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Senior Executives Opinions regarding Educational Competencies of University Graduate Young Labor Force: Logistics Education Case

Üst Düzey Yöneticilerin, Üniversite Mezunu Genç İşgücünün Eğitim Yeterliliklerine Yönelik Görüşleri: Lojistik Eğitimi Örneği

Gülsen Serap Çekerol*

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Abstract. The aim of this study is to explore the opinions of executive managers about educational competencies of young graduates of logistics departments. The study is a phenomenological study designed according to the principles of qualitative research. The reason for choosing logistics sector is that the departments established at universities with high expectation of employment for their graduates have failed to realize this expectation. The data for the study were collected through semi-structured interview technique, which is a qualitative data collection method. The study lasted 11 months between 2018 and 2019, and the interviews were carried out with the senior executives of 8 large-scale companies. The participants of the study were given code names due to ethical concerns. The data were analyzed through content analysis technique, and it revealed three main themes; namely "Disability", "Requirements" and "Expectations". The opinions were later classified into subthemes under each main them. Based on these themes, suggestions were made regarding university graduate young labor force in logistics sector.

Keywords: Logistics education, educational competencies, qualitative study, phenomenology

Öz. Bu araştırmanın amacı, genç nüfusun istihdamında, sektör yöneticilerinin eğitim yeterlilikleri ile ilgili görüşlerini ortaya koymaktır. Araştırma nitel olarak desenlenmiş fenomenolojik bir çalışmadır. İstihdam beklentisinin yüksek olduğu görüşüyle birçok üniversitede açılan lojistik programlarının, beklenen istihdamı gerçekleştirememesi nedeniyle örnek olarak lojistik eğitimi ele alınmıştır. Araştırmanın verileri nitel veri toplama tekniklerinden yarı yapılandırılmış görüşme tekniği ile toplanmıştır. Araştırma, 2018-2019 yılları arasında 11 ay süren ve 8 dev ölçekli işletmelerin üst düzey yöneticilerinin katılımıyla gerçekleştirilmiştir. Araştırmanın bütün katılımcılarına etik olarak kod isimler verilmiştir. Araştırmanın analizi içerik analizi ile yapılmış olup "Yetersizlikler", "Gereklilikler", "Beklentiler" olmak üzere üç ana temaya ulaşılmıştır ve her temanın altında ana temaya ilişkin alt temalarla katılımcı görüşleri değerlendirilmiştir. Oluşan temalar sonrası, üniversite mezunu genç işgücüne yönelik öneriler oluşturulmuştur.

Anahtar Kelimeler: Lojistik eğitimi, eğitim yeterlilikleri, nitel araştırma, fenomenoloji

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* *Correspondence:* Eskişehir Technical University, Turkey, gscekerol@eskisehir.edu.tr. ORCID:0000-0003-0391-2489

Introduction

The challenging marathon starting from primary school years and involving families aims to create good employment opportunities for young children in the future. While earning sufficient amount of money to survive is enough for some people, others aspire to work in high-paid jobs and in jobs with considerable career options.

In today's world, large-scale companies satisfactorily meet this career and high-income expectation of individuals. It is a well-known fact that the first requirement individuals need to fulfill in order to be employed in such enterprises is to receive quality education. However, it is also known that receiving quality education itself is not enough to accomplish such goals in a country like Turkey, where 15.8% of the population are in 15-24 age range (TÜİK, 2019).

On the other hand, the rules of business world have changed and the gap between generations has become more clear-cut due to the technological advancements in this new era. There is often a generation gap between new generation employees and old generation managers when they have to work together in certain organizational structures. The cost of an employee to a company who quits his position is 2.5 times more than of his gross wage (Capital Dergisi, 2019), thus expectations of all employees should be in harmony with others to avoid potential problems in a particular company.

In Turkey, there are 130 state universities (10 technical universities, 1 high technology institute, 2 fine art universities, 1 National Defence University and Police Academy) and 73 foundation universities (Assessment Selection and Placement Center Guide Book). According to data published by Turkish Statistical Institute (TSI), despite this rapidly increasing number of universities, the number of unemployed people (15 years and older) reached 4.650.000 with an increase of 980.000 in August period, which includes July, August and September months. In other words, it increased to 14 % with an increase of 2.9 %. The unemployment rate for young population (15-24 age range) increased to 27.4% with an increase of 6.6% (Turkish Statistical Institute) in August period. The percentage of unemployed university graduates in this age group (15-24 age range) is 34.4% (TÜİK, 2019).

