

Learning, Absorbing Capacity, and Competence at the Individual Level in the Activities of Loading and Unloading of Fuels

Aprendizagem, capacidade de absorção e competência no plano individual nas atividades de carga e descarga de combustíveis

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Abstract

This research aimed to understand how absorptive capacity promotes individual learning and the competencies development of drivers that provide service to BR Distributor e Industrial Port Complex of Suape/PE. The methodological procedures adopted qualitative research of the exploratory and descriptive types. Four research subjects were interviewed, including two drivers and two professionals responsible for training and monitoring the loading and unloading processes. Content analysis was used to compare the informants' responses according to the categories a priori of the theoretical reference. The results revealed two fields of vision: the technician, represented by the instructor and operations technician, and the operational field, represented by the drivers. With this, it was possible to initially point out some points that were not convergent, such as training hours, flexibility of days, need for recycling, and infrastructure to carry out activities, which connotes the need for more effective feedback evaluation tools, focusing even on the program taught. The potential impact of these findings on the logistics and transportation industry is significant, highlighting the relevance and significance of this research..

Keywords: learning, absorptive capacity competences development.

Resumo

O objetivo desta pesquisa foi compreender como a capacidade de absorção promove a aprendizagem individual e o desenvolvimento de competências dos motoristas que prestam serviço à BR Distribuidora no Complexo Portuário de Suape/PE. Foi adotada uma pesquisa qualitativa de cunho exploratório e descritivo. Foram entrevistados quatro sujeitos de pesquisa (dois motoristas e dois profissionais responsáveis pelo treinamento e monitoramento nos processos de carga e descarga). A análise de conteúdo foi utilizada para comparar as respostas dos informantes de acordo com as categorias pré-estabelecidas do referencial teórico. Os resultados revelaram dois campos de visão: o técnico, representado pelo instrutor e pelo técnico de operações, e o campo operacional, representado pelos motoristas. Foi possível apontar inicialmente alguns pontos que não eram convergentes, como as horas de treinamento, a flexibilidade de horários, a necessidade de reciclagem e a infraestrutura para realizar as atividades, o que denota a necessidade de ferramentas de avaliação de feedback mais eficazes, focadas até mesmo no programa ministrado.

Palavras-chave: aprendizado, capacidade de absorção, desenvolvimento de competências

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Introduction

Loading and unloading processes are essential for the distribution of fuels. It is the responsibility of drivers to learn and execute both processes. However, for drivers, this knowledge ends up having its degree of complexity due, mainly, to the low level of education they have. Therefore, the theoretical approach of individual learning is used, which is fundamental for the understanding of how individuals acquire, reflect and enjoy new knowledge (Kolb, 1984).

In this article, it is discussed that for an effective learning of fuel loading and unloading practices it is necessary for drivers to absorb the set of knowledge transferred to them by BR Distributor. Therefore, we consider that the absorptive capacity is present in learning processes. On absorptive capacity, we can understand it as processes of acquisition, assimilation, transformation and exploitation (Cohen and Levinthal, 1990; Zahra and George, 2002).

In addition to absorptive capacity to be considered a parameter for learning, the development of competences can be a result of an effective learning process. In this sense, Le Boterf (1995) elucidates that the competence of the individual is not a state and cannot be delimited only for a single knowledge. Competence is visualized because of the individual's crossing, that is, his biography, modes of interaction, his educational level and his professional experience already experienced.

According to Bapuji, Crossan and Rouse (2005), this study is justified, firstly, because the individual is a unit of analysis that is little explored in qualitative research as well as in quantitative research on organizational learning. The authors also point out the lack of combinations of the learning theme along with other theoretical approaches, as is what is intended to be done in this study. Therefore, the theme of learning still focuses on performance, innovation, knowledge transfer and other more traditional approaches. In addition, regarding the professional category and function of the research subjects, Antonello and Godoy (2011) emphasize that the studies are concentrated in the managerial and strategic level of the organizations. Therefore, this research addresses these issues at the operational level, the latter with a negative focus on academic publication.

Therefore, the main objective of this research is to understand how absorptive capacity promotes individual learning and the development of competence in drivers providing service to BR Distributor in the Suape/PE Port Industrial Complex. And the specific objectives are: (i) to describe how the stages (acquisition, assimilation, transformation, exploitation of knowledge) of the absorptive capacity in drivers to perform the procedures of loading and unloading of fuels occur; ii) understand how acquisition and assimilation occurs through individual learning; iii) understanding how the transformation and application of knowledge results in competence.

The article is structured in four parts, in addition to this introduction equivalent to section one. In section two (theoretical reference) the conceptual approach of learning, absorptive capacity and development of competences in the level

of the individuals are discussed. Section three presents a systematization of the research categories based on the elements that make up these concepts. In section four, the methodological procedures with which this research was constructed are reported. Section five presents the analysis and discussion of the results. And finally, in the sixth section the final considerations and lines of future research are pointed out.

Theoretical Framework

Individual Learning

Individual learning is related to behavioral changes, as well as to the lasting changes in attitudes, involving affective, cognitive and motor plans. These changes are the result of personal reflection and social interaction, and promote flexibility, adaptability and transformative and adaptive capacity to the individual (Correia-Lima et al., 2019).

