

UDC: 331.5:658.7

DOI: <https://doi.org/10.30546/2521-6341.2025.01.031>

THE PRACTICAL SITUATION OF EMPLOYEES IN THE LOGISTICS SECTOR: SOME EVIDENCE-BASED PERSPECTIVES FROM THE LITERATURE

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ARTICLE INFO	ABSTRACT
<p>Article history</p> <p>Received:2025-05-26</p> <p>Received in revised form:2025-05-26</p> <p>Accepted:2025-05-29</p> <p>Available online</p>	<p><i>The Systematic Literature Review used in this study was chosen because it is an appropriate approach to link the research in the literature as far as it can be accessed and to extract and evaluate the evidence on the researched topic from the existing literature. In other words, this systematic or structured study offers the opportunity to evaluate the available evidence by combining it. It can also be said that this methodology allows social research to be unbiased and comprehensive in terms of the results it produces. In this study, it is aimed to evaluate the current situation of logistics employees according to the evidence obtained from the literature. Some perspectives have been formed according to the evidence obtained from the literature. Within the scope of the perspectives, some evaluations were made such as the concept of employees in the definition of logistics, the consequences of the scarcity and/or absence of employees in a problematic logistics sector, the responsibility of managers in the logistics sector, the logistics employees evaluation indicator system.</i></p>
<p>Keywords:</p> <p>logistics business, managers, employees</p>	
<p>JEL CODES: M0, M1</p>	

1.INTRODUCTION

Logistics is like the blood systems of society. Over the past century, the transportation of people, goods and information has increased tremendously. The global economy functions through trade. There is a significant positive relationship between logistics and the economy, as the growth of one economy encourages another. Logistics has become an important sector in the global economy in its own right, sustaining employment opportunities and spatially extended economic networks, as well as allowing other sectors to function. On the other hand, it has made its importance felt not only in the economy but also in different fields as a sector. For instance, logistics has contributed significantly to the formation of the integration process of the world with the dynamism it creates (Banister et al., 2011: 248). In other words, it would not be an exaggerated assessment to see logistics among the dynamics that contribute to many fields, it should also be underlined that logistics is seen as the backbone of economic progress, as well as being likened to the blood system of society (Gudmundsson et al., 2016: 81-109). However, since logistics employees are known to be at the center of all these evaluations, the study is based on a qualitative methodology and is based on the evaluation of the practical situation of logistics employees under some perspective headings based on literature evidence. For this, a Systematic Literature Review was conducted due to the nature of qualitative research.