What is unemployment? "Unemployment" is used to define a situation in which individuals fail to find a job although they are eager and healthy enough to work. According to Ülgener, unemployment is the gap between "full employment" and "actual employment volume" (Ülgener, 1991, 112). Biçerli defines unemployment as "failure to fully use potential labor force, which is the main production factor (Biçerli, 2011 427); and according to Zaim, "it is the gap between labor force level and the employment level, which refers to those who find a job to work" (Zaim, 1997, 167). The phrases "although they are eager to work" and "are healthy enough to work" have triggered the current study.

This study aims to find an answer to the following question: "What criteria related to educational competencies of potential candidates do employers have in their minds to affect their decision to employ them? In order to narrow down the scope of the study, it focuses on educational competencies of students who graduated from "Logistics" education programs of universities as criteria for employment - whose number has rapidly increased as of 2000s.

73 universities in Turkey have programs offering Logistics education, and thousands of students graduate from these programs every year. However, despite this high number of graduates, the sector report published in 2018 revealed that the percentage of the participants who believe that the most serious problem of logistics sector is the lack of qualified labor force is 42.3 and the percentage of those who believe that people who work in logistics sector lack competencies and skills necessary for the sector is 36.5% (Ulaştırma ve Lojistik Sektör Raporu, 2019). What are the reasons of this dissatisfaction in the sector although the education provided is considered sufficient enough in theory? Before we look for answers to this question, we need to examine logistics and its education in detail.

Logistics and Logistics Education

The most suitable general definition of logistics as part of business life is the one suggested by Council of Supply Chain Management Professionals-CSCMP, a world-wide non-governmental organization. This council defines logistics as "supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements (Long, 2003).

As the definition suggests, logistics plays an important role in people's lives and a large number of scientific studies have been conducted on the issue as of 1990s. Logistics has always been a sector that requires expertise, which has inevitably created a considerable demand for knowledge and a labor force that can apply this knowledge into practice. Due to technology-sensitive structure of the sector, there is a need for software and equipment that plan and track logistic operations as well as employees who can use this equipment effectively. Thus, it is recommended that logistics education should include content focusing on both theory and practice. The needs of the sector should be determined effectively and labor force demand of the sector should be met by providing educational opportunities at high school, associate degree and undergraduate degree levels (Çekerol, 2019).

Those receiving logistics education are expected to acquire the following knowledge and skills (Çalışkan & Öztürkoğlu 2014, 148);

> Logistics staff should be equipped with functional, technical and leadership-based skills and they should have experience in global management and be credible (Dischinger et.al 2006).
>
> Knowledge and skills logistics managers should have been classified into three groups: general knowledge, specific knowledge about logistics and supply chain, and competencies and skills (Mangan & Cristopher, 2005).
>
> The abilities of logistics staff should not be limited to operational ones such as how operations are carried out and how cost per kilometer can be reduced. They should also include the abilities related to managerial issues such as making necessary changes in existing situations, adapting to new conditions and coordinating as effectively as possible (Sheffi & Claus, 1997).
>
> Professionals in logistics sector should be able to work with others, consider problems from different point of views and find different solutions in addition to their knowledge and experience in logistics (Van Hoek, 2001).
>
> Logistics staff should be competent in the following management knowledge and skills: supply chain management, logistics and shipping, management ethics, production management, correspondences, accounting and electronic trade (Murphy & Poist, 2007).

Logistics education is offered at both high school and higher education level in Turkey. The first high school that provided logistics education is Mehmet Emin Horoz Vocational and Technical High School, which was founded in 2005-2006 academic year. In 2017-2018 academic year, there were 118 logistics departments in Vocational and Technical high schools under the supervision of Ministry of National Education. These high schools are often located in densely populated regions and those with well-developed harbor and transportation services. The first higher education program offering logistics education was established in 1988 in the School of Maritime Business and Management at Dokuz Eylül University. Many other universities started to offer similar associate degree, undergraduate and graduate degree programs in the following years. These programs were generally established in business administration faculties or in management and organization departments of vocational schools.

As displayed in Table 1 below, there are currently 142 associate degree programs in 73 universities in Turkey (53 state and 20 foundation universities). Of these 142 programs, 41 are evening education programs and 3 distance education programs. As for the data regarding undergraduate degree programs, there are 92 undergraduate degree and 1 distance education programs in 64 universities (35 state universities and 29 foundation universities). Of these 92 programs, 19 are evening education programs and 20 offer English-medium instruction (ÖSYM Klavuzu, 2019). The data regarding master's degree programs show that there are 48 master's degree programs in 25 universities (10 state universities and 15 foundation universities). Of these 48 programs, 20 offer a program with thesis, 21 without thesis and 7 distance education programs without thesis. Finally, 6 universities (2 state and 4 foundation universities) offer PhD programs on logistics in physical science institutes (2 programs) and social sciences institutes (4 programs).

Table 1.

