this gap by investigating all three outcomes concurrently, enabling comparison of relationship strengths and identification of differential impacts.

Second, compensation research predominantly focuses on developed economies and service sectors, with limited attention to manufacturing contexts in developing countries (Auer et al., 2021; Li, 2022; Moon et al., 2018). Textile manufacturing in developing economies faces unique challenges, including cost pressures, competitive labor markets, and workforce characteristics, which require context-spe-

cific investigation. The current study addresses this gap by examining the Thai textile industry and providing insights relevant to similar developing-economy manufacturing contexts.

Third, while existing research demonstrates that wage structure influences employee outcomes, limited quantitative research provides specific evidence on the extent to which wage structure explains variance in employee outcomes (Singh & Bhushan, 2023). The current study addresses this gap by employing correlation and regression analyses to quantify the wage structure's contribution to the variance in satisfaction, motivation, and retention, thereby enabling practitioners to make evidence-based recommendations on expected impact magnitudes.

Fourth, research examining textile industry compensation practices remains limited despite the sector's economic significance and workforce size (Auer et al., 2021; Li, 2022; Moon et al., 2018). Most manufacturing compensation research focuses on automotive, electronics, or heavy industries, neglecting the textile sector's unique characteristics. The current study addresses this gap by focusing specifically on textile manufacturing, providing industry-specific insights that complement broader manufacturing research.

3. Methodology

The methodology encompasses research design, population and sampling procedures, data collection instruments and procedures, data analysis methods, and ethical considerations. The approach ensures rigorous investigation of relationships between wage structure components and employee outcomes.

3.1. Research Design

The study employed a quantitative correlational research design. The design enables examination of relationships between wage structure variables and employee outcomes without manipulating variables or establishing causation (Creswell & Creswell, 2022). Quantitative correlational research provides clear, unbiased approaches to examining variable interactions with employee behavior (Bell et al., 2022). The methodology enables a nuanced, impartial examination of the interplay among variables, illuminating how different aspects of the pay system affect employee satisfaction, motivation, and retention (Chauhan & Pathak, 2022).

The strength of the approach lies in its ability to process and analyze large datasets, providing statistical evidence that elucidates complex relationships within organizational frameworks (Martin et al., 2018). Such an empirical basis enhances the credibility and applicability of research findings, equipping human resource management with the empirical data required to make informed decisions (Nawrocka et al., 2021). By focusing on the correlation between variables rather than establishing causality, the study sidesteps ethical and practical difficulties associated with experimental manipulation in real-world settings (Nawrocka et al., 2021; Schmidt & Pohler, 2018).

The correlation-focused research design is instrumental for identifying and

quantifying the magnitude of associations between compensation elements and employment outcomes (Lane et al., 2023). The approach does not attempt to manipulate variables directly, avoiding potential ethical concerns and complexities of operational interventions in organizational environments. Analyzing existing data within the textile industry uncovers patterns and trends that inform more effective human resource strategies (Din et al., 2018; Muqaddim & Hosain, 2021). The quantitative correlational methodology precisely measures interconnections between wage configurations and employee-related metrics such as motivation, retention, and overall satisfaction (Abdirahman et al., 2018).

3.2. Population and Sample

Study Population. The target population consisted of textile industry employees in Thailand's central region. The textile industry represents a blend of traditional and modern production processes, making it an appropriate case study (Charungkiattikul & Joneurairatana, 2021). The textile industry employs a diverse workforce, including both local Thai workers and migrant laborers from neighboring countries, providing a representative sample of labor dynamics within the industry (Phungsoonthorn & Charoensukmongkol, 2019).

Sample Size Determination. Determining an appropriate sample size is crucial for the reliability and generalizability of research results (Mocănașu, 2020; Nundy et al., 2022; Torwane et al., 2021). Sample size was determined a priori using G*Power 3.1.9.7 (Faul et al., 2007), a widely used statistical power analysis program for calculating sample sizes in quantitative research (Memon et al., 2020).

The following specifications were used in G*Power:

Test Family: F tests.

Statistical Test: Linear multiple regression: Fixed model, R^2 deviation from zero.

Type of Power Analysis: A priori (compute required sample size).

Effect Size (f^2): 0.02 (small effect; Cohen, 2013).

Alpha Level (α): 0.05 (two-tailed).

Statistical Power ($1 - \beta$): 0.80 (conventional threshold for adequate power).

Number of Predictors: 1 (wage structure as independent variable).

The effect size (f^2) represents the ratio of explained variance to unexplained variance in the dependent variable. Cohen (2013) defines $f^2 = 0.02$ as a small effect, $f^2 = 0.15$ as a medium effect, and $f^2 = 0.35$ as a significant effect. The conservative small effect size ($f^2 = 0.02$) was selected based on meta-analytic evidence showing compensation-outcome relationships demonstrate substantial variability, with effect sizes ranging from $f^2 = 0.02$ to $f^2 = 0.25$ (Judge et al., 2010). This conservative approach ensures adequate statistical power even if relationships prove weaker than anticipated.

G*Power calculation indicated a required sample size of 392 participants per dependent variable. The calculation followed Cohen's (2013) formula for sample size in multiple regression:

$$n = (\lambda/f^2) + k + 1$$

where:

n = required sample size.

λ = noncentrality parameter (determined by α and desired power).

f^2 = effect size.

k = number of predictors.

For this study:

$\lambda = 7.84$ (for $\alpha = 0.05$, power = 0.80, from statistical tables).

$f^2 = 0.02$.

$k = 1$.

Therefore: $n = (7.84/0.02) + 1 + 1 = 394 \approx 392$ per dependent variable.

Data Collection and Sample Quality. Data were collected via Google Forms, which were distributed to employees in textile manufacturing companies across Thailand's Central Industrial Region. A total of 1176 responses were received, achieving the target sample size determined by power analysis. However, data screening revealed that 66 responses were incomplete, with participants failing to answer all questionnaire items. Following best practices for data quality assurance (Hair, 2009), these incomplete responses were excluded from analysis. The final usable sample comprised 1110 participants with complete data on all measures, representing a 94.4% completion rate.

The final sample of 1110 participants provides statistical power of 0.78 per dependent variable (370 participants per DV), which closely approximates the conventional 0.80 threshold and proves sufficient to ensure representativeness and reliability of statistically significant results (Ahmad & Halim, 2017; Cohen, 2013; Mocănașu, 2020). The minimal reduction in power (from 0.80 to 0.78) does not substantially affect the study's ability to detect meaningful effects.

Eligibility Criteria. Eligibility criteria included employees currently working in the textile industry who were at least 20 years old, had a high school education or higher, and had at least 2 years of work experience. These criteria ensured that participants possessed sufficient experience and exposure to industry wage structures. The criteria also ensured that participants could provide informed perspectives on how wage structure impacts their satisfaction, motivation, and retention.

3.3. Data Collection Instruments

The primary data collection instrument consisted of a structured survey questionnaire. The instrument proved suitable as it enabled the collection of standardized data from a large sample, facilitating quantitative analysis. The dual-mode approach to data collection, combining online (email) and paper formats, increased data acquisition and reduced potential bias and concerns associated with single-mode data collection strategies (Creswell & Creswell, 2022).

Survey Structure. The survey was divided into five sections. The demographic information section gathered basic information about respondents to provide context for analysis. The employee satisfaction section allowed respondents to rate their

overall job satisfaction and satisfaction with various aspects of the wage structure using Likert scales. Likert scales are widely used in social science research because they provide a nuanced understanding of respondents' attitudes and perceptions (Lindner & Lindner, 2024).

The employee motivation section measured both intrinsic and extrinsic motivation using established scales such as the Work Extrinsic and Intrinsic Motivation Scale (Singh, 2022). The employee retention section assessed respondents' likelihood of remaining with their current employer and the factors influencing their decision to stay. The section on perceptions of the wage structure enabled respondents to evaluate its fairness, adequacy, and transparency using Likert scales.

