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## Article

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Economies

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*Suggested Citation:* Kovács, Ildikó; Keresztes, Éva Réka (2022) : Young employees' perceptions about employability skills for e-commerce, *Economies*, ISSN 2227-7099, MDPI, Basel, Vol. 10, Iss. 12, pp. 1-28,  
<https://doi.org/10.3390/economies10120309>

This Version is available at:

<https://hdl.handle.net/10419/328609>

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Article

# Young Employees' Perceptions about Employability Skills for E-Commerce

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**Abstract:** With the digital transformation of businesses, digital marketing has been a prominent feature of organizations in the 21st century. Changing consumer behavior has also created a need for versatile hard and soft skills for marketing professionals. Inspired by the ongoing disruption to businesses across the world, this research focuses on employability skills in the field of e-commerce. A systematic review of the managerial research literature on digital marketing and e-commerce competencies has revealed a research gap regarding the investigation of the perceived importance of employability skills. The aim of this paper is to find out how important these skills are for future and current employees. The novelty of this study is the comparison between perceptions related to nonworking versus working young employees based on five key skill categories across 30 soft and hard skills. The study is quantitative in nature: a self-administered computer-assisted personal interviewing (CAPI) method is used for data collection. The findings reveal that the examined skills are perceived as important from the employee point of view. In addition to exploring the perceived relevance of the employability skills categories, the study identifies differences among the skills that young workers consider important in terms of their work experience. The research results reveal significant differences by work segments in relation to soft skills, such as teamwork, stress resilience, planning, organization and time management, precision, and attention to detail.

**Keywords:** employability skills; e-commerce; skills perceptions; young employees



**Citation:** Kovács, Ildikó, and Éva Réka Keresztes. 2022. Young Employees' Perceptions about Employability Skills for E-Commerce. *Economies* 10: 309. <https://doi.org/10.3390/economies10120309>

Academic Editor: Nick Drydakis

Received: 21 September 2022

Accepted: 26 November 2022

Published: 3 December 2022

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## 1. Introduction

In the coming years, the global and European e-commerce markets are expected to continue to grow at a high rate (Statista 2021a, 2022). Moreover, according to the study conducted by The Centre for Market Insights, Amsterdam University of Applied Sciences, within Europe, the regions with the highest turnover growth rates from 2019 to 2020 were Eastern Europe (36%), Central Europe (28%), and Southern Europe (24%) (Lone 2022). Changes in recent years and the impact of COVID-19 have also contributed to the surge in e-commerce (Rupeika-Apoga et al. 2022). By observing the current changes taking place in it, we have a unique opportunity to learn about the employability skills required in the field of e-commerce positions. The steady growth of the e-commerce market and the volatile changes in e-commerce technologies induce the need to develop transferable skills.

It is anticipated that online sales of physical goods to end consumers (business-to-customer, B2C) will steadily grow, and figures show that the proportion of the e-commerce market reached 15.9% worldwide in 2020, and 17.9% in 2021. Digitalization has made e-commerce a relatively mature market alongside traditional retail. Due to rapid growth in the Asian economies and fast-paced digital innovations, the e-commerce landscape is constantly evolving, and new shopping methods are being offered to consumers such as interactive shopping and metaverse. In 2020, China, the US and Europe were the three largest e-commerce markets, worth USD 1343.5 billion, USD 537.7 billion, and USD 460.5 billion,

respectively. According to the e-commerce Report (Statista 2021a), desktop computers, including notebooks and laptops, represented 39.8% of the total share of digital channels in 2020. Due to growing purchasing power and internet penetration, more consumers are gaining access to e-commerce, especially through mobile devices. Mobile devices, including smartphones and tablets, accounted for 56.7% of the total share and is expected to rise. In the European market, the top revenues were coming from the segments of fashion (USD 184.4 billion) and electronics (USD 148.9 billion) in 2020. E-commerce has also been affected by the COVID-19 pandemic; while the revenue growth in 2019 was between 6.8% and 11.6% across the segments, while in 2020 it rose to between 26.9% and 59.9% (Statista 2021a, 2022). With a value of USD 14.9 trillion in 2020, the business-to-business (B2B) market was five times larger than the B2C market (Statista 2021b, p. 1).

Several technological trends shape the future of work requirements. As artificial intelligence (AI) continues to develop, it will have far-reaching effects on society and businesses. In upcoming changes, we can anticipate a variety of new ways in which businesses can organize labor and capital (Rudko et al. 2021). As the digital marketing and e-commerce marketing fields are rapidly evolving, the e-commerce workforce needs to focus on transferable employability skills, as job security can be more maintained by having marketable employability skills (Forrier and Sels 2003). Customer relationship management (CRM) and loyalty managers can gather large volumes of data and generate reports on various segments of customers to build loyalty platforms, strategies, and retention tools. Creative and content managers with backgrounds in copywriting, design, and art direction can optimize go-to-market strategies and bring brand authenticity to their organizations. The in-house management of creative control and content makes it easier for marketing teams to manage a project's full lifecycle, from the creative concept through to the final execution. In addition to managing influencer partnerships, email campaigns, search engine marketing (SEM) and search engine optimization (SEO), paid advertising, and loyalty programs, digital marketing experts have broad expertise across all digital touchpoints, from social media to apps and platforms. With the shift to digital accelerating rapidly, the demand for experts equipped with e-commerce skills has risen even further. A successful e-commerce manager understands the various aspects of the online store, including content, product scheduling, digital data and marketing, identifying areas for improvement, planning cross-channel promotions and creating commerce calendars (Hays 2022, p. 1).

Fundamental soft skills are increasingly valued by employers and are influencing employment prospects in digital marketing, so to be successful in their careers, business graduates need to develop and balance hard and soft skills (Kovács 2021).

The digital marketing industry moves quickly, and employees change jobs frequently, making transferrable skills crucial for a successful career. By reviewing the literature, our goal is to explore business managers' expectations to see what competencies to include in the curriculum of business universities. In terms of students' perspective, the importance of perceptions on employability skills is expected to vary between segments with and without work experience. Our primary study seeks to identify where the gap between manager and student perceptions in the skillset is the largest.

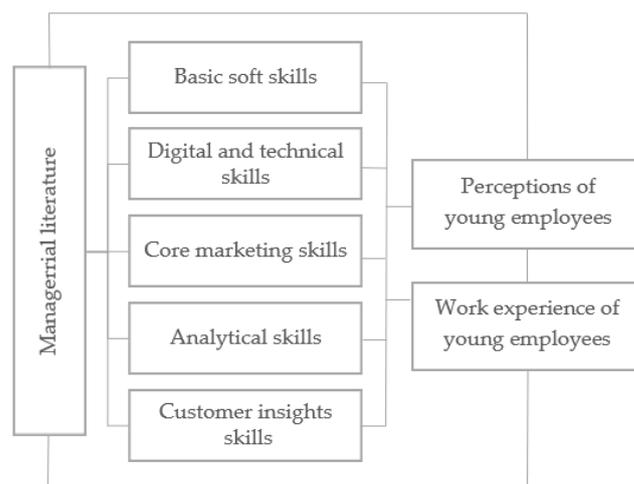
Given the dynamic growth of the e-commerce market and the trends mentioned above, it is expected that the needs of the labor market will also change. University education aims to develop key competences. Understanding which competences are considered important could improve the motivation of students. The competencies that employees consider important but are perceived to be less important and less motivating by students need to be better communicated. Another important expected outcome of this research is to support the findings of employer research by getting the views of young employees already working.

We have reviewed the relevant literature and have found a gap in academic research aiming to examine the perceived importance of hard and soft skills in the areas of digital marketing from the employees' perspective. It is essential to examine what basic competencies young workers need to be able to find employment, which is particularly important in

the rapidly changing world of e-commerce. Our investigation attempts to fill the research gap by addressing the following questions to find out how important these skills are for future and current employees. Our primary study seeks to establish an e-commerce-driven response to this natural disruption, by asking the following questions:

1. In comparison with the results of previous managerial research, how do young employees perceive employability skills?
2. Which group of skills do young employees consider important?
3. Is there a significant difference between young employee segments with and without work experience in terms of employability skills?

This study was conducted by utilizing former research results based on expert interviews to determine the most outstanding digital marketing skills. Working from these findings, we utilized a measurement scale to examine the perceptions of young employees. A quantitative survey was implemented surveying three different segments of university students. This paper makes several contributions to future academic research as follows. First, we collected the skillset based on former results to develop a measurement instrument. Then, we examined the reliability of the measurement scale that enables later comparative research. The result of the current study provides a base for comparison of perceived importance of employability skills. It is possible to incorporate the skillsets that were collected into the training structure by identifying the educational aims and skillsets. As a result, the students will have a better understanding of these, and it is possible to draw attention to skills that may have been overlooked by students. The research framework is visualized in Figure 1.



**Figure 1.** Research framework of young professionals' employability skills in e-commerce.

## 2. Literature Review

We intend to present the current e-commerce market trends since the digital transformation of markets induces socio-economic changes and specific needs from the labor market. In the next section, we present an overview of the soft and hard employability skills in the field of e-commerce.

### 2.1. Implications of E-Commerce Demands for Labor Market

The competitive advantage of digital firms and the employability of the workforce depend on the skills of the employees. The reason for this is that structural processes, such as globalization and technological advances, demand higher-level and more marketable skills to guarantee high-quality jobs and to increase productivity (European Commission 2017). Moreover, the impact of the COVID-19 pandemic has increased the pace of technological development in the labor market, such as remote work and digital transformation (Eurofound 2021). Maresova et al. (2018) have investigated the consequences of Industry

4.0 and have concluded that transforming work environments requires more general skills and competencies. To meet the growing expectations of digital firms, triggered by Marketing 4.0, highly skilled business professionals and marketing experts are needed in the e-commerce workforce (Kovács 2021).

Several studies examine the impact of the spread of e-commerce, emphasizing the effects of the increasing volume and use of big data (Thiebaut 2019; Peng et al. 2022), the effects of internationalization (Yan et al. 2022), and the rising level of digital proficiency (Piroșcă et al. 2021).

Corporate operations also have an impact on the digital competency expected of employees, with a growing share of online consumer demand (Wang and Scrimgeour 2022; Olsson et al. 2022) and a deeper understanding of online consumer needs (Dospinescu et al. 2022; Karampournioti and Wiedmann 2022). Labor market responses to all of these should not be neglected.

Amoako (2022) conducted a study to determine what effect the teaching philosophy and curriculum design could have on graduates' employability. Labor market soft skills in the digitalized economy were explored by Schislyaeva and Saychenko (2022). Their review found that during job interviews, soft skills are considered crucial; however, they are becoming increasingly scarce. We can distinguish meta-skills that allow a person to improve and develop other skills as well as learn new skills faster. As researched by Prasittichok and Klaykaew (2022), meta-skills are components of self-awareness, creative problem solving and resilience. According to Barkas et al. (2021), students at a British university were found to have higher-order meta-skills and social capital that contributed to their employability.

