

## *Pursuing a Career in Logistics: Study Choice Motives and Career Expectations*

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### **Abstract**

Major trends, such as digitalization and sustainability, are shaping the future of logistics. As a consequence, qualifications required in the professional field will significantly change, and the demand for logistics professionals with a graduate degree will generally increase. At the same time, the industry has to cope with a skills shortage. A sufficient number of well-educated logistics specialists is essential to master future challenges in the logistics industry. An understanding of the motives for choosing a logistics degree program is an essential basis for effective actions to promote studies and careers in logistics. Therefore, in this work, we explore logistics students' study choice motives. Based on the results, implications for the logistics industry, higher education institutions, and other relevant stakeholders are discussed. An existing model has been adapted to the specific situation of logistics programs at universities of applied sciences. On this basis, a survey among students of a bachelor and a master program in logistics was carried out at an Austrian university of applied sciences. Findings suggest that understanding study choice motives is a multidimensional problem that requires considering a wide range of motives. In conclusion, the motives identified by this work provide a starting point for designing measures to arouse interest in logistics.

Keywords: Career in Logistics, Study Choice Motives, Decision-Making Model

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## 1. Introduction

The logistics field, probably more than almost any other industry, is being strongly transformed by the megatrends of digitalization and sustainability (DHL, 2022). Long-term success in logistics means making the best out of the opportunities offered by the so-called twin transition (World Economic Forum, 2022), i.e., not only achieving economic goals in the most effective way possible, but also meeting ecological and social challenges by utilizing technology and data. These changes require appropriate adjustments in employees' skills and competences at all levels of qualification (McKinnon et al., 2017). Therefore, the logistics and supply chain industry need well-educated people who are ready for these challenges.

To provide the logistics industry well-trained people, schools and universities play an important role to arouse interest in logistics and teach the skills that students of logistics will need for their careers (Eitler & Schodl, 2019). This is particularly important, as the logistics sector is already suffering from a severe skills shortage (Puls, 2018; BVL, 2017). The shortage of skilled applicants might be due to the negative perception of career opportunities and occupations in logistics, as well as the labor force's demographic structure. Less attractive remuneration and working conditions compared to other sectors may have also contributed to the shortfall (Logistics UK, 2021). A major challenge for the logistics industry is its image. The perceived lack of opportunity for career growth and the perceived low status of professions in logistics negatively affect talent acquisition and retention. Although many tasks are still carried out manually, there is intense ongoing discussion about the application of digitization and automation in the logistics industry to alleviate the skills shortage (Ittermann & Eisenmann, 2019). Nevertheless, people will remain the focus of attention in transport and logistics in the future, and companies and educational institutions need to work on strategies to address the challenges in the labor market.

For higher education institutions (HEIs), it is of particular interest to find out why students decide to study logistics. There are several reasons it is important to understand how students make their study choice decisions:

- Identifying the motives for choosing a certain degree program allows stakeholders to identify the underlying reasons for low student enrollment.
- Knowing the factors influencing study choice allows recruitment activities to be improved and campaigns designed appropriately.
- Knowing young students' expectations allows the curriculum to be tailored not only to the requirements of the labor market but also to students' expectations and needs. This could increase satisfaction with the choice of degree program and lead to more positive word-of-mouth advertising.

Research is sparse concerning logistics students' study choice motives and students at universities of applied sciences (UASs), who are assigned different study choice motives than students at universities (Oberrauch et al., 2021). Therefore, the objectives of this paper are twofold: to explore the study choice motives and career expectations of logistics students at UASs and to propose measures for the logistics industry, tertiary institutions, and politics to encourage more young people to pursue a career in logistics.

The remainder of the paper is structured as follows. Section 2 presents a general overview of study choice motives, followed by an explanation of the methodology in Section 3. Section 4 discusses some empirical results. Section 5 concludes.