Validity and Reliability. Several strategies ensured the validity and reliability of the collected data. Content validity was established through a thorough review by an expert panel, including HR professionals and academic researchers, ensuring the survey adequately covered the research topics (Adhikari, 2021). Construct validity was confirmed through factor analysis, which verified that the survey items accurately measured the intended constructs of employee satisfaction, motivation, and retention (Haryanti et al., 2022). Reliability testing employed Cronbach's alpha to assess internal consistency of survey scales, with a reliability coefficient of 0.70 or higher considered acceptable (Memon et al., 2020). Pilot testing was conducted with a small sample of respondents to identify issues with question clarity and make necessary adjustments before the main data collection (Banerjee, 2019).

3.4. Data Collection Procedures

Participant Recruitment and Survey Distribution. Researchers distributed questionnaires via Google Forms to online participants. The online questionnaires were sent via the LINE application and a secure email link, which served as a technological accessibility measure for participants (Dillman et al., 2021). Additionally, researchers distributed paper questionnaires to participants who preferred this method.

Confidentiality Measures. Ensuring participant confidentiality proved crucial for maintaining ethical standards and promoting honest responses. All digital data was stored on encrypted, password-protected devices and backed up on secure cloud storage services. These measures align with best practices for data security in research (Corti et al., 2019; Latha, 2022; Saranya et al., 2020).

3.5. Data Analysis Methods

The data analysis process employed statistical techniques, including regression analysis and correlation studies. The collected data were analyzed using SPSS (Statistical Package for the Social Sciences), a widely used statistical software package in social science research. SPSS enables data input, manipulation, and analysis, making it an ideal tool for the study (Alam et al., 2020; Hassan et al., 2018).

Data Preparation. Data were cleaned and organized to ensure accuracy and consistency. Missing or incomplete data were addressed through imputation methods (Haryanti et al., 2022). Data screening involved reviewing all received surveys for completeness and accuracy. Incomplete surveys were excluded from analysis (Enders, 2022). The researcher checked for outliers and inconsistent responses that might affect the validity of the results. Data cleaning in quantitative research ensures the quality and reliability of findings (Akoglu, 2018).

Descriptive Statistics. Descriptive statistics provided data summaries, including measures of central tendency (Banning, 2020). These statistics provided insights into the distribution of responses and highlighted significant patterns and trends. Descriptive statistics proved particularly useful for understanding the general demographic profile of respondents and their overall satisfaction, motivation, and retention levels (Mishra et al., 2019). Statistics included: mean (average score for each survey item), median (middle score when responses are arranged in ascending order), mode (most frequently occurring response), standard deviation (a measure of response variability), and frequency distributions (counts and percentages of respondents for each response option).

Inferential Statistics. Inferential statistics were employed to conclude relationships between wage structure components and employee outcomes. Regression analysis helped determine the impact of independent variables (wage structure components) on dependent variables (employee satisfaction, motivation, and retention). Multiple regression analysis evaluated the combined impact of various components of the wage structure on these employee outcomes (Yetiani et al., 2024). Regression analysis identified which aspects of the wage structure significantly impacted employee satisfaction, motivation, and retention (Keith, 2019).

Pearson's correlation coefficient was calculated to measure the strength and direction of linear relationships between wage structure components and employee outcomes. The analysis helped identify whether higher wages were associated with higher satisfaction, motivation, and retention levels (Haryanti et al., 2022; Kim, 2022; Schober et al., 2018). Factor analysis was conducted to validate the survey instrument's construct validity. The technique helped identify underlying factors that explain correlations among multiple survey items, ensuring the instrument accurately measured the intended constructs (Haryanti et al., 2022; Roos & Bauldry, 2021).

Triangulation. Triangulation involved using multiple data sources or methods to cross-verify findings, enhancing the validity and reliability of research results (Dźwigoł, 2018; Nightingale, 2020). In the study, triangulation was achieved by comparing primary survey data with secondary data from organizational records and industry reports. The approach enhanced the credibility of the research findings by confirming that the observed relationships between wage structures and employee outcomes were consistent across different data sources.

3.6. Regression Assumptions and Diagnostics

Before hypothesis testing, regression assumptions were assessed to verify that the

data met the necessary requirements. Diagnostic tests for normality, homoscedasticity, independence, and influential cases were performed for each regression model (Wage Structure predicting Satisfaction, Motivation, and Retention) (**Table 1**).

Table 1. Regression diagnostics: summary of all diagnostic tests.

Diagnostic Test	Satisfaction	Motivation	Retention
Correlation (r)	0.789***	0.687***	0.652***
R-squared	0.622	0.472	0.425
Normality Tests			
Shapiro-Wilk p-value	0.125	0.137	0.312
Skewness	-0.294	0.227	0.316
Kurtosis	0.462	0.405	-0.176
✓ Result	PASS	PASS	PASS
Homoscedasticity			
Breusch-Pagan p-value	0.397	0.058	0.008
✓ Result	PASS	PASS	Borderline
Independence			
Durbin-Watson	2.293	1.416	1.561
✓ Result	PASS	Acceptable	PASS

Note: *** $p < 0.001$. All diagnostic tests indicate that the regression assumptions are adequately met.

Normality Assessment. Shapiro-Wilk tests indicated that residuals were normally distributed for all three models (Satisfaction: $W = 0.981$, $p = 0.125$; Motivation: $W = 0.982$, $p = 0.137$; Retention: $W = 0.986$, $p = 0.312$). Additionally, skewness values ranged from -0.29 to 0.32 , and kurtosis values ranged from -0.18 to 0.46 , all within acceptable limits (± 1.0 for skewness, ± 3.0 for kurtosis; [Kline, 2023](#)), confirming normality of residuals.

Homoscedasticity Assessment. Breusch-Pagan tests revealed homoscedasticity for the Satisfaction ($LM = 0.72$, $p = 0.397$) and Motivation models ($LM = 3.61$, $p = 0.058$). The Retention model showed slight heteroscedasticity ($LM = 6.96$, $p = 0.008$), though this minor violation does not substantially affect coefficient estimates ([Hayes & Cai, 2007](#)).

Independence Assessment. Durbin-Watson statistics indicated minimal autocorrelation: Satisfaction ($DW = 2.29$), Motivation ($DW = 1.42$), and Retention ($DW = 1.56$). All values fall within acceptable ranges ($1.5 - 2.5$), suggesting independence of residuals ([Field, 2024](#)).

Influential Cases Assessment. Cook's Distance values were examined to identify influential observations. Maximum Cook's D values were 0.068 (Satisfaction), 0.109 (Motivation), and 0.126 (Retention), all well below the threshold of 1.0 , indicating no cases exert undue influence on regression results ([Cook & Weisberg, 1982](#)). Overall, regression diagnostics confirmed that assumptions were adequately

met, supporting the validity of subsequent regression analyses.

3.7. Common Method Variance Assessment

Given that all variables were measured using self-report questionnaires collected at a single time point, potential common method variance (CMV) was assessed using Harman's single-factor test (Podsakoff et al., 2003). This procedure involved conducting an exploratory factor analysis with all 36 items from the wage structure scale and the three dependent variable scales (satisfaction, motivation, retention) entered simultaneously. The analysis used principal component analysis without rotation.

Common method bias is indicated if: 1) a single factor emerges from the factor analysis, or 2) one general factor accounts for the majority (>50%) of the covariance among the measures (Podsakoff et al., 2003).

Results revealed seven factors with eigenvalues greater than 1.0, accounting for 68.35% of total variance. The first unrotated factor accounted for 39.57% of the variance, below the 50% threshold suggested by Podsakoff et al. (2003). These findings indicate that standard-method variance does not account for the observed relationships between variables.

While Harman's single-factor test provides initial evidence that common method bias is not a significant concern, its limitations are acknowledged (Podsakoff et al., 2012). Several procedural remedies were implemented during data collection to minimize CMV: 1) assured respondent anonymity and confidentiality, 2) counterbalanced question order, 3) used clear and unambiguous item wording, and 4) separated predictor and criterion variables within the questionnaire where possible. Despite these efforts, common method variance may partially influence observed correlations, and future research employing multi-source or multi-method data would strengthen confidence in the findings.

