



Determination of Employee Job Satisfaction and Productivity of Port Loading and Unloading Workers: A Literature Review

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Abstract: The purpose of this study is to develop hypotheses related to factors that affect the productivity of loading and unloading workers, especially in transportation sector companies. The approach used in this literature review study is descriptive qualitative. The data collection technique used was a literature study or review of relevant previous articles published between 2020 and 2025. The technique used in this literature review was comparative analysis. The data used in this descriptive qualitative approach comes from previous studies relevant to this study and sourced from academic online media such as Thomson Reuters Journal, Springer, Taylor & Francis, Scopus Q2-Q4 Emerald, Elsevier, Sage, Web of Science, Sinta 2-5 Journal, DOAJ, EBSCO, Google Scholar, Copernicus, and digital reference books. The results of this literature review are: 1) Ability influences the job satisfaction of loading and unloading workers; 2) Competence influences the job satisfaction of loading and unloading workers; 3) Leadership influences the job satisfaction of loading and unloading workers; 4) Ability influences the productivity of loading and unloading workers; 5) Competence affects the productivity of loading and unloading workers; 6) Leadership affects the productivity of loading and unloading workers; 7) Job satisfaction affects the productivity of loading and unloading workers; 8) Ability affects productivity through the job satisfaction of loading and unloading workers; 9) Competence affects productivity through the job satisfaction of loading and unloading workers; 10) Leadership affects productivity through the job satisfaction of loading and unloading workers.

Keywords: Ability; Competence; Job Satisfaction; Leadership; Productivity.

1. BACKGROUND

The transportation sector is the backbone of every country's economy, especially archipelagic countries (Ali et al., 2024) . The smooth flow of goods and national logistics is highly dependent on operational efficiency at every transportation hub, whether land, sea, or air (Primadi et al., 2024).

In this sector, *loading and unloading* activities are crucial in determining *dwelling time* and overall logistics cost efficiency. Loading and unloading workers (TKBM) play a key role in ensuring that every shipment is managed properly, safely, and on time (Gultom et al., 2022).

However, despite the strategic role of TKBM, various transportation companies in developing countries, including Indonesia, still face significant challenges in the form of low work productivity. This productivity problem often stems from suboptimal human resources. Field observations reveal performance fluctuations influenced by workers' physical and technical limitations in handling modern equipment, as well as discipline issues that impact operational target achievement (Heryanto et al., 2025).

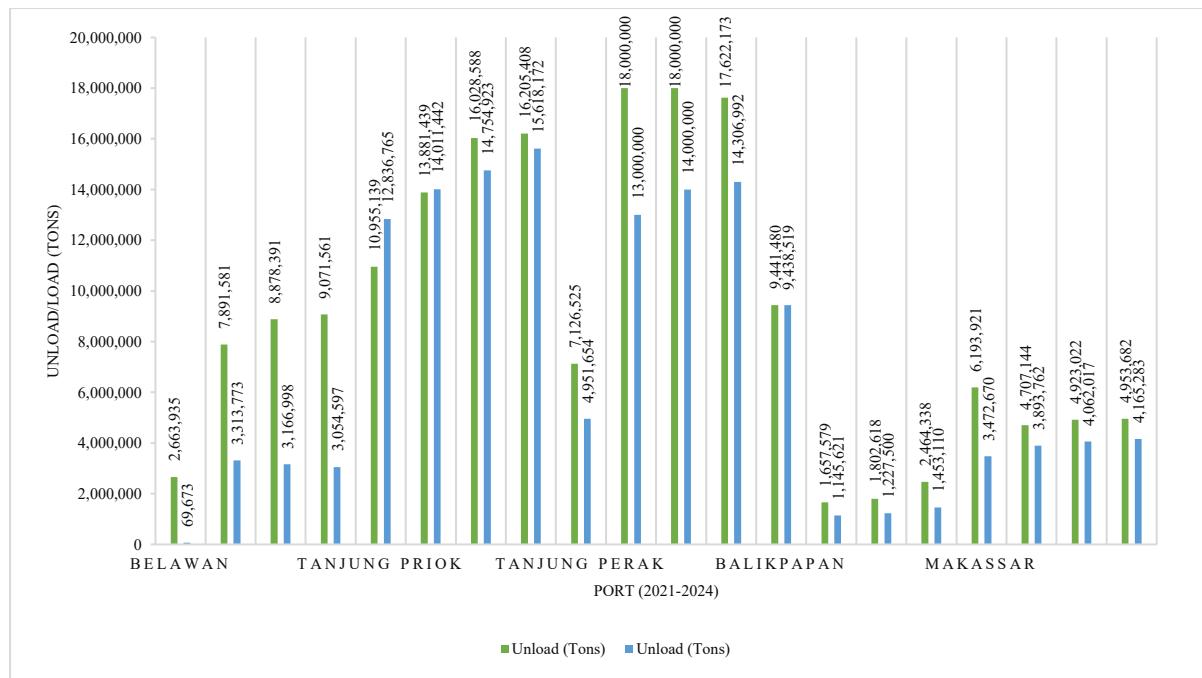


Figure 1. Data on Inter-Island Navy Cargo Loading and Unloading at Major Ports (Tons) in 2021-2024.

