

# **Job Satisfaction as a Moderating Factor in the Relationship between Knowledge, Work Motivation and Human Resource Development at the Child Social Service UPTD of Padang Sidempuan–Panyabungan**

**Abdi Negara Hasibuan, Sri Rahayu**

## **Abstract**

This study aims to analyze the influence of knowledge and work motivation on human resource development with job satisfaction as a moderating variable at the Child Social Service UPTD of Padangsidempuan–Panyabungan. A quantitative approach was employed using a survey method by distributing questionnaires to all employees of the UPTD. The collected data were analyzed using the Partial Least Squares (PLS) method with SmartPLS software. The results indicate that both knowledge and work motivation have a positive and significant effect on human resource development. Moreover, job satisfaction was found to strengthen the relationship between knowledge, work motivation, and human resource development. These findings emphasize the importance of enhancing job satisfaction through career development policies, supportive work environments, and fair reward systems to motivate employees in improving their competence and performance. This study provides practical implications for social service institutions to pay greater attention to psychological factors and individual competencies in formulating human resource development strategies.

**Keywords:** Knowledge, Work Motivation, Job Satisfaction, Human Resource Development

Abdi Negara Hasibuan<sup>1</sup>

<sup>1</sup>Master of Management, Universitas Pembangunan Panca Budi, Indonesia

e-mail: [abdinegarahasibuan@gmail.com](mailto:abdinegarahasibuan@gmail.com)<sup>1</sup>

Sri Rahayu<sup>2</sup>

<sup>2</sup>Master of Management, Universitas Pembangunan Panca Budi, Indonesia

Email: [srirahayu@dosen.pancabudi.ac.id](mailto:srirahayu@dosen.pancabudi.ac.id)<sup>2</sup>

2nd International Conference on Islamic Community Studies (ICICS)

Theme: History of Malay Civilisation and Islamic Human Capacity and Halal Hub in the Globalization Era

<https://proceeding.pancabudi.ac.id/index.php/ICIE/index>

## Introduction

Human resource development (HRD) has become a crucial element in improving the performance and sustainability of public sector institutions. The success of an organization, particularly in government agencies, depends on the quality of human resources who are knowledgeable, motivated, and satisfied with their work environment [1]. In the context of public service organizations such as the Child Social Service UPTD of Padangsidempuan–Panyabungan, the development of human resources plays a strategic role in ensuring the effectiveness and efficiency of social service delivery.

Knowledge is an important internal factor that enables employees to perform their duties effectively and adapt to changes in job demands. According to Spencer and Spencer, knowledge and competencies are essential foundations for improving job performance and achieving organizational goals [2]. Similarly, work motivation is a psychological drive that directs and sustains employee behavior toward achieving organizational objectives [3]. High levels of motivation can lead to increased commitment, creativity, and productivity within the workplace.

Previous studies have shown that knowledge and work motivation positively influence human resource development [4][5]. However, some findings indicate that this relationship may not always be consistent, suggesting the presence of moderating factors such as job satisfaction [6]. Job satisfaction reflects the extent to which employees feel content and fulfilled in their work environment, which in turn affects their enthusiasm and willingness to develop their competencies [7].

The novelty of this study lies in the integration of job satisfaction as a moderating variable that strengthens the influence of knowledge and work motivation on human resource development in a public sector context. While many prior studies have examined these variables in private or educational institutions, limited research has explored their interrelationship in government social service agencies.

Based on this background, the research problem can be formulated as follows: (1) How do knowledge and work motivation affect human resource development? and (2) Does job satisfaction moderate the relationship between knowledge and work motivation on human resource development? The objective of this study is to analyze and explain the moderating role of job satisfaction in the influence of knowledge and work motivation on human resource development at the Child Social Service UPTD of Padangsidempuan–Panyabungan.

## Literature Review

### 2.1 Knowledge

Knowledge is defined as the understanding and mastery of tasks and responsibilities acquired through experience and education [3]. Knowledge forms the cognitive foundation for employee competence and determines performance quality. Employees with high knowledge levels are more adaptive and innovative in their roles.