There have been many changes in e-commerce, both for the employer and the employee. While this is challenging because the environment is constantly transforming around them, millennials are also motivated by the new technology of e-commerce. (Theodora et al. 2019). In addition, young professionals expect a different work environment and leadership style from former generations in order to deliver adequate work performance and develop their skills (Bilge et al. 2021).

## 2.2. Soft and Hard Employability Skills

As early as in the 1910s, in a research study exploring the important factors of the engineering profession, personal qualities were mentioned more than seven times as frequently as knowledge of engineering science and practice techniques. The reasons for employability, success and promotion were reflected in the respondents' answers of, respectively, character, judgment, efficiency, understanding of people, knowledge, and technique, with the list of priorities starting with "soft skills" and ending with "hard skills" (Mann 1918). As defined by Moss and Tilly (1996), the term "soft skills" or "non-cognitive skills" refers to abilities or traits relating to personality, attitude, and behavior rather than formal or technical knowledge. These skills are considered essential for success in education and employment. Cimatti (2016) expands this definition by saying that personal transversal skills, such as interpersonal skills, language and communication abilities, friendship, and teamwork, are soft skills too. When hiring employees, companies prefer candidates who have meta-skills that make them compatible with other team members and are viewed as a good fit for the department or organization (Kenton 2022; Schlee and Harich 2010; Yorke 2006). This indicates that employees are of the opinion that in order to be efficient at work and be prepared for the future, they must manage personal relationships well.

Desired soft skills are aligned with the 5C principles of marketing set up for the Fourth Industrial Revolution by Nosalska and Mazurek (2019). These principles are cooperation, conversation, co-creation, cognitivity and connectivity, which have been found to enhance productivity through communicating with stakeholders in the market, as well as working together in a full business ecosystem, with prices determined by cognitive processes that analyze customer behavior in real time. When employers' expectations are different from what graduates possess in terms of skills, a skills mismatch arises. The discrepancy between

the supply and demand of skills should be addressed by further measures. Optimal workplace performance requires a balanced mixture of hard and soft skills. In terms of long-term employability, previous research has also emphasized the importance of soft skill development (Grugulis and Vincent 2009; Heckman and Kautz 2012; Hurrell 2016) and personal proactive adaptivity (Fugate et al. 2004).

There is a growing trend of the hybridization of skills, and more traditional jobs require complex approaches. For instance, sales representatives not only need strong communication and persuasion skills, but they also need to understand the origins and research methodologies of products. What is more, such skills as structured query language (SQL) expertise, strong data analysis skills, and knowledge of CRM (customer relationship management) can lead to higher remuneration for marketing managers and customer service managers, which is also an example of hybridization (Doyle 2019).

Past decades have seen a variety of studies exploring marketing soft skills, including factors which make a marketer employable and are demanded in the marketing field (Finch et al. 2013; Gregorio et al. 2019; Walker et al. 2009). Previous research highlights the importance of soft skills, which are already strong expectations in career and junior positions and are reflected in job advertisements (Kovács and Zarándné 2022). To effectively prepare for the expectations of the labor market, it is important to know the competencies that are essential in the world of work. The study of students' assumptions is special because it is an under-researched area. In education and in the design of corporate training, it is also important to know which competencies are considered important by future generations in the labor market.

According to the academic literature, improving the employability of graduates by equipping them with soft skills that enable them to adapt to the ever-changing digital marketing work environment is crucial. An awareness of essential hard and soft skills is a critical factor for competitiveness and employability for universities and graduate students and wherever employees are on their career paths (Kovács 2021). The differences in desirable job transition options are based on the information on skills required and on building up strategies and identifying options.

In recent years, a number of studies have examined employers' recruitment practices and job offers, and they have revealed that employers place a high value on non-cognitive skills in recruiting and hiring (Kovács and Zarándné 2022; Börner et al. 2018; Clarke and Skuterud 2016; Hoeschler et al. 2018; Verma et al. 2019). Employees and employers should be aware of expectations and skills, as this motivates employers to develop their skills and provides employers with financial recognition (Bassi and Nansamba 2019). Evolved around outstanding employability skills in various digital marketing fields including e-commerce positions, former research (Kovács 2021; Kenton 2022; Finch et al. 2013; Gregorio et al. 2019; Walker et al. 2009; Kovács and Zarándné 2022) found that soft skills were imperative in marketing positions. This present research follows the summary of Gregorio et al. (2019) on the primary skillsets that affect marketing employability (Table 1).

Surveying business graduates and employers, studies on skills in marketing (Azevedo et al. 2012; Barker 2014) found that employers were not confident regarding business graduates' abilities in key hard and soft skill areas and in key generic competencies that seemed to be essential in long term employability. Using a text-mining method, Rios et al. (2020) tested and identified graduate competences as important predictors of employers' satisfaction with graduates' work performance. Their results were based on a sample of roughly 120,000 job advertisements. Implications for developing educational standards around 21st century skill development were discussed and described. Thus, the most relevant skills for the near future seem to be collaboration, communication, content analysis, critical thinking, descriptive analysis, problem solving, social processes/development and textual analysis.

**Table 1.** The employability skillset of marketing professionals.

Factors	Skills
Basic soft skills	Flexibility, Teamwork, Interpersonal skills, Initiative, Motivation, Oral communication and presentation skills, Stress resilience, Self-development
Digital and technical skills	Knowledge of social media, Knowledge of mobile, Knowledge of e-commerce, Knowledge of analytics and real time practices, Knowledge of Internet and software knowledge, SEO and SEM
Core marketing skills	Planning, organization and time management, Content creation across channel, Creative thinking, Precision and attention to detail, Sales knowledge and management skills, Ability to manage multiple marketing tasks
Analytical skills	Data-driven/ data-oriented, Good conceptual and analytical skills, Statistical knowledge, Problem solving, Critical thinking, Ability to synthesize information into meaningful and actionable reports
Customer insights skills	Knowledge of company and its customers, Knowledge of research methods, Knowledge of customer touchpoints and journey, CRM and relational skills

Source: Kovács (2021) based on Gregorio et al. (2019).

### 3. Materials and Methods

In this research, future, junior and senior digital marketing professionals were asked to consider what knowledge and skills they perceive as being needed at work. A computer-assisted personal interviewing (CAPI) method was used to administer a survey measuring perceptions of soft skills' relevance to employability. A skill scale was created based on the work of Gregorio et al. (2019). The employability skillset measuring scale consisted of five subscales (basic soft skills, digital and technical skills, core marketing skills, analytical skills, and customer insights skills). The scale has 30 items (see Appendix A, Table A1) in the five subscales that are assessed by using a 6-point Likert-type scale (1 = not at all important, 6 = very important). It is an even-numbered scale, where the respondent had to decide which way their opinion leaned. The data acquisition took place from November 2021 to February 2022 in Hungary at three leading business universities offering digital marketing courses focusing on e-commerce. The professional practical experience of the respondents comes from digital marketing, e-commerce, and related fields. The respondents ranged in age from 21 to 40. Based on a quota sampling method, we planned balanced proportions in each work experience segment. The response rate was 83%. We asked nominal questions for the three categories of work experience and respondents classified themselves into each category. Data cleansing was applied to filter out unusual, incomplete responses. In the analyzed sample, 31% of the participants worked regularly full-time or part-time, 31% worked casually or as interns, and 38% had not yet started working. There were 125 completions of the questionnaire, out of which 116 were valid.

In data analysis, descriptive statistical methods, analysis of variance (ANOVA), and canonical discriminant analysis (CDA) using SPSS 28.0 were employed to examine the difference between the segments at a 5% significance level. Interpolated drop-line diagrams across skill groups provided an enhanced visual display of the data analysis. They illustrated discrete mean values and the differences in perceived employability skills.

To assess scale reliability, Cronbach's Alpha was calculated. The evaluation of the internal consistency of a scale showed that the instrument was reliable. The overall value and the subscale values were all above the acceptable level of 0.6. The Cronbach's Alpha values for the sub-scale item groups were the following: basic soft skill category N of 8 scale items' Alpha = 0.657; digital and technical skills N of 6 items' Alpha = 0.880; core marketing skills N of 5 items' Alpha = 0.745; analytical skills N of 6 items' Alpha = 0.735; and customer insights skills N of 5 items' Alpha = 0.784.

## 4. Results

The results are presented in terms of perceptions on employability skills showing the differences between the various work experience segments. In addition, the main differences are also identified.

### 4.1. Perception of Skills' Importance—Descriptive Statistics

The survey results for the perceptions of skills' importance for the full sample are presented in Table 2. In the order of their average perceived importance, the examined skill groups were viewed as: core marketing skills (mean = 5.00), digital and technical skills (mean = 4.81), basic soft skills (mean = 4.77), customer insight skills (mean = 4.69), and analytical skills (mean = 4.65). The median values showed that the examined skill groups fell into the positive categories of the 6-item scale, i.e., they were considered more important, important, or very important. Motivation, knowledge of social media, creative thinking stood out, where the median value was 6, the average values were also above 5.30, i.e., they fell into the very important category. The data are negatively skewed, except initiative skills. Median values of most of the items are above the value of the means. The designation of the least important values appeared for six skills, of which three were among the basic soft skills. In the case of four skills, the smallest value is three, which indicated that these were considered important by the employees. As standard deviations were low, there seemed to be an agreement within the respondents' segments.

All the researched skills are arranged in the order of their perceived importance, starting with the lowest averages of perceived relevance (initiative), and ending with the highest averages of perceived relevance (creative thinking) in terms of work experience segments (see Appendix B, Figure A1).

### 4.2. Perceptions of Five Types of Employability Skills Based on Work Experience

In this section, five types of employability skills are described using descriptive statistical methods. Analysis and visual representation of the collected data reveal a left-skewed pattern, as respondents placed higher value on employability skills. The responses from the different segments based on work experience were compared. According to the results of our study, the reach between the three segments shows a diverse pattern of perceived importance. The subgroups defined by work experience are depicted by blue-colored area charts, while the color of the entire sample is represented by whitesmoke area charts. The differences are clearly observable in the case of each variable. Overall, full-time and part-time employees rated skill importance higher on average, followed by casual workers/interns and nonworking respondents (see Appendix B, Table A2, Figures A2–A4). In the following sections, each skill group is described in detail.

#### 4.2.1. Basic Soft Skills

In the basic soft skill category, flexibility, teamwork, interpersonal skills, initiative, motivation, oral communication and presentation skills, stress resilience, and self-development were examined. In this skill group, Motivation was the most highlighted in each work-experience category. For full-time or part-time employees, 61.1% rated it very important, 19.4% rated it as important, 58.3% of casuals or interns believed it was very important and 22.2% thought it was important, and 43.2% of the members of the no work experience segment found it very important and 43.2% important.