Logistics Education at Higher Education Level

	Formal	Distance Education
Logistics Associate Degree	73 Universities 53 state universities and 20 foundation universities 142 associate degree programs 41 evening education programs	3
Logistics Undergraduate Degree	64 Universities 35 state universities and 29 foundation universities 92 undergraduate programs 19 evening education undergraduate programs 20 English-medium undergraduate programs	1
Master's Degree Program	25 Universities 10 state universities and 15 foundation universities 48 Master's Degree Programs 20 Master's Degree Programs with Thesis 21 Master's Degree Programs without Thesis 7 Master's Degree Distance Education Programs without Thesis	7
PhD Programs	6 PhD programs 2 state universities and 4 foundation universities	

The Aim of the Study

This study was conducted to explore education-based problems that negatively affect the employment of young people who receive logistics education. For the purposes of the study, interviews were conducted with senior executives of large-scale companies in logistics sector.

Large-scale logistics companies employ thousands of employees, operate at global level in terms of market share, and have strong competitive power and considerable amount of capital. They contribute to the economy of their country and to employment by offering 7/24 logistics services for important companies that play an important role in the economy.

The study explores the opinions of senior executives of large-scale logistics companies through in-depth interviews focusing on logistics education. The study seeks answers to the following questions:

1. How do the participants perceive graduates of logistics departments?
2. How do the participants perceive logistics education?

Method

Research Design

This is a phenomenological study designed according to the principles of qualitative research. Phenomenological study aims to explore common characteristics of individuals' experiences with a phenomenon or concept (Creswell, 2013). This approach provides rich data to help researchers understand such experiences in detail (Smith, Flowers & Larkin 2009). The study uses phenomenology design since it aims to determine how senior executives perceive education-employment relationship based on their experiences and what they expect from employment and the following processes.

Participants

Personal experiences are an important criterion in phenomenological research. People with experiences about the phenomenon in focus are often participants of a particular study because first hand and subjective experiences are considered valuable data in such studies (Güler, Halıcıoğlu &Taşğın, 2013, Güder, 2019). The ideal number of participants in phenomenological research is still a debatable issue. Based on Dukes and Polkinhore's ideas, Creswell (2013) suggests that the number of participants may change between 3 and 25. Dukes (1984) recommends the presence of 3-10 participants while Polkinghorne (1989) claims that 5 to 25 participants will be enough in phenomenological studies (Sever & Ersoy, 2017).

Criterion sampling method, which is one of the purposeful sampling methods, was used to determine the participants of the current study. In purposeful sampling, researcher himself decides which units or groups to choose according to the aim of the study (Koçak & Arun, 2006, 26). Criterion sampling is about studying all the samples which meet predetermined criteria (Punch, 2005; Yıldırım & Şimşek, 2016, s.112). Criterion sampling is not only based on time

variable, and any situation related to the topic of a study can be determined as criterion (Grix, 2010). The criterion for participation in the current study is "being a senior executive in a large-scale company". The interviews were conducted on a voluntary basis.

Since the study focuses on opinions regarding employment of young people, the large-scale companies with high rates of employment in logistics sector were determined and their senior executives were included in the study group. A total of 8 senior executives were accessed accordingly and the interviews were conducted with those who volunteered to participate in the study.

Table 2 below displays demographic information about the senior executives who participated in the study

Table 2.

Demographic Information about the Participants

Participants	Gender	Age	Work Experience (year)	Educational Background	Foreign Language	Place of residence	The number of employees
P1	Male	54	33	Undergraduate degree	English	İstanbul	7.500
P2	Male	47	22	Master's Degree	English	İstanbul	3.500
P3	Male	59	30	Master's Degree	English German	İstanbul	385.000
P4	Male	50	11	PhD degree	English	İstanbul	2.600
P5	Male	50	24	Master's Degree	English German Italian	İstanbul	7.050
P6	Male	48	19	Undergraduate degree	English	İstanbul	21.000
P7	Male	55	30	Undergraduate degree	English	İstanbul	100.000
P8	Male	48	21	Undergraduate degree	English German	İstanbul	400.100

Table 2 shows that all the participants are male and four of them are graduates of undergraduate programs, 3 of master's degree programs and 1 of PhD programs. Their ages range between 47 and 59 and they have work experiences in the sector ranging between 11 years and 33 years. In addition, 5 senior executives can speak 1 foreign language, 2 of them 2 foreign languages and 1 of them 3 foreign languages. They all reside in İstanbul and the companies can be considered large-scale companies with their more than 2500 employees.

Data Collection

Due to the need to obtain in-depth information for the purposes of the study, the data were collected by using qualitative data collection methods. Researchers dealing with subjective data aim to explain cases and phenomena in their own environments and conditions instead of making generalizations (Gürbüz & Şahin, 2016, 401). The main data collection instrument in

phenomenological research is interview (Yıldırım & Şimşek, 2016). The data of the current study were collected through semi-structured interviews.