Source: (Central Statistics)

Figure 1 shows data on inter-island naval cargo loading and unloading at Indonesia's main ports during the period 2021–2024. In general, the data shows fluctuations in loading and unloading volumes from year to year, but this has not been accompanied by a significant increase in productivity. The increase in volume tends to be moderate and relatively stagnant, indicating that the growth in loading and unloading activities has not been able to optimally reflect improvements in labor performance.

This condition indicates that the increase in the volume of goods handled has not been fully offset by the ability of loading and unloading workers to improve work efficiency and effectiveness (Suryantoro et al., 2020). In the context of productivity, improved performance should be reflected in the ability of workers to produce greater output with the same or even lower use of resources. However, the pattern in Figure 1 suggests that the productivity of loading and unloading workers is still at a relatively stable level, without any significant increase in performance.

The insignificant increase in productivity may be influenced by various human resource factors, such as limited workforce abilities, competency gaps, and operational leadership patterns that are not yet fully capable of driving optimal performance. In addition, suboptimal job

satisfaction also has the potential to weaken the motivation, discipline, and commitment of the workforce in achieving higher operational targets (Dewa et al., 2021).

Thus, Figure 1 highlights the existence of structural productivity problems in the loading and unloading sector, where increased operational activity does not automatically result in increased labor productivity. This finding provides a strong empirical basis for this study to further examine the role of ability, competence, and leadership through job satisfaction as determining factors that could potentially explain why labor productivity in loading and unloading has not experienced a significant increase in transportation companies in Indonesia.

Based on the above background, the research question for this literature review is: Do ability, competence, and leadership affect productivity and job satisfaction among loading and unloading workers, both directly and indirectly through job satisfaction?

2. THEORETICAL REVIEW

Based on the background and research question above, the theoretical review of this study is as follows:

Productivity

Productivity is a reflection of the efficiency and effectiveness of resource use in producing a given output. Technically, productivity is often defined as the ratio between the results achieved (*output*) and the total resources used (*input*), such as labor, capital, time, and raw materials. High productivity indicates that the organization is able to achieve its strategic objectives with minimal waste, while maintaining the quality standards expected by stakeholders (Susanto, Supardi, et al., 2024).

Indicators of productivity include: 1) Efficiency: Measures the extent to which resources (time, raw materials, costs) are used optimally. The less waste there is in producing one unit of output, the more efficient the productivity; 2) Effectiveness: Focuses on the achievement of targets or objectives. This indicator examines whether the work results are in accordance with the quality and quantity that has been set at the beginning; 3) Work Quality: Assesses whether the *output* produced meets applicable standards. High productivity is not only about quantity, but also minimal errors (R. Saputra et al., 2023).

Productivity variables are relevant to previous studies conducted by: (Triswanto & Yunita, 2022), (Pantouw et al., 2022), (Khalik et al., 2021).

Job Satisfaction

Job satisfaction refers to the pleasant or unpleasant emotional state in which employees view their work. It is the result of employees' perceptions of how well their jobs provide things

they consider important, such as fair pay, safe working conditions, harmonious coworker relationships, and opportunities for growth. The impact of high job satisfaction is very significant for organizations, as it often correlates positively with employee motivation, discipline, and mental health, and correlates negatively with absenteeism and employee *turnover* (T. Putri & Warsindah, 2021).

Indicators of job satisfaction include: 1) The Work Itself: The extent to which the tasks assigned provide interesting challenges, learning opportunities, and meaningful responsibilities for employees; 2) Compensation and Rewards: Employees' perceptions of the fairness of the payroll and benefits system they receive compared to their workload and contributions; 3) Interpersonal Relationships: The quality of support received from superiors and the harmony of relationships with coworkers, which create a supportive work environment (Yandi & Bimaruci Hazrati Havidz, 2022).

The job satisfaction variables are relevant to previous studies conducted by: (F. Saputra & Mahaputra, 2022), (Serang et al., 2023), (Situmorang & Wardhani, 2022).

Ability

Ability is an individual's current capacity to perform various tasks in a job. In general, ability is divided into two broad categories: intellectual ability and physical ability. Intellectual ability includes mental capacities such as numerical reasoning, verbal comprehension, perception speed, and spatial visualization, which are crucial for complex managerial or technical roles. On the other hand, physical abilities involve the muscle strength, flexibility, and stamina required for manual work. Unlike skills that can be learned in a short period of time, abilities are often considered to be a person's basic potential, either due to natural talent or the result of long-term learning (Mate, 2023).