From the employee's point of view, oral communication and presentation skills were the next most important skills. By full- or part-time workers, they were considered very important (44.4%) or important (27.8%). A total of 47.2% of respondents in casual or internship rated them as very important, 19.4% of them as important, 38.6% of the nonworking group as very important, and 27.3% of them as important.

**Table 2.** Perceptions of skills' importance.

	Mean	Median	Std. Dev.	Min.	Skewness
<b>Basic soft skills</b>					
Motivation	5.31	6	0.90	2	−1.32
Oral communication and presentation skills	4.99	5	1.17	1	−1.13
Interpersonal skills	4.98	5	1.06	1	−0.95
Flexibility	4.97	5	0.97	2	−0.74
Teamwork	4.90	5	1.07	1	−1.02
Stress resilience	4.50	5	1.05	2	−0.36
Self-development	4.31	5	0.89	2	−1.25
Initiative	4.20	4	1.16	2	0.01
<b>Digital and technical skills</b>					
Knowledge of social media	5.34	6	0.93	3	−1.21
Knowledge of e-commerce	4.98	5	1.04	3	−0.55
Knowledge of mobile	4.96	5	1.14	2	−0.81
Knowledge of Internet and software knowledge	4.89	5	1.14	2	−0.78
SEO & SEM	4.39	4	1.10	2	−0.34
Knowledge of analytics and real time practices	4.31	4	1.07	2	−0.15
<b>Core marketing skills</b>					
Creative thinking	5.48	6	0.80	2	−1.72
Precision and attention to detail	5.20	5	0.85	3	−0.76
Ability to manage multiple marketing tasks	4.92	5	1.08	1	−0.88
Planning, organization and time management	4.87	5	0.97	2	−0.56
Contents creation across channel	4.86	5	1.18	1	−0.81
Sales knowledge and management skills	4.65	5	1.08	2	−0.45
<b>Analytical skills</b>					
Problem-solving	5.25	5	0.86	3	−0.86
Critical thinking	4.95	5	0.95	2	−0.78
Good conceptual and analytical skills	4.73	5	0.92	2	−0.68
Ability to synthesize information into meaningful and actionable reports	4.48	5	1.07	2	−0.53
Data-driven/data-oriented	4.28	4	1.04	2	−0.19
Statistical knowledge	4.21	4	0.97	2	−0.26
<b>Customer insights skills</b>					
Knowledge of company and of its customers	5.04	5	1.01	2	−0.93
Knowledge of customer touchpoints and journey	4.77	5	1.13	1	−0.74
CRM and relational skills	4.47	4	1.05	2	−0.37
Knowledge of research methods	4.46	4.5	1.11	2	−0.28

6-point Likert scale 1 = not at all important, 6 = very important.

In the case of interpersonal skills, the important and very important achievements for the two working segments were close to each other. They were very important for 41.7% of full- or part-time respondents, and for 30.6% of them they were important. A total of 38.9% of casuals or interns considered them very important, and 30.6% of them important. Among those without work experience, 38.6% stated they were very important,

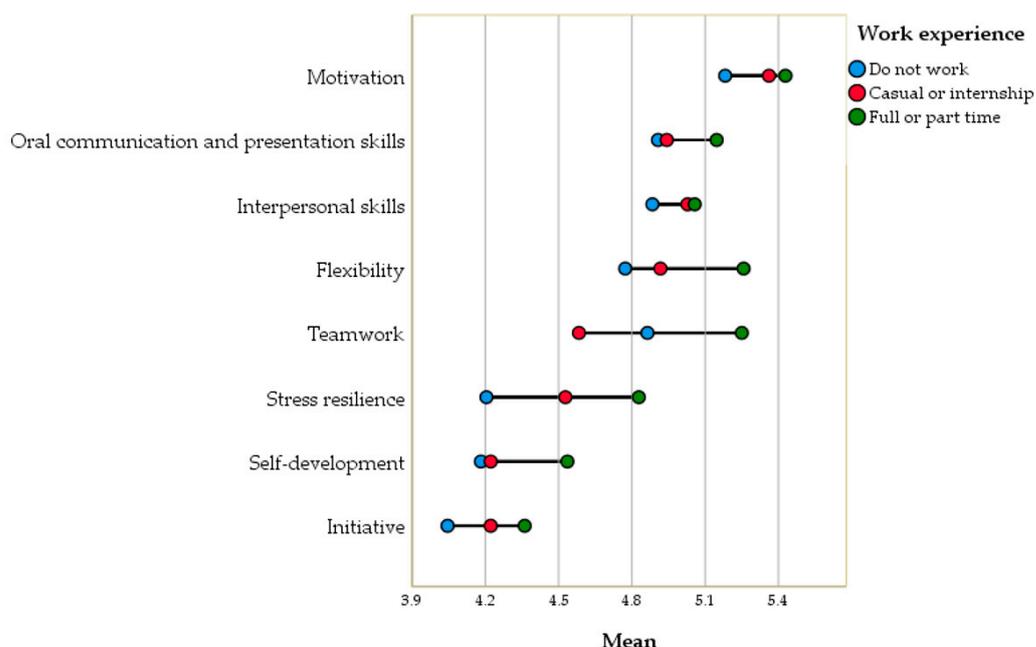
25.0% said they were important, and 2.3% said they were not important at all. In the case of flexibility, the difference is outstanding between the segments in terms of perceived importance. Flexibility was very important for 50.0% of full-time and part-time employees, 30.6% of casual and internship employees, and 22.7% of those with no work experience (see the total skill list in Appendix B, Table A2).

Within the basic soft skill category, motivation, oral communication and presentation skills, and interpersonal skills have the highest means, on average. The greatest differences between the means of the segments are in the case of teamwork, stress resilience and flexibility. For all skills, employees in the labor market attached higher perceived importance to the examined skills by work experience, except in the case of teamwork (Table 3 and Figure 2).

**Table 3.** Descriptive statistics of young employees’ perceptions on the importance of their basic soft skills per work experience segment.

Work Experience	Full- or Part-Time		Casual or Internship		No Work Experience	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Motivation	5.43	0.85	5.36	0.87	5.18	0.97
Oral communication and presentation skills	5.15	1.02	4.94	1.33	4.91	1.15
Interpersonal skills	5.06	1.06	5.03	0.94	4.88	1.18
Flexibility	5.26	0.95	4.92	0.97	4.77	0.96
Teamwork	5.25	0.84	4.58	1.30	4.86	0.96
Stress resilience	4.83	0.95	4.53	1.16	4.20	0.95
Self-development	4.54	0.64	4.22	0.97	4.18	0.98
Initiative	4.36	1.20	4.22	1.29	4.05	1.01

6-point Likert scale 1 = not at all important, 6 = very important.

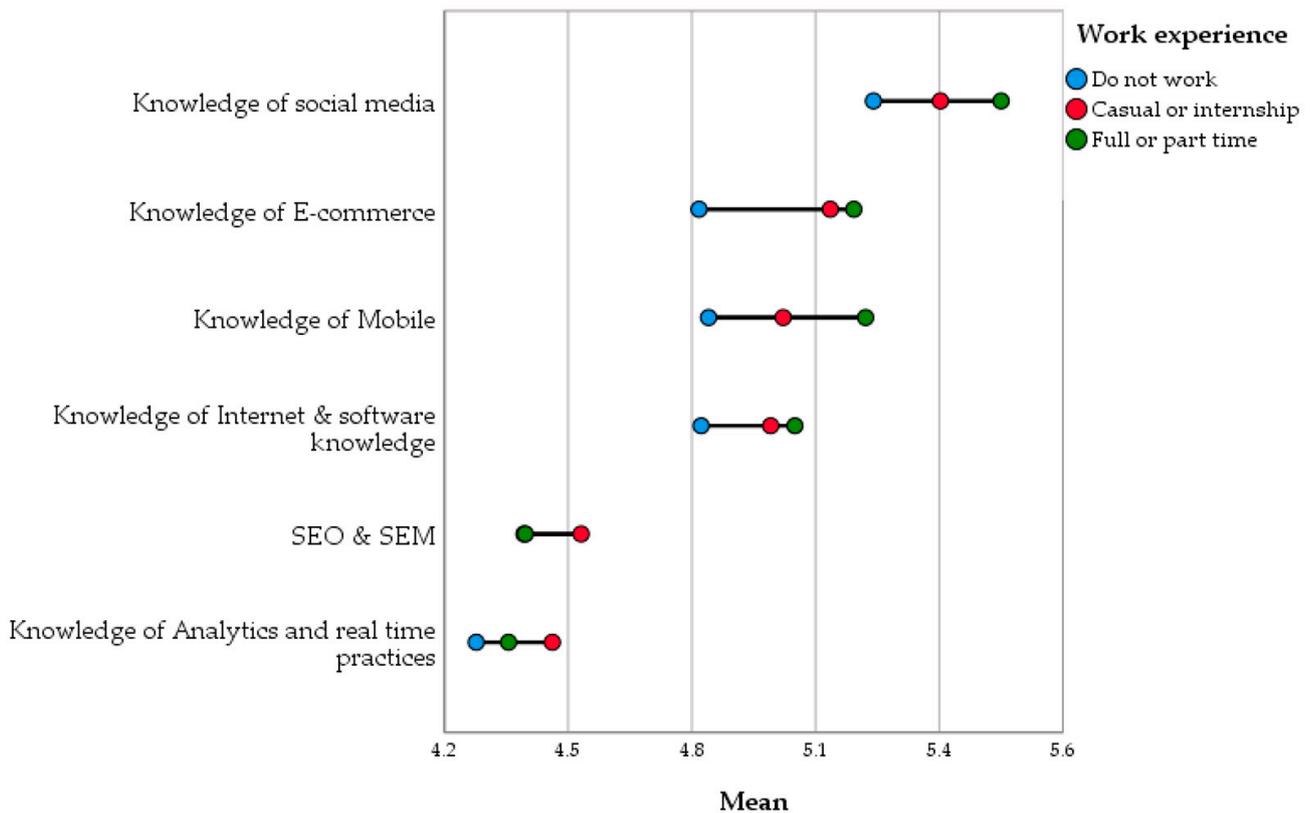


**Figure 2.** Perceptions of young employees regarding the mean importance of their basic soft skills based on their work experience.

### 4.2.2. Digital and Technical Skills

In this hard skill group, the perceptions of non-workers show a relatively lower value in comparison to the other segments. In the digital and technical skill category, Knowledge of social media, knowledge of mobile, and knowledge of e-commerce has higher perceived importance. In the case of social media, 50.0% of the respondents indicated the highest perceived importance, 22.7% thought it was important, and the lowest value was 3 (rather less important). In the case of e-commerce, 29.5% thought it was very important, 31.8% thought it was important, and the lowest value was 3. Knowledge of analytics and real time practices, knowledge of Internet and software knowledge, SEO and SEM were marked as less important. In the case of analytics, only 11.4% thought it very important, and 29.5% important; it was typically considered to be of less importance in the case of those who were not yet working (see Appendix B, Table A2).