## **2. Study Choice Motives**

Following general motivation theories, study choice motives can be divided into intrinsic, extrinsic, and altruistic motives (Heublein et al., 2017). Intrinsic motivation “is defined as the doing of an activity for its inherent satisfactions” (Ryan & Deci, 2000), e.g., studying a subject because it genuinely interests and excites. Most of the activities people do are not intrinsically but extrinsically motivated (Ryan & Deci, 2000). Extrinsic motivation involves “behaviors done for reasons other than their inherent satisfactions” (Ryan & Deci, 2020), e.g., studying hard to get good grades and receive praise or approval from parents or teachers. Altruistic motivation (Bar-Tal, 1985) is centered around the desire to contribute to others’ well-being without expecting personal gain or external rewards. Nevertheless, it is not individual motives that are crucial for the decision to study a particular degree program, but the interplay of several motives (Oberrauch et al., 2021), and motivations can change over time and in different situations.

The decision to study and the choice of degree program depend on various factors. Study choice motives are fundamental to whether someone completes an education, whether someone later works in the sector, and how professional competences (and hence, professional success) develop (Ramm et al., 2014). Despite the increasing importance of extrinsic motives in choosing a degree program, intrinsic motives dominate the decision (Sobiraj et al., 2017; Ramm et al., 2014). Ramm et al. (2014) identify a special interest in the field of study, personal skills, the variety of career opportunities, good prospects for a secure job, and a good salary as important motives for choosing a degree program, and give the following insights: For students at UASs, the variety of career opportunities is a strong motive; in addition, income and career prospects are more important to them than to their fellow students at universities. The reasons for choosing a degree program also vary according to the chosen program. Interest in the field of study is particularly important for students in medicine, cultural studies, and natural sciences. For students in the cultural sciences, motivation is the most important motive for their choice of degree program. Job security is most important to students in medicine and economics, while income and career are more important to students in economics and law.

To summarize, choosing a degree program is a complex decision-making process in which several aspects must be considered under uncertainty (Sobiraj et al., 2017).

## **3. Methodology**

A lot of decision-making models attempt to provide an understanding of students’ choice of which HEI to attend and which degree program to follow (e.g., Punj & Staelin, 1978; Harren, 1979; Chapman, 1981; Jackson, 1982; Cubillio et al., 2006; Vrontis et al., 2007). One of the most important uses for these decision-making models is to support HEIs to market themselves more effectively to their prospective students (Vrontis et al., 2007). The so-called integrated generic higher education student-choice model by Vrontis et al. (2007) combines various student-choice models into a single model and serves as basis for this study. For the purpose of this study, it was slightly adapted to the situation of Austrian UASs (See Figure 1).

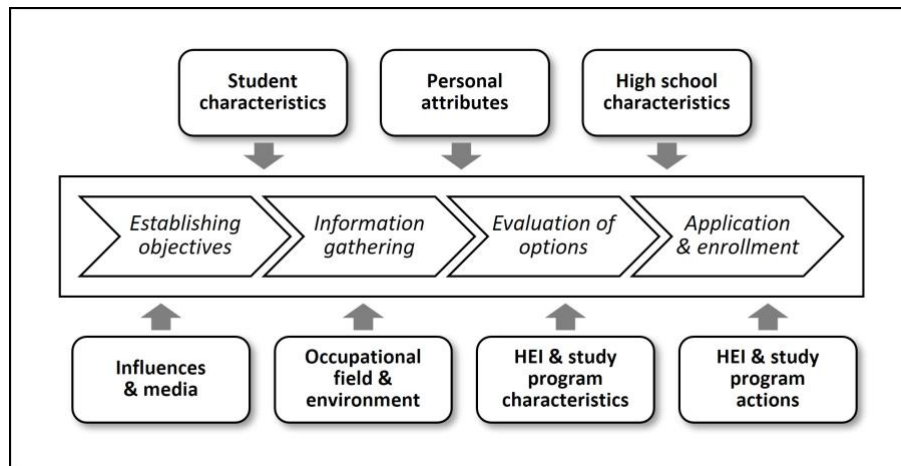


Figure 1: Adapted integrated generic higher education student-choice model (based on Vrontis et al., 2007)