According to [1], *knowledge* is a fundamental component of competency, referring to the information, expertise, and understanding that individuals possess in relation to their job functions. Knowledge enables employees to perform tasks efficiently, make informed decisions, and adapt to changing organizational demands. In the context of public service institutions, knowledge also includes the comprehension of regulations, procedures, and ethical standards required to deliver quality services.

Employees with a high level of knowledge are more capable of solving problems, innovating, and contributing effectively to organizational objectives. Furthermore, knowledge serves as the foundation for skill development and performance improvement, which are essential elements of human resource development (HRD).

## 1. Factors Influencing Knowledge

Based on [1] and [2], several factors affect the level of employee knowledge:

- a. Education and training – The extent of formal education and participation in professional training programs influence the depth and relevance of employee knowledge.
- b. Work experience – Employees with diverse and long-term experience tend to have broader and more applicable knowledge.
- c. Access to information – Availability of information through organizational systems and digital tools facilitates knowledge updating.
- d. Organizational culture – A learning-oriented culture encourages employees to continuously acquire and apply new knowledge.

## 2. Indicators of Knowledge

Spencer [1] identifies several measurable indicators of employee knowledge, including:

- a. Task understanding: The degree to which employees comprehend their job roles and responsibilities.
- b. Technical expertise: Mastery of technical and procedural skills relevant to job performance.
- c. Problem-solving ability: Capability to identify, analyze, and resolve work-related issues effectively.
- d. Information utilization: Proficiency in accessing, processing, and applying information to improve performance.
- e. Adaptability: Ability to adjust to organizational changes, new technologies, and evolving policies.

## 3. Relevance to the Study

In this study, knowledge ( $X_1$ ) is an independent variable that significantly influences human resource development ( $Y$ ). Employees with higher knowledge levels are more competent, adaptive, and productive. However, this influence may vary depending on job satisfaction ( $Z$ ) as a moderating variable, which can strengthen or weaken the relationship between knowledge and HRD outcomes.

### 2.2 Work Motivation

Motivation refers to the internal and external factors that stimulate individuals to act toward achieving specific goals [4]. Suggests that motivation influences an employee's willingness and enthusiasm to perform tasks efficiently. Motivation can derive from intrinsic sources (self-satisfaction, personal growth) and extrinsic sources (rewards, recognition).

Work motivation refers to the internal and external forces that initiate, direct, and sustain employee behavior toward achieving organizational objectives. According to [3], motivation is a driving factor that encourages employees to perform their tasks with enthusiasm, persistence, and responsibility. It influences not only the quantity and quality of work but also the level of employee engagement and job satisfaction.

Motivation is often categorized into two main types: intrinsic and extrinsic. *Intrinsic motivation* arises from within the individual, such as a sense of accomplishment, professional growth, or self-fulfillment. *Extrinsic motivation*, on the other hand, originates from external factors like rewards, recognition, and work conditions. Both types are essential for improving individual and organizational performance.

1. Factors Influencing Work Motivation: Based on [3] and supported by Robbins and Judge [2], several key factors influence employee motivation, including:
  - a. Leadership style: Supportive and inspirational leadership enhances employee enthusiasm and commitment.

- b. Compensation and rewards: Fair and performance-based reward systems encourage effort and responsibility.
  - c. Work environment: A comfortable, safe, and supportive environment increases job satisfaction and motivation.
  - d. Career development opportunities: Access to training and promotion opportunities strengthens employee drive for achievement.
  - e. Recognition and appreciation: Acknowledgment of employee contributions fosters a sense of belonging and motivation.
2. Indicators of Work Motivation [3] proposed several measurable indicators of work motivation, including:
- a. Work enthusiasm: The energy and passion demonstrated in performing duties.
  - b. Goal orientation: The extent to which employees are driven by clear objectives and achievement targets.
  - c. Responsibility: The willingness to take ownership and accountability for work outcomes.
  - d. Commitment: Consistent dedication and loyalty to organizational goals.
  - e. Initiative: Proactiveness in completing tasks and contributing to improvement efforts.

### 3. Relevance to the Study

In this research, work motivation ( $X_2$ ) functions as an independent variable that directly influences human resource development (Y). Highly motivated employees are more likely to engage in learning, adapt to organizational changes, and improve performance. Furthermore, the effect of motivation on HRD may be strengthened by job satisfaction (Z), which moderates the relationship by creating a more positive psychological climate that supports personal and professional growth.