Indicators of ability include: 1) Intellectual Ability: An individual's mental capacity to perform activities such as logical reasoning, quick problem solving, and verbal and numerical comprehension; 2) Physical Ability: An individual's endurance, muscle strength, agility, and stamina in performing tasks that require intense motor or physical activity; 3) Technical Ability: Mastery of procedures, methods, and the use of special tools needed to perform certain roles effectively (Hasan et al., 2023).

The ability variable is relevant to previous studies conducted by: (Febrianna & Solovida, 2020), (Li et al., 2022), (Dabuke et al., 2023).

Competencies

Competency is an integrated combination of knowledge, skills, and attitudes that are manifested in the form of observable and measurable work behavior. A competent employee

not only has a diploma or certificate, but is also able to demonstrate effectiveness in challenging situations and consistently meet established standards. Organizations use competency variables to map training needs, career development, and succession planning. By having clear competency standards, companies can align individual behavior with organizational values and strategic goals more precisely (Thayeb & Santosa, 2021).

The indicators included in competencies are: 1) Knowledge: The information and theoretical understanding that a person has in a particular field. This is the intellectual foundation for a person to know "what" to do; 2) Skills: The ability to put that knowledge into practice. This relates to technical proficiency and dexterity in completing tasks; 3) Attitude and Character: An individual's mental and personality tendencies in facing work, such as integrity, work ethic, and motivation to achieve, which encourage the maximum use of knowledge and skills (S. A. Rahayu et al., 2023).

The competency variables are relevant to previous studies conducted by: (Sabuhari et al., 2020), (Tsendsuren et al., 2021), (Susanto, Sawitri, et al., 2024).

Leadership

Leadership is a social process of influencing, directing, and motivating others to work together to achieve predetermined common goals. Unlike management, which focuses more on systems and procedures, leadership emphasizes vision, inspiration, and interpersonal relationships. An effective leader is able to create meaningful change by building trust, communicating a clear direction, and empowering team members. Leadership is not just a formal position in an organizational structure, but the ability to move the hearts and minds of others without coercion. Great leaders focus not only on the end result, but also on developing the potential of their followers and creating a positive organizational culture. In the dynamic world of business, adaptive leadership is the key to the resilience and sustainability of an institution (Buana & Supartha, 2023).

The indicators of leadership include: 1) Vision and Direction Setting: The ability of leaders to formulate clear future goals and communicate them to team members so that they have a common understanding; 2) Decision Making: The courage and accuracy of leaders in choosing solutions or strategic steps in the midst of uncertainty or conflict; 3) Motivational Ability: The extent to which a leader is able to provide encouragement, inspiration, and empowerment to subordinates so that they work beyond their personal interests for the benefit of the organization (Suliman et al., 2023).

Leadership variables are relevant to previous studies conducted by: (Fachrudi et al., 2021), (Fauziah et al., 2023).

Previous Research

Table 1. Previous Research.

No	Author (Year)	Research Results	Similarities With This Article	Differences With This Article
1.	(Simanjorang, 2020)	Work Ability and Work Experience Variables Affect Employee Job Satisfaction at PT Prudential Life Assurance Rantauprapat	This article shares similarities in examining the Ability variable as an independent variable and examining the Job Satisfaction variable as a dependent variable.	The difference from previous studies lies in the research object, which is conducted at PT Prudential Life Assurance Rantauprapat
2.	(Malau et al., 2019)	Competency and Compensation Variables Affect the Job Satisfaction of PT Amas Isindo Utama Ship Crew	This article has similarities in examining the Competence variable as an independent variable and examining the Job Satisfaction variable as a dependent variable.	The difference lies in the other independent variables studied, including the Compensation variable.
3.	(R. Rahayu, 2023)	Leadership and Work Facilities Variables Influence Employee Job Satisfaction at PT Angkutan Lautan	This article has similarities in examining the Leadership variable as an independent variable and examining the Job Satisfaction variable as a dependent variable	The difference lies in the other independent variables studied, including the Work Facilities variable
4.	(Alfian Zein Fauzi & Sumarzen Marzuki, 2023)	The variables of Ability and Human Resource Quality affect the Work Productivity of Loading/Unloading Workers at the Surabaya Container Terminal	This article has similarities in examining the Ability variable as an independent variable and examining the Productivity variable	-The research was conducted at PT Angkutan Lautan -The difference lies in the other independent variables studied, including the Human Resource Quality variable