The following steps were taken while finalizing the semi-structured interview form to be used as the data collection tool in this study:

- Following the literature review, semi-structured interview questions were prepared and shared with a non-participant academician and 3 experts in the field in order to ensure reliability.
- The form was finalized according to the feedback received from the experts. The following questions were asked to the participants in the following order:

    1. What are your opinions about logistics education?

    2. What do you think about graduates of logistics departments?

    3. What would you advise to the educational institutions offering logistics education?

Since the participants are senior executives, the researcher made appointments beforehand, written consent forms were sent via e-mails. The participants were also informed about the study and the procedures to be followed in the interviews such as voice recording. They were also told that no one else except the researcher will listen to these recordings or read the transcripts. The researcher visited the company on the day of the appointments and the participants answered all the questions. The duration of the interviews ranged between 50 minutes and 120 minutes. The participants were informed that the interview will be voice recorded, and necessary permissions were taken accordingly. Because of the participants' busy schedule, the data collection took 11 months between November 2018 and October 2019. The participants were given codes instead of their real names, and they were sent the transcripts of their own interviews so that they can check them for accuracy. No negative feedback was received from the participants.

Data Analysis

The data obtained from the interviews were analyzed through content analysis method, in which data are analyzed in four phases: Coding; generating themes, reviewing codes and themes; and defining findings and interpreting.

The following steps were taken in the analysis of the data; First, the voice recordings were transcribed and written by using MS Word software (Times New Roman 12 point 1.5 row spacing) and a total of 267 pages of data were obtained.

Later, the transcripts were examined and the data were coded. The common points among the codes were determined and categorized accordingly. After that, these codes and categories were thematized. NVivo qualitative data analysis software was used for data analysis purposes. Based on the findings obtained from the interviews conducted with senior executives, three main themes were identified; "Disability", "Expectations" and "Requirements". Finally, the relationship between the codes, the themes and the findings were interpreted through quotations from the transcripts.

Validity and Reliability

In order to ensure validity and reliability of the study, certain strategies were used such as persuasiveness, transferability, consistency and objectivity (Yıldırım & Şimşek, 2016). To ensure persuasiveness, transcripts of the data collected were sent to the participants and their approvals for accuracy were taken. The analyses were done regularly and the findings obtained were compared, interpreted and conceptualized. Experts were counselled while writing research questions. As for transferability, the method of the study was explained clearly in detail and the findings were supported through direct quotations from the transcripts. Consistency was achieved by taking an expert's opinions during the coding of the data.

Results

Based on the findings obtained from the interviews conducted with senior executives, three main themes were identified; "Disability", "Expectations" and "Requirements". These themes are displayed in Figure 1 below.

Disability: Analytical Thinking Skill, Personality Traits

In this theme, senior executives emphasized disability problems of logistics department graduates.

All the participants stated that they find graduates of logistics programs insufficient; especially in terms of analytical thinking skill. Therefore, they said that they preferred industrial engineers for the activities requiring this skill. P7 said the following in support of this tendency: "*... I mean, in operations research, graduates are a bit weak in analytical thinking. I think this is a shortcoming, A concept, maybe "logistics engineering", might be created. I mean engineering side lacks in new graduates."*

Similarly, P6 emphasized the importance of analytical thinking skill as follows: "*... Yes, if you fail to think analytically, you cannot manage an operation. I observe that this fact is ignored by young graduates and this makes me upset. So, there should be analytical thinking, mathematics, software and computer skill; I mean... It is like; how can you talk if you don't know the alphabet?"*

The inadequacy of the graduates in mathematics were supported by the words of P6 as follows: "*"How much am I going to sell this, write the price on a piece of paper and let me sell it" You cannot represent a company like that. "But most of the customers want to learn the price" No, if one of them asks "So how did you decide on this price?", you have only one minute there."*

One of the subthemes of "disability" main theme is "personality traits". The participants stated that students should prepare themselves for the sector throughout their education. They also claimed that these graduates have communication problems and fail to set goals. P8 gave the following example to explain inadequacies of graduates: "*... I think it was 3 years ago. We were doing a job interview with a graduate of Logistics Department. He had gone abroad with Erasmus Exchange Program, everything looked perfect on documents. Later, he wanted to see the environment he would work and did not show up in the next interview. Throughout his*

education life, he did not prepare himself about his possible working environment. He did not show up in the next interview when he saw the field…"