2.THEORETICAL FRAMEWORK

In order to assess the processes in the transportation sector, a number of theoretical concepts have been tried to be explained. For instance, the starting point for the Theory of Transport is the function of preparing services to meet consumer needs, the function of transport services to be productive for the elements of every division of labor and every market, and the integrative functions in state and society relations (Voigt and Witte, 1982: 13). However, without moving away from the theory and definition of logistics, it is necessary to refer to the concept of transportation. Transportation is considered as the movement of all kinds of objects from one place to another. Everything that fits this definition falls within this scope in its most general form. When we add to this assessment an understanding that underlies all logistics movements for a purpose, in other words, the perfection of the movements with a focus on the employees, we will be able to reach the assessment that transportation is not just a mechanical movement by spending time and effort. According to this assessment, a logistics that realizes the movement of objects with the least power and in the shortest time will be the most perfect. So speed is a fundamental test, economy of power is cheapness when evaluated in the light of real conditions (Cooley, 1894: 13), and excellence will be achieved when the focus of the realization of excellence is on the employees. Without structural criticism, excellence cannot be realized. Due to this assessment, in this section, which is called the theoretical framework, it is necessary to include the constructive criticism dimension of company practices in logistics within the theoretical boundaries. Within the scope of the efforts to realize excellence, it should be noted that the practices listed in the following section affect and concern all employees of a logistics company, including drivers. For example, business can adopt the Tom Peters Approach, each of which provides a new perspective; the Tom Peters Approach, which puts the customer back in focus and foresees development in chaos and the disintegration of traditional management structures, variance analysis and total quality management, which advocates the necessary involvement of the production team to eliminate root causes, The world has witnessed a number of new business solutions, such as the production control perspective, which aims to solve the problems of chaos and variability in supply chains through better forecasting and material requirements planning and control systems; the procurement emphasis, which includes the need to transform relationships with suppliers into partnerships; and business process re-engineering, which emphasizes the importance of process and offers ways to automate processes to reduce costs. However, it may be fair to assess that they all tend to produce partial solutions that narrowly focus on certain aspects of a company's complex process. There have therefore been popular criticisms of such approaches. Total quality management, for example, has been the focus of criticism for failing to accumulate savings gains and for failing to build buyer-supplier partnerships. Supply chain management has faced criticism for failing to respond to rapidly changing demand and failing to improve process utilization. Business process re-engineering has also suffered from its use as a method of employees reduction (Jones et al., 1997: 153). Although the criticisms are justified, it is safe to say that the logistics sector follows developments due to its special structure. For instance, logistics outsourcing, also called third-party logistics, is among them (Marasco, 2008: 127). On the other hand, in our opinion, the special nature of logistics as an integrative function in state and society relations mentioned above has crystallized a broader-based human logistics involving various parties including political power, military, civil society and commercial structures (Schiffing and Piecyk, 2014: 198).

3.METHODOLOGY

The *Systematic Literature Review* used in this study was chosen because it is an appropriate approach for linking studies in the literature as far as it is available and for extracting and evaluating evidence on the topic under study from the existing literature. In other words, this systematic or structured study offers the opportunity to evaluate the available evidence by combining it. Another factor in the choice of this methodology in social research is that its use allows it to be unbiased and comprehensive in terms of the results it produces (Schiffeling and Piecyk, 2014: 201). In this study, it is aimed to evaluate the current situation of logistics employess according to the evidence obtained from the literature.

4.FINDINGS

According to the evidence obtained from the literature, some perspectives have been formed. Within the scope of the perspectives, some evaluations were made such as the concept of employee in the definition of logistics, the consequences of the scarcity and/or absence of employees in the logistics sector as a problematic, the responsibility of managers in the logistics sector, the logistics employee evaluation indicator system.

-First Perspective: Employee Concept in the Definition of Logistics

The literature states that supply chain management and logistics are used interchangeably and that the difference between the two concepts is only semantic. The Council of Supply Chain Management Professionals (CSCMP), formerly known as the Council for Logistics Management, defines both logistics (management) and supply chain management as follows (Overstreet et al., 2011: 115-116). Logistics (management): *The part of supply chain management that plans, implements and controls the effective, efficient and productive forward and backward flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' needs.* Supply chain management is also: *It covers the planning and management of all activities involved in sourcing and procurement, transformation and all logistics management activities.* This includes coordination and collaboration with partners, which can be suppliers, intermediaries, third-party service providers and customers. In another definition, logistics is described as *a strategic process that enables the supply, movement and storage of materials, parts and other related materials, and the cost-effective management of orders through marketing channels within the scope of organization and information flow in a way that maximizes current and future profitability* (Christopher, 2011: 2). In another definition that emphasizes that logistics is a dominant part of supply chain management, logistics is described as the storage of goods, services and related information from the point of origin to the point of consumption in order to meet the needs of customers who plan, implement and control efficient, flow efficiency and control (Wang et al., 2021: 2).