Within the digital and technical skill category, knowledge of social media, knowledge of e-commerce, and knowledge of mobile had the highest means on average. The greatest differences between the means of the segments were also in these three aforementioned skills (Table 4 and Figure 3).



**Figure 3.** Perceptions of young employees regarding the mean importance of their digital and technical skills based on their work experience.

**Table 4.** Descriptive statistics of young employees' perceptions on the importance of their digital and technical skills per work experience segment.

Work Experience	Full- or Part-Time		Casual or Internship		No Work Experience	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Knowledge of social media	5.50	0.83	5.35	0.92	5.19	1.02
Knowledge of E-commerce	5.14	0.94	5.09	1.07	4.77	1.07
Knowledge of Mobile	5.17	1.04	4.97	1.27	4.79	1.10
Knowledge of Internet and software knowledge	5.00	1.18	4.94	1.15	4.77	1.12
SEO and SEM	4.35	0.98	4.48	1.34	4.34	1.00
Knowledge of Analytics and real time practices	4.31	1.04	4.41	1.18	4.23	1.01

6-point Likert scale 1 = not at all important, 6 = very important.

#### 4.2.3. Core Marketing Skills

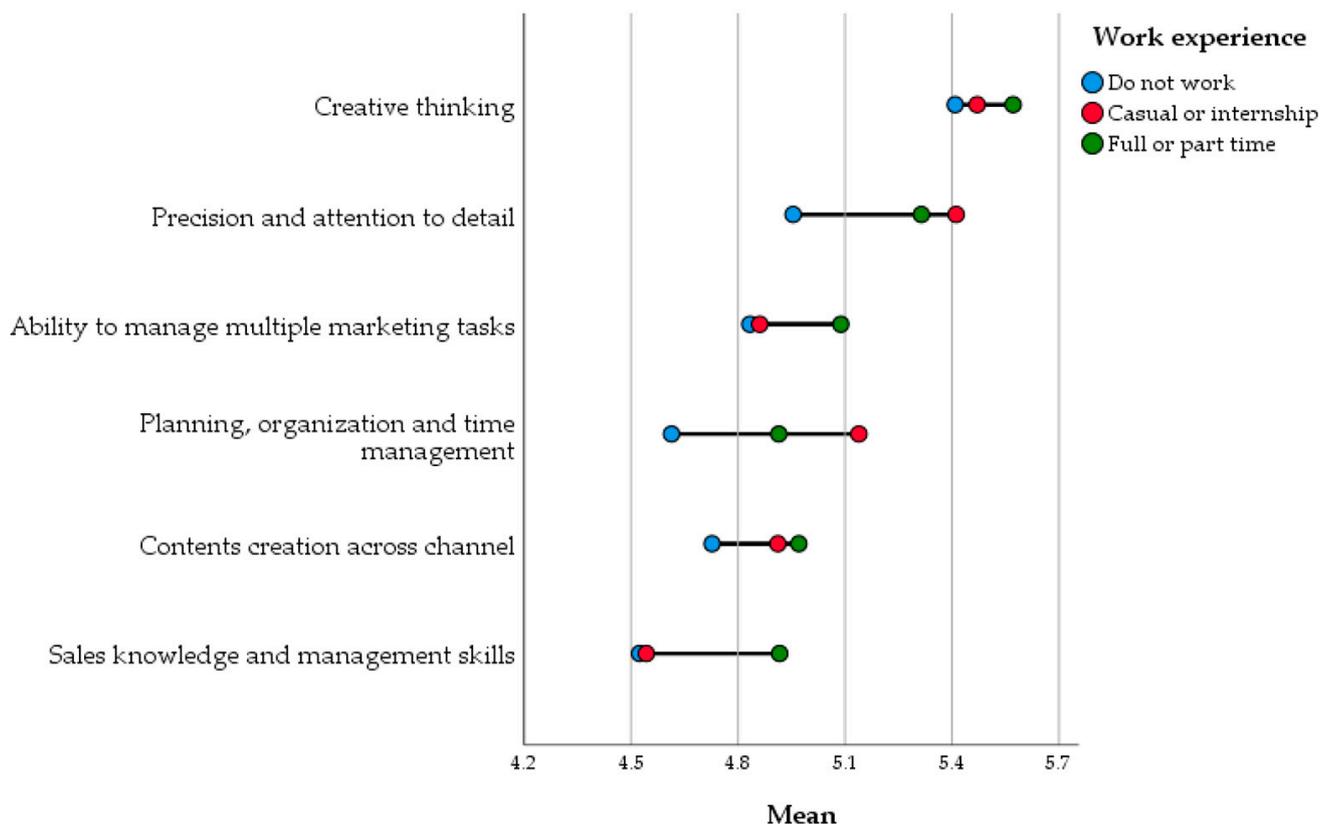
Within the core marketing skill category, planning, organization and time management, content creation across channel, creative thinking, precision and attention to detail, sales knowledge and management skills, and ability to manage multiple marketing tasks were examined. Creative thinking reached the highest perceived importance in all the three segments, and precision and attention to detail had also high scores. Sales knowledge and management skills had the lowest ratings. The greatest differences between the means of the segments were in the case of planning, organization and time management, and precision and attention to detail (Table 5 and Figure 4).

**Table 5.** Descriptive statistics of young employees' perceptions on the importance of their core marketing skills per work experience segment.

Work Experience	Full- or Part-Time		Casual or Internship		No Work Experience	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Creative thinking	5.57	0.61	5.47	0.96	5.41	0.82
Precision and attention to detail	5.31	0.76	5.41	0.82	4.95	0.89
Ability to manage multiple marketing tasks	5.09	0.90	4.86	1.31	4.83	1.01
Planning, organization and time management	4.91	0.89	5.14	0.96	4.61	0.99
Contents creation across channel	4.97	1.14	4.91	1.11	4.73	1.28
Sales knowledge and management skills	4.92	0.91	4.54	1.27	4.52	1.02

6-point Likert scale 1 = not at all important, 6 = very important.

Creative thinking was important or very important for 91.7% of full-time or part-time respondents, 83.3% of casual or internship respondents, and 84.1% of not-working respondents. As for precision and attention to detail, 86.1% of full-time respondents indicated it was important or very important, while 80.6% of casuals and interns, and 68.2% of those who do not work reported it as important or very important (see Appendix B, Table A2).



**Figure 4.** Perceptions of young employees regarding the mean importance of their core marketing skills based on their work experience.

#### 4.2.4. Analytical Skills

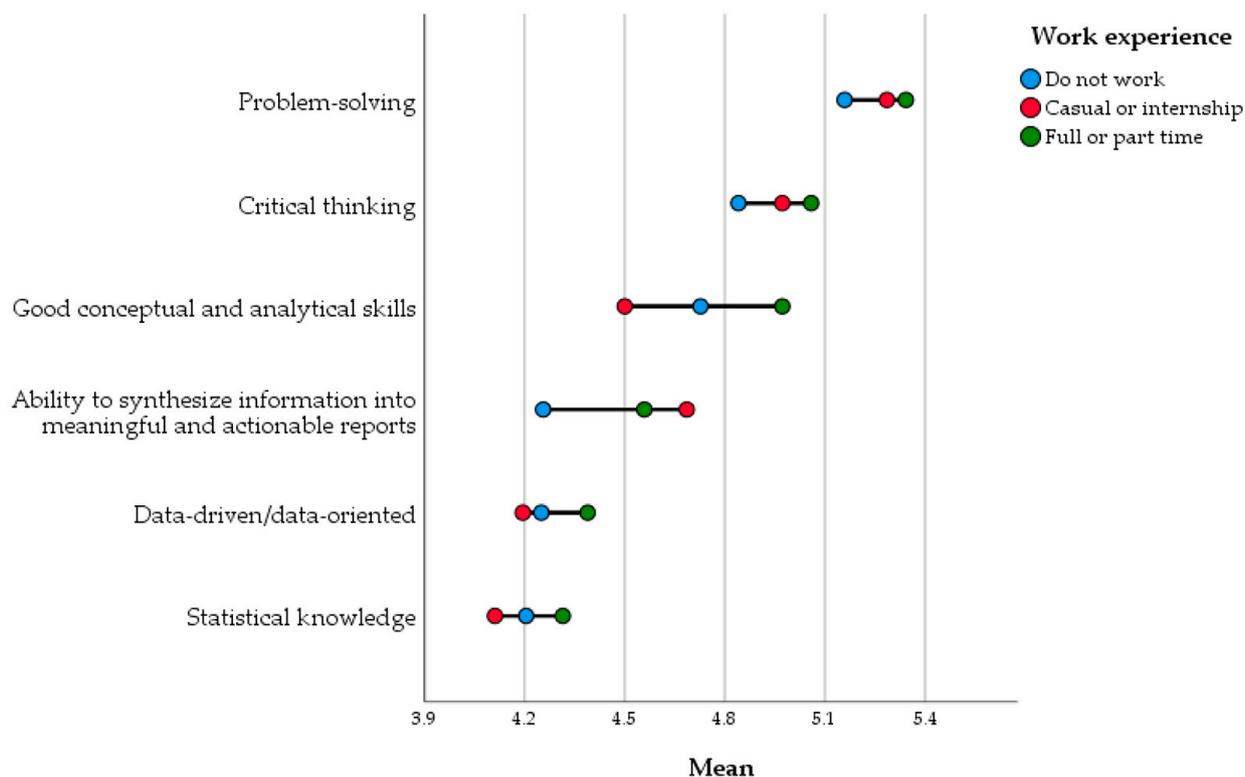
The analytical skills group consists of data-driven/data-oriented, good conceptual and analytical skills, statistical knowledge, problem solving, critical thinking, and ability to synthesize information into meaningful and actionable reports. Problem solving proved to be of the highest perceived importance from the employee point of view, and the agreement across segments was also high. Critical thinking and good conceptual and analytical skills had a higher appreciation in the two segments with work experience. The greatest differences between the means of the segments were in the case of good conceptual and analytical skills, and the ability to synthesize information into meaningful and actionable reports (Table 6 and Figure 5).

Problem solving was considered important or very important by 77.8% of respondents with full-time or part-time work, 77.8% of casual employees, and 79.5% of those who do not work (see Appendix B, Table A2).

**Table 6.** Descriptive statistics of young employees’ perceptions on the importance of their analytical skills per work experience segment.