Research related to learning in the organizational environment, promote the understanding of organizational processes, as well as enable interventions, in the search for differentials, from the understanding of how individuals learn collectively and individually (Antonello, 2006). According to Fleury and Oliveira Junior (2001), learning can be understood by a process of change, which begins in the individual, caused by stimuli, and which consequently generates an alteration in their behavior. Emotion in this process must be considered. Already for Argyris and Schön (1996), the learning is due to the resolution of a problem and reflection before a situation.

Among the models of learning, the most outstanding are the behaviorist, cognitive and experiential model. In cognitive and experiential models, learning is studied based on the experience and behavioral changes resulting from this learning (Terra, 2000).

Illeris (2004) complements the authors by pointing out that learning takes place through a continuous process between individuals, communities, workplaces and organizations. It considers that learning occurs while there is interaction between context and involved and is characterized by a dynamic process where its elements interact and influence each other. The author discusses learning as a process in which the individual develops skills, attitudes, and acquires knowledge, as well as contextualizes it, can be related to the author's reflection on the development of competences.

DeFillippi and Ornstein (2003) point to social construction and applied learning for explanations of individual learning. In the case of social construction, the emphasis is on the social context, considering that learning occurs through relationships and interactions between people, involves social mediation, cognitive and interpretive processes and production of meaning, as well as social practices. On applied learning, it is considered that learning is established from experience and requires the intervention of facilitators and consultants, that is, training programs.

The key word here is competence, the observable or measurable pattern of learning, knowledge, skills, abilities, behaviors and other characteristics critical to future job performance. The competencies specify what a student needs to know to be successful in his future professional career. Competence is a dynamic concept; it cannot be achieved once and for all. The process of acquiring competence is endless and individual. Current cognitive theory suggests that a key to competent performance lies in the organization of knowledge and individual learning (Makarova, 2014). Considering this perspective and according to Satur and Silva (2020), it is assumed that individual learning can be improved and expanded with the management of information and knowledge and an appropriate and dynamic environment so that it can be reflected on it, shared it and created it.

The learning generated can increase organizations' ability to absorb something new. Once knowledge is understood and incorporated, it raises the level of knowledge existing in the organization, expanding the possibilities of international learning, as evidenced by the research developed by Cassol et al. (2021). However, it is clear in this same research (Cassol et al., 2021) that absorptive capacity and international learning differ between organizations, although the source of knowledge is the same for organizations present in the network, the intraorganizational environment and its internal characteristics impact the way new knowledge is received and used.

Absorptive Capacity

The conceptual model developed by Cohen and Levinthal (1990) and improved by Zahra and George (2002) to the organizations level suggests that the absorptive capacity is visualized in the 'potential' and 'realized' dimensions. In the potential absorptive capacity are present the dimensions of 'acquisition' and 'assimilation'. In the absorptive capacity carried out, the dimensions 'transformation' and 'exploitation' are present. The authors point out that potential absorptive capacity is related to learning about a given knowledge and the ability and realized absorptive capacity can allow individuals and organizations to apply knowledge and therefore develop competence.

To transpose the concepts of absorptive capacity to the level of individuals, some research approaches this objective, as is the case of Cadiz, Sawyer and Griffith (2009) who investigated the absorptive capacity at the group level focused on a context of communities of practice. The authors analyzed three dimensions: i) evaluation; ii) assimilation; (iii) exploitation. On the evaluation dimension, the authors took as parameters indicators that dealt with the recognition and the filtering of the information; in the assimilation dimension the indicators were based on the metamorphosis of new knowledge for useful knowledge, and in the exploitation dimension the indicators were based on the usability of knowledge. In Elbashir, Collier and Sutton (2011) it was proposed to investigate the organization's absorptive capacity through two levels of analysis: i) the absorptive capacity of the operational managers; ii) the absorptive capacity of top management teams, whose metrics were created from the

previous knowledge considered relevant to the company together with the intensity of the effort.

However, a concrete possibility of investigating the stages of the absorptive capacity at the level of the individuals is through the study of (Vinding, 2006; Schmidt, 2010; Jimenez-Barrionuevo, García-Morales and Molina, 2011). Thus, for the acquisition process, attention was focused on respect, trust, interaction, friendship and reciprocity in the relationship between individuals (which can be extrapolated to the level of the organization). For the process of assimilation of knowledge, aspects such as similarity, compatibility, common language and complementarity were observed. Concerning the process of knowledge transformation, the authors suggest using evidence about meetings, transmission, flow, time, communication and documents. Finally, to understand the exploitation process, it would be necessary to observe aspects about the real use of knowledge.

According to Cappellari et al. (2019), the event of absorptive capacity through its antecedents is conditioned using activation triggers (external and internal events), by mechanisms of social integration (reduction of barriers in the dissemination of information) and by appropriateness regimes (protection of the benefits of innovation). In the end, the results combine strategic flexibility, innovation and performance as part of the competitive advantage.

Under a managerial approach, the main contributions of the study of absorption capacity are in the linking of this construct in the understanding of the innovative capacity of companies. From the dimensions of absorption capacity, companies can better exploit and take advantage of knowledge and opportunities (Bouguerra et al., 2020).

Therefore, it can be understood that absorptive capacity presents itself as a multidimensional construct and focuses its attention on the sharing of knowledge, focusing on the generation of ideas for problem solving and innovation generation. In this regard, it appears that, in the process of acquiring knowledge, the company modifies its resource base and integrates new skills, processes and routines, which will support the innovation process (Souza, Silva and Abreu, 2019).