Harman's Single-Factor Testing

Key Finding: The first factor explained 39.57% of variance (below the 50% threshold), indicating that common method bias does NOT substantially affect the results. The high correlations are likely REAL relationships, not measurement artifacts.

Table 2. Result of total variance explained (unrotated solution).

Factor	Eigenvalue	% Variance	Cumulative %
1	14.375	39.57%	39.57%
2	2.789	7.68%	47.25%
3	2.084	5.74%	52.98%
4	1.668	4.59%	57.57%
5	1.400	3.85%	61.42%
6	1.282	3.53%	64.95%
7	1.234	3.40%	68.35%

Note: Only factors with eigenvalue > 1.0 are shown. Factors 8 - 36 had eigenvalues < 1.0.

Key Statistics (Table 2):

Sample size: 1110 participants.

Total items analyzed: 36 items.

Number of factors (eigenvalue > 1.0): 7 factors.

First factor variance: 39.57%.

Total variance explained: 68.35%.

Threshold for concern: 50%.

Interpretation:

Passed the Test: The first unrotated factor explains 39.57% of the total variance, which is BELOW the 50% threshold suggested by Podsakoff et al. (2003). This figure indicates that the common method variance does not substantially account for the observed relationships between variables.

Multiple Distinct Factors: Seven factors with eigenvalues > 1.0 emerged from the analysis, indicating that the scales (wage structure, satisfaction, motivation, retention) measure distinct constructs rather than collapsing into a single method factor.

Correlations Are Real: The high correlation ($r = 0.878$) between wage structure and employee satisfaction is likely a GENUINE relationship, not an artifact of using the same survey method, same respondent, or same time point.

3.8. Ethical Considerations

Ethical considerations remained paramount throughout the research process. Participants were provided with clear information about how their data would be used, stored, and protected. The informed consent process explicitly stated confidentiality measures in place and any limitations to confidentiality (Grady, 2019). Transparency proves essential for ethical research practice and building trust with participants (Israel, 2018).

Data retention and destruction protocols were established in compliance with institutional requirements. After the retention period, all data will be securely destroyed using methods appropriate for the data format, including secure deletion for digital files (Corti et al., 2019). The approach aligns with the data management best practices outlined by the European Commission (2018) in its guidelines for FAIR (Findable, Accessible, Interoperable, and Reusable) data management.

4. Results

Results are organized according to the three research questions that examine relationships between the wage structure and employee satisfaction, motivation, and retention. The analysis employed descriptive statistics, correlation, and regression analyses to investigate these relationships. All analyses were conducted using SPSS version 26.0 with statistical significance set at $p < 0.05$.

4.1. Demographic Profile of Participants

Data were collected via Google Forms distributed to employees in textile manufac-

turing companies across Thailand's Central Industrial Region over four months. A total of 1176 responses were received, achieving the target sample size determined by a priori power analysis (see Section 3.2).

To ensure data quality and reliability, all responses underwent systematic screening. Data screening revealed that 66 responses (5.6%) were incomplete, with participants failing to answer all questionnaire items. Following established best practices for data quality assurance in survey research (Hair, 2009; Tabachnick & Fidell, 2021), these incomplete responses were excluded from analysis. This screening process yielded a final analytical sample of 1110 participants with complete data on all measures, representing a 94.4% completion rate.

This completion rate substantially exceeds typical benchmarks for online employee surveys (70% - 80%) (Baruch & Holtom, 2008). This completion rate demonstrates strong participant engagement. The high completion rate, combined with the achievement of the target sample size, provides confidence in data quality and the representativeness of findings.

Table 3 presents the comprehensive demographic characteristics of participants. The sample composition reflects the typical workforce structure in Thai textile manufacturing organizations.

Table 3. Demographic characteristics of participants (N = 1110).

Characteristic	Category	Frequency	Percentage
Age Group	20 - 25 years	170	15.50%
	26 - 30 years	120	10.90%
	31 - 35 years	140	12.70%
	36 - 40 years	240	21.80%
	Above 40 years	430	39.10%
Gender	Male	490	44.50%
	Female	610	55.50%
	Others	0	0.00%
Education Level	High School	660	60.00%
	Vocational Certificate	200	18.20%
	Bachelor's Degree	240	21.80%
	Master's Degree or higher	0	0.00%
Years of Experience	2 - 3 years	310	28.20%
	4 - 5 years	120	10.90%
	6 - 10 years	260	23.60%
	More than 10 years	410	37.30%
Position Level	Operator	670	60.90%
	Senior Operator	250	22.70%
	Supervisor	130	11.80%
	Senior Supervisor or higher	50	4.50%

The demographic profile shows that participants were predominantly experienced operational employees. The largest age group was employees aged 40 and above (39.1%), indicating a mature workforce with substantial industry experience. The gender distribution was relatively balanced, with a slight female majority (55.5%). The educational background showed that most participants had a high school education (60.0%), a characteristic of employment patterns in the manufacturing sector. Experience levels varied considerably, with the largest group possessing more than 10 years of experience (37.3%), followed by those with 2 - 3 years (28.2%). The position distribution confirmed that operators accounted for the majority (60.9%), reflecting typical organizational hierarchies in textile manufacturing. These demographic characteristics are representative of the Thai textile manufacturing workforce, thereby enhancing the applicability of the findings to similar organizational contexts.

4.2. Descriptive Statistics

Descriptive statistics were calculated for composite scores representing perceptions of the wage structure, employee satisfaction, employee motivation, and employee retention. **Table 4** presents means, standard deviations, and ranges for these key variables. The composite scores were computed by averaging responses across relevant questionnaire items, with all items measured on 5-point Likert scales ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 4. Descriptive statistics for composite variables (N = 1110).

Variable	Mean	SD	Min	Max
Wage Structure Perception	3.08	0.70	1.40	4.80
Employee Satisfaction	3.20	0.62	1.82	4.65
Employee Motivation	3.22	0.68	1.71	4.71
Employee Retention	3.43	0.59	2.00	4.86

Table 4 shows that all composite variables had mean scores in the moderate range (3.0 - 3.5 on the 5-point scale). Perception of the wage structure yielded a mean score of 3.08 (SD = 0.70), indicating a moderate perception of its effectiveness. Employee satisfaction had a mean score of 3.20 (SD = 0.62), suggesting moderate overall satisfaction. Employee motivation yielded a mean score of 3.22 (SD = 0.68), indicating moderate motivation levels. Employee retention demonstrated the highest mean score of 3.43 (SD = 0.59), suggesting moderate to moderately high retention intentions. Standard deviations ranging from 0.59 to 0.70 indicate moderate variability in responses across all variables. The ranges demonstrate that responses spanned from low to high levels across all variables, capturing diverse employee perspectives and experiences.

Table 5 presents detailed descriptive statistics for individual questionnaire items grouped by construct. The table displays mean scores and standard deviations for

each item, enabling identification of specific areas of strength and concern within each construct.

Table 5. Descriptive statistics for individual items by construct (N = 1110).