Work Experience	Full- or Part-Time		Casual or Internship		No Work Experience	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Problem solving	5.34	0.80	5.29	0.93	5.16	0.86
Critical thinking	5.06	0.74	4.97	0.94	4.84	1.10
Good conceptual and analytical skills	4.97	0.85	4.50	0.97	4.73	0.90
Ability to synthesize information into meaningful and actionable reports	4.56	0.99	4.69	1.05	4.26	1.14
Data-driven/data-oriented	4.39	1.02	4.19	1.17	4.25	0.94
Statistical knowledge	4.31	0.90	4.11	1.06	4.20	0.95

6-point Likert scale 1 = not at all important, 6 = very important.



**Figure 5.** Perceptions of young employees regarding the mean importance of their analytical skills based on their work experience.

#### 4.2.5. Customer Insights Skills

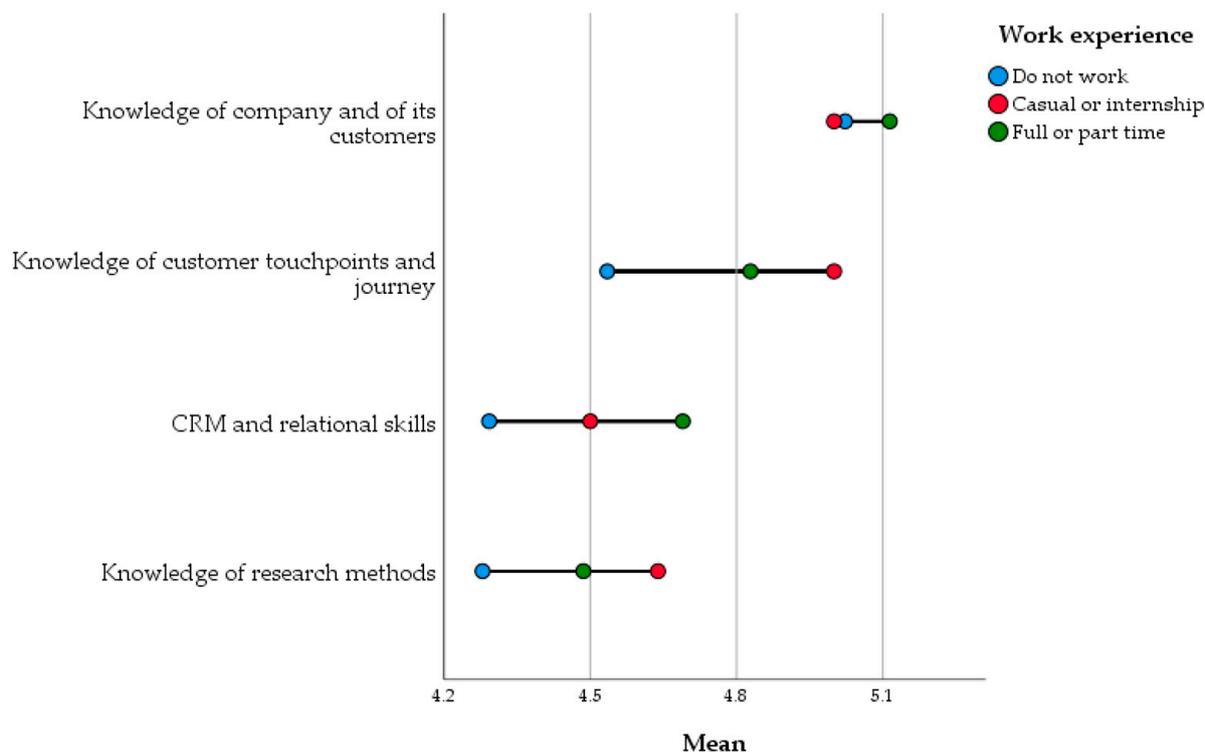
In the skill group of customer insights skills, knowledge of company and its customers, Knowledge of research methods, knowledge of customer touchpoints and journey, and CRM and relational skills were examined. The following table summarizes the perceptions of young employees regarding the perceived importance of their customer insights skills based on their work experience. This was the skill group where an evaluation of how young employees rate the perceived importance of their customer insights skills based on their work experience differed to a large extent. The highest agreement was observable in the knowledge of the company and its customers’ insights skills. Knowledge of CRM and

research methods were considered less important, and the responses were diverse between the segments (Table 7 and Figure 6).

**Table 7.** Descriptive statistics of young employees’ perceptions on the importance of their customer insights skills per work experience segment.

Work Experience	Full- or Part-Time		Casual or Internship		No Work Experience	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Knowledge of company and its customers	5.11	0.93	5.00	1.11	5.02	1.00
Knowledge of customer touchpoints and journey	4.83	1.04	5.00	1.10	4.53	1.20
CRM and relational skills	4.69	1.00	4.50	1.08	4.29	1.06
Knowledge of research methods	4.49	1.10	4.64	1.10	4.28	1.14

6-point Likert scale 1 = not at all important, 6 = very important.



**Figure 6.** Perceptions of young employees regarding the mean importance of their customer insights skills based on their work experience.

Knowledge of the company and its customers was the only customer insights skill that fell into the important or very important category in terms of mean value in all three categories with work experience (see Appendix B, Table A2).

In light of the results of the research, the authors consider young employees’ skills perception of relevance when it comes to e-commerce employability skills. The results of employees and future employees’ survey support the findings of the expert managerial literature. We were able to ascertain the most relevant skill category, which is core marketing skills followed by digital and technical skills. We were able to convey the perceived importance of soft skills, since it increases for those already in the labor market. Moreover, within the top five skills (see Appendix B, Figure A2), four soft skills appear, such as

creative thinking, motivation, problem solving, and precision. The former results of a content analysis of job advertisements also showed the importance of these skills (Kovács and Zarándné 2022). Similar conclusions were described in the work of Juhász and Horváth-Csikós (2021), who found that there are differences by gender, age, and previous work experience for young people in terms of which soft skills they consider important.

#### 4.3. Differences between Work Experience Segments

Examining the differences between the three segments, we were able to prove that, in addition to the higher perceived importance, a significant difference can be shown between the segments in the perception of teamwork ( $F = 3.72, p = 0.03$ ), stress resilience ( $F = 3.66, p = 0.03$ ), planning, organization and time management ( $F = 3.07, p = 0.05$ ), and the precision and attention to detail ( $F = 3.37, p = 0.04$ ) skills (Appendix C, Table A3). All skills showing the biggest difference belong to soft skills. These results confirm the previous research results of Kovács (2021), according to which employees who are already working attribute a higher perceived importance to soft skills. In Appendix B, Figures A2–A4 illustrate the deviation of the sample frequency from the three work segments in the form of whitesmoke representation.

Examining the differences between the segments with a discriminant analysis, the results prove that teamwork and flexibility are significantly appreciated in the segment with higher work experience. Since the casual and internship groups are not significantly different from one another, it is unlikely that the equality of the group means that significance is high (See Appendix D, Table A4). The representation of the centers also shows where the centers are located in relation to each other (Figure 7).

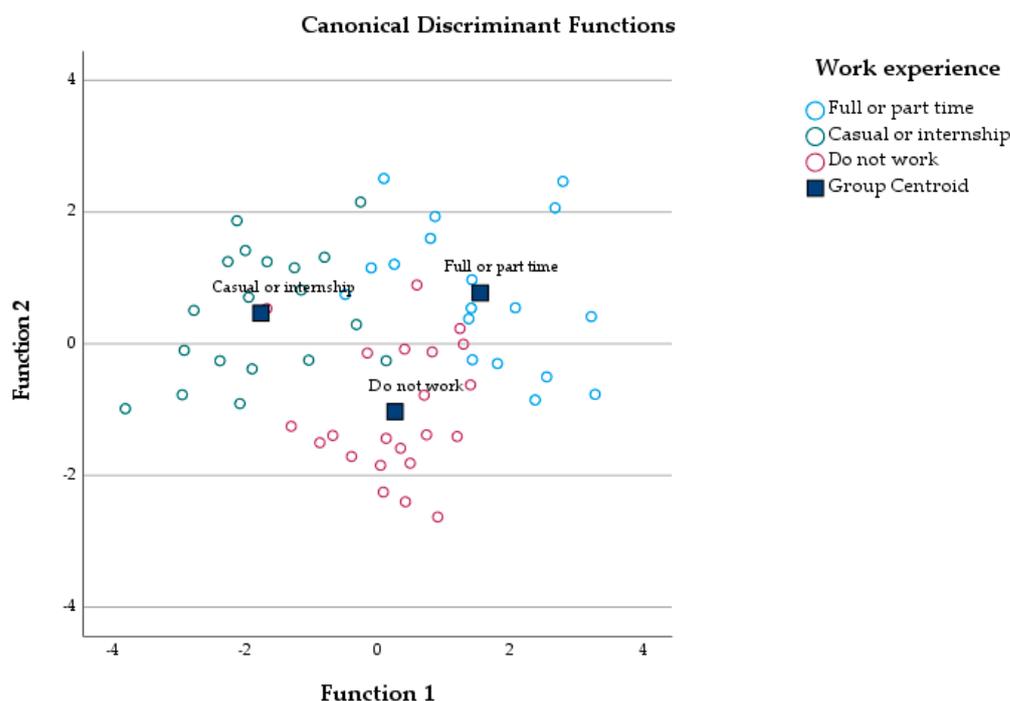


Figure 7. Canonical discriminant functions and group centroids of the three work experience segments.

## 5. Conclusions

E-commerce development is increasing very fast, and digital technological changes indicate the importance of transferrable skills. Based on the reviewed reports, the market changes in e-commerce and expected labor demand have restructured the key employability skillset. We also looked at the most important skills from the results of previous managerial research through the lens of employees, and their perceived importance was confirmed

from this point of view as well. The importance of the examined skillset was validated through employee perspectives, confirming their relevance in a work field of e-commerce and related digital marketing fields. What distinguished this work is that the authors examined the skillsets from an employee perspective.

In conclusion, among transferable skills, the following skills were perceived to be of highest importance: motivation, oral communication and presentation skills, interpersonal skills, flexibility, teamwork, stress resilience, problem solving, and creative thinking. In addition, good analytical and conceptual skills, knowledge of social media, e-commerce, mobile, and internet and software were also among the top categories.

We examined a group of employees for segmentation according to present work experience. Based on the results of the study, it transpires that the perceived importance of soft skills increases with the level of work experience. Those currently employed in e-commerce and related fields seem to be more confident about the importance of these skills as compared to those who have not yet worked, which seems to make sense because individuals without any work experience tend to have a more limited understanding of what the job entails.

We found a large difference between the perceptions of student respondents and managerial expectations confirmed in previous research in terms of analytical thinking, statistical knowledge, and data-driven or data-oriented thinking. In terms of basic soft skills, initiative was rated significantly lower by respondents, below managerial expectations.