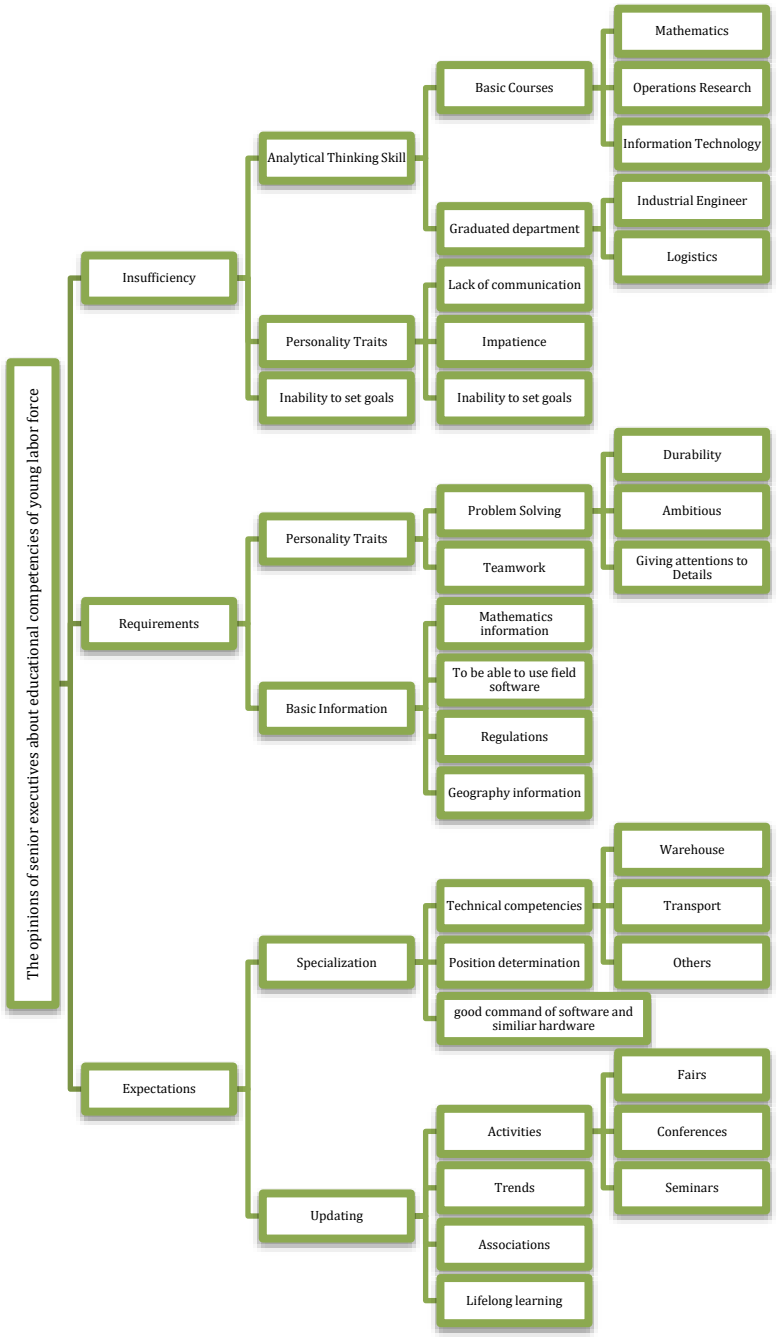

Figure 1. *The opinions of senior executives about educational competencies of young labor force; main themes, subthemes and codes*

More than half of the participants reported that graduates are incompetent and impatient in terms of setting goals. P7 explained this opinion through his real-life experiences as follows: *"We have intern students from logistics departments every year. We want to employ them in the future, however, one week later we find out that they have limited knowledge and are not open to new learning opportunities. They try to give up since they want to work in more comfortable working environments"*

In summary, the senior executives opined that graduates of logistics departments they have employed so far have been incompetent in many ways. The senior executives who employ logistics graduates report that they lose their employment chances because of their incompetencies and industrial engineers are preferred instead of them. It is believed that their inadequacy in basic mathematics, operational research and information technologies negatively affect their analytical thinking skill. Another inadequacy that negatively affects employment is communication problems. The participants also believe that graduates of logistics departments lack effective communication skills, are reluctant to learn new things and not well-prepared for working environment conditions. They are also impatient and are not interested in tasks to fulfill. These problems are clearly related to their personality traits.

Requirements: Personality Traits, Basic Information

Another main theme obtained from the interviews is "requirements", which consists of two subthemes: "Personality Traits" and "Basic Information".

As for "personality traits" subtheme of "requirements" main theme, the participants explained personality traits they expect from graduates of logistic education programs as criteria for employment. All the participants suggested that graduates to be employed in the sector should effectively communicate with people from all hierarchical levels since their work environment is not a plaza environment. P5 stated the following to explain the importance of communication in the sector: "*In logistics sector, there are people who you have to have dialogues with; storage employees who load goods to trucks and those who carry and deliver them. There are two different profiles. On the other hand, there are local and international managers with different cultural backgrounds. You have to have different relationships with each of them. You should understand their needs and requests and find solutions accordingly. So, network of people you need to communicate is quite wide. You should ignore you ego and do your job because there are many customers you should satisfy and communicate with*."