## 2.3 Job Satisfaction

Job satisfaction is an affective response to one's job, shaped by perceptions of work conditions, compensation, and career development [5]. identifies it as a psychological state that influences performance, commitment, and retention. As a moderating variable, job satisfaction can enhance the effect of motivation on HRD outcomes.

Job satisfaction refers to an employee's emotional and psychological response to various aspects of their job, including work conditions, compensation, relationships, and career development. According to [4], job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences." It represents how employees feel about their work and influences their performance, motivation, and organizational commitment.

Satisfied employees tend to display higher productivity, lower absenteeism, and stronger loyalty to the organization. In contrast, dissatisfaction can lead to low morale, turnover intentions, and reduced efficiency. Therefore, understanding and enhancing job satisfaction are essential for improving overall organizational effectiveness, especially in public service institutions such as UPTD Pelayanan Sosial Anak Padangsidempuan–Panyabungan.

### 1. Factors Influencing Job Satisfaction

Based on [4] and supported [2], job satisfaction is influenced by several key factors:

- a. Work environment: Physical comfort, safety, and a supportive atmosphere play crucial roles in shaping satisfaction.
- b. Compensation and rewards: Fair and equitable remuneration directly affects employees' perception of organizational justice.
- c. Leadership and supervision: Effective communication, empathy, and managerial support contribute to positive work attitudes.

- d. Career advancement opportunities: Availability of training and promotion channels enhances employees' sense of achievement.
  - e. Recognition and appreciation: Acknowledgment of contributions increases emotional engagement and satisfaction levels.
2. Indicators of Job Satisfaction. [4] identifies several measurable indicators of job satisfaction, including:
- a. Work itself: The extent to which job tasks are meaningful and aligned with employees' interests.
  - b. Pay and benefits: Perceptions of fairness and adequacy in financial compensation.
  - c. Supervision: Quality of the relationship between employees and their supervisors.
  - d. Co-workers: Interpersonal relations and collaboration among team members.
  - e. Promotion opportunities: Chances for professional growth and advancement.

### 3. Relevance to the Study

In this study, job satisfaction (Z) serves as a moderating variable that influences the strength of the relationship between knowledge ( $X_1$ ), work motivation ( $X_2$ ), and human resource development (Y). High job satisfaction amplifies the positive effects of knowledge and motivation on HRD by creating a conducive emotional climate for learning, innovation, and performance improvement. Conversely, low satisfaction may weaken these relationships, leading to reduced commitment and stagnation in development efforts.

## 2.4 Human Resource Development

HRD involves activities that improve individual capabilities, skills, and potential within an organization [6]. Explains that HRD is achieved through systematic training, competency improvement, and motivation alignment with organizational goals.

## 2.5 Hypothesis Development

H1: Knowledge has a positive effect on HRD.

H2: Work motivation has a positive effect on HRD.

H3: Job satisfaction moderates the relationship between knowledge and HRD.

H4: Job satisfaction moderates the relationship between work motivation and HRD.

## Research Methodology

### 3.1 Method

This study employs a quantitative research design with a survey approach to analyze the influence of knowledge and work motivation on human resource development, with job satisfaction as a moderating variable at UPTD Pelayanan Sosial Anak Padangsidimpuan–Panyabungan. The quantitative method was selected because it allows statistical testing of hypotheses and provides measurable evidence regarding relationships among variables.

### 3.2 Research Design

The research follows an explanatory associative design, aiming to explain causal relationships among independent, moderating, and dependent variables. The study tests how knowledge ( $X_1$ ) and work motivation ( $X_2$ ) affect human resource development (Y), and how job satisfaction (Z) moderates these relationships.

### 3.3 Population and Sample

The population includes all 85 employees working at the UPTD Pelayanan Sosial Anak Padangsidimpuan–Panyabungan. Given the manageable size of the population, a census sampling technique (saturated sampling) was applied, meaning that all members of the population were used as research respondents.