Competence Development

The development of skills has been used as business tools since the early 1980s, becoming an essential element in organizational strategies, also highlighting research that demonstrates a strong relationship between performance and skills development in people (Munk and Borges, 2020). According to Schmidmeier, Takahashi and Bueno (2020), the competency management model is relatively new and complex, which contributes to several uncertainties regarding the public sector; however, the results obtained in the private sector have served as inspiration, emphasizing the concern with the adaptability of the private to the public, due to the different logic applied in these different areas.

The development of organizational activities has undergone transformations in recent years. These changes are influenced by the knowledge that presents itself as a new variable of economic order. From there, it is perceived that the old organizational routine, based on capital and intensive use of labor is rapidly disappearing and only organizations capable of developing skills that follow the new logic will have a greater chance of continuing to compete (Mendes et al., 2019).

Considering this scenario, the model of development and management by competence gains strength, which, according to Brečka and Valentová (2017), is the way to lead employees to achieve the objectives of the organization through their technical and behavioral capabilities, as an option to modern management standards. This model is based on strengthening management, providing it with more capacity in planning, capturing and developing the human resources needed to achieve better operational results.

Sandberg (2000) points out that, in rationalist approaches, competence in work is constituted by a specific set of attributes, knowledge and skills that are used to perform a certain work, these result in a simplification of skills, which, does not represent the complexity of the context. McClelland (1973) initiated the debate on the subject and represents the rationalist approach described by Sandberg (2000), which associates competence with performance.

Zarifian (2001) and Le Boterf (2003) consider that competence has greater dynamism and is related to the context. For Le Boterf (2003) competence is a provision to act in a relevant way in relation to a specific situation. According to the author, the competence must be observed by the other, that is, it is related to the value and the direction directed to action and evaluation. Competence will then be embodied in professional practices that will have an impact on performance.

Finally, competence relates to and consists of several distinct resources. Regarding practical questions (Le Boterf, 2003), the competence is the ability to integrate diverse and heterogeneous knowledge to finalize them in the accomplishment of activities, in relation to the demands of a given context. Zarifian (2001) emphasizes the importance of social learning and communication in the formation of competence and its application in the collective sphere related to work.

The concept of competence of Sandberg (2000) complements Zarifian, (2001) and Le Boterf (2003), because it considers in its understanding as constituted by the meaning and experience of the individual in relation to the work, that is, the attributes applied for the realization of the are linked to the context, they are situational. It emphasizes that the attributes (knowledge, skills, etc.) used to perform the work are preceded by the meaning that the individual attributes to it.

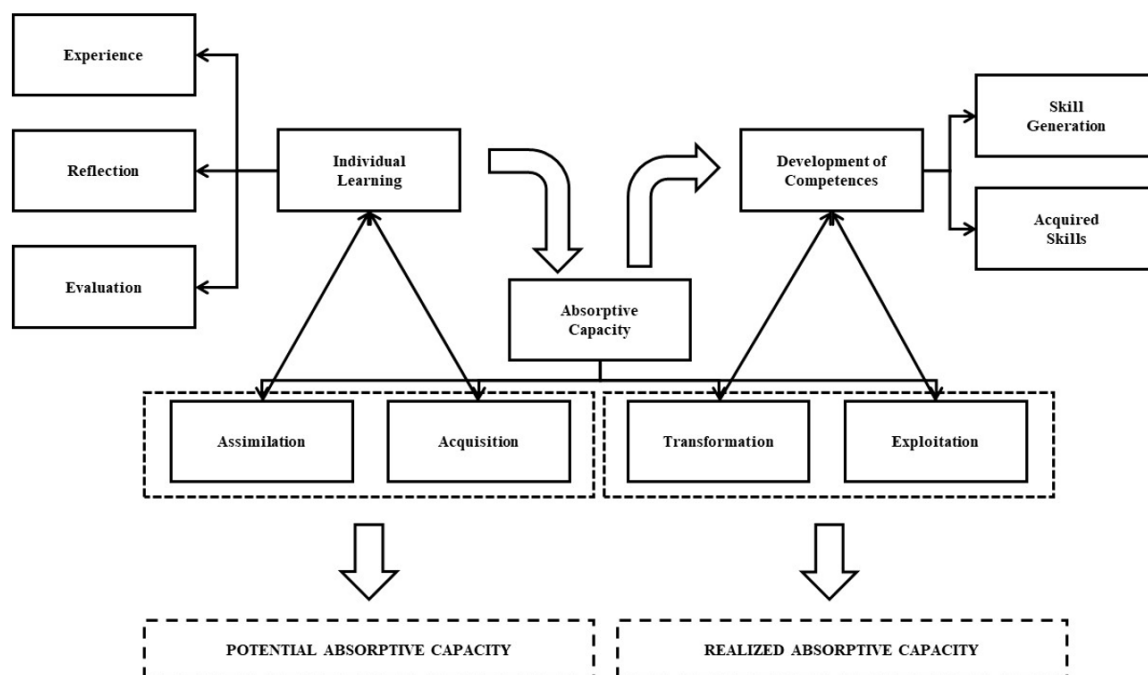
Systematized Research Categories Model

In the relationship between the concepts of learning, absorptive capacity and development of competences for the level of individuals and based on the interpretation

of some researchers of these themes, it was decided to propose a systematization of categories that could synthesize the relationship between these concepts, as shown in Figure 1.