			as a dependent variable	
5.	(Dewa et al., 2021)	The variables of Loading and Unloading Equipment, Waiting Time, and Competence affect the Productivity of TKBM at the Port of Cirebon PT. Bira Bumi Persada	This article has similarities in examining the Competence variable as an independent variable and examining the Productivity variable as a dependent variable	-The research was conducted at the Surabaya Container Terminal -Differences in other independent variables include the variables of Loading and Unloading Equipment and Waiting Time -The research was conducted at the Port of Cirebon PT. Bira Bumi Persada
6.	(Suryantoro et al., 2020)	Leadership and Field Effectiveness Variables Affect the Productivity of Container Loading and Unloading Workers	This article has similarities in examining the Leadership variable as an independent variable and examining the Productivity variable as a dependent variable	Differences in other independent variables include the Field Effectiveness variable
7.	(Mikael Kevin & Gugus Wijonarko, 2024)	Job Satisfaction and Work Quality Variables on Loading and Unloading Productivity at PT Terminal Petikemas Surabaya	This article has similarities in examining the Job Satisfaction variable as an independent variable and examining the Productivity variable as a dependent variable.	-Differences in other independent variables, including the Work Quality variable -The research was conducted at PT Terminal Petikemas Surabaya
8.	(Ariskiya et al., 2024)	The variables of Work Culture and Ability affect Productivity through Job Satisfaction at PT Jatim Autocomp Indonesia	This article has similarities in examining the Ability variable as an independent variable, the Productivity	-Differences in other independent variables, including the Work Culture variable

		variable as a dependent variable, and the Job Satisfaction variable as an intervening variable	-The research was conducted at PT Jatim Autocomp Indonesia
9. (Sari, 2021)	The variables of Competence and Individual Ability affect Productivity through Job Satisfaction of Loading and Unloading Workers at CV. Radja Motor Padang	This article has similarities in examining the Competence variable as the independent variable, the Productivity variable as the dependent variable, and the Job Satisfaction variable as the intervening variable	-The difference in other independent variables includes the Individual Ability variable -The research was conducted at CV. Radja Motor Padang
10. (Syamriati, 2022)	The variables of Leadership, Work Environment, and Compensation affect Productivity through Job Satisfaction at the Class II Railway Engineering Center in the Southern Sumatra Region	This article has similarities in examining the Leadership variable as the independent variable, the Productivity variable as the dependent variable, and the Job Satisfaction variable as the intervening variable	-The difference lies in the other independent variables, including the Work Environment and Compensation variables -The research was conducted at the Class II Railway Engineering Office in South Sumatra

3. RESEARCH METHOD

The approach used in this study is descriptive qualitative with a literature review design. The purpose of this approach is to explore and synthesize previous findings related to factors that affect the work productivity of loading and unloading workers in transportation companies in Indonesia, which include ability, competence, leadership, and job satisfaction. The research data was obtained from secondary sources in the form of international and national academic publications, such as Scopus, Web of Science, Springer, Taylor & Francis, Elsevier, Emerald (Q2–Q4), Sage, Thomson Reuters, DOAJ, EBSCO, Copernicus, Google Scholar, and Sinta 2–

5 journals. In addition to articles, additional sources such as digital books and policy documents were also used to enrich the analysis (Boulton, M. J., & Houghton, 2021).

Data collection procedures were carried out through literature searches using *keywords* such as productivity, job satisfaction, ability, competence, and leadership. Articles published within the last five years were included to ensure that the findings studied remained relevant. Selection was carried out by reading the title, abstract, and full text to ensure compliance with the inclusion criteria, while duplicate and irrelevant articles were excluded. Data analysis was carried out using comparative analysis, namely comparing and synthesizing findings between studies to find consistent patterns, differences, and research gaps. The credibility of the results was maintained through data triangulation, by comparing findings from various databases and types of publications and verifying the consistency of the results with frequently referenced literature (Vebrianto et al., 2020).

4. RESULTS AND DISCUSSION

Based on the problem formulation, literature review, and relevant previous studies above, the results and discussion of this study are as follows:

The Effect of Ability on the Job Satisfaction of Loading and Unloading Workers

Based on the literature review and several relevant previous studies, it can be concluded that ability affects the job satisfaction of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the job satisfaction of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to ability, which includes: 1) Intellectual ability: Management can improve intellectual ability through training in safety procedures, understanding quality standards, and problem-solving simulations; 2) Physical ability: Management can pay attention to this aspect through fitness programs, work schedules that allow for adequate rest, and the provision of ergonomic tools such as forklifts, hand pallets, or work pads; 3) Technical ability: Management can implement periodic technical training, competency certification, and skill evaluations to ensure that workers have the relevant skills.

If management or leaders of transportation companies in Indonesia can implement these three abilities, it will have an impact on job satisfaction, which includes: 1) The job itself: When workers have mature *abilities* (intellectual, physical, technical), they tend to feel comfortable and competent in carrying out their daily activities; 2) Compensation and rewards: Good ability is often associated with high performance and consistent productivity.