Another participant emphasizing the importance of communication is P2: "*The most important component of the sector is truck drivers, if you are into shipping business. One should be able to understand what they really mean, how they communicate, their problems, concerns and reasons of happiness. It is a complicated job and only graduates who are eager to have such communication should apply for this job."*

Most of the participants highlighted that those who would like to work in logistics sector should be ambitious. P1 explains this criterion as follows: "*If someone is really ambitious and eager to do something, education has secondary importance. Because diploma is not sufficient itself. We try to see the ideal profile behind the diploma".* P6, who stated that dealing with details is important in the sector, emphasized the following: *"Currently speaking, we do our job without a good grasp of details. Since we do it like that, we are not like Japan or South Korea or Germany.*

In fact, success comes with details. If you have a good grasp of details, you are more likely to succeed. They should be here with real knowledge"

The participants who consider team work as a requirement highlighted the importance of collaboration. P8 stated the following to explain this importance: *"The most important input needed is people who work in harmony with each other, we always talk about global market and competition. The best way to have competitive power is to unite."*

As for "Basic Information" subtheme, the participants mentioned basic information employees should know and also basic information that might be used as criteria for employment. All the participants reported that mathematics and geography information are the most basic ones for the sector: P5 stated the following to explain this issue: "*he should know basic concepts of logistics. With basic concepts, I mean that they should know about the country, its roads, types of vehicle. He should know the country, its geography and roads for sure.. Also mathematical knowledge related to the sector; for example the vehicles, the vehicles used here, their capacities, what is the tonnage of a truck, how much can it be loaded. Calculations are based on this information. That many pallets of load are good for that truck or the size of a pallet is like that … He should know all these and make necessary calculations accordingly."* Similarly, P3 emphasized the importance of mathematics as follows: *"They don't even know about what m^3 means, what volume means, how distance is measured. These are serious shortcomings. It is crucial to have this knowledge in logistics sector. It is necessary to give them background; especially at schools*.

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Since the sector serves at international level, knowledge of foreign language is considered a must. P2 explains this importance as follows: "*75% of our sector has been bought by foreigners. Most probably, there will be only one company left in 10 years' time, which is 100% Turkish, non-foreigner. Employees have no chance to survive if they do not know English."* Similarly, P8 stated: *"Logistics sector fairs are foreigner-dominant environments. A person we send to such fairs should come with new information, so he should communicate them in a foreign language."*

Most of the participants suggested that it is important to be informed about regulations related to logistics sector so that they can act appropriately in case of unexpected situations. P1 emphasized the importance of this knowledge as follows. "*This sector has many components; roads, insurance, those who carry the load, who organize shipping procedures, storage managers and customers. I mean both our side and customer side. We try to explain everybody we make business the law focusing on responsibilities of both sides. The relationships with a*

customer while making business or during an operation is something all managers should know. Carrier should know that responsibility is not valid in case of lightning stroke. They look quite simple but important both on customer and employee sides."

In summary, senior executives want potential labor force to be knowledgeable about the sector before they apply for the job. Due to the nature of the sector, working environment might involve people from various educational and cultural levels and the success depends on appropriate communication with these diverse shareholders. The participants expect employees to be prone to team work and collaboration and find solutions to problems without ignoring details. Another requirement for the solution of these problems is good command of sector knowledge. A person with poor mathematical skills is unlikely to be successful in the sector. The senior executives stated that it is necessary to know a foreign language in the sector. In addition, knowledge of geography – i.e transportation networks- as well as knowledge of logistics regulations are among the requirements for the employment in the sector.

Expectations: Specialization, Updating

Based on the opinions of senior executives about employment competencies, the third main theme "expectations" consists of two subthemes: Specialization and Updating.

As for the subtheme "specialization", senior executives stated that they expect graduates to be guided for a specific field of the sector so that they can decide on a good position for themselves and acquire technical competencies for this particular position. P1 uttered the following sentences to explain this situation. "*Young employees always ask what their position will be in time, which is a kind of expectation. This expectation puts burden on the sector, creates problems in a sector where healthy solutions are planned, considered and designed. It also causes waste of resources. Also, when these employees think that their expectations are not met in short term, they prefer to work in a different position by leaving a position which is likely to give them a better and more quality career, which seems to be a bad decision*."