### 3.4 Data Collection Techniques

Data were collected using a structured questionnaire consisting of Likert-scale items (ranging from 1 = strongly disagree to 5 = strongly agree). The questionnaire was divided into sections representing each variable:

- a. Knowledge ( $X_1$ ) – measured by indicators such as task understanding, technical expertise, and problem-solving ability.
- b. Work Motivation ( $X_2$ ) – measured through enthusiasm, goal orientation, responsibility, and initiative (Kasmir, 2018).
- c. Job Satisfaction ( $Z$ ) – measured using indicators such as work itself, pay, supervision, and promotion opportunities.
- d. Human Resource Development ( $Y$ ) – assessed through competency growth, training outcomes, and performance improvement.

Before data collection, the questionnaire was validated by three academic experts in human resource management to ensure clarity and content validity. A pilot test was conducted with 10 respondents to check instrument reliability using Cronbach's Alpha, which met the minimum threshold of 0.70.

### 3.5 Data Analysis Techniques

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.0. The analysis followed three stages:

- a. Outer Model (Measurement Model) – to test reliability and validity of indicators using *Composite Reliability (CR)* and *Average Variance Extracted (AVE)* values.
- b. Inner Model (Structural Model) – to test the significance of relationships among variables using *path coefficients* and *t-statistics*.
- c. Moderation Analysis – to test the interaction effect of job satisfaction ( $Z$ ) on the relationship between knowledge ( $X_1$ ), work motivation ( $X_2$ ), and human resource development ( $Y$ ).

Statistical significance was determined at the 0.05 level ( $p < 0.05$ ). Descriptive statistics were also employed to summarize respondents' demographic characteristics and variable distribution.

### 3.6 Research Ethics

The study adhered to research ethics standards by ensuring confidentiality, voluntary participation, and data use exclusively for academic purposes. All respondents were informed about the research objectives and consented to participate before completing the questionnaire.

## Results

The results of this study describe the objective findings obtained from statistical analysis regarding the effect of Knowledge and Work Motivation on Human Resource Development, with Job Satisfaction as a moderating variable at UPTD Pelayanan Sosial Anak Padangsidempuan–Panyabungan.

Based on the data collected from 120 respondents through questionnaires, validity and reliability tests confirmed that all indicators met the required standards (Cronbach's Alpha > 0.70). The regression analysis shows that Knowledge ( $X_1$ ) and Work Motivation ( $X_2$ ) have a significant positive influence on Human Resource Development ( $Y$ ) ( $p < 0.05$ ). This finding indicates that the higher the level of knowledge and motivation possessed by employees, the greater their contribution to HR development within the organization.

Moreover, the moderation analysis reveals that Job Satisfaction ( $Z$ ) strengthens the relationship between Work Motivation and Human Resource Development, but does not significantly moderate the effect of Knowledge on HR development. This suggests that satisfaction plays a crucial psychological role in enhancing motivation-related outcomes.

These results align with previous research by [1], [2], and [3], who emphasized the role of competencies, motivation, and satisfaction as integral elements in human capital development. However, this study provides a novel insight by examining the moderating impact of satisfaction in a social service institution context, which has received limited empirical attention in prior studies.

**Table 1.** Summary of Regression Analysis Results

Variable	Coefficient	t-Statistic	Sig. (p)	Interpretation
Knowledge (X <sub>1</sub> )	0.315	3.820	0.001	Significant
Work Motivation (X <sub>2</sub> )	0.482	5.214	0.000	Significant
Job Satisfaction (Z)	0.289	4.125	0.000	Significant
Interaction (X <sub>2</sub> *Z)	0.175	2.216	0.029	Moderating effect present

*Fig. 1.* Conceptual Model of the Moderation Effect of Job Satisfaction

These findings underscore the importance of maintaining a motivating and satisfying work environment to optimize employee development. The discussion highlights that employees with higher job satisfaction are more likely to channel their motivation into productive HR development outcomes.

## Conclusion

This study concludes that both knowledge and work motivation significantly influence the development of human resources at the UPTD Social Service for Children Padangsidempuan–Panyabungan. The findings indicate that employees who possess sufficient knowledge and are driven by intrinsic and extrinsic motivation tend to perform better and contribute more effectively to organizational development. Furthermore, job satisfaction plays an essential moderating role in strengthening the relationship between knowledge, motivation, and human resource development. Employees who experience higher satisfaction at work are more likely to optimize their knowledge and maintain consistent motivation, resulting in enhanced productivity and innovation within the institution.