Organizations that reward these abilities through fair compensation systems such as productivity incentives, performance bonuses, and competency allowances will reinforce employees' perception that their abilities are valued materially; 3) Interpersonal relationships: Management that supports skill development will create an open and collaborative work environment, thereby strengthening healthy interpersonal relationships.

The results of this study are in line with previous research conducted by (Simanjorang, 2020), which states that there is an influence between ability and job satisfaction among loading and unloading workers in the transportation sector in Indonesia.

The Influence of Competence on the Job Satisfaction of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that competency influences the job satisfaction of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the job satisfaction of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to competencies, which include: 1) Knowledge: Management needs to facilitate systematic learning and socialization programs so that workers understand the context of their work comprehensively; 2) Skills: Management needs to provide regular technical training, work-based simulation learning, and competency certification to ensure that each worker has the skills relevant to their job; 3) Attitude and character: Management needs to build a positive work culture by setting a good leadership example, rewarding positive behavior, and fostering organizational values.

If management or leaders of transportation companies in Indonesia can implement these three competencies, it will have an impact on job satisfaction, which includes: 1) The job itself: Satisfaction with the job itself is a strong form of intrinsic reward for employees who feel competent in carrying out their duties; 2) Compensation and rewards: Rewards such as performance bonuses, competency awards, and incentives for technical skills signal that the organization values individual contributions. This increases job satisfaction because workers feel that what they earn is commensurate with their abilities and contributions; 3) Interpersonal relationships: Good relationships with coworkers and superiors increase comfort in the workplace, minimize conflict, and create a sense of togetherness that directly impacts employee job satisfaction.

The results of this study are in line with previous research conducted by (Malau et al., 2019), which states that there is an influence between competence and job satisfaction among loading and unloading workers in the transportation sector in Indonesia.

The Influence of Leadership on the Job Satisfaction of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that leadership affects the job satisfaction of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the job satisfaction of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to leadership, which includes: 1) Vision and direction setting: Management needs to ensure that the organization's vision is well communicated to loading and unloading workers, for example through regular meetings, information boards, and field briefing sessions; 2) Decision making: Decision making refers to the leader's ability to make quick, accurate, and fair decisions, especially in stressful or volatile conditions such as loading and unloading operations; 3) Motivational skills: A leader who is able to motivate understands the psychological and work needs of their subordinates, provides positive feedback, and gives rewards or recognition for work achievements.

If management or leaders of transportation companies in Indonesia can implement these three leadership qualities, it will have an impact on job satisfaction, including: 1) The work itself: When workers understand clear goals (through vision), feel involved and treated fairly in decision-making, and receive consistent motivation from their superiors, their perception of their work improves; 2) Compensation and rewards: Leadership plays an important role in explaining the criteria for compensation and ensuring that the reward system reflects fairness and recognition of the hard work of loading and unloading workers; 3) Interpersonal relationships: Leaders who are communicative, empathetic, and fair strengthen mutual respect within the team. When interpersonal relationships are well maintained, conflict levels decrease, and the work atmosphere becomes more conducive, all of which contribute to an increase in overall employee job satisfaction.

The results of this study are in line with previous research conducted by (R. Rahayu, 2023), which states that there is an influence between leadership and job satisfaction among loading and unloading workers in the transportation sector in Indonesia.

The Influence of Ability on the Work Productivity of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that ability affects the work productivity of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the work productivity of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or

pay attention to ability, which includes: 1) Intellectual ability: Transportation company management can improve intellectual ability through training in understanding SOPs (Standard Operating Procedures), visual communication related to workflows, and providing safety and operational procedure materials; 2) Physical ability: Management needs to pay attention to the physical condition of workers through fitness programs, task rotation, adequate rest schedules, and the provision of ergonomic tools such as forklifts, hand pallets, and other supporting equipment that minimize fatigue; 3) Technical ability: Management can provide technical training, competency certification, and repetitive work simulations to improve these skills.

If management or leaders of transportation companies in Indonesia can implement these three abilities, it will have an impact on work productivity, including: 1) Efficiency: Workers who understand procedures, have adequate physical stamina, and are proficient in work techniques will avoid wasting time and effort, thereby increasing overall operational efficiency; 2) Effectiveness: Effectiveness means achieving results in accordance with established standards and objectives. Workers with high ability will be able to perform tasks in accordance with operational guidelines and performance targets expected by the organization; 3) Work quality: Intellectual ability supports understanding of quality standards, physical ability helps maintain accuracy in activities that require concentration, and technical ability ensures that work is performed according to the best techniques.