The analyses conducted by the authors provide useful information for e-commerce professionals presenting a managerial research-based skillset validated by an employee survey. In the light of the results, it is especially essential for business and management education to equip students with the relevant soft and hard skills which can enhance their employability, or confidence and knowledge to start a business. The results of this work also serve the purpose of drawing the attention of students to the importance of soft skills when targeting the development of these competencies.

The implications for tertiary education and business are the enhancement of transferable skills that were proven to be important by this research. They should be built into the curriculum and continuously be developed in the work environment. They also need to be reflected in university development and in the self-development of students. The assessment of progress in higher education and the development of soft skills is to be built in the educational portfolio, for example, in the form of peer feedback.

To fulfil the research aims, we limited the research to younger employees. Studies carried out with larger samples and more detailed questionnaires may result in more stratified results and supplement academic literature. The scope of the research is within the employees to distinguish future and current employees' perceptions. A great source of profound knowledge in this area can be from a large-sample primary research, also planned by the authors. Especially in the case of soft skills, we found a gap in student perceptions on employability skills based on work experience segments. Therefore, it is worthwhile to pay attention and work on competence improvement.

Equipping university graduates with the right hard and soft skills could make the transition from higher education to the world of work easier. Skilled workers can become employable, which in turn can boost job creation and increase productivity. The quality of the workforce is a crucial factor for economic growth in all countries. Building human capital is essential to prepare for the transformation brought about by Industry 4.0. As a result, the implications for employers of on-the-job training, for example, are as critical as skills development in higher education. The flexibility of the learning environment and e-learning resources enable learners and workers to take advantage of their learning and career paths. Hard skills can be developed using the latest technology and management and IT software, while soft skills can be developed through work placements, real-life experiences, training simulations and role playing. Non-credit skills development courses can be offered to specific groups of learners as part of fulfilling the third mission of higher education.

**Author Contributions:** Conceptualization, I.K.; methodology, I.K. and É.R.K.; software, I.K. and É.R.K.; validation, I.K.; formal analysis, I.K. and É.R.K.; investigation, I.K. and É.R.K.; resources, I.K. and É.R.K.; data curation, I.K. and É.R.K.; writing—original draft preparation, I.K.; writing—review and editing, I.K. and É.R.K.; visualization, I.K. and É.R.K.; supervision, I.K. and É.R.K.; project administration, I.K. and É.R.K.; funding acquisition, I.K. and É.R.K. All authors have read and agreed to the published version of the manuscript.

**Funding:** The APC was funded by Budapest Business School.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The datasets generated and analysed during the current study are available in .sav and .csv format upon reasonable request to the corresponding author. The data is available in Hungarian language.

**Acknowledgments:** The authors would like to acknowledge support received from Katalin Kolláth. We are also grateful to the reviewers for their time, for their careful reading, and for their insightful comments and suggestions that helped improve the quality of our manuscript.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

**Table A1.** The variable list of the researched employability skills.

V2	Flexibility
V3	Teamwork
V4	Interpersonal skills
V5	Initiative
V6	Motivation
V7	Oral communication and presentation skills
V8	Stress resilience
V9	Knowledge of social media
V10	Knowledge of E-commerce
V11	Knowledge of Mobile
V12	Knowledge of Analytics and real time practices
V13	Knowledge of Internet and software knowledge
V14	SEO and SEM
V15	Planning, organization and time management
V16	Contents creation across channel
V17	Creative thinking
V18	Precision and attention to detail
V19	Sales knowledge and management skills
V20	Ability to manage multiple marketing tasks
V21	Data-driven/data-oriented
V22	Good conceptual and analytical skills
V23	Statistical knowledge
V24	Problem-solving
V25	Critical thinking
V26	Ability to synthesize information into meaningful and actionable reports

**Table A1.** *Cont.*

V27	Knowledge of company and of its customers
V28	Knowledge of research methods
V29	Knowledge of customer touchpoints and journey
V30	CRM and relational skills
V31	Self-development

**Appendix B****Table A2.** Relative frequency distribution of the researched employability skills per work segment (1) ordered by the ratio of full- or part-time segment's "very important" value frequencies; (2) ordered by the ratio of casual or internship segment's "very important" value frequencies; (3) ordered by the ratio of nonworking segment's "very important" value frequencies.

Employability Skills	Full- or Part-Time						
	1	2	3	4	5	6	9
Knowledge of social media	0.0%	0.0%	2.8%	11.1%	16.7%	63.9%	5.6%
Creative thinking	0.0%	0.0%	0.0%	5.6%	30.6%	61.1%	2.8%
Motivation	0.0%	0.0%	2.8%	13.9%	19.4%	61.1%	2.8%
Problem-solving	0.0%	0.0%	0.0%	19.4%	25.0%	52.8%	2.8%
Flexibility	0.0%	2.8%	0.0%	16.7%	27.8%	50.0%	2.8%
Knowledge of Mobile	0.0%	0.0%	11.1%	11.1%	25.0%	50.0%	2.8%
Teamwork	0.0%	0.0%	2.8%	16.7%	33.3%	47.2%	0.0%
Knowledge of E-commerce	0.0%	0.0%	2.8%	27.8%	19.4%	47.2%	2.8%
Precision and attention to detail	0.0%	0.0%	2.8%	8.3%	41.7%	44.4%	2.8%
Oral communication and presentation skills	0.0%	2.8%	2.8%	16.7%	27.8%	44.4%	5.6%
Knowledge of Internet and software knowledge	0.0%	2.8%	11.1%	13.9%	22.2%	44.4%	5.6%
Interpersonal skills	0.0%	2.8%	5.6%	16.7%	30.6%	41.7%	2.8%
Knowledge of company and of its customers	0.0%	0.0%	5.6%	19.4%	30.6%	41.7%	2.8%
Contents creation across channel	0.0%	2.8%	8.3%	19.4%	22.2%	41.7%	5.6%
Ability to manage multiple marketing tasks	0.0%	0.0%	0.0%	33.3%	19.4%	41.7%	5.6%
Knowledge of customer touchpoints and journey	0.0%	0.0%	11.1%	27.8%	25.0%	33.3%	2.8%
Sales knowledge and management skills	0.0%	0.0%	5.6%	27.8%	36.1%	30.6%	0.0%
Good conceptual and analytical skills	0.0%	0.0%	5.6%	19.4%	47.2%	27.8%	0.0%
Critical thinking	0.0%	0.0%	0.0%	22.2%	44.4%	27.8%	5.6%
Planning, organization and time management	0.0%	0.0%	5.6%	25.0%	38.9%	27.8%	2.8%
Stress resilience	0.0%	2.8%	5.6%	19.4%	47.2%	22.2%	2.8%
Initiative	0.0%	5.6%	19.4%	30.6%	22.2%	22.2%	0.0%
Knowledge of research methods	0.0%	2.8%	13.9%	36.1%	22.2%	22.2%	2.8%
CRM and relational skills	0.0%	2.8%	2.8%	30.6%	25.0%	19.4%	19.4%
Ability to synthesize information into meaningful and actionable reports	0.0%	2.8%	11.1%	25.0%	41.7%	13.9%	5.6%
Data-driven/data-oriented	0.0%	2.8%	19.4%	25.0%	41.7%	11.1%	0.0%
Knowledge of Analytics and real time practices	0.0%	2.8%	22.2%	27.8%	36.1%	11.1%	0.0%
Statistical knowledge	0.0%	0.0%	22.2%	27.8%	41.7%	5.6%	2.8%
SEO and SEM	0.0%	2.8%	11.1%	22.2%	30.6%	5.6%	27.8%
Self-development	2.8%	0.0%	5.6%	25.0%	47.2%	0.0%	19.4%

(1) 6-point Likert scale, 1 = not at all important, 6 = very important, 9 = na

Table A2. Cont.

Employability Skills	Casual or Internship						
	1	2	3	4	5	6	9
Creative thinking	0.0%	2.8%	2.8%	5.6%	19.4%	63.9%	5.6%
Motivation	0.0%	0.0%	2.8%	16.7%	22.2%	58.3%	0.0%
Precision and attention to detail	0.0%	0.0%	2.8%	11.1%	25.0%	55.6%	5.6%
Knowledge of social media	0.0%	0.0%	5.6%	11.1%	22.2%	55.6%	5.6%
Problem-solving	0.0%	0.0%	5.6%	13.9%	25.0%	52.8%	2.8%
Knowledge of Mobile	0.0%	5.6%	8.3%	19.4%	13.9%	50.0%	2.8%
Planning, organization and time management	0.0%	0.0%	5.6%	22.2%	25.0%	47.2%	0.0%
Knowledge of E-commerce	0.0%	0.0%	11.1%	16.7%	22.2%	47.2%	2.8%
Oral communication and presentation skills	2.8%	2.8%	8.3%	16.7%	19.4%	47.2%	2.8%
Knowledge of customer touchpoints and journey	0.0%	2.8%	8.3%	16.7%	30.6%	41.7%	0.0%
Knowledge of company and of its customers	0.0%	2.8%	8.3%	16.7%	27.8%	41.7%	2.8%
Ability to manage multiple marketing tasks	2.8%	2.8%	13.9%	5.6%	36.1%	38.9%	0.0%
Interpersonal skills	0.0%	0.0%	5.6%	25.0%	30.6%	38.9%	0.0%
Contents creation across channel	0.0%	0.0%	13.9%	19.4%	22.2%	38.9%	5.6%
Knowledge of Internet and software knowledge	0.0%	5.6%	5.6%	13.9%	33.3%	36.1%	5.6%
Critical thinking	0.0%	0.0%	11.1%	11.1%	47.2%	30.6%	0.0%
Flexibility	0.0%	0.0%	11.1%	16.7%	41.7%	30.6%	0.0%
Sales knowledge and management skills	0.0%	8.3%	11.1%	25.0%	25.0%	27.8%	2.8%
Teamwork	5.6%	0.0%	11.1%	22.2%	36.1%	25.0%	0.0%
Knowledge of research methods	0.0%	2.8%	13.9%	25.0%	33.3%	25.0%	0.0%
Stress resilience	0.0%	2.8%	19.4%	25.0%	27.8%	25.0%	0.0%
Ability to synthesize information into meaningful and actionable reports	0.0%	2.8%	11.1%	22.2%	38.9%	22.2%	2.8%
Initiative	0.0%	8.3%	25.0%	25.0%	19.4%	22.2%	0.0%
SEO and SEM	0.0%	8.3%	8.3%	19.4%	16.7%	22.2%	25.0%
Data-driven/data-oriented	0.0%	8.3%	13.9%	47.2%	11.1%	19.4%	0.0%
Knowledge of Analytics and real time practices	0.0%	8.3%	11.1%	25.0%	33.3%	16.7%	5.6%
CRM and relational skills	0.0%	5.6%	8.3%	25.0%	36.1%	13.9%	11.1%
Good conceptual and analytical skills	0.0%	5.6%	5.6%	33.3%	44.4%	11.1%	0.0%
Statistical knowledge	0.0%	8.3%	19.4%	30.6%	36.1%	5.6%	0.0%
Self-development	0.0%	8.3%	2.8%	27.8%	36.1%	0.0%	25.0%