Potential students' decision-making process starts with establishing the general objective to study and other study-related objectives. Then they seek and evaluate information about various universities and degree programs. After completing applications to degree programs and the admissions processes, enrollment in a degree program takes place. This decision-making process is affected by various factors (adapted from Vrontis et al., 2007): students' characteristics (gender, age, cultural background, family background, place of residence, financial situation, occupational situation, etc.), personal attributes (interests, personal values, personal goals, lifestyle, etc.), high school characteristics (type, quality, specialization, etc.), influences and media (peers, parents, teachers, traditional media, social media, etc.), occupational field and environment (labor market, working conditions, career opportunities, image, etc.), the HEI's and degree program's characteristics (curriculum, reputation, location, price, study organization, ambience, etc.), and the HEI's actions (recruitment activities, communication, admission policies and process, etc.).

An online questionnaire based on existing literature and studies already conducted on this topic, which covers central elements of these seven factors, was developed. The online survey was conducted among students at the UAS BFI Vienna from the bachelor's degree program Logistics and Transport Management and the master's degree program Logistics and Strategic Management from September to October 2023.

#### 4. Results

The sample comprised 128 respondents; 77% were students from the bachelor's degree program and 23% from the master's degree program. 41% of the respondents were female and 59% male, approximating the distribution of the student population.

In the following, only some of the results relating to the motives for choosing a logistics degree program are presented. The motives were surveyed using the question "How important were the following reasons for choosing your degree program?" A 5-point Likert-Scale was deployed in which "1" represents "very important" and "5" represents "unimportant." Figure 2 shows the mean values of the most important study choice motives.

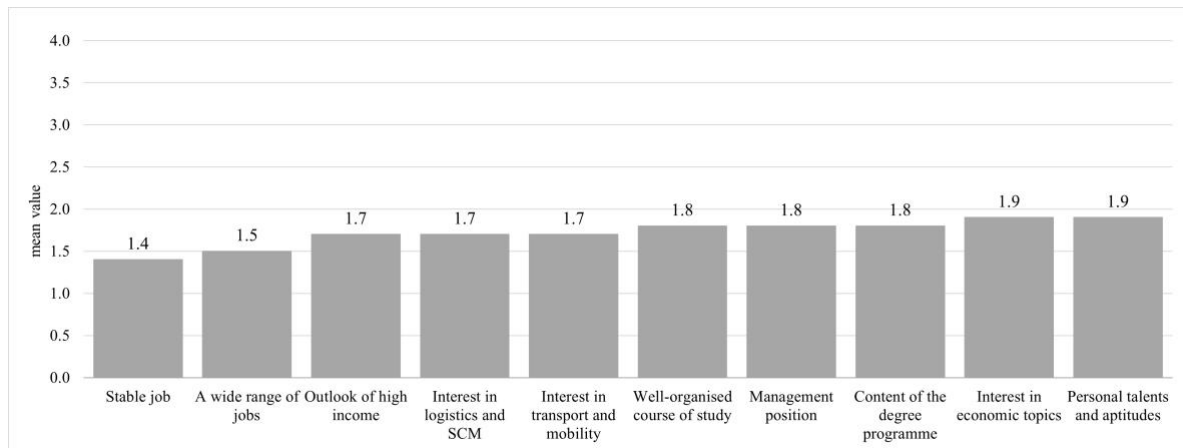


Figure 2: Mean value study choice motives I (1: very important, 5: unimportant, n = 128)

A future stable job (MV = 1.4, SD = 0.76) was the most important study choice motive for logistics students, followed by a wide variety of jobs in the logistics industry (MV = 1.5, SD = 0.76), the outlook of a high income (MV = 1.7, SD = 0.85), and a special interest in logistics and supply chain management (MV = 1.7, SD = 0.86) as well as in transport and mobility (MV = 1.7, SD = 0.87). Additionally, a well-organized course of study (MV = 1.8, SD = 1.05), good prospects for a future management position (MV = 1.8, SD = 1.08), the content of the degree program (MV = 1.8, SD = 0.80), interest in economic topics (MV = 1.9, SD = 0.93), and personal talents and aptitudes (MV = 1.9, SD = 0.85) were relatively important for the study choice. An analysis of the results by gender or degree program shows no significant deviations.