The definitions described above make it valid to consider logistics business, which are independent from the production areas, as specialized in carrying out various economic activities related to the circulation of materials and goods. On the other hand, in a market economy, the main function and task of logistics business is oriented towards the production of services through planned purchase, sale and transportation, according to the total supply and total need of the market, to complete the realization of production units and use values, and to guarantee social production and reproduction between production units and consumers (Yue, 2008: 2608). These activities require employess with marketing skills, relevant experience in customer management and a general understanding of many aspects of logistics operations. The

most frequently cited skills for logistics in the literature include professional technique, interpersonal communication, information and communication technology, management, command of at least one language, and recognition of the culture and values of business from both Eastern and Western societies (Shi and Handfield, 2012: 165). Such assessments imply that logistics is a strategic process and that the easy transportation of materials and goods within and between societies, which is within the scope of the definition, enables the formation of many connections around the world. On the other hand, the process of connectivity has been further strengthened by the global emergence of information and communication technology. However, such considerations should not be taken to mean that it is an easy question to ask and/or answer who or what is responsible for the complexity and negative externalities arising from the integration of regional and national economies (Gudmundsson et al., 2016: 81-109). On the other hand, due to the special nature of logistics, reducing overall transportation costs, updating route planning, and reporting management information are among the questions that need to be constantly updated (Corporate Finance Associates, 2017: 1; Prato, 2009: 65). However, the assessments and definitional descriptions made so far are not only general but also flexible enough to be applied to different contexts. For instance, it can also be said to be flexible enough to emphasize that there is no reference to the employee context (Cascetta, 2001: 1). For instance, the literature identifies the labor element as critical for achieving the logistics objectives of business and entire supply chains. Studies have supported the position of the employees by examining the nature of important variables and testing propositions regarding logistics employees issues. Logistics faces major challenges in recruiting, developing, supervising and retaining the employees. Business will need to make more intensive use of the labor element. Many businesses have invested heavily in technological and infrastructure improvements and investments. The next improvements and investments should focus on the employees who manage and operate the supply chain (Keller and Ozment, 2009: 379). In the long run, for instance, the key to competition between businesses is to create and improve their own structures. In order to maintain healthy development, it is vital for logistics business to employ scientific staff. Because employees, who have a decisive role in the development of business, are the masters of company resources and shapers of profits (Yue, 2008: 2608). In this section, only the necessity of including the concept of employee in the definition of logistics has been discussed, and in order to emphasize the importance of employees, the necessity of including the concept of employee in the definition of logistics, it would be appropriate to leave the subject to experts.

-Second Perspective: Scarcity and/or Absence of Employees in the Logistics Sector as a Problematic

The problem is not limited to the inclusion and/or employment of the concept of employee in the definition. Although it is necessary to discuss, it is emphasized in the literature that employees lack the necessary skills to fulfill their logistics tasks. The lack of preparedness for the coronavirus environment can be cited as a reason to discuss the coordination problem. Nevertheless, it would also be appropriate to attribute the emphasis to various reasons. For the emphasis here, the qualifications of the employees who will be demanded in the logistics sector will be related to the training they have received or will receive due to the nature of logistics, the way they are managed and motivated, as increasing mechanization and automation increase the boring, repetitive and unattractive status of some jobs for many people (McKinnon et al., 2017).

Nevertheless, due to its special nature, logistics is not only a dynamic that must respond to the problems faced by the economy and business, but also a sector that has the ability to respond to

the problems of almost all strategic areas of a society. Therefore, the lack or absence of labor should be considered as the basis for responses to a problematic as a whole (a collection of problems). It would be appropriate to show the reasons for this basis, the coronavirus infection, the effects of which have been felt all over the world in recent history. The logistics sector has been forced to coordinate with the conditions created by the coronavirus infection. One of the most important issues here has been the driver-based labor shortage. On the other hand, it is also necessary to draw attention to some reasons, such as low management attention to the coordination of new technologies that limit or completely affect the capabilities of employess in the logistics sector from practice, lack of continuous training, ineffective work of human resources departments due to lack of motivation or applicable necessary skills and indicators, insufficient supply of a labor force on the general labor market with the necessary qualifications (Vinogradov and Vorona, 2024). On the other hand, it should be added that stress and tensions arising from lack of financial support, poor working conditions, physiological and psychological work demands have a negative impact on the health and working ability of drivers (Staats et al., 2017: 383). In the face of these considerations, it should be noted that the supply of labor in the sector does not allow for encouraging forecasts regarding the proportional growth of the logistics sector (Vinogradov and Vorona, 2024). This is because, according to the literature, the demand for logistics employess in the world is growing at a rate of 10-12% per year. This situation shows the world's labor shortage. It would not be an exaggerated assessment to predict that the problematic will continue in the coming years (Kilibarda et al., 2019: 271).