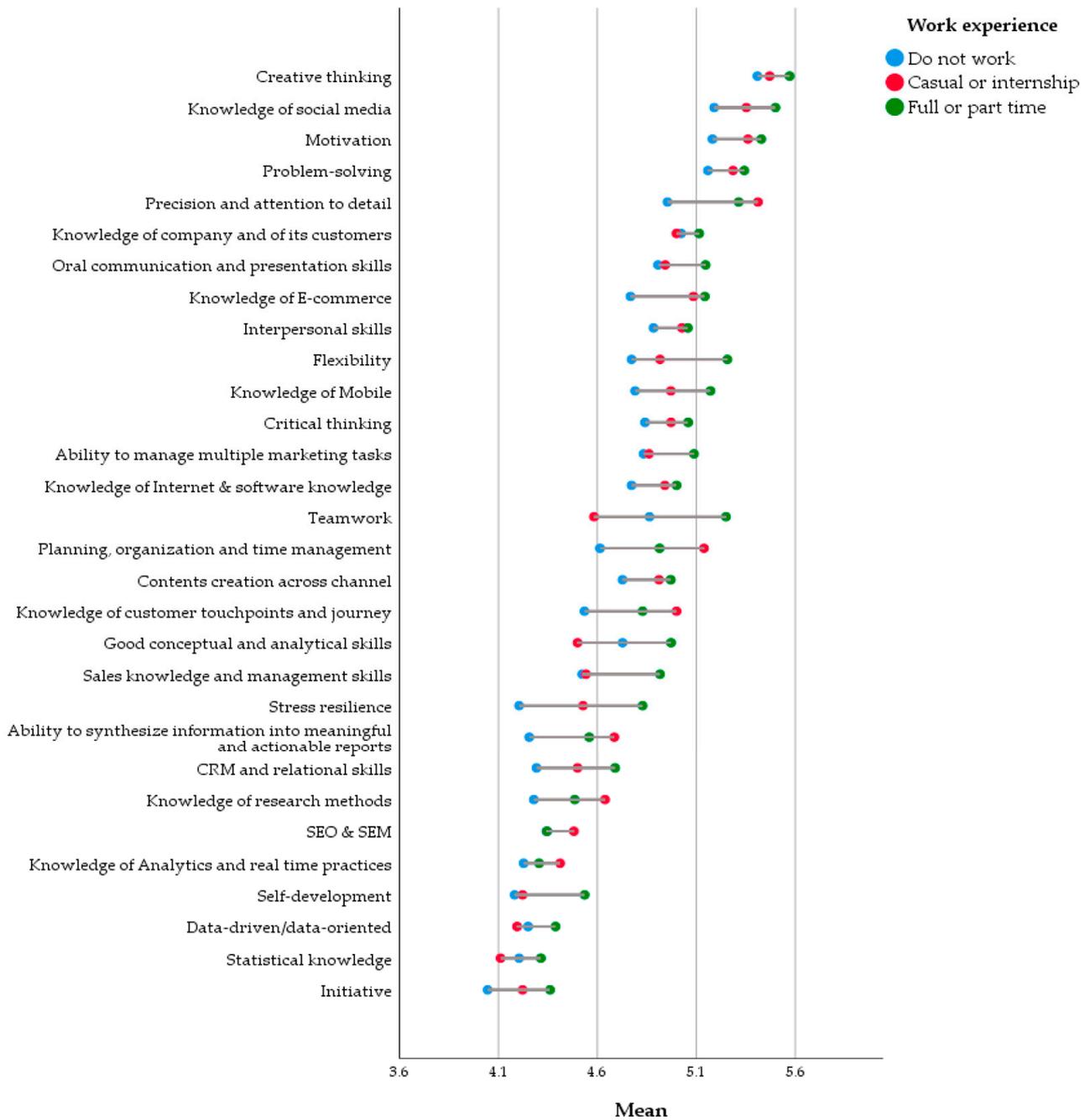
(2) 6-point Likert scale, 1 = not at all important, 6 = very important, 9 = na

Employability Skills	Do Not Work						
	1	2	3	4	5	6	9
Creative thinking	0.0%	0.0%	2.3%	13.6%	25.0%	59.1%	0.0%
Knowledge of social media	0.0%	0.0%	9.1%	13.6%	22.7%	50.0%	4.5%
Motivation	0.0%	2.3%	6.8%	4.5%	43.2%	43.2%	0.0%
Problem-solving	0.0%	0.0%	4.5%	15.9%	38.6%	40.9%	0.0%
Oral communication and presentation skills	0.0%	4.5%	6.8%	20.5%	27.3%	38.6%	2.3%
Interpersonal skills	2.3%	0.0%	9.1%	22.7%	25.0%	38.6%	2.3%
Knowledge of company and of its customers	0.0%	2.3%	6.8%	13.6%	40.9%	36.4%	0.0%
Contents creation across channel	2.3%	4.5%	6.8%	27.3%	22.7%	36.4%	0.0%
Knowledge of Internet and software knowledge	0.0%	2.3%	11.4%	27.3%	25.0%	34.1%	0.0%
Critical thinking	0.0%	2.3%	13.6%	13.6%	38.6%	31.8%	0.0%
Precision and attention to detail	0.0%	0.0%	4.5%	27.3%	36.4%	31.8%	0.0%

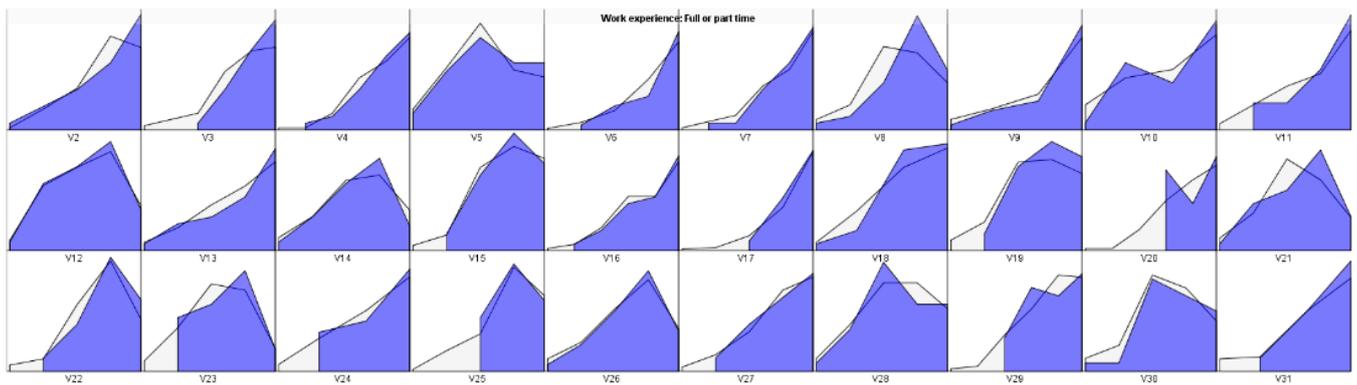
Table A2. Cont.

Employability Skills	Do Not Work						
	1	2	3	4	5	6	9
Knowledge of Mobile	0.0%	2.3%	11.4%	22.7%	29.5%	31.8%	2.3%
Teamwork	0.0%	0.0%	6.8%	31.8%	29.5%	31.8%	0.0%
Knowledge of E-commerce	0.0%	0.0%	15.9%	20.5%	31.8%	29.5%	2.3%
Ability to manage multiple marketing tasks	0.0%	0.0%	11.4%	22.7%	31.8%	29.5%	4.5%
Flexibility	0.0%	0.0%	13.6%	18.2%	45.5%	22.7%	0.0%
Knowledge of customer touchpoints and journey	2.3%	2.3%	15.9%	18.2%	38.6%	20.5%	2.3%
Good conceptual and analytical skills	0.0%	2.3%	4.5%	29.5%	45.5%	18.2%	0.0%
Planning, organization and time management	0.0%	4.5%	4.5%	34.1%	38.6%	18.2%	0.0%
Sales knowledge and management skills	0.0%	2.3%	11.4%	34.1%	29.5%	18.2%	4.5%
Knowledge of research methods	0.0%	6.8%	18.2%	27.3%	31.8%	13.6%	2.3%
CRM and relational skills	0.0%	4.5%	13.6%	38.6%	22.7%	13.6%	6.8%
Ability to synthesize information into meaningful and actionable reports	0.0%	9.1%	13.6%	29.5%	34.1%	11.4%	2.3%
Knowledge of Analytics and real time practices	0.0%	0.0%	29.5%	29.5%	29.5%	11.4%	0.0%
SEO and SEM	0.0%	2.3%	13.6%	27.3%	27.3%	9.1%	20.5%
Statistical knowledge	0.0%	4.5%	13.6%	47.7%	25.0%	9.1%	0.0%
Stress resilience	0.0%	6.8%	6.8%	54.5%	22.7%	9.1%	0.0%
Initiative	0.0%	6.8%	18.2%	47.7%	18.2%	9.1%	0.0%
Data-driven/data-oriented	0.0%	4.5%	13.6%	40.9%	34.1%	6.8%	0.0%
Self-development	0.0%	6.8%	9.1%	22.7%	36.4%	0.0%	25.0%

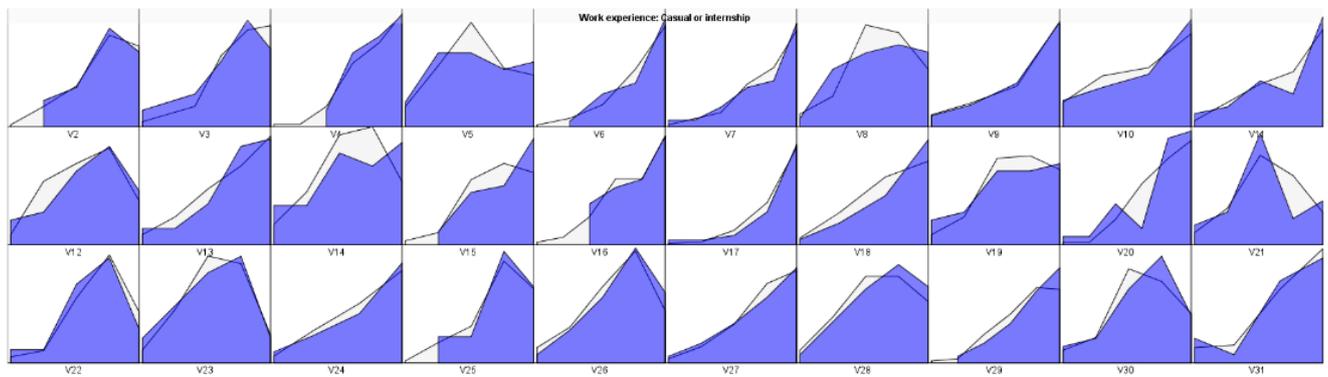
(3) 6-point Likert scale, 1 = not at all important, 6 = very important, 9 = na.