Figure 1

Systematization of the categories



Source: authors

As the individual learns and there is a reversal of this learning in knowledge (Cohen and Levinthal, 1990). The collective also develops and consequently the organization learns, in this way the occurrence of the absorptive capacity, once there is transformation of knowledge and their application in work routines (Argyris and Schön, 1996).

In this sense, according to Jiménez-Barrionuevo, Garcia-Morales and Molina (2011) for the acquisition and assimilation stage the absorptive capacity acts as an intermediary in the identification, evaluation, classification and interpretation of the knowledge by the individuals that is considered essential for the learning process in the execution of operations. However, for the transformation and exploitation phase, individuals' absorptive capacity tends to facilitate transference, combining previous knowledge with new knowledge, incorporating them into routines and developing skills (Jiménez-Barrionuevo, Garcia-Morales and Molina, 2011).

It is observed that competence is a dynamic concept that relates to the individual and context in which it is inserted. Therefore, the notion of competency is closer to the capacity to combine and mobilize resources and, mainly, a stock of knowledge and skills, a perspective that is closer to the notion of competence. Corroborating the relationship between learning, ability and absorptive capacity and competence, Mezirow (1998) understands that learning is a process that occurs

through an interpretation so that individuals can stimulate and teach others organizational practices.

Methodological Procedures

Method and Nature of Research

The method of this research is qualitative, and its nature is exploratory and descriptive. According to Godoy (1995), this type of research is most appropriate when the researcher deals with few known problems, which the search is based on the understanding of the phenomenon. A fundamental value in qualitative research is the understanding of the real interactions between the subjects and the senses that configure the scenarios of organizational life.

Data Collection Strategy and Profile of Subjects

As qualitative research, for Merriam (2009) there is no rigid delimitation in relation to the adequate number of interview subjects. In other words, it is a fact that can be altered throughout the research, and, in addition, there is a need for completeness of information or in the case of exhaustion, as the answers begin to present redundancies.

Four interviews were conducted in the workplace, two of them with drivers who periodically participate in the training courses on loading and unloading of fuels promoted by BR Distributor. These drivers are tied to carriers who render service to this organization. In addition to the drivers, we interviewed the instructor who teaches these courses to obtain their respective impressions about the drivers' learning. Finally, the operator of the BR Distributor was interviewed in the storage terminal with the purpose of collecting his report on the execution of loading and unloading procedures by the drivers, who were taught during the training. To maintain anonymity, the abbreviations E1, E2, E3 and E4 were used in reference to the subjects cited (Table 1).

Table 1

Profile of subjects

Subjects	Gender	Education	Age	Hierarchical level	Time in the company
E1	Male	Elementary School	43	Driver	22 years
E2	Male	Elementary School	45	Driver	14 years
E3	Male	Safety Technician	53	Operator	27 years
E4	Male	Safety Technician	29	Training instructor	2 years

Source: authors.

The data collection was performed by the application of a script (semi-structured questionnaire) containing specific questions about the themes of learning, absorptive capacity and skills development. It also involved the search for secondary data, documents provided by companies, the participation of one of the authors in the course offered by BR Distributor and the authors in loco observations.

Data Analysis Technique

The analysis technique adopted was content analysis (Bardin, 2006). In the treatment of the obtained data, the analysis of categories was performed, comprising a process with four phases: i) identification of key points; ii) formation of units of meaning; (iii) composition of categories; iv) analysis of results. For Bardin (2006) it is necessary that the data be categorized respecting the criteria of mutual exclusion, homogeneity, pertinence, objectivity and fidelity.

Data Analysis

Step 1 - Identification of Key Points

For this stage, the identification of key points was done with the purpose of identifying the frequency of the words, expressions and periods most cited by the subjects of this research. It should be noted that the achievement of the key points was based on the topics that were addressed by the interviewees, since open questions were applied so that the subjects responded in the best possible way on the subject (Table 2).

Table 2

Most cited words, expressions and periods in interviews.

Words – Expressions - Periods	Driver 1	Driver 2	Instructor	Technician	Total
Theoretical training	5	6	6	4	21
Practical training	3	4	4	5	16
Written assessment	4	5	3	4	16
Safety equipment	6	4	3	4	17
Videos	4	3	-	-	7
Experienced drivers	7	5	3	2	17
Experience in the segment	6	4	5	4	19
Awareness	7	6	-	9	22
Procedures	4	3	2	9	18
Accidents	6	4	1	4	15
Spill of fuels	4	5	-	4	13
Flexibility in unloading	4	6	4	8	22
Ability to use safety equipment	6	5	4	5	20
Ability to operate equipment for loading	3	4	2	6	15
Ability in seals conference	3	6	-	2	11

Source: authors.

Step 2 - Formation of Units of Meanings

In this step, the elements considered as intermediates of the content analysis that are named as units of meaning have been identified (Bardin, 2006). The central idea of units of meanings is to group together the main ideas conveyed by the research subjects. Bardin (2006) indicates that, first, grouping must be carried out according to the order of the questions, and then by similarity of responses given in the various points of view of the informants. Thus, nine units of meanings can be visualized in Table 3.

Table 3

Units of meaning recognized in interviews

Acronyms	Unit of Meaning Name
UM1	Theoretical learning
UM2	Practical learning
UM3	Error Minimization
UM4	Expertise in procedures
UM5	Questioning the changes that have occurred
UM6	Responsibility
UM7	Flexibility
UM8	Equipment handling
UM9	Use of safety procedures

Source: authors.