The results of this study are in line with previous research conducted by (Alfian Zein Fauzi & Sumarzen Marzuki, 2023), which states that there is an influence between ability and the work productivity of loading and unloading workers in the transportation sector in Indonesia.

The Influence of Competence on the Work Productivity of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that competence affects the work productivity of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the work productivity of loading and unloading workers in the transportation sector in Indonesia, transportation company management can implement or pay attention to competencies, which include: 1) Knowledge: Management can improve knowledge through formal training, work orientation sessions, visual guides in operational areas, and structured communication regarding SOPs and company policies; 2) Skills: Management needs to schedule skills training, work simulations, and direct mentoring in the field to improve these technical abilities; 3) Attitude and character: Management can develop attitudes and character

through work culture coaching, rewards for positive behavior, monitoring of SOP compliance, and open internal communication.

If management or leaders of transportation companies in Indonesia can implement these three competencies, it will have an impact on work productivity, including: 1) Efficiency: Sufficient knowledge enables workers to understand the correct work steps, so that the loading and unloading process runs smoothly, minimizing wasted time and optimizing the use of resources, thereby increasing the company's operational efficiency; 2) Effectiveness: The combination of knowledge, skills, and good character ensures that each step of the work is done correctly, so that work objectives are achieved with a minimum level of error; 3) Work quality: Knowledge ensures that workers understand quality standards, skills minimize technical defects in the execution of tasks, and a professional attitude encourages attention to detail, all of which contribute to superior work quality.

The results of this study are in line with previous research conducted by (Dewa et al., 2021), which states that there is an influence between competence and the work productivity of loading and unloading workers in the transportation sector in Indonesia.

The Influence of Leadership on the Work Productivity of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that leadership affects the work productivity of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the work productivity of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to leadership, which includes: 1) Vision and direction setting: Leaders must ensure that every team member understands the vision through daily briefings, operational information boards, or direct open communication; 2) Decision making: Involve workers in the decision-making process, such as asking for their opinions when preparing work schedules or arranging loading and unloading areas, so that they feel valued and contribute; 3) Motivational skills: Good leaders understand individual needs and are able to adjust their motivational approaches, whether through incentives, public recognition, or inspirational guidance. High motivation makes workers more proactive, thorough, and high-performing.

If management or leaders of transportation companies in Indonesia can implement these three leadership principles, it will have an impact on work productivity, including: 1) Efficiency: Clear leadership in vision and direction means that workers no longer have to work by trial and error, thereby reducing wasted energy and working time; 2) Effectiveness: When

employees know what is expected of them through a clear vision, and when decisions are made with consideration of operational input, employees are able to execute tasks by following the correct guidelines; 3) Work quality: The right decisions ensure that rules and procedures are consistently enforced, while motivation creates a sense of responsibility for individual and team work results.

The results of this study are in line with previous research conducted by (Suryantoro et al., 2020), which states that there is an influence between leadership and the work productivity of loading and unloading workers in the transportation sector in Indonesia.

The Effect of Job Satisfaction on the Work Productivity of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that job satisfaction affects the work productivity of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the work productivity of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to job satisfaction, which includes: 1) The work itself: Management needs to design loading and unloading work in such a way that workers feel that the work is meaningful, well-structured, and provides them with the opportunity to use their skills; 2) Compensation and rewards: Management must ensure that the compensation structure is fair, competitive, and transparent. Compensation that is perceived as fair signals to employees that the organization values their contributions, which increases their sense of appreciation and motivation; 3) Interpersonal relationships: Management can improve interpersonal relationships through open communication, teamwork training, fair conflict resolution, and internal social activities that build team solidarity.

If management or leaders of transportation companies in Indonesia can implement these three aspects of job satisfaction, it will have an impact on work productivity, including: 1) Efficiency: Efficiency increases because workers are motivated to perform their duties in a more organized and consistent manner. 2) Effectiveness: Employees who are satisfied with their compensation, the work itself, and interpersonal relationships will tend to meet work targets better; 3) Work quality: Satisfied employees will be more thorough and results-oriented, resulting in fewer errors or defects in their output. Good work quality not only increases productivity but also meets the service standards expected by stakeholders.

The results of this study are in line with previous research conducted by (Mikael Kevin & Gugus Wijonarko, 2024), which states that there is an influence between job satisfaction and the productivity of loading and unloading workers in the transportation sector in Indonesia.

The Influence of Ability on Productivity through Job Satisfaction of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that ability influences productivity through job satisfaction among loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the work productivity of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to ability and job satisfaction, which include: 1) Intellectual ability: Management can improve this aspect through SOP training, work briefings, and operational visual media; 2) Physical ability: Management can support this through humane work schedules, adequate rest, health checks, and the provision of ergonomic work aids; 3) Technical ability: Management can provide technical training and competency certification related to loading and unloading techniques; 4) The work itself: Management provides task rotation, role clarity, and realistic work targets so that loading and unloading work is not perceived as a mere burden; 5) Compensation and rewards: Management provides fair, appropriate, and performance-based compensation, strengthening the relationship between workers' abilities, efforts, and results; 6) Interpersonal relationships: Company leaders create harmonious interpersonal relationships between workers, supervisors, and coworkers, creating a comfortable and supportive work environment.