Within the framework of specialization, the participants stated that good command of software and similiar hardware is an expectation of the sector. P2 explains his opinion about this issue as follows: "*In addition to general knowledge provided, how do logistic ERP interactions and logistic PP module work in SAP? Here, generally logistics operations, production and how they will be delivered to customers are planned, let's say PP module. What I mention here is very specific. SAP is software and PP module is its sub module. It has a widespread use in Turkey. When we see a person who knows about this technology, it means he has knowledge, talent about "what is happening in logistics world, what is happening in Turkey, what kind of activities happen in Turkey? We hire a person who says that I can process an order"*

P6, who highlights the importance of specialization, states: "*Indeed, if someone comes to me and says "I know how to unload a truck, I know anything about unloading a truck but nothing else, I immediately hire him, I hire him thinking that his logic is correct. He knows one thing but he knows it in detail*."

As for "updating" subtheme of "expectation" main theme, the senior executives emphasized the importance of knowledge. They suggested that they should always update themselves and become a member of the associations in the field even when they are students. By doing so, they

might have the opportunity to keep up with the up-to-date knowledge by attending seminars, conferences and fairs. P7 supported the importance of updating by stating : *... there is a strong competition among young people but there are many opportunities for those who want to improve themselves. A young person who asks an interesting question in a conference we organize can catch the opportunity to show himself up. We see that there are students who contact to us after conferences and create new opportunities for themselves in this way."* Similarly, P1 exemplifies the issue as follows: *"... in fact, what we do is an analysis of the delivery of a product in a network in a correct way. There are not ideal solutions yet. It might be possible to make better analyses thanks to new technology and artificial intelligence. What is the concept called "über"? It helps a person to optimize the needed source at local level. From logistics point of view, it will be possible to meet people's and companies' demands by using optimum time and resources in a region even if this demand can be up to millions. In other words, logistics is a dynamic process and the rule of surviving in the sector is an to be equipped with konwledge to adapt this dynamic structure."*

P7, who emphasizes the importance of lifelong learning as a necessity for the occupation although it is an individual gain, explain it by stating: "*... I strongly believe that the most crucial component of logistics is human. Every activity is carried out by people, even if you have the best technology in the world, this is not important if you do not work with the right person. Who is this right person? The person who continuously asks himself how he can do better."*

Discussion, Conclusion, and Suggestions

Based on the findings obtained from the interviews carried out with the participant senior executives, the study revealed three main themes regarding employment of young people following their graduation: "Disability", "Expectations" and "Requirements".

The main theme "disability" consists of two sub themes: analytical thinking skill and personality traits. According to the participants, analytical thinking skill is a must and it is impossible to carry out logistics operations without this skill. They also stated that mathematics and computer skills are the basis of analytical thinking skill and logistics departments' graduates are not competent in these two components. Since the sector requires effective planning and optimization, industrial engineers can meet these requirements. Murphy and Poist (2007) stated that those who receive logistics education should have analytical thinking skill. The study found that graduates of logistics department fail to meet this requirement. In this respect, the claim that logistics education fails to develop this skill should be examined in detail. Another subtheme of "disability" theme is personality traits. The participant executives emphasized that they have communication problems with newly graduated employees who are not well prepared in terms of personality traits. Due to insufficient knowledge about the practical issues in the field, the new graduates are not interested in business environment and cannot set goals, which means that they fail to be patient, which is an incompetency in terms of personality traits.

Another subtheme of "disability" theme is personality traits. The participant executives emphasized that newly graduated employees who are not well prepared in terms of personality traits experience problems in their communication attempts. Due to insufficient knowledge about the practical issues in the field, the new graduates are not interested in business

environment and cannot set goals, which means that they fail to be patient as an incomptency in terms of personality traits.

Senior executives stated that graduates of logistics departments are not competent in mathematics, operational research and information technologies and these problems result in inadequacy in analytical thinking skill. In addition, they reported that newly graduated students are impatient due to their ineffective communication skills and fail to set goals, which shows a serious incompetency in terms of personality traits.

The incompetency-related opinions of the participant senior executives about graduates of logistics departments are quite striking. Although Van Hoek's (2001) study emphasized that effective communication and team work should be indispensable components of logistics education, these opinions clearly show that logistics education does not meet these sectoral expectations, therefore, it is necessary to examine course contents in logistics education by looking for an answer to the question "What does the sector ask for?" The ideal employee profile is defined as a graduate who does not receive engineering education but is equipped with skills to find solutions with an analytical perspective and with communication skills to communicate with employees from all levels of hierarchy in a company.