Step 3 - Formation of Categories

This stage aimed to group the units of meanings for the formation of the final categories (Table 4) of this research. Bardin (2006) calls this stage of categorization because they represent classes that bring together a set of elements (units of meanings) under a universal title due to the common aspects of these elements. For the elucidation of the a priori categories of the theoretical basis, we sought to achieve groupings using semantic, syntactic, expressive and lexical criteria.

Table 4

Research Categories

Category	Levels	Unit of meaning
C1 - Absorptive Capacity	Acquisition	UM1 Theoretical learning UM2 Practical learning UM3 Error Minimization UM4 Expertise in procedures
	Assimilation	
	Transformation	
	Exploitation	
C2 - Individual Learning	Reflection	UM5 Questioning the changes that have occurred UM6 Responsibility
	Evaluation	
	Experience	
C3 - Competence Development	Skill Generation	UM7 Flexibility UM8 Equipment handling UM9 Use of safety procedures
	Acquired Skills	

Source: authors.

The category C1 - Absorptive Capacity - was created by grouping the following units of meaning:

- UM1 Theoretical learning
- UM2 Practical learning
- UM3 Error Minimization
- UM4 Expertise in procedures

This category presents the descriptions indicated by the subjects about the absorptive capacity regarding the stages of acquisition, assimilation, transformation

and exploitation of the knowledge that the drivers, the instructor and the operational technician understand that they occur during the process of loading and unloading of fuels.

About training, drivers pointed out that this step involves two types of training. The first one concerns the theoretical training, where it is demanded for each driver who provides service to the BR distributor to attend every six months a class with duration of four hours that takes place every Thursday in the distribution base of BR distributor in the Industrial Complex Port of Suape / PE. In this theoretical stage, the driver assists four modules, they are: (i) good manners in the traffic; (ii) loading and unloading practices; (iii) environment, health and safety (EHS); iv) setting.

On the practical training, it was verified that after the teachings transferred during the classroom stage, drivers go through a stage that demands that they carry out three alternate shipments during the same day, with different drivers but with experience in these processes. The objective of this stage is for drivers to experience how to carry out the loading, to heal some doubts and to be evaluated. It is noteworthy that the practical step only occurs for the loading process, not happening in the unloading process. The excerpts from E₂ and E₄ show:

It's good, but, when you do delivery in some stations we realize that they do not have, for example, a place to put the ground and do not have the main exit, the one that has the lock, theirs are still threaded and so you cannot place a sealed discharge. So, the training gives one thing and the client when you go there is another [...] (Driver 2).

It has an atmosphere that he talks about the behavior of every driver in the course of time right, how it should be, how can I say, how it should behave on the road, the purpose of everything while delivering the product to the customer and if it is download here in the terminal. Not to mention that too, there is a talk that is updated every two months ... there is the zero accident pact and the loading and unloading that is the course provided so they can unload and load inside the terminal. (Training instructor).

Regarding the process of knowledge acquisition, the drivers reported that the training offered is interesting and helps in the execution of the loading and unloading process. However, there are still occasional problems about unloading, and some resellers do not have an adequate structure so that the pertinent equipment is allocated and that this process occurs according to what was taught in the training together with mistakes made by the customers themselves in the positioning of the tanks and their respective measurement. In this sense, drivers emphasize that they are not trained for these contingencies and in some situations do not know how to proceed to solve situations of this nature. The excerpts from E₂ and E₄ depict:

I have no doubts in these processes, because every day you get the mechanics of loading and unloading, now they there, in the case of BR they do the renovation ... There in BR you type, position the car, puts the grounding, all safety equipment, helmet, belt and you do quantity programming and expect to load [...] (Driver 2).

From what he saw he has a perception of what it is like in theory, but in practice it does not. There is the operator [...] he will only enter with more experienced drivers. (Training instructor).

Regarding the assimilation stage, the drivers mentioned that even with the absence of training in contingency situations, both theoretical and practical training are well understood. This, drivers assimilate essential activities such as the emission of the loading print, the handling of the machines used to mix the products and fill the capacity of the vehicle, the use of the ground, the use of the safety equipment and the conference of the seals of each the truck tank to avoid any problems with inspections. The excerpts from E₁ and E₄ show:

[...] makes sense. But many drivers do not use and do not care about all the rules that are taught in the course, if you observe them on a day-to-day basis they do not care much. It makes sense also because it prevents, avoids risk of accident, prevents fire risk, does not it? But it does not just depend on the course, it depends on the driver if it will work according to the teaching. For example, at the time of loading one should place the overfill that is so that no spillage occurs, if the computer does not fire and the fuel touches the overfill it will automatically shut down avoiding spillage, meaning it makes a lot of sense [...] (Driver 1).

One of the strategies that passes to them is the operational coach because in these three entrances he will always be accompanied not only by the driver who already has a certain experience that will pass for him, but also of the operational technician who will accompany him and during these three entries. And when he makes his first entry as he will have certain doubts he will always have to ask the operative technician who will be accompanying him so he can do the correct procedure. (Training instructor).

About the transformation stage, drivers give meaning to the loading and unloading process about the impossibility of accidents. In this sense, the drivers report several examples in which it is necessary to have attention for fires to be avoided, not to spill fuels, so that measures are taken in the case of machines have defects, etc. However, even drivers converting and solidifying learning about these activities, stimulated by the risks of serious accidents, it was nevertheless reported by the subjects that many drivers deliberately ignored these practices and therefore taking a risk of being victims and at the same time provoking serious accidents. The excerpts from E₁ and E₄ show:

It was interesting, because I learned right? And to this day I work on what they taught me and for trying to follow the procedures until today I had no problem. I have never had a spill here during the loading and the post during the unloading, I was never blocked, many drivers are blocked because they do not follow the standards imposed by BR [...] (Driver 1).