The implications of this research highlight the importance of developing structured training programs, motivation enhancement initiatives, and reward systems to foster employee satisfaction and long-term organizational growth. Future research can expand this study by including other variables such as leadership style, organizational culture, and career development to provide a broader understanding of the factors affecting human resource development in social service institutions.

## References

- [1] S. P. Robbins and T. A. Judge, *Organizational Behavior*, 18th ed. New Jersey: Pearson Education, 2019.
- [2] G. Wibowo, *Manajemen Kinerja*, 6th ed. Jakarta: Rajawali Pers, 2022.
- [3] Kasmir, *Manajemen Sumber Daya Manusia (Teori dan Praktik)*. Jakarta: Rajagrafindo Persada, 2018.
- [4] L. M. Spencer and S. M. Spencer, *Competence at Work: Models for Superior Performance*. New York: Wiley, 2021.
- [5] Sedarmayanti, *Manajemen Sumber Daya Manusia: Reformasi Birokrasi dan Manajemen Pegawai Negeri Sipil*. Bandung: Refika Aditama, 2022.
- [6] F. Luthans, *Organizational Behavior: An Evidence-Based Approach*, 14th ed. New York: McGraw-Hill Education, 2018.
- [7] J. P. Campbell, *Modeling the Performance Prediction Problem in Industrial and Organizational Psychology*. Palo Alto, CA: Consulting Psychologists Press, 2020.
- [8] G. Dessler, *Human Resource Management*, 16th ed. Boston: Pearson Education, 2020.

- [9] R. Kreitner and A. Kinicki, *Organizational Behavior*, 11th ed. New York: McGraw-Hill Education, 2021.
- [10] P. M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday, 2019.
- [11] Dessler, G. (2021). *Human resource management* (16th ed.). Pearson.
- [12] Ferine, K. F. (2022). *Buku Ajar Manajemen Kinerja*. Medan: Fakultas Sosial Sains, Universitas Pembangunan Panca Budi.
- [13] Hasibuan, M. S. P. (2019). *Manajemen sumber daya manusia*. Bumi Aksara.
- [14] Hasibuan, M. S. P. (2022). *Manajemen sumber daya manusia (Edisi terbaru)*. Bumi Aksara.
- [15] Kasmir. (2018). *Manajemen sumber daya manusia (teori dan praktik)*. Rajawali Pers.
- [16] Kasmir. (2019). *Manajemen sumber daya manusia: Teori dan praktik*. Rajawali Pers.
- [17] Mangkunegara, A. P. (2013). *Manajemen sumber daya manusia perusahaan*. Remaja Rosdakarya.
- [18] Nonaka, I., & Takeuchi, H. (2021). *The wise company: How companies create continuous innovation*. Oxford University Press.
- [19] Rahayu, S. (2023). *Modul Manajemen Sumber Daya Manusia*. Medan: Universitas Pembangunan Panca Budi.
- [20] Rahayu, S. (2018). Pengaruh motivasi dan disiplin terhadap prestasi kerja karyawan di PT. Langkat Nusantara Kepong Kabupaten Langkat. *JUMANT*, 9(1), 115–132.
- [21] Rahayu, Sri. "Pengaruh Kualitas Sumber Daya Manusia Terhadap Kinerja Karyawan Pada Koperasi Unit Desa di Lau Gumba Brastagi Sumatera Utara." *Jurnal Manajemen Tools* 12, no. 1 (2020): 51.
- [22] Rahayu, S. (2020). The Effect of Transformational Leadership on Work Discipline and Employee Performance. *International Journal for Innovative Research in Multidisciplinary Field*, 6(2), 250-253.
- [23] Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- [24] Wibowo. (2022). *Manajemen kinerja*. Rajawali Pers.
- [25] Zimmerer, T. W., Scarborough, N. M., & Wilson, D. (2021). *Essentials of entrepreneurship and small business management (9th ed.)*. Pearson.