The second main theme of the study based on the opinions of senior executives who participated in the study is "requirements", which consists of two subthemes: personality traits and general information. The first theme determined for the employment of graduates of logistics departments is personality traits. The working environment for logistics sector is not a large plaza. Although each large-scale company has its own headquarters, most of graduates do not work in these headquarters. They often work in places such as storages, harbors and shipping coordination points, where many people from different sectors also work. The first step to find solutions to problems faced in such a working environment is getting to know about the environment and being patient. Logistics sector is a 7/24 dynamic sector, through which millions of products are carried by using different shipping methods and kept in different transfer points or storages for some time. Many problems might occur during this 24-hour dynamic process. At this point, logistics staff should know all the details and act according to his job definition in order to find solutions to these problems. The participants stated that ambition and patience are necessary personality traits for problem solution. Many different employees work together because of the nature of the sector, which requires taking actions with a team spirit. Thus, logistics graduates, as a part of the team, should effectively communicate with other team members through a strong collaboration.

Under the "general information" subtheme of "requirements" main theme, the participants mentioned about basic information that logistics graduates should know in order to be employed in the sector. Knowledge of mathematics is a must for all the operations in logistics activities and this requirement has been stated by the participants many times during the interviews. Another requirement stated in the interviews is that logistics graduates should know at least one foreign language because logistics is the power unit of trade activities in this globalized world. Still another requirement reported by participant executives in terms of employment criteria is knowledge of geography because shipping networks and geographical features of other countries are very important in logistics activities. The final requirement stated by the participant executives is the knowledge about logistics regulations, which is important in finding solutions to problems encountered in this risky sector. Thus, considerable knowledge about regulations and laws related to logistics sector was reported as a requirement for graduates of logistics

departments. Basic level information is considered important in Turkish logistics sector, however, more general competencies such as information technologies competency are more important at global level. The study by Razaaque and Bin Sirat (2001), which examined Asian professional logistics staff, reported expectations specific to the sector and about personality traits. The expectations specific to the sector mainly focus on logistics information and shipping in contrast to the focus on basic information as revealed by the current study. However, the expectations in terms of general management issues such as analytical thinking skill, specific software and communication skills are consistent with the findings of other studies.

The third theme determined from the opinions of the participant senior executives is "expectation", which consists of two subthemes: "specialization" and "updating". As for "specialization" subtheme, the participants stated that logistics graduates should be specialized on certain specific operations and activities in the sector since they cannot be knowledgeable about everything. They should set career goals for themselves by deciding on a specific field such as storage area, shipping or other activities. When a graduate decides on his area of specialty, he is expected to decide on the ideal position and meet necessary technological requirements of this position. Today, technology is integrated into every field. Logistics also uses specific software and technological devices in its operations and activities. The participants suggested that knowing how to use these types of software and technology will bring a lot advantages to graduates of logistics and it will be easier to use similar ones in the future. The participants reported that the subtheme "updating" is a natural expectation since people should update their existing knowledge depending on the latest developments. They also said that graduates of logistics departments can do something to update themselves as part of lifelong learning process. Finally, they suggested that the associations in the sector as well as attending fairs, conferences and seminars play a role in updating this knowledge and a good way to keep up with sectoral trends.

An overall evaluation for the findings of the study reveals a negative perception by senior executives in logistics sector about logistics education in Turkey. They opine that graduates of logistics education programs are not equipped with sufficient amount of knowledge about the sector and its operations. In other words, education provided in educational institutions is often based on theoretical knowledge and memorization and therefore do not prepare students for the actual practice. They also believe that graduates do not have analytical thinking skill as well as adequate knowledge about mathematics, geography and information technologies. They also report that students are not competent enough in communication skills, problem solving skills, patience and working in detail. The participants stated that logistics education should provide quality content in basic courses and help students develop analytical thinking skill, which is quite important due to the nature of the sector. They also found educational institutions inadequate because they do not focus on specialization. They suggest that students should develop their software use skills by doing practical applications in lessons. They also believe that logistics education should include detailed content in logistics regulations, world geography, foreign language etc. Students should be open to learning at all times and keep up with the latest developments by attending events such as conferences, seminars etc. All executives state that graduates will have a better chance of employment if they are specialized in a task rather than knowing about everything a little.

There are a number of master theses focusing on logistics education and its development in the literature. However, literature review revealed no studies on logistics education and expectation

of the sector in Turkey. The findings of the study were obtained from the interviews conducted with the senior executives of large-scale logistics companies operating in Turkey. If we want graduates of logistics education programs to be employed in the sector, the findings obtained from the current study should be examined in detail in collaboration between the sector and educational institutions and necessary revisions should be made to train well-equipped graduates. The basic topics to focus on are developing analytical thinking skill and effective communication skills.

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Author

Dr. Gülsen Serap Çekerol is associate proffessor in the field of Quantitative Decision Making. Her fields of work are logistics and distance education.

Contact

Eskisehir Technical University
Transportation Vocational School
Basin sehitleri st. Porsuk Campus, Eskişehir, Turkey
gscekerol@eskisehir.edu.tr