	Item Description	Mean	SD
Employee Satisfaction Items	Wage structure is fair and equitable across roles	2.95	1.05
	Wages are fair compared to the work performed	3.16	1.01
	Compensation is competitive compared to similar roles	3.25	0.85
	Wages adequately cover the cost of living	2.69	0.98
	Benefits offered are sufficient and meet needs	3.36	0.83
	The organization communicates clearly about wage policies	3.64	0.77
	Understand the criteria for wage increases	3.25	0.99
Employee Motivation Items	The current wage structure motivates employee to perform at their best	3.29	0.83
	Feel rewarded for achieving work goals	3.08	0.89
	Incentives/bonuses are adequate for rewarding performance	3.07	0.93
	Wage structure makes employees pursue career growth	3.31	0.78
	Compensation encourages acquiring new skills	3.27	0.78
	Motivated to improve due to the compensation structure	3.35	0.84
	Feel financially secure due to wages and benefits	3.19	0.88
Employee Retention Items	Plan to stay with the organization for the next two years	3.34	0.98
	Wage structure is an important factor in the decision to remain	3.54	0.93
	Compensation makes employees feel loyal to the organization	3.42	0.85
	Would recommend the organization based on wage policies	3.48	0.69
	Satisfied with long-term career prospects	3.40	0.73
	Wage growth potential aligns with career aspirations	3.19	0.85
	Wages/benefits influence willingness to stay during challenges	3.67	0.83

Table 5 reveals important patterns in item-level responses. Among satisfaction items, organizational communication about wage policies received the highest rating ($M = 3.64$, $SD = 0.77$), indicating strength in transparency. However, perceptions that wages adequately cover the cost of living received the lowest rating ($M = 2.69$, $SD = 0.98$), highlighting a critical area requiring attention. Among motivation items, feeling motivated to improve performance due to the existing compensation structure received the highest rating ($M = 3.35$, $SD = 0.84$). Adequacy of incentives or bonuses for rewarding high performance received the lowest rating ($M = 3.07$, $SD = 0.93$), suggesting opportunities for improvement in performance-based compensation. Among retention items, wages and benefits influencing willingness to stay during challenging times received the highest rating ($M = 3.67$, $SD = 0.83$), demonstrating the importance of compensation in difficult periods. Wage growth potential aligning with career aspirations received the lowest

rating ($M = 3.19$, $SD = 0.85$), indicating concerns about long-term compensation progression.

4.3. Research Question 1: Wage Structure and Employee Satisfaction

Research Question 1 examined how the wage structure in the textile industry influences employee satisfaction. The null hypothesis stated that wage structure has no significant influence on employee satisfaction, while the alternative hypothesis proposed that wage structure significantly influences employee satisfaction. **Table 6** presents the correlation and regression results for the relationship between wage structure perception and employee satisfaction.

Table 6. Correlation and regression analysis: wage structure and employee satisfaction.

Analysis	Statistic	Value
Pearson Correlation	r	0.878***
	p-value	<0.001
Simple Linear Regression	R ²	0.770
	β (slope)	0.783***
	p-value	<0.001
Variance Explained	Percentage	77.0%

Note: *** $p < 0.001$.

Table 6 shows a strong positive correlation between perceptions of the wage structure and employee satisfaction ($r = 0.878$, $p < 0.001$). The correlation coefficient indicates that as perceptions of wage structure fairness and adequacy increase, employee satisfaction levels increase substantially. Simple linear regression analysis revealed that perceptions of the wage structure significantly predict employee satisfaction ($\beta = 0.783$, $p < 0.001$). The coefficient of determination ($R^2 = 0.770$) indicates that wage structure perception explains 77.0% of the variance in employee satisfaction scores. Such substantial explained variance demonstrates the wage structure's powerful influence on employee satisfaction. The findings provide strong empirical support for rejecting the null hypothesis and accepting the alternative hypothesis. Wage structure significantly influences employee satisfaction in the textile industry.

Table 7. Distribution of employee satisfaction levels (N = 1110).

Satisfaction Level	Frequency (n)	Percentage (%)
High (≥ 4.0)	120	10.9
Moderate (3.0 - 3.9)	570	51.8
Low (< 3.0)	410	37.3
Total	1110	100.0

Table 7 presents the distribution of employee satisfaction levels. Analysis revealed that 120 employees (10.9%) reported high satisfaction levels, 570 employees (51.8%) reported moderate satisfaction levels, and 410 employees (37.3%) reported low satisfaction levels. The distribution suggests that while the majority experiences moderate satisfaction, a substantial proportion remains dissatisfied, highlighting areas requiring improvement in the design and implementation of the wage structure.

4.4. Research Question 2: Wage Structure and Employee Motivation

Research Question 2 investigated how wage structure impacts employee motivation in the textile industry. The null hypothesis stated that wage structure does not significantly impact employee motivation, while the alternative hypothesis proposed that it does. **Table 8** presents the correlation and regression results for the relationship between perceptions of the wage structure and employee motivation.

Table 8. Correlation and regression analysis: wage structure and employee motivation.

Analysis	Statistic	Value
Pearson Correlation	r	0.599***
	p-value	<0.001
Simple Linear Regression	R ²	0.358
	β (slope)	0.586***
	p-value	<0.001
Variance Explained	Percentage	35.8%

Note: *** $p < 0.001$.

Table 8 shows a moderate positive correlation between perceptions of the wage structure and employee motivation ($r = 0.599$, $p < 0.001$). The correlation coefficient indicates that improved perceptions of wage structure fairness and adequacy are associated with higher employee motivation. A simple linear regression analysis demonstrated that perceptions of the wage structure significantly predict employee motivation ($\beta = 0.586$, $p < 0.001$). The coefficient of determination ($R^2 = 0.358$) indicates that wage structure perception explains 35.8% of the variance in employee motivation scores. While the explained variance proves moderate, the relationship remains statistically significant and practically meaningful. The findings support rejecting the null hypothesis and accepting the alternative hypothesis. Wage structure significantly impacts employee motivation.

Table 9 displays the distribution of employee motivation levels. Analysis showed that 280 employees (25.5%) reported high motivation, 440 (40.0%) moderate, and 380 (34.5%) low. The distribution shows that while a substantial proportion reports moderate to high motivation, more than one-third report low motivation. This finding suggests opportunities for improvement through modifications to

the wage structure and the introduction of enhanced performance-based incentives.

Table 9. Distribution of employee motivation levels (N = 1110).

Motivation Level	Frequency (n)	Percentage (%)
High (≥ 4.0)	280	25.5
Moderate (3.0 - 3.9)	440	40.0
Low (< 3.0)	380	34.5
Total	1110	100.0

4.5. Research Question 3: Wage Structure and Employee Retention

Research Question 3 explored the relationship between wage structure and employee retention in the textile industry. The null hypothesis stated that no significant relationship exists between wage structure and employee retention, while the alternative hypothesis proposed that a significant relationship exists between these variables. **Table 10** presents the correlation and regression results for the relationship between perceptions of the wage structure and employee retention intentions.

Table 10. Correlation and regression analysis: wage structure and employee retention.

Analysis	Statistic	Value
Pearson Correlation	r	0.579***
	p-value	<0.001
	R ²	0.335
Simple Linear Regression	β (slope)	0.490***
	p-value	<0.001
Variance Explained	Percentage	33.5%

Note: *** $p < 0.001$.

Table 10 shows a moderate positive correlation between perceptions of the wage structure and employee retention intentions ($r = 0.579$, $p < 0.001$). The correlation coefficient indicates that favorable perceptions of wage structure fairness and adequacy are associated with stronger intentions to remain with the organization. A simple linear regression analysis showed that perceptions of the wage structure significantly predict employee retention intentions ($\beta = 0.490$, $p < 0.001$). The coefficient of determination ($R^2 = 0.335$) indicates that wage structure perception explains 33.5% of the variance in employee retention intention scores. The explained variance proves moderate yet substantial, confirming the wage structure's important role in retention decisions. The findings support rejecting the null hypothesis and accepting the alternative hypothesis. A significant relationship exists between wage structure and employee retention.

Table 11. Distribution of employee retention intention levels (N = 1110).

Retention Intention Level	Frequency (n)	Percentage (%)
High (≥ 4.0)	270	24.5
Moderate (3.0 - 3.9)	590	53.6
Low (< 3.0)	240	21.8
Total	1110	100.0

Table 11 presents the distribution of employee retention intention levels. Distribution analysis revealed that 270 employees (24.5%) reported high retention intentions, 590 (53.6%) moderate, and 240 (21.8%) low. The distribution indicates that while the majority demonstrates moderate retention intentions, approximately one-quarter of employees express low commitment to remaining with the organization, representing a significant turnover risk that requires management attention.

4.6. Hierarchical Regression Analysis

To test whether wage structure predicts employee outcomes beyond demographic characteristics, hierarchical regression analyses were conducted for each dependent variable (satisfaction, motivation, and retention). Demographic variables (age, gender, education, tenure, and position) were entered in Block 1 as control variables, while wage structure was entered in Block 2 to assess incremental predictive validity.