A comparison with existing studies that have not dealt with logistics degree programs, but with the choice of degree program in general, makes these results appear plausible. As mentioned before, students at UASs have different main motives for choosing a degree program than students at universities. While university students generally focus on personal development, students at UASs usually focus on the prospect of a stable job and the variety of career opportunities (Ramm et al., 2014). Results show that students do not necessarily see intrinsic and extrinsic motives as opposites; they are often quite compatible and can complement each other.

It is also interesting to note motives that were less important to the decision to choose a logistics degree program (see Figure 3). Not getting a place in the degree program of one's choice (MV = 4.1, SD = 1.35), having friends studying logistics (MV = 4.0, SD = 1.29), and published rankings of universities and UASs (MV = 3.9, SD = 1.29) were relatively unimportant study choice motives. Not having a better idea than going into logistics (MV = 3.8, SD = 1.19) was of no great significance either. The decision to study logistics seems to be a very conscious one, as recommendations from career counsellors (MV = 3.8, SD = 1.33), friends (MV = 3.5, SD = 1.25), or parents and relatives (MV = 3.5, SD = 1.34) do not have a major influence on the study choice.

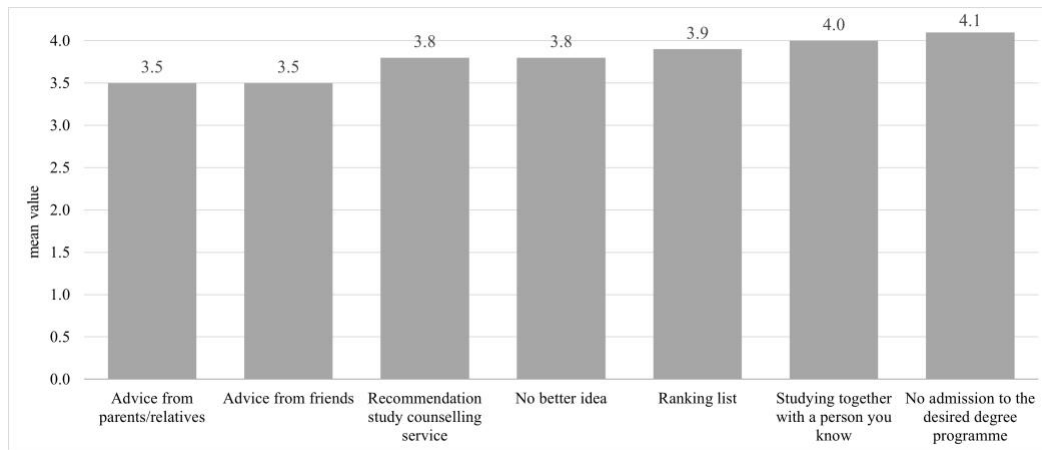


Figure 3: Mean value study choice motives II (1: very important, 5: unimportant, n = 128)

It is also worth noting that the megatrends in logistics, digitalization (MV = 2.7, SD = 1.13), and sustainability (MV = 2.6, SD = 1.14) did not play a particular role in the decision to choose logistics as a degree program. Additionally, altruistic motives such as contributing to society (MV = 2.4, SD = 1.01) and protecting the environment (MV = 3.1, SD = 1.23) had no substantial influence on the study choice.

## 5. Conclusion

Although the logistics sector is suffering from a severe skills shortage, employability is the most important study choice motive for logistics students at a UAS, reflecting their uncertainty regarding the future. Therefore, UASs and the logistics industry should emphasize job security and the diversity of career opportunities to attract more young people.

In line with other studies, a high future income and the prospect for a management position are very important motives for choosing a degree program among students at UASs. Studying logistics can be seen as an opportunity for social advancement, which should be emphasized more strongly in the promotional activities for choosing a logistics program at an UAS as well as the logistics industry as a potential employer.

Sustainability and digitalization do not play a particular role in the decision to choose logistics as a degree program. This opens the opportunity to address those who are interested in sustainability or digitalization but do not realize the great possibilities for pursuing these interests within the logistics industry.

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