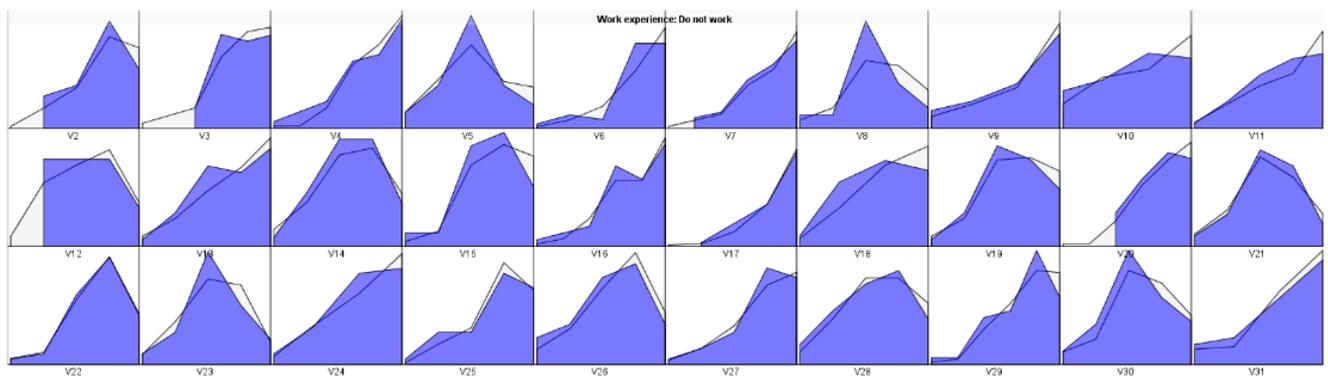
**Figure A1.** Perceptions of young marketing professionals regarding the mean importance of their employability skills.



**Figure A2.** Whitesmoke representation of the total sample frequency deviation from the full-time and part-time work experience segment.



**Figure A3.** Whitesmoke representation of the total sample frequency deviation from the casual/intern work experience segment.



**Figure A4.** Whitesmoke representation of the total sample frequency deviation from the nonworking segment.

## Appendix C

**Table A3.** Analysis of variance: differences between segments based on work experience.

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Flexibility	Between Groups	4.70	2	2.35	2.55	0.08
	Within Groups	103.16	112	0.92		
	Total	107.86	114			
Teamwork	Between Groups	8.08	2	4.04	3.72	0.03
	Within Groups	122.68	113	1.09		
	Total	130.76	115			
Interpersonal skills	Between Groups	0.69	2	0.34	0.30	0.74
	Within Groups	127.28	111	1.15		
	Total	127.97	113			
Initiative	Between Groups	2.00	2	1.00	0.74	0.48
	Within Groups	152.44	113	1.35		
	Total	154.44	115			
Motivation	Between Groups	1.31	2	0.65	0.80	0.45
	Within Groups	91.42	112	0.82		
	Total	92.73	114			
Oral communication and presentation skills	Between Groups	1.21	2	0.61	0.44	0.64
	Within Groups	149.78	109	1.37		
	Total	150.99	111			
Stress resilience	Between Groups	7.65	2	3.82	3.66	0.03
	Within Groups	117.10	112	1.05		
	Total	124.75	114			
Knowledge of social media	Between Groups	1.81	2	0.91	1.05	0.36
	Within Groups	92.74	107	0.87		
	Total	94.56	109			
Knowledge of e-commerce	Between Groups	3.26	2	1.63	1.54	0.22
	Within Groups	116.70	110	1.06		
	Total	119.97	112			
Knowledge of mobile	Between Groups	2.80	2	1.40	1.08	0.34
	Within Groups	143.06	110	1.30		
	Total	145.86	112			
Knowledge of analytics and real time practices	Between Groups	0.65	2	0.33	0.28	0.75
	Within Groups	127.60	111	1.15		
	Total	128.25	113			
Knowledge of Internet & software knowledge	Between Groups	1.11	2	0.55	0.42	0.66
	Within Groups	143.61	109	1.32		
	Total	144.71	111			
SEO & SEM	Between Groups	0.35	2	0.18	0.14	0.87
	Within Groups	104.51	85	1.23		
	Total	104.86	87			
Planning, organization and time management	Between Groups	5.56	2	2.78	3.07	0.05
	Within Groups	101.48	112	0.91		
	Total	107.04	114			

Table A3. Cont.

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Contents creation across channel	Between Groups	1.28	2	0.64	0.45	0.64
	Within Groups	154.43	109	1.42		
	Total	155.71	111			
Creative thinking	Between Groups	0.52	2	0.26	0.40	0.67
	Within Groups	71.68	110	0.65		
	Total	72.20	112			
Precision and attention to detail	Between Groups	4.63	2	2.32	3.37	0.04
	Within Groups	75.69	110	0.69		
	Total	80.32	112			
Sales knowledge and management skills	Between Groups	3.63	2	1.81	1.59	0.21
	Within Groups	125.91	110	1.15		
	Total	129.54	112			
Ability to manage multiple marketing tasks	Between Groups	1.40	2	0.70	0.59	0.55
	Within Groups	128.87	109	1.18		
	Total	130.28	111			
Data-driven/data-oriented	Between Groups	0.73	2	0.36	0.34	0.72
	Within Groups	122.44	113	1.08		
	Total	123.17	115			
Good conceptual and analytical skills	Between Groups	4.02	2	2.01	2.45	0.09
	Within Groups	92.70	113	0.82		
	Total	96.72	115			
Statistical knowledge	Between Groups	0.73	2	0.37	0.39	0.68
	Within Groups	106.26	112	0.95		
	Total	106.99	114			
Problem-solving	Between Groups	0.71	2	0.35	0.47	0.62
	Within Groups	82.92	111	0.75		
	Total	83.62	113			
Critical thinking	Between Groups	0.94	2	0.47	0.52	0.60
	Within Groups	100.74	111	0.91		
	Total	101.68	113			
Ability to synthesize information into meaningful and actionable reports	Between Groups	3.85	2	1.93	1.69	0.19
	Within Groups	124.11	109	1.14		
	Total	127.96	111			
Knowledge of company and of its customers	Between Groups	0.26	2	0.13	0.13	0.88
	Within Groups	114.52	111	1.03		
	Total	114.78	113			
Knowledge of research methods	Between Groups	2.58	2	1.29	1.04	0.36
	Within Groups	137.70	111	1.24		
	Total	140.28	113			

**Table A3.** *Cont.*

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Knowledge of customer touchpoints and journey	Between Groups	4.40	2	2.20	1.75	0.18
	Within Groups	139.67	111	1.26		
	Total	144.07	113			
CRM and relational skills	Between Groups	2.72	2	1.36	1.24	0.30
	Within Groups	108.70	99	1.10		
	Total	111.41	101			
Self-development	Between Groups	2.18	2.0	1.09	1.39	0.26
	Within Groups	66.54	85.00	0.78		
	Total	68.72	87.00			

6-point Likert scale 1 = not at all important, 6 = very important.

## Appendix D

**Table A4.** Discriminant analysis: classification and test of equality of group means.

	Classification Function Coefficients			Tests of Equality of Group Means				
	Full- or Part-Time	Casual or Internship	Do Not Work	Wilks' Lambda	F	df1	df2	Sig.
	Work Experience							
Flexibility	15.631	12.346	14.332	0.849	4.997	2	56	0.010
Teamwork	−0.281	−2.226	−1.614	0.810	6.565	2	56	0.003
Interpersonal skills	3.524	2.573	3.014	0.997	0.086	2	56	0.917
Initiative	−12.220	−10.735	−10.742	0.997	0.077	2	56	0.926
Motivation	13.913	14.756	13.837	0.995	0.147	2	56	0.864
Oral communication and presentation skills	−2.598	−1.481	−2.025	0.988	0.344	2	56	0.711
Stress resilience	0.251	0.299	−0.213	0.942	1.722	2	56	0.188
Knowledge of social media	11.897	10.801	11.740	0.985	0.425	2	56	0.656
Knowledge of E-commerce	−6.508	−2.633	−6.533	0.992	0.232	2	56	0.793
Knowledge of Mobile	17.016	13.796	15.786	0.995	0.133	2	56	0.876
Knowledge of Analytics and real time practices	−5.602	−4.088	−3.664	0.983	0.492	2	56	0.614
Knowledge of Internet and software knowledge	−2.757	−2.035	−1.548	0.983	0.484	2	56	0.619
SEO and SEM	−0.469	−0.910	−0.973	0.996	0.112	2	56	0.894
Planning, organization and time management	−1.125	2.953	−0.008	0.950	1.486	2	56	0.235
Contents creation across channel	−13.293	−11.970	−12.651	0.995	0.150	2	56	0.861
Creative thinking	17.075	12.845	15.397	0.991	0.260	2	56	0.772
Precision and attention to detail	9.869	10.282	7.724	0.916	2.560	2	56	0.086
Sales knowledge and management skills	5.628	3.469	4.226	0.984	0.449	2	56	0.641

Table A4. Cont.

	Classification Function Coefficients			Tests of Equality of Group Means				
	Work Experience			Wilks' Lambda	F	df1	df2	Sig.
	Full- or Part-Time	Casual or Internship	Do Not Work					
Ability to manage multiple marketing tasks	−3.495	0.106	−0.980	0.986	0.401	2	56	0.672
Data-driven/data-oriented	−8.556	−12.200	−9.063	0.965	1.008	2	56	0.372
Good conceptual and analytical skills	8.924	6.702	7.969	0.944	1.657	2	56	0.200
Statistical knowledge	11.099	11.285	10.601	0.994	0.173	2	56	0.842
Problem-solving	−4.018	−2.833	−3.119	0.961	1.146	2	56	0.325
Critical thinking	9.136	7.712	8.527	0.989	0.319	2	56	0.728
Ability to synthesize information into meaningful and actionable reports	3.263	2.288	2.192	0.950	1.480	2	56	0.236
Knowledge of company and of its customers	−0.539	1.639	0.658	0.997	0.078	2	56	0.925
Knowledge of research methods	−6.120	−6.401	−5.941	0.991	0.246	2	56	0.783
Knowledge of customer touchpoints and journey	−2.511	−3.331	−3.832	0.994	0.166	2	56	0.848
CRM and relational skills	−9.284	−7.696	−8.278	0.996	0.120	2	56	0.887
Self-development	14.518	12.476	13.954	0.999	0.042	2	56	0.959
(Constant)	−177.277	−156.236	−157.503					
Fisher's linear discriminant functions								

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