[...] what that boy said here, he said there were five buckets there that were not grounded, so I took it and explained to him that you must pass on to the operating technician that the bucket is not grounded, and this is putting their safety and that of others at risk. He must move on to the operative technician. Then he realized. He paid attention to the training and stored it there; he saw

that it was wrong, and he came to me and said it was wrong. (Training instructor).

Finally, as regards the stage of exploitation, drivers pointed out that knowledge about loading and unloading is very significant. They assume that by following what is requested correctly they do not face problems and avoid accidents. In addition, they report that by the effective use of this knowledge were not suspended, nor at least blocked from loading by BR Distributor. However, one point that emerged in the interview was the issue of course flexibility. Drivers understand that the course needed to be offered on other days of the week by reducing the company's blocking of drivers when it comes to vehicle loading. In other words, if the course expires on the day the driver needs to perform a load, he does not do so until his course is renewed. Therefore, from the point of view of drivers, this situation tends to disrupt the dynamics of company operations.

The category C2 - Individual Learning - was created by grouping the following units of meaning:

- UM5 – Questioning the changes that have occurred.
- UM6 - Responsibility.

This category presents the descriptions pointed out by the subjects about individual learning regarding the subcategories reflection, evaluation and experience that the drivers, the instructor and the operational technician understand that occur during the process of loading and unloading of fuels.

About the reflection, the drivers showed that, in general, they question the procedures, mainly, when they undergo some changes. In addition, the observation allows drivers to see some faults that are made by colleagues during the loading process. Another point that is mentioned in the interviews and discussed during theoretical classes is the risk of accident. It was perceived by the researchers that drivers become apprehensive and worried when they hear reports and become aware of serious accidents resulting from the omission to comply with the standards established by BR Distributor. In this sense, defensive driving practices, behavior, handling of machinery and equipment are adequately questioned by drivers to reflect on the consequences of not using the equipment properly and meeting the standards. The excerpts from E2 and E4 show:

I reflect a lot, but you mostly think of some of the flaws you see inside. A lot of people do not want to wear a safety goggles, but if there is a leak in one of those pipes ... you keep watching what the gang does not do ... I always ask when I'm in doubt, especially when there is a change. And it always changes something [...] not only me, but I see that the whole class asks [...] (Driver 2).

That. As I said here, we think right, right? [...] I always say the speed in this way is 60 and they correct me because they already know the speed. Or the speed is 10 rights? Not 10 not! Is 20. Sometimes I ask the speed is 50 minus 30? I always play so they give me the right answer and as you saw they told me it's not 20! They always say and I always play. This is my strategy for them to give me the correct answer and get involved in training. [...] Being sincere to you is a lot of

content for a short time. And for them to store all that knowledge, in my point of view it should take about two to three days for them to better assimilate all this information. (Training instructor).

Drivers report that their learning is subject to both theoretical and practical assessment. Regarding the theoretical evaluation, they are submitted to answer a test of ten questions and must agree on at least 70% of the evaluation. Regarding the practical evaluation, the drivers are submitted to three entries in the fuel terminal accompanied by another more experienced driver to carry out three different loads. This practice assessment policy is used to verify that the driver has really learned what was taught during the course and is not making any mistakes. In this sense, the driver is in possession of a card with its respective data and delivery to the operating technician for the purpose of being observed and evaluated by this professional. As he carries out the uploads recorded on his card it represents that the driver has passed this step. In the drivers' perception, the two modes of evaluation are significant. However, they emphasize that the practical part contributes with more intensity due to the presence of another driver, where they receive guidelines to carry out the process of loading correctly. The excerpts from E1 and E3 reveal:

It's evaluated. In the end, we make a test of ten questions (...). In the practical test you enter with the paper that he leaves in the concierge and each time you go in you take that paper with your name and delivery to the operator who is watching you. In case I came in with an old driver, the driver kept giving me the tips and the operator watching me if it was really me who was doing the correct procedures or was not. There at the end of each evaluation the operator gives a visa and stamps to release his driver's license [...]. (Driver 1).

Look at my assessment is positive. If it were to give a grade I would give a grade seven, which is not good yet and needs to be improved. The good one would be 9 or more, okay. Why this 7? Because there are things that we need to be charging them, even need to make a threat of punishment. So, we realize that both theoretical and practical training is not enough to raise awareness among drivers. We need to keep tabs on, make complaints, threaten punishments and sometimes even punish them. But it's not the majority, it's around 30%. (Operational Technician).

About the experience, the drivers showed that the work time already experienced in the segment allows the loading and unloading practices to be improved. However, it is worth noting that the interviewees commented on the fact of the comfort and lack of responsibility on the part of some drivers. In other words, as experience and mastery are gained with loading and unloading practices in parallel, some professionals tend to ignore some essential procedures and norms for carrying out these activities. The involvement of critics in some attitudes on which personal postures are based is perceived. This being a central concept in the debate of individual transformative learning, which aims to go beyond the acquisition of skills and knowledge, promoting changes of posture, relationship with the environment. Thus, the critical reflection of the drivers proposes to transform perspectives (MEZIROW, 1998). The sections of E1 and E3 present:

For sure. I contributed because you need to put into practice right? If I had not learned correctly, I had not paid attention in class, in practical teaching, in theory I would not have developed the way I have developed loading and unloading during these five years [...] every year that you spend in this activity you are getting more experience [...] (Driver 1).