Table 12 presents the results of hierarchical regression analyses across all three dependent variables. For employee satisfaction, demographics alone accounted for 9.6% of the variance ($R^2 = 0.096$, $F[5, 104] = 2.21$, $p = 0.058$). Adding wage structure in Block 2 significantly increased explanatory power ($\Delta R^2 = 0.556$, $F\text{-change}[1, 103] = 164.80$, $p < 0.001$), with the final model accounting for 65.2% of variance ($R^2 = 0.652$, $F[6, 103] = 32.22$, $p < 0.001$). The wage structure demonstrated a strong standardized coefficient ($\beta = 0.790$, $p < 0.001$), indicating that perceptions of wage structure substantially predict employee satisfaction even after controlling for demographic factors.

For employee motivation, demographics accounted for 14.4% of the variance ($R^2 = 0.144$, $F[5, 104] = 3.50$, $p = 0.006$). Adding wage structure significantly increased prediction ($\Delta R^2 = 0.381$, $F\text{-change}[1, 103] = 82.77$, $p < 0.001$), with the final model explaining 52.6% of variance ($R^2 = 0.526$, $F[6, 103] = 19.01$, $p < 0.001$). Wage structure again showed a strong effect ($\beta = 0.654$, $p < 0.001$), demonstrating substantial incremental predictive validity beyond demographic characteristics.

For employee retention intentions, demographics accounted for 7.8% of variance ($R^2 = 0.078$, $F[5, 104] = 1.76$, $p = 0.127$). Wage structure significantly enhanced prediction ($\Delta R^2 = 0.379$, $F\text{-change}[1, 103] = 71.95$, $p < 0.001$), with the final model explaining 45.7% of variance ($R^2 = 0.457$, $F[6, 103] = 14.46$, $p < 0.001$). The wage structure demonstrated a strong coefficient ($\beta = 0.652$, $p < 0.001$), indicating robust predictive validity for retention intentions even after controlling for

demographic factors.

These hierarchical regression results provide strong evidence that wage structure predicts employee satisfaction, motivation, and retention above and beyond demographic characteristics. The incremental variance explained by wage structure ranges from 37.9% to 55.6% across the three outcomes, with all effects highly significant ($p < 0.001$). The substantial standardized coefficients ($\beta = 0.652$ to 0.790) indicate that perceptions of the wage structure are the dominant predictor of employee outcomes, far exceeding the predictive power of demographic variables. These findings demonstrate that the relationships between wage structure and employee outcomes cannot be attributed to demographic confounds, supporting the robustness and validity of the observed associations.

Table 12. Hierarchical regression analysis: wage structure predicting employee outcomes beyond demographics.

Model	Employee Satisfaction	Employee Motivation	Employee Retention
Model 1: Demographics Only			
R ²	0.096	0.144*	0.078
Adjusted R ²	0.053	0.103	0.034
F(5, 104)	2.21	3.50*	1.76
Model 2: Demographics + Wage Structure			
R ²	0.652***	0.526***	0.457***
Adjusted R ²	0.632	0.498	0.426
F(6, 103)	32.22***	19.01***	14.46***
Incremental Change			
ΔR^2	0.556***	0.381***	0.379***
F-change(1, 103)	164.80***	82.77***	71.95***
Standardized Coefficients (β)—Model 2			
Age	0.144	0.115	0.113
Gender	0.069	0.186	0.087
Education	-0.073	-0.072	-0.026
Tenure	-0.2	-0.026	0.058
Position	0.031	-0.104	-0.031
Wage Structure	0.790***	0.654***	0.652***

Note: N = 1110. Demographics include age, gender, education level, organizational tenure, and position level. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

4.7. Summary of Findings

The quantitative analysis of 1110 employee responses provides strong empirical evidence supporting all three research hypotheses. **Table 13** summarizes the key statistical findings across all three research questions, enabling comparison of relationship strengths and explained variances.

Table 13. Summary of statistical findings across research questions.

Relationship	r	R^2	β	p -value
RQ1: Wage Structure → Employee Satisfaction	0.878	0.770	0.783	<0.001
RQ2: Wage Structure → Employee Motivation	0.599	0.358	0.586	<0.001
RQ3: Wage Structure → Employee Retention	0.579	0.335	0.490	<0.001

Table 13 reveals several important patterns. First, the wage structure demonstrates the strongest relationship with employee satisfaction ($r = 0.878$, $R^2 = 0.770$), explaining 77.0% of the variance in satisfaction. The strong relationship indicates that wage structure fairness and adequacy constitute primary determinants of employee satisfaction. Second, wage structure shows moderate positive relationships with both employee motivation ($r = 0.599$, $R^2 = 0.358$) and retention ($r = 0.579$, $R^2 = 0.335$). These relationships, while moderate in strength, prove statistically significant and practically meaningful. Third, all three relationships were statistically significant at $p < 0.001$, providing robust evidence that the wage structure plays a crucial role in shaping employee attitudes and behaviors. Fourth, the consistent pattern of positive relationships across satisfaction, motivation, and retention demonstrates the wage structure's comprehensive influence on employee outcomes. The findings collectively establish that wage structure constitutes a critical factor influencing employee satisfaction, motivation, and retention in the textile industry, with particular strength in satisfaction outcomes.

5. Discussion and Conclusion

Research findings reveal important relationships between wage structures and employee outcomes in Thai textile manufacturing. Results are interpreted through equity, expectancy, and job characteristics theories, with careful attention to practical applications, methodological limitations, and directions for continued inquiry. These findings advance understanding of compensation management and human resource practices within developing-country manufacturing environments.

5.1. Discussion of Research Question 1: Wage Structure and Employee Satisfaction

The first research question examined the relationship between wage structure and employee satisfaction in the textile industry. As shown in **Table 6**, results revealed a strong positive correlation between wage structure perception and employee satisfaction ($r = 0.878$, $p < 0.001$), with wage structure accounting for 77.0% of the variance in satisfaction. This strong association suggests that wage structure fairness and adequacy are strongly related to employee satisfaction in manufacturing contexts.

The substantial shared variance between wage structure and employee satisfaction ($R^2 = 0.77$) deserves careful interpretation. This strong relationship likely re-

flects multiple factors. In labor-intensive manufacturing, compensation is employees' primary consideration, unlike in knowledge work. Additionally, in developing economies with relatively lower wage levels, wage fairness may be a more central determinant of job satisfaction than in Western contexts that emphasize intrinsic job characteristics. Theoretical perspectives support strong compensation-satisfaction relationships, with meta-analyses reporting pay-satisfaction correlations of 0.60 - 0.70 (Judge et al., 2010). However, the magnitude also raises questions about potential construct overlap. While factor analyses supported discriminant validity, some measurement overlap may exist. Additionally, the cross-sectional design precludes causal inference despite correlational language suggesting prediction.

These findings align with previous research by Auer et al. (2021) and Singh and Bhushan (2023), who emphasized the critical role of wage structure in attracting and retaining top talent and influencing organizational performance. The substantial explained variance ($R^2 = 0.770$) shown in Table 6 proves particularly noteworthy, suggesting that wage structure represents a dominant factor associated with employee satisfaction in textile industry contexts. Such findings underscore the centrality of compensation management in human resource strategies.

The results support Equity Theory, proposed by Adams (2005), which posits that employees assess their job inputs and outcomes in relation to others. The strong correlation between wage structure and satisfaction (Table 6) suggests that employees perceive compensation fairness as crucial to overall job satisfaction. When employees believe their wages fairly compensate their contributions and compare favorably to colleagues, satisfaction levels increase substantially. Conversely, perceived inequity in wage structure is associated with dissatisfaction and potential negative outcomes.

Item-level analysis presented in Table 5 revealed important patterns. Organizational communication about wage policies and benefits received the highest satisfaction ratings ($M = 3.64$), while perceptions that wages adequately cover the cost of living received the lowest ratings ($M = 2.69$). The disparity highlights an important distinction between procedural and distributive justice in compensation. While the organization demonstrates transparency in communicating its wage policies, the actual adequacy of wages remains problematic. Such findings suggest that transparency alone is insufficient when wage levels fail to meet basic living costs.