If management or leaders of transportation companies in Indonesia can implement these six aspects of ability and job satisfaction, it will have an impact on work productivity, including: 1) Efficiency: Adequate ability enables workers to work correctly from the outset, while job satisfaction encourages focus and discipline. The combination of the two reduces waste of time, energy, and work errors, thereby increasing operational efficiency; 2) Effectiveness: Intellectual and technical abilities ensure that work is done correctly, while job satisfaction increases commitment to achieving work goals. As a result, loading and unloading targets can be achieved consistently; 3) Work quality: Ability supports technical accuracy and work safety, while job satisfaction encourages thoroughness and responsibility.

The results of this study are in line with previous research conducted by (Ariskiya et al., 2024), which states that there is an influence between ability and productivity through job satisfaction among loading and unloading workers in the transportation sector in Indonesia.

The Influence of Competence on Productivity through Job Satisfaction of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that competency affects productivity through the job satisfaction of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the work productivity of loading and unloading workers in transportation companies in Indonesia, transportation company management can implement or pay attention to competence and job satisfaction, which include: 1) Knowledge: Management needs to ensure that workers obtain adequate knowledge through training, regular briefings, and operational information media; 2) Skills: Company management can provide technical training, senior mentoring, and skills certification to improve worker competency; 3) Attitude and character: Management can instill these values through leadership by example, reward systems, and a positive work culture; 4) The work itself: Management can provide fair task distribution, role clarity, and realistic work targets to make workers feel that their work is meaningful and manageable, not just a physical burden; 5) Compensation and rewards: Management can provide fair, performance-based compensation, which is an important link between competence, effort, and the results received by workers; 6) Interpersonal relationships: Creating harmonious interpersonal relationships strengthens job satisfaction through a sense of togetherness and social support.

If management or leaders of transportation companies in Indonesia can implement these six aspects of competence and job satisfaction, it will have an impact on work productivity, including: 1) Efficiency: Competent and satisfied workers work correctly from the start, reducing errors and wasting time and energy. The work process becomes smoother and more resource-efficient; 2) Effectiveness: Competence ensures that work is done according to standards, while job satisfaction encourages commitment to achieving targets. Work results become more consistent and in line with the company's operational objectives; 3) Work quality: Knowledge and skills improve technical accuracy, while a positive attitude and job satisfaction encourage thoroughness and responsibility. This combination results in high-quality, safe, and error-free work.

The results of this study are in line with previous research conducted by (Sari, 2021), which states that there is an influence between competence and productivity through the job satisfaction of loading and unloading workers in the transportation sector in Indonesia.

The Influence of Leadership on Productivity through the Job Satisfaction of Loading and Unloading Workers

Based on a review of the literature and several relevant previous studies, it can be concluded that leadership affects productivity through the job satisfaction of loading and unloading workers in transportation companies in Indonesia.

To achieve and improve the productivity of loading and unloading workers in the transportation sector in Indonesia, transportation company management can implement or pay attention to leadership and job satisfaction, which includes: 1) Vision and direction setting: Management must ensure that operational leaders have a clear, realistic vision that is easily understood by loading and unloading workers; 2) Decision making: Management needs to encourage leaders to make decisions quickly, fairly, and based on field conditions, especially regarding task distribution, work schedules, and work safety; 3) Motivational skills: Leaders need to be equipped with the ability to motivate workers through positive communication, rewards for performance, and recognition of individual and team contributions. Management can design a simple but fair reward system, such as productivity-based incentives or non-financial appreciation; 4) The work itself: Management must ensure that loading and unloading work is designed to be clear, safe, and in line with the capabilities of the workforce; 5) Compensation and rewards: Management needs to implement a compensation system that is fair, competitive, and commensurate with the workload and risks of loading and unloading work; 6) Interpersonal relationships: Management must encourage the creation of harmonious working relationships through open communication, teamwork, and fair conflict resolution.

If management or leaders of transportation companies in Indonesia can implement these six aspects of leadership and job satisfaction, it will have an impact on work productivity, including: 1) Efficiency: Where efficiency is created because workers work according to procedures with minimal waste of time and energy; 2) Effectiveness: Can be achieved because work targets are achieved according to set standards and schedules; 3) Work quality: Because work is done more carefully, safely, and responsibly.