Then the driver to the truck, turns off the main switch, picks up the ground cable and connects the ground cable from his truck to the loading platform. This systematics is automatic, so if its ground cable is in trouble, for example if it is broken, at the time it will start charging, the equipment will not operate. It will give a signal that you have grounding problem. The driver will then have to get off because the charging is done overhead on a platform and so he would have to check the ground cable conditions. If, by chance, bad contact occurred because he did not position correctly, he will need to adjust and prepare to charge. So, when it arrives on top of the platform it will enter the amount to be loaded. (Operational Technician).

The instructor demonstrates considering the process of reflection related to meaningful learning, describing in his speech the adoption of a strategy that seeks to promote this reflection, through questioning with the drivers. But it also leaves implicit when it questions the relation content by hour load, approaching that the second one is insufficient in front of the content that must be presented. The technician in turn resumes safety by relating care to the execution of the activities, focusing on the analysis and reflection of cause and effect, ie, consider the impact of performance to proceed with loading without causing accidents and / or losses.

Category C3 - Competence Development - was created by grouping the following units of meaning:

- UM7 Flexibility
- UM8 Equipment handling
- UM9 Use of safety procedures

This category presents the descriptions pointed out by the subjects regarding the development of competences regarding flexibility, the handling of equipment and the use of the safety procedures that the drivers, the instructor and the operational technician understand that occur during the loading process and unloading of fuels.

About the generation of skills, drivers have shown that they consider themselves skilled at carrying out loading and unloading. They consider that learning about the handling of machinery, the use of safety procedures at the time of loading and the disposal of cones, plates, the use of fire extinguishers during unloading. Another point that has been pointed out by drivers is their ability to be flexible. The drivers commented that in some situations the customer (reseller station) does not have a tank structure with the necessary capacity to cover all the fuel purchased along with the lack of adequate space so that the driver can properly position the vehicle. This situation demands that the driver develop an ability to adapt to these contingencies and even execute the unloading process. However, a great difficulty pointed out by the interviewees and that can hinder the development of this skill is the fact that drivers perform around two to three deliveries per day. Therefore, this negatively impacts,

from the point of view of some professionals ignoring some aspects of safety procedures and the correct use of the equipment for the unloading process. The excerpts from E2 and E3 point out:

You see, you do it, but there's that thing I usually say to do the loading and unloading, you do not have to hurry, you must be calm because you cannot hurry and there you go wrong. example, upon arriving at a customer I deliver the invoice, and he informs me that the discharge will be in the tank three [...] while he checks the invoice I am isolating the area. I put the ten cones, the four plates, ground, the fire extinguisher on the floor and I wait for the client's command to start the procedure [...] I'm not in a hurry and by no means answering cell phone [...] (Driver 2).

Look, yes. Because, for example, it's his ability to position the unloading arm, okay? Even the noise of the loading operation, he notices, has failed and can cause transshipment. He already warned before and is more attentive with respect to the procedures in general [...] then this is with the experience [...] now those items that are more security oriented [...] obvious, because sometimes has a product leak and the driver should already know what measures to take. If the driver does not develop these skills will be compromising the operation. (Operational Technician).

Regarding the skills acquired, drivers point out that as they carry out both loading and unloading they acquire and internalize the necessary skills in the use of equipment, machinery operation and on the professional posture to carry out these processes. The excerpts from E2 and E4 reveal:

Certainly, because day to day you acquire practice and have the knowledge of everything you need and should do, but if the comrade wants to do it wrong is on his own. For example, I pass by, and I see the comrades unloading their shorts and sandals with only the hose inside the tank, with nothing being taught [...] but I think that when you take the course you learn everything it is necessary ... I have taught several drivers here and participated in several entries in BR [...] (Driver 2).

[...] yes competence for sure they will develop perceive? So, for example I see their attitude on the road [...] we visualize this in the invisible audit. (Training instructor).

Regarding skills development, the instructor points out two situations, those that adopt the correct behavior as routine procedures and others that only comply with the safety standards due to not being penalized by the audits performed. The technician stresses that he identifies the skills developed by the practical performance in the function, considering from physical positioning to performing more technical procedures.

Discussion

The acquisition process from the point of view of the instructor as well as the operational technician relies on the importance of the contents presented in the

training, as well as the three shipments carried out by the driver under the supervision of a contracted professional. The instructor emphasizes in his speech the importance of periodic recycling, that there is an excess of content that should be better distributed with increasing training time load, to optimize knowledge acquisition, different from the drivers do not express in their discourse concern with flexibilization days to complete the courses.

As for the assimilation process, the instructor emphasizes the relevance between the theory learned during the course and the actual practice of loading and unloading, the technician emphasizes in his speech the importance of the operational part, but also points the safety issues as relevant for the and the low accident rate, which can be interpreted as a correct adoption of the procedures taught in the training, but do not consider infrastructure issues for the process as pointed out by the drivers.

The dimension acquisition demonstrates the ability of the organization to recognize, attribute value and acquire sufficient external knowledge for their respective operations. The directing of efforts has an influence on the ways in which the organization moves to obtain external knowledge. The dimension assimilation points out to the question of routines and processes of the organization, to allow the understanding, analysis and interpretation of information (Schmidt, 2010; Jimenez-Barrionuevo, García-Morales and Molina, 2011; Araújo and Pereira, 2021).