While opportunities in the logistics sector are being created, some problems are also being created at the same time. One of them is the problem of finding sufficient number of employess, which is still waiting for a solution. Studies in the literature have tried to identify the root causes of the problem and have also suggested strategies on how to solve it (Lonk and Lia, 2024: 11). Although the problematic of the scarcity and/or absence of employess in the logistics sector as a problematic in the literature has been recognized with the coronavirus infection, it has been the subject of studies for a long time and it is observed that evaluations have been made on the subject by referring to developed societies. For example, in the US, the issue of driver recruitment has been addressed, examining different driver recruitment strategies and assessing that closer ties with high schools and vocational programs, which are internal career ladders for future drivers, could help ameliorate the driver shortage problem. In Ireland, Transport, Transportation, Distribution and Logistics also commented on the same issue (Ji-Hyland and Allen, 2022: 232).

It is known that the training element, which is considered as a response to the shortage and/or absence of labor force in global logistics business, will make significant contributions to the reduction of traffic accidents in the countries specific to drivers. For instance, in the case of Turkey, a total of 1 million 444 thousand 27 traffic accidents occurred on the highway network in 2024. Of these accidents, 1 million 177 thousand 172 were traffic accidents with material damage and 266 thousand 855 were traffic accidents with fatal injuries. In 2024, 85.5% of traffic accidents involving death or injury occurred within the settlement and 14.5% occurred outside the settlement. 48.4% of the people killed in traffic accidents in 2024 were drivers, 30.6% were passengers and 21.0% were pedestrians, while 52.7% of the injured people were drivers, 36.3% were passengers and 11.0% were pedestrians. Looking at the total 318 thousand 926 defects causing traffic accidents involving death or injury in Turkey in 2024, 90.1% of the defects were caused by drivers, 8.2% by pedestrians, 0.8% by vehicles, 0.5% by passengers and 0.3% by roads.

On the other hand, when the defects are analyzed by sub-headings, the defect of "not keeping the vehicle speed in line with the conditions required by the road, weather and traffic" accounted for 105,802 of the total 318,926 defects. "Failure to comply with the priority of passing at intersections" was the second most common defect with 46,458, while "Failure to comply with the general conditions regulating maneuvers" was the third most common defect in 2024 with 26,487 defects (Turkish Statistical Institute, 2025). Elimination of such problematics, training will not only contribute to the employment of logistics business, but will also contribute to the reduction of human loss to zero as a perspective assessment in reducing the loss of goods.

-Third Perspective: Managers' Responsibility in Logistics Enterprises

Even though the logistics sector has seen a decline in jobs due to automation and digitalization compared to other sectors, the vast majority of its work is still performed by employees. In fact, logistics activities are labor intensive at both operational and managerial levels (Hofbauer and Putz, 2019: 332). In other words, the logistics sector remains a labor-intensive business. The logistics performance of business, industries and nations is strongly influenced by the quantity and quality of labor. Inability to find employees with adequate qualifications and the right competencies can negatively affect both the efficiency and quality of logistics. This negativity extends across a wide range of occupational level, industry sector and geography. For instance, while the problematic highlighted above emerges at the operational level as a lack of drivers, at the strategic level, senior managers who can manage global supply chains emerge (McKinnon et al., 2017). However, it is pertinent to consider the responsibilities and tasks of managers from a broader perspective. For instance, the development trends discussed in the theoretical framework section above have an impact on the organization and strategic importance of logistics. For example, it can be assessed that in the future, whereas the tasks of the logistics manager were previously focused on internal coordination and management, in the future they will increasingly focus on relationship management through employees in connection with collaborators, regardless of whether they are suppliers or customers. Important tasks will be to negotiate partnership agreements, maintain and develop collaborative relationships with external partners, and develop intercompany information systems, with a focus on the employee. On the other hand, the role of the logistics manager will change from that of a fire extinguisher solving daily logistics problems to that of a project manager for cross-working teams of employees. However, it should be emphasized once again that it will be the employees, not the systems and processes, that will provide solutions to logistics tasks and give the company the necessary competitiveness (Skjoett-Larsen, 2000: 386). On the other hand, in our opinion, it is the drivers that managers should prioritize within the scope of employees.