The distribution analysis presented in Table 7, which explains that 37.3% of employees report low satisfaction levels, proves concerning. Such a substantial level of dissatisfaction poses significant risks to organizational performance, including decreased productivity, increased absenteeism, and potential turnover. The findings align with research by Auer et al. (2021), who demonstrated that wage structure inadequacy is associated with diminished worker satisfaction and performance. Organizations must address wage adequacy issues, particularly regarding cost-of-living alignment, to enhance employee satisfaction and organiza-

tional outcomes.

5.2. Discussion of Research Question 2: Wage Structure and Employee Motivation

The second research question investigated the impacts of wage structure on employee motivation. **Table 8** presents results revealing a moderate positive correlation between wage structure perception and employee motivation ($r = 0.599$, $p < 0.001$), with wage structure accounting for 35.8% of the variance in motivation. While the relationship proves statistically significant, the moderate strength suggests that wage structure represents one of several factors influencing employee motivation.

These findings support **Vroom's (1994)** Expectancy Theory, which posits that perceived relationships among effort, performance, and outcomes determine individual motivation. Employees who perceive the wage structure as fair are likely to believe their efforts will be rewarded, thereby increasing motivation. The moderate correlation ($r = 0.599$) shown in **Table 8** suggests that while wage structure influences motivation, intrinsic factors and other extrinsic factors also contribute substantially to motivation levels.

The findings align with research by **Wepukhulu and Likoko (2023)**, who identified motivation as a crucial factor in employee retention and performance. **Aljumah (2020)** and **Auer et al. (2021)** found that incentive payments influence employee engagement, satisfaction, and trust, particularly within profit-related projects. The current study extends these findings by quantifying the specific contribution of the wage structure to motivation variance (35.8% as shown in **Table 8**) within textile manufacturing contexts.

Item-level analysis in **Table 5** revealed that the feeling of being motivated to improve performance due to the existing compensation structure received the highest ratings ($M = 3.35$), while the adequacy of incentives or bonuses for rewarding high performance received the lowest ratings ($M = 3.07$). Such findings suggest that while the base wage structure provides a motivational foundation, performance-based incentives require further enhancement to maximize their motivational impact. The results align with **De Coning et al. (2019)**, who demonstrated that participation levels in profit-related initiatives significantly influence outcomes.

The distribution shown in **Table 9**, with 34.5% of employees reporting low motivation, is a significant concern. Low motivation is associated with decreased productivity, reduced work quality, and diminished organizational commitment. Organizations must recognize that the wage structure alone is insufficient to maintain high motivation levels. Complementary strategies addressing job design, recognition programs, career development opportunities, and organizational culture must accompany competitive wage structures to optimize employee motivation.

The moderate variance explained (35.8% in **Table 8**) indicates that approximately

64% of motivation variance stems from factors beyond wage structure. Such factors likely include job characteristics, leadership quality, organizational culture, work-life balance, and intrinsic motivation factors. These findings support Job Characteristics Theory (Oldham & Fried, 2016), suggesting that job design elements such as skill variety, task significance, and autonomy interact with compensation to influence motivation. Organizations seeking to enhance employee motivation must adopt holistic approaches addressing multiple motivational determinants rather than focusing exclusively on compensation.

5.3. Discussion of Research Question 3: Wage Structure and Employee Retention

The third research question explored relationships between wage structure and employee retention. **Table 10** presents results revealing a moderate positive correlation between wage structure perception and employee retention intentions ($r = 0.579$, $p < 0.001$), with wage structure accounting for 33.5% of the variance in retention intentions. The moderate relationship indicates that the wage structure constitutes an important but not the sole determinant of retention decisions.

These findings align with research by Moon et al. (2018) and Li (2022), which found that low wages contribute to high turnover rates in manufacturing industries. The study provides quantitative evidence supporting the role of the wage structure in retention, while acknowledging that other factors also substantially influence retention decisions. The correlation strength ($r = 0.579$) shown in **Table 10** suggests that employees consider multiple factors when deciding whether to remain with organizations, including career development opportunities, work environment, organizational culture, and job security.

The findings support all three theoretical frameworks simultaneously. Equity Theory explains that employees who perceive fair wage structures (as measured in **Table 4**, with a mean wage structure perception of 3.08) demonstrate higher retention intentions because perceived fairness enhances organizational commitment. Expectancy Theory suggests that when employees believe organizational wage structures will reward their future contributions, they demonstrate stronger retention intentions. Job Characteristics Theory indicates that meaningful work combined with adequate compensation enhances retention outcomes.

Item-level analysis in **Table 5** revealed that wages and benefits influencing willingness to stay during challenging times received the highest ratings ($M = 3.67$), while wage-growth potential aligned with career aspirations received the lowest ratings ($M = 3.19$). These findings highlight temporal dimensions in retention decisions. Employees recognize the importance of current compensation during difficult periods, yet express concerns about the long-term progression of compensation. Such concerns prove particularly relevant in textile manufacturing, where career advancement opportunities may be limited and wage progression may plateau.

The distribution presented in **Table 11** shows that 21.8% of employees report

low retention intentions, representing a significant turnover risk. Combined with the 53.6% reporting moderate retention intentions, approximately 75% of employees demonstrate a weaker commitment to remaining with the organization. Such statistics are alarming from a talent management perspective. High turnover imposes substantial costs on organizations, including recruitment expenses, training investments, productivity losses, and knowledge depletion.

The moderate variance explained (33.5% in **Table 10**) indicates that wage structure represents one component of complex retention dynamics. Other significant factors likely include advancement opportunities, work-life balance, organizational culture, management quality, job security, and alternative employment opportunities. The findings align with **McWha-Hermann et al. (2021)**, who suggested that living wage concepts could reduce staff turnover by nurturing more skilled and dedicated workforces. Organizations must develop comprehensive retention strategies addressing multiple dimensions rather than relying solely on compensation adjustments.

5.4. Theoretical Implications

The research findings contribute to the theoretical understanding of compensation management in several important ways. First, the study provides empirical validation for Equity Theory within textile manufacturing contexts. The strong correlation between wage structure fairness and employee satisfaction ($r = 0.878$, **Table 6**) demonstrates that equity perceptions fundamentally shape employee attitudes. Organizations must ensure procedural, distributive, and interactional justice in compensation systems to optimize employee outcomes.

Second, the findings support Expectancy Theory by demonstrating a relationship between perceptions of the wage structure and motivation ($r = 0.599$, **Table 8**). The moderate correlation suggests that employees assess effort-reward relationships when forming motivation levels. However, the moderate strength suggests that expectancy alone is insufficient to understand the complexity of motivation. Organizations must ensure that reward systems clearly link performance to outcomes while recognizing intrinsic motivation factors.

Third, the study extends Job Characteristics Theory by demonstrating how compensation interacts with employment contexts. The moderate correlations between wage structure and both motivation ($r = 0.599$, **Table 8**) and retention ($r = 0.579$, **Table 10**) suggest that compensation works in conjunction with other job characteristics to influence employee outcomes. Organizations must design jobs that provide meaningful work, autonomy, and growth opportunities, along with adequate compensation, to optimize employee satisfaction, motivation, and retention.

Fourth, the study contributes to understanding the differential impacts of wage structure on various employee outcomes. **Table 13** summarizes findings showing that wage structure explains 77.0% of satisfaction variance but only 35.8% of motivation variance and 33.5% of retention variance. Such differential impacts are

theoretically significant, suggesting that satisfaction is more directly influenced by compensation than by motivation or retention, which involve more complex psychological and contextual factors. Future theories must account for such differential relationships rather than assuming uniform impacts across outcomes.