About the transformation stage the instructor presents the accompaniment carried out by the most experienced drivers as a moment of consolidation of the knowledge transmitted during the training, once there is opportunity to acquire more practical experience and solve doubts. The technician considers the importance of accompanying the driver as well as the correct compliance with the rules.

On the exploitation, the instructor refers to older professionals as a reference for those who are developing the loading and unloading process, the technical highlights once again the relationship between theory and practice, illustrating the loading process relating respect the rules safety and the ability developed by the driver to identify and sometimes remedy failures in the process, ie accomplishing the task with quality so as to achieve the proposed objectives and avoid accidents.

The dimension transformation refers to the ability to develop and improve routines that facilitate the integration of existing knowledge with assimilated knowledge. Thus, this type of capacity enables organizations to identify how to adapt the new knowledge to specific demands (Zahra and George (2002; Jimenez-Barrionuevo, García-Morales and Molina, 2011; Araújo and Pereira, 2021). Zahra and George (2002) emphasize that social integration mechanisms are necessary conditions to facilitate the sharing and the exploitation process of a possible knowledge. It is worth mentioning that integration capacity mechanisms can also reduce the inherent barriers to knowledge transfer.

According to Volberda, Foss and Lyles (2010) the internal processes of learning and the role of individuals cannot be neglected during studies on absorptive capacity, thus deserving emphasis in research. It is necessary to understand the process in which people are at the heart, as what generates competitive advantage and/or better results is a way in which the organization's members learn, combine and inform

knowledge. The relationship between absorptive capacity and organizational learning is one of recursion, that is, as an organization trains, it increases its capacity to understand and obtain new knowledge, expanding even more what she knows and expanding her learning (Lane and Lubatkin, 1998; Lane et al., 2006).

Regarding the evaluation both the instructor and the technician emphasize their relevance highlighting the fundamental "invisible" audit in the process. The instructor highlights in his speech the importance of evidence as well as the use of instrument such as disk tachograph. It should be noted that from the technician's point of view, the general evaluation by means of the monitoring of the process is good, but it can still be improved, which in a way echoes in the instructor's speech when he approaches the importance of recycling. As for the experience, the instructor values it as an ally for the development of the beginning drivers in the process, from the perspective of the technician the experience contributes to the execution of the tasks with precision and quality, enabling the professional to adjust for the success of the operation.

As for the development of competence the instructor points out that it occurs and that the best way to observe it is by auditing. The technician's focus on competency identification again reflects practice situations, where we can identify well-defined flow, correct execution of the procedure, ability to identify and solve failures, consequently a guaranteed safety standard and a successful procedure (Sandberg, 2000; 2001; Le Boterf, 2003).

Conclusions

This article has as main objective to understand how the absorptive capacity promotes the individual learning and the development of competence in drivers service providers for BR Distributor. Also having as specific objectives the description of how the stages of the absorptive capacity in drivers to carry out the procedures of loading and unloading of fuel occur, the understanding of how acquisition and assimilation occur through individual learning and how the transformation and the application of knowledge results in a competence.

On the acquisition and assimilation of knowledge, there were indications that the training offered helps individual learning about the execution of the loading and unloading process (Mezirow, 1998; Jiménez-Barrionuevo, Garcia-Morales and Molina, 2011). The theoretical and practical trainings are well understood and therefore, the drivers assimilate essential activities such as the issuing of the proof of loading, the use of safety equipment, the use of grounding, the handling of the machines used to mix the products and the conference of the seals from each tank of the truck.

About the transformation and exploitation of knowledge, it was evidenced that the drivers give meaning to the process of loading and unloading, rendering it impossible for accidents to occur. In addition, drivers consider this knowledge significant in seeking to follow correctly what is asked of them. And, therefore, they end up developing specific skills in these activities.

From the perspective of the interviewed technicians, the training offered is relevant and that there are drivers who actually acquire and assimilate knowledge,

which has often been reinforced in the discourses regarding the low accident rates, the audits carried out and because there are few punishments related to the process, however some drivers do not adopt the procedures effectively which may denote low individual learning, in this context it becomes relevant the inspection, as highlighted by the technician who inspects the process.

As far as the transformation and exploitation is evidenced the occurrence of both, as far as the application of the knowledge and ability to solve problems as reported by the interviewed technicians. It should be noted that these already begin in the phase of the three loads that drivers perform, that is, the practical application of theoretical knowledge. It can be considered that there is the development of skills related to know-how, performing correct loading and unloading procedures, performance optics (McClelland, 1973), task responsibility and equipment utilization (Le Boterf, 2003).

Finally, it can be observed that the research offers two fields of vision: the technician represented by the instructor and inspector. It was the operational performance of the drivers, which made it possible to initially point out some points that were not convergent, such as training hours, flexibility of days, need for recycling and infrastructure to carry out activities, which connotes the need for feedback, with a focus on the program delivered.

The present study presents limitations because it focuses on only one distributor, and in this context it is necessary to broaden the scenarios and actors studied. The research also points out the need to deepen the study of the processes of communication and feedback, monitoring the professionals longitudinally (before, during and after training), analysis of the contents given among others. Therefore, the recommendation for future research, with a greater number of distributors located in the Industrial Port Complex of Suape/PE, as well as quantitative research, which allow greater possibilities of generalizations.

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