Driver shortage in the logistics sector can be seen from different perspectives; driver shortage can be considered as an antecedent factor, a consequence effect and/or a phenomenon. There are many identified causes of driver shortage. These include, for example, aging drivers, expensive license fees and perceived poor working conditions. General working conditions can also include wage rates and working hours (Wang et al., 2022: 2). However, it is observed that studies on the subject have been conducted in the literature on the search for solutions that are not indifferent to these problematics. Some examples of studies are given in the following table to support this assessment.

Table 1-Logistics Literature Examples

Sample Author(s)	Sample Topics	Place of Publication
Baccichetto et al., 2024	Balancing act: Fostering employee well-being during labour shortages in e-commerce logistics	In <i>E3S Web of Conferences</i> , EDP Sciences, 585, 06008
Adhikari et al., 2024	Procurement process and shortages of essential medicines in public health facilities: A qualitative study from Nepal	<i>PLOS Global Public Health</i> , 4(5), e0003128.
Meershoek et al., 2023	Ensuring military-logistic capabilities through discriminatory public procurement? Legal routes to overcome a personnel shortage	<i>Public Procurement Law Review</i> , 32(3), 141-156.
Dabral & Purohit, 2023	Addressing human resource challenges in the logistics and supply chain management industry: Impediments on the path to achieving sustainability	<i>DME Journal of Management</i> , 4(02), 1-9.
Aserkar & Govar, 2023	Labour shortage during COVID-19 pandemic in the logistic sector of Singapore	<i>International Journal of Logistics Economics and Globalization</i> , 10(4), 368-385.
Andrejić et al., 2022	Job satisfaction and labor fluctuation: A case study in the logistics sector in Serbia	<i>Logistics</i> , 6(3), 50.
Lin & Chang, 2018	Evaluating skill requirement for logistics operation practitioners: based on the perceptions of logistics service providers and academics in Taiwan	<i>The Asian Journal of Shipping and Logistics</i> , 34(4), 328-336.
McKinnon et al., 2017	Assessing and improving countries' logistics skills and training.	<i>In Digitalization in Maritime and Sustainable Logistics: City Logistics, Port Logistics and Sustainable Supply Chain Management in the Digital Age. Proceedings of the Hamburg International Conference of Logistics (HICL), Berlin: epubli GmbH, 24, 97-117.</i>
Ding et al., 2015	Effects of human resource management practices on logistics and supply chain competencies-evidence from China logistics service market.	<i>International Journal of Production Research</i> , 53(10), 2885-2903.
Savage et al., 2015	Understanding the effect of skilled labour resource shortages on supply chain sustainability: A review of the logistics skills gap in Southern Africa	<i>The 20th LRN Annual Conference and PhD Workshop</i> , 9th to 11th September, University of Derby, UK.
Jhawar et al., 2014	Analysis of the skilled work force effect on the logistics performance index-Case study from India	<i>Logistics Research</i> , 7, 1-10.
Kovács & Spens, 2011	Trends and developments in humanitarian logistics-A gap analysis	<i>International journal of physical distribution & logistics management</i> , 41(1), 32-45.
Kam & Tsahuridu, 2010	Does human resource management contribute to the development of logistics and supply chain capabilities? An empirical study of logistics service providers in China	<i>Research & Practice in Human Resource Management</i> , 18(2), 15-34.
Dubey & Singh, 2009	Study on logistics skill gap in supply chain sector in India-Empirical findings	<i>AIMS International Journal of Management</i> , 3(3), 191-205.
Murphy & Poist, 1991	Skill requirements of senior-level logisticians: Practitioner perspectives	<i>International Journal of Physical Distribution & Logistics Management</i> , 21(3), 3-14.