The results of this study are in line with previous studies conducted by (Syamriati, 2022), which state that there is an influence between leadership and productivity through the job satisfaction of loading and unloading workers in the transportation sector in Indonesia.

Conceptual Framework

Based on the problem formulation, relevant previous research, and the results and discussion of the above research, among others:

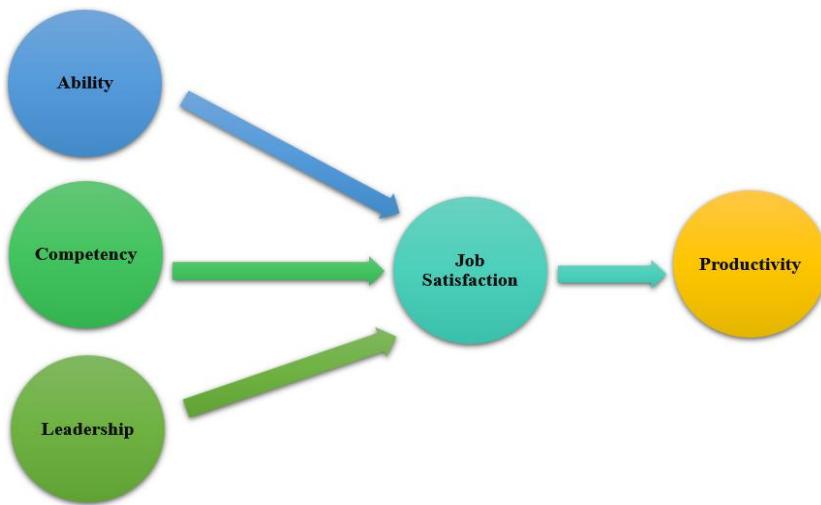


Figure 2. Conceptual Framework.

Based on Figure 2 above, ability, competence, and leadership influence productivity through job satisfaction among loading and unloading workers in the transportation sector in Indonesia. In addition to the above independent variables that influence the dependent variable (productivity), there are other variables that influence productivity in the transportation sector, including:

- a) Career Development: (Susanto, Soehaditama, et al., 2023), (G. A. M. Putri et al., 2023), (Susanto, Sawitri, et al., 2023), (F. Saputra et al., 2024).
- b) Work Environment: (Susanto, Simarmata, et al., 2024), (F. Saputra et al., 2023), (Hasan et al., 2023), (Maylida & Soemadi, 2025).
- c) Work Motivation: (Ali et al., 2022), (F. Saputra, 2021), (Siagian et al., 2023), (Rachman et al., 2025).

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the research question, results, and discussion above, the conclusion of this study on the subject of the air transportation sector company is:

- a. Ability influences the job satisfaction of loading and unloading workers, indicating that adequate intellectual, physical, and technical abilities make workers feel more capable, comfortable, and confident in performing their jobs.
- b. Competence affects the job satisfaction of loading and unloading workers, because mastery of knowledge, skills, and a good work attitude increase the perception of meaningfulness and appreciation for work.

- c. Leadership affects the job satisfaction of loading and unloading workers, indicating that a clear vision, fair decisions, and the ability to motivate leaders create a more conducive and supportive work environment.
- d. Ability influences the productivity of loading and unloading workers, as good abilities enable workers to work more efficiently, effectively, and in accordance with operational quality standards.
- e. Competence affects the productivity of loading and unloading workers, confirming that a combination of knowledge, skills, and professional attitudes encourages optimal work performance.
- f. Leadership affects the productivity of loading and unloading workers, as effective leadership is able to direct, coordinate, and motivate workers to achieve operational targets.
- g. Job satisfaction affects the productivity of loading and unloading workers, which shows that workers who feel satisfied tend to work more disciplined, focused, and responsible.
- h. Ability influences productivity through the job satisfaction of loading and unloading workers, which confirms that worker ability not only has a direct impact on performance but also through improved psychological working conditions.
- i. Competence affects productivity through the job satisfaction of loading and unloading workers, indicating that good competence increases job satisfaction, which in turn strengthens productivity.
- j. Leadership affects productivity through the job satisfaction of loading and unloading workers, which shows that effective leadership creates job satisfaction, which is an important mechanism in increasing worker productivity.

The managerial implications of this study indicate that transportation company management needs to prioritize holistic human resource development by improving ability through intellectual, technical, and physical training, and strengthening competency through work standards and certification.

This study contributes theoretically by enriching the human resource management literature, particularly in the context of loading and unloading workers, through testing the role of ability, competence, and leadership on productivity with job satisfaction as a mediating variable.

This study has several limitations, including the use of a literature review approach that does not involve direct empirical testing in the field and limitations in the publication period reviewed.

Recommendations

Further research is recommended to use a quantitative or mixed methods approach with primary data collection on cargo handling workers in various ports, testing the model empirically using SEM or PLS.

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