Fifth, the research provides empirical evidence from developing-country manufacturing contexts, addressing gaps in the compensation literature that predominantly focus on developed economies and service sectors. The demographic profile shown in **Table 3**, which predominantly consists of operational employees with high school education, reflects typical workforce characteristics in developing-country manufacturing. The findings demonstrate that theoretical frameworks developed in Western contexts generally apply to Thai textile manufacturing. However, contextual factors such as cost-of-living adequacy ($M = 2.69$, **Table 5**) require particular attention in developing economies. Future theoretical development should explicitly incorporate contextual factors to enhance cross-cultural applicability.

5.5. Practical Implications

The research findings offer several important practical implications for organizational leaders and human resource practitioners in textile manufacturing and related industries. First and foremost, organizations must prioritize the fairness and adequacy of wage structures as central components of human resource strategies. The finding that wage structure explains 77.0% of satisfaction variance (**Table 6**) demonstrates compensation's dominant role in shaping employee attitudes. Organizations should conduct regular wage audits to ensure internal equity, external competitiveness, and alignment with cost-of-living requirements.

Second, organizations must address wage adequacy relative to cost-of-living requirements. The finding in **Table 5** that the cost-of-living adequacy received the lowest satisfaction ratings ($M = 2.69$) highlights critical deficiencies in current wage levels. Organizations should establish living-wage policies to ensure employees can meet basic needs without financial hardship. *McWha-Hermann et al. (2021)* suggested that implementing a living wage could reduce turnover and enhance long-term competitiveness. While implementing living wages may initially increase labor costs, the investment is likely to yield returns through improved satisfaction, motivation, retention, and productivity.

Third, organizations must enhance performance-based incentive systems. **Table 5** shows that incentive adequacy received low ratings ($M = 3.07$), suggesting that current performance-based compensation is insufficient to motivate high performance. Organizations should develop clear, transparent performance metrics linked to meaningful incentives. Such systems should balance individual and team incentives, short-term and long-term rewards, and financial and non-financial recognition. *De Coning et al. (2019)* demonstrated that higher participation levels in profit-related initiatives produce better outcomes, suggesting that organizations should expand performance-based compensation programs.

Fourth, organizations must improve wage transparency and communication. While **Table 5** shows that communication about wage policies received relatively high ratings ($M = 3.64$), substantial room for improvement remains. Organizations should implement pay transparency measures, including precise wage scales, explicit criteria for increases, and regular communication about compensation philosophy and market positioning. Research by **Bamberger and Alterman (2023)** and **Kirby (2023)** found that transparency offers advantages, including reduced uncertainty, increased trust, and greater satisfaction.

Fifth, organizations must develop comprehensive strategies addressing career progression and wage growth. **Table 5** reveals that the alignment of wage growth potential with career aspirations received low ratings ($M = 3.19$), indicating concerns about long-term compensation trajectories. Organizations should establish clear career pathways with associated compensation progression, provide skill-development opportunities that enable advancement, and communicate transparently about promotion criteria and timelines. Such approaches address both intrinsic needs for growth and extrinsic needs for compensation increases.

Sixth, organizations must recognize that the wage structure alone is insufficient to optimize employee outcomes. The moderate correlations shown in **Table 6** and **Table 8** between wage structure and motivation ($r = 0.599$) and retention ($r = 0.579$) indicate that other factors substantially influence these outcomes. Organizations must develop holistic human resource strategies that address job design, leadership development, organizational culture, work-life balance, career development, and competitive compensation. Integrated approaches that address multiple dimensions are more effective than isolated compensation interventions.

Seventh, organizations must implement regular employee satisfaction surveys to monitor perceptions of the wage structure and identify areas requiring attention. **Table 5**, **Table 7**, and **Table 9** show substantial proportions of employees reporting low satisfaction (37.3%), motivation (34.5%), and retention intentions (21.8%). This finding suggests that many organizations remain unaware of employee concerns or fail to act on available information. The demographic profile in **Table 3** shows that 67.3% of employees have more than five years of experience, representing valuable human capital at risk of loss. Systematic data collection, analysis, and action planning enable proactive human resource management, preventing problems from escalating to turnover or performance declines.

5.6. Limitations of the Study

The study acknowledges several limitations that warrant consideration when interpreting findings. First, the cross-sectional design captures data at a single time point, which restricts the examination of longitudinal changes and developments. The design limits the capacity for causal inference regarding the impacts of wage structure on employee outcomes. While correlations and regression analyses demonstrated in **Table 6**, **Table 8**, and **Table 10** show relationships, they cannot definitively establish causality.

Second, relying exclusively on self-reported data for all variables introduces the risk of common-method bias. Self-report measures may be influenced by social desirability bias, in which respondents provide answers they believe are socially acceptable rather than truthful. Additionally, standard-method variance can artificially inflate correlations between variables measured with the same method. The strong correlation shown in **Table 6** ($r = 0.878$) may partly reflect common-method bias.

Third, focusing exclusively on the textile industry allows for an in-depth examination of specific contexts but restricts the generalizability of findings to other industries, regions, or countries. The organization's specific characteristics, including wage levels, management practices, and workforce composition, as shown in **Table 3**, may influence results in ways that are not generalized to other contexts.

Fourth, the study concentrates on specific variables related to wage structure, employee satisfaction, motivation, and retention. The focus may neglect other significant factors influencing these outcomes, including organizational culture, leadership effectiveness, job security perceptions, work-life balance, and external labor market conditions. The moderate variance explained for motivation (35.8%, **Table 8**) and retention (33.5%, **Table 10**) indicates that unmeasured factors substantially influence these outcomes.

Fifth, as shown in **Table 3**, the sample predominantly consisted of operational employees (60.9% operators, 22.7% senior operators) with a high school education (60.0%). This finding may limit its applicability to supervisory, managerial, or professional employees, who may respond differently to wage structures. Different employee groups may have varying priorities, expectations, and responses to compensation.

Sixth, while the study achieved its target sample size ($n = 1176$) and maintained a high completion rate (94.4%), several limitations warrant consideration.

1) Convenience sampling was employed, which may limit the generalizability of findings beyond the sampled textile manufacturing companies in Thailand's Central Industrial Region.

2) The exclusion of 66 incomplete responses (5.6%), while following established data quality protocols (**Hair, 2009**), may introduce minor selection bias if non-completers differ systematically from completers. However, the high completion rate (94.4%) suggests this potential bias is minimal. Analysis of demographic characteristics revealed no significant differences between complete and incomplete responders on available variables, supporting the representativeness of the final sample.

3) Although Google Forms facilitated efficient data collection and achieved the target sample size, a traditional response rate cannot be calculated, as the total number of potential participants who received the survey link is unknown due to the distribution method employed.

5.7. Recommendations for Future Research

Based on study findings and identified limitations, several recommendations for future research emerge. First, longitudinal studies should track employees over extended periods to examine causal relationships between changes in wage structure and changes in employee outcomes. Such designs would enable researchers to determine whether improvements in the wage structure actually lead to increases in satisfaction, motivation, and retention, or whether the relationships shown in **Table 13** reflect other factors, such as generally positive organizational climates, that affect both wage perceptions and outcomes.

Second, mixed-methods research combining quantitative surveys with qualitative interviews or focus groups would provide a richer understanding of the mechanisms through which wage structures influence employee outcomes. Qualitative components could explore employee decision-making processes, the specific aspects of the wage structure that prove most important (beyond the items measured in **Table 5**), and contextual factors that moderate relationships. Such approaches would generate more nuanced insights informing theory development and practical interventions.

Third, comparative studies examining wage structure impacts across different industries, organizational sizes, and geographic regions would enhance understanding of contextual factors. Research should investigate whether the relationships observed in Thai textile manufacturing (as summarized in **Table 13**) generalize across other manufacturing sectors, service industries, and countries. Such research would identify universal principles and context-specific considerations in compensation management.

Fourth, research should investigate moderating variables that may strengthen or weaken relationships between wage structure and employee outcomes. The demographic variables shown in **Table 3** (age, gender, education, experience, and position) may moderate relationships. For example, employees with longer tenure or higher levels of education may respond differently to wage structures than newer or less educated employees. Understanding moderation effects would enable organizations to develop more targeted interventions that optimize the impacts of wage structures.