Although there are studies on the employees from the literature, it is still necessary for managers to overcome skill deficiencies after the employment of all employees, including drivers, in the company. Otherwise, the expected benefit of employment will not be achieved. Talent shortage is not only the perspective of this study. It is an intensely discussed issue in the logistics sector. A shortage and/or absence of skilled employees, in a sense a labor shortage, occurs when the demand for a type of employees with certain characteristics decreases. There are various potential reasons for skills shortages. For instance, changing required competencies (e.g. digital transformation), increasing demand (e.g. booming e-commerce), low attractiveness of the industry, low wages, poor working conditions) and inadequate training (e.g. inappropriate curricula, inappropriate teaching methods). The education system potentially plays a central role in reducing and/or enhancing skills. There can be two main levers to overcome skills shortages in the education system. First, the demand for skills in the occupational field should be analyzed and students or active employees should be trained accordingly. The second one can be said to be the correct and up-to-date training in the education system (Schodl and Eitler, 2020: 3). Beyond these general reasons, it is also necessary to refer to personal reasons. It can be seen as the ultimate motivation for choosing and staying in a demanding profession such as driving. Here, using the review of the existing literature, it is necessary to indicate possible sources of satisfaction and frustration. Sources of satisfaction include self-sufficiency, the ability to travel, income and most importantly the pleasure of driving, while sources of frustration may include problems related to being away from home, lack of appropriate training, etc. (Dubey and Gunasekaran, 2015: 218).

-Fourth Perspective: Employee Evaluation Indicator System

According to the basic needs of employee quality, which is based on employee evaluation methods and the principle of the combination of talent and morality, a basic indicator system can be created for logistics business, covering *moral quality, work ability, work success, psychological and physical quality, knowledge and technological level*. On the other hand, if some concrete indicators are added to the basic indicators listed below, a two-tier indicator system can be formed. However, the indicators listed in the following section should be integrated. In other words, one indicator is not isolated from the others, but is interconnected with other indicators. Therefore, the meaning of the indicators will be to create an equilibrium point of the maximum value of the efficiency that logistics business will create (Yue, 2008: 2609).

a-Moral quality is a personality trait that should be present in the employee and consists of evaluation indicators such as commitment, realism, perseverance and team spirit.

b-The ability to work is the combination of the employee's methods of coping with problems and their effects. It also represents the individual potential of the employee. It is also divided into four assessment indicators such as coordination, communication, emergency solving and renewal, comprehension and learning abilities.

c-Testing of work results covering four indicators, work achievement, work efficiency, production efficiency, quality of work completion and degree of satisfaction of customers. This indicator can be used as the most direct response to assess the competence of the employee. The concretization of the indicators found here can be considered as the main key to managing capabilities.

d-Psychological and physical quality are internal factors that affect the work of the employee and are divided into two parts: psychological quality and physical quality.

e-Information and technological level is the test measure of the resource structure of employee management and consists of four indices: professional title, knowledge structure and foreign language skills.

Since the continuous iteration of the indicator system will be directly proportional to the development of employee competencies, some competencies of logistics sector employees are clustered in the following table and explanations of the aly competencies are given.

Table 2-Competencies of Logistics Sector Employees

Competence Clusters	Sub Competencies	Explanations
Principles	<ul style="list-style-type: none"> -Planning and management skills -Ability to develop and evaluate policy -Ability to develop logistics and hinterland -Cargo handling, transfer, tracking procedures system capability 	<ul style="list-style-type: none"> -Ability to manage planning and development for future facilities and logistics -Domestic and international logistics policy understanding and the ability to create and evaluate new policies Ability to develop logistics and its hinterland and optimize the added value of the logistics-related sector -Systematization, transfer and storage of logistics cargo through logistics management and the ability to improve procedures
System Management	<ul style="list-style-type: none"> -Customs clearance system capability 	<ul style="list-style-type: none"> -Ability to systematize relevant procedures to speed up customs clearance
Service	<ul style="list-style-type: none"> -Quality management capability -Ability to create a service model -Ability to manage the services to be provided to the cargo owner -Ability to improve service quality -Distribution optimization and marketing capability 	<ul style="list-style-type: none"> -Ability to manage the logistics connectivity transit system on a continuous basis -Ability to create business models such as new logistics facilities, technology, manpower, information and finance, and provide total services Ability to provide effective service follow-up and manage the business for the load owner -Ability to understand and improve continuous logistics service quality -Ability to optimize distribution structure through logistics market trends
Logistics Development and Promotion	<ul style="list-style-type: none"> -The ability to promote cargoling -Logistics development capability -Ability to understand and use logistics and information technologies 	<ul style="list-style-type: none"> -Ability to bring in cargo from shipping business and strengthen logistics consulting and implement marketing functions -Ability to generate new port and logistics materials and goods through surveying future demands and business opportunities for logistics products -Ability to understand and effectively use logistics information technologies
Information	<ul style="list-style-type: none"> -Information technology network and operating capability -Analysis capability for global logistics 	<ul style="list-style-type: none"> -Ability to establish and operate information technology networks for total quality management based on logistics information -Ability to make decisions by analyzing global economies and societies for global logistics
Globalization	<ul style="list-style-type: none"> -Ability to predict and use information 	<ul style="list-style-type: none"> -Ability to anticipate changing trends in the logistics industry and utilize information to improve logistics

Source: Ahn and McLean, 2008: 546.

5.CONCLUSION

Beyond the traditional root causes of logistics labor shortages and/or shortages, the conditions surrounding the mobility of drivers in particular need to be examined. The literature generally points to two different ways to close this gap. The first is a reactive approach where business' efforts are directed towards driver retention. The second approach is to improve working conditions to retain existing drivers and take initiatives to attract new drivers (Chandiran et al., 2023: 117). The overall strength of logistics business directly depends on the effectiveness and efficiency of their employees. Given this fact, both the recruitment and retention of employees is of interest as emphasized in the studies. However, it has been underlined that in the face of labor shortage and employee turnover, retaining employees attracts more attention (Sersland and Nataraajan, 2015: 648). While all these assessments have emphasized the need to improve economic and non-economic factors, it is still unclear whether addressing them in isolation can fill the driver shortage gap (Chandiran et al., 2023: 117). Therefore, there is a need to identify and address the issues that have become problematic in the logistics industry with a focus on employees. However, short-term solutions should be against the disease, not against the symptoms (Vinogradov and Vorona, 2024). Therefore, the long-term solution needs to emphasize student-centeredness. For instance, the lack of specialized schools and the need to provide academic education to train professional employees has been recognized in developing societies (Kilibarda et al., 2019: 271). In other words, it can be said that the problem of labor shortages and shortages should be reduced to university education and basic education with a vision-based approach. On the other hand, it is also necessary to refer to the importance of private education providers contributing to the solution with employee training programs. Student-based education, which is the main focus of employment, provides a natural point in the discussion of employee training. As a first step in developing students' knowledge of the fundamentals of logistics management, it would be appropriate to encourage the use of qualitative and quantitative methods of business case analysis. This will help students to improve their decision-making and problem-solving abilities and in turn gain a clearer understanding of how logistics affects organizational strategy as a whole (Keller and Ozment, 2009: 381-382).

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