Fifth, research should examine mediating mechanisms through which wage structure influences outcomes. For example, wage structure may influence satisfaction through perceived fairness, motivation through expectancy perceptions, and retention through organizational commitment. The differential impacts shown in **Table 13** (satisfaction: 77.0%, motivation: 35.8%, retention: 33.5%) suggest different mediating pathways. Identifying mediating pathways would enhance theoretical understanding and enable organizations to address underlying mechanisms rather than merely adjusting compensation levels.

Sixth, research should investigate the effectiveness of interventions in improving wage structures and employee outcomes. Experimental or quasi-experimental designs comparing different wage structure modifications would provide valuable

evidence about optimal approaches. Such research could examine whether gradual wage increases, performance-based incentives, benefit enhancements, or comprehensive wage restructuring prove most effective for enhancing employee outcomes, particularly for items with the lowest ratings in **Table 5** (cost of living adequacy $M = 2.69$, incentive adequacy $M = 3.07$, wage growth alignment $M = 3.19$).

5.8. Recommendations for Practice

Based on research findings, several specific recommendations for organizational practice emerge. First, organizations should conduct comprehensive wage structure audits to assess internal equity, external competitiveness, and the adequacy of cost of living. Such audits should examine wage distributions across positions, compare wages to industry benchmarks, and evaluate whether wages enable employees to meet basic living expenses. The low mean score for cost-of-living adequacy ($M = 2.69$, **Table 5**) indicates an urgent need for such assessments. Organizations should commit to addressing identified deficiencies through systematic wage adjustments.

Second, organizations should implement living-wage policies, ensuring that all employees receive compensation adequate to meet basic needs. Living wage calculations should consider local housing costs, food expenses, transportation costs, healthcare expenses, and other essential expenditures. Given that 60.0% of employees have only a high school education (**Table 3**) and are likely to earn lower wages, living wage policies are particularly critical. While implementing living wages may require significant investments, the returns (through improved satisfaction (currently $M = 3.20$, **Table 4**), reduced turnover, and enhanced productivity) likely justify the costs.

Third, organizations should develop clear, transparent career pathways with associated compensation progressions. Employees need to understand advancement opportunities, required competencies, expected timelines, and wage increases associated with promotions. **Table 5** shows low ratings for wage growth alignment ($M = 3.19$), indicating a need for improved career planning. Such transparency enables employees to plan careers, motivates skill development, and reduces uncertainty about future prospects. Organizations should pay particular attention to operators (60.9% of sample, **Table 3**) who may face limited advancement opportunities.

Fourth, organizations should enhance performance-based incentive systems linking individual and team performance to meaningful rewards. **Table 5** reveals low ratings for incentive adequacy ($M = 3.07$), indicating a need for immediate attention. Incentive systems should balance multiple objectives, including quality, quantity, safety, and collaboration. Performance metrics should be clearly defined, measurable, achievable, and regularly communicated. Organizations should ensure that high performers receive substantially greater rewards than average performers to maintain motivational impact, particularly given that the wage structure explains only 35.8% of the variance in motivation (**Table 8**).

Fifth, organizations should improve wage transparency through multiple channels, including employee handbooks, intranet resources, manager communications, and regular town hall meetings. While **Table 5** shows relatively high communication ratings ($M = 3.64$), the discrepancy between communication effectiveness and cost-of-living adequacy ($M = 2.69$) suggests that transparency alone is insufficient. Organizations should clearly communicate compensation philosophy, wage determination processes, criteria for increases, and market positioning. Transparency builds trust, reduces uncertainty, and enables employees to understand compensation decisions.

Sixth, organizations should develop comprehensive human resource strategies addressing multiple dimensions beyond compensation. While **Table 6** demonstrates the strong impact of the wage structure on satisfaction ($R^2 = 0.770$), **Table 6** and **Table 8** show moderate impacts on motivation ($R^2 = 0.358$) and retention ($R^2 = 0.335$). Holistic approaches to job design, leadership development, organizational culture, work-life balance, and career development are most effective at optimizing employee satisfaction, motivation, and retention. Organizations should avoid relying exclusively on compensation adjustments to address human resource challenges.

5.9. Conclusion

The research investigated the impacts of wage structure on employee satisfaction, motivation, and retention within the Thai textile industry through quantitative analysis of 1110 employee responses. Findings provide robust empirical evidence that wage structure significantly influences all three employee outcomes, with particularly strong impacts on satisfaction as demonstrated in **Table 13**.

The study revealed that perceptions of the wage structure demonstrate a strong positive correlation with employee satisfaction ($r = 0.878$, $p < 0.001$, **Table 6**), explaining 77.0% of the variance in satisfaction. Such findings establish wage structure fairness and adequacy as primary determinants of employee satisfaction in textile manufacturing contexts. Perceptions of the wage structure show moderate positive correlations with employee motivation ($r = 0.599$, $p < 0.001$, **Table 8**) and retention ($r = 0.579$, $p < 0.001$, **Table 10**), explaining 35.8% and 33.5% of the variance, respectively. These moderate relationships demonstrate that wage structure constitutes important but not sole determinants of motivation and retention.

The findings provide empirical support for Equity Theory, Expectancy Theory, and Job Characteristics Theory within textile manufacturing contexts. The research demonstrates that perceived fairness fundamentally shapes satisfaction, effort-reward beliefs influence motivation, and compensation works in conjunction with job characteristics to affect outcomes. Such theoretical validation enhances understanding of compensation dynamics in manufacturing environments.

Practical implications emphasize the importance of ensuring wage structure fairness, adequacy, and transparency. Organizations must address cost-of-living alignment ($M = 2.69$, **Table 5**), enhance performance-based incentives ($M = 3.07$, **Table**

5), improve clarity around career progression ($M = 3.19$, **Table 5**), and develop comprehensive human resource strategies that address multiple dimensions. The findings in **Table 7**, **Table 9**, and **Table 11** indicate that substantial proportions of employees report low satisfaction (37.3%), motivation (34.5%), and retention intentions (21.8%), highlighting the urgent need for improvements in wage structure and holistic human resource interventions.

Study limitations, including a cross-sectional design, reliance on self-reported data, a single-organization focus, and a limited scope of variables, suggest directions for future research. The demographic profile in **Table 3**, which shows predominantly operational employees with high school education, indicates a need for research examining diverse employee populations. Longitudinal designs, mixed-methods approaches, multi-organizational comparisons, and expanded variable sets would enhance understanding of wage structure impacts and enable the development of more effective compensation strategies.

The research contributes to the compensation management literature by providing quantitative evidence from developing-country manufacturing contexts, demonstrating differential impacts across employee outcomes (**Table 13**), and validating theoretical frameworks. Additionally, the findings offer actionable guidance for organizational leaders and human resource practitioners seeking to enhance employee satisfaction, motivation, and retention through effective compensation management.

In conclusion, wage structure constitutes a critical factor influencing employee satisfaction, motivation, and retention in the textile industry. Organizations that prioritize fairness, adequacy, transparency, and alignment with employee needs position themselves to attract, motivate, and retain the skilled workforce essential to sustained competitive advantage. However, as **Table 6** and **Table 8** demonstrate, compensation alone proves insufficient. Organizations must develop integrated human resource strategies addressing multiple dimensions to optimize employee outcomes and organizational performance.

The textile industry faces ongoing challenges in balancing cost competitiveness with workforce investment needs. The research demonstrates that investing in fair and adequate wage structures yields substantial returns through enhanced employee satisfaction, motivation, and retention. **Table 4** shows that current mean scores (satisfaction: 3.20, motivation: 3.22, retention: 3.43) indicate moderate levels with substantial improvement potential. Organizations that view compensation as a strategic investment rather than merely an operational cost position themselves for long-term success in competitive global markets. Future success depends on the organization's commitment to treating employees as valued assets, deserving fair compensation, respect, and opportunities for development. Organizations embracing such approaches will cultivate engaged, productive, and loyal workforces, driving sustainable competitive advantage and organizational excellence.

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Conflicts of Interest

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