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SKILLS REQUIRED OF PROFESSIONAL ACCOUNTANTS: EVIDENCE FROM LABOUR MARKET IN CROATIA

Abstract

Purpose: The main purpose of this paper is to develop a further understanding of professional accountants' attributes and professional skills required by employers. This paper analyses the requirements of the labour market of the Republic of Croatia using the framework derived from IFAC's International Education Standard (IES) 3 from 2015 to identify the specific dimensions of professional skills in job advertisements.

Methodology: This study uses a qualitative data collection method to analyse the required professional skills of professional accountants from the accounting employers' perception. We have used Internet research to collect primary data and analyse job advertisements. Content analysis was used to analyse job advertisements.

Results: The evidence suggests that employers mostly required professional accountants with attributes categorised as the organisational skills dimension. They were followed by attributes categorised as the intellectual skills dimension, the interpersonal and communication dimension, and the personal dimension. Taking into account the professional skills dimension, a professional accountant is required to possess the ability to use appropriate information technology (IT), teamwork skills, responsibility, the ability to work independently, be analytical and committed to learning, since those were most highly ranked attributes in the collected job advertisements.

Conclusion: This study revealed a 'profile' of a professional accountant considering the requirements of employers regarding professional skills. Future research should take into consideration further analysis regarding the required skills using different data sources and explore the required skills within different accounting related professions and various sectors and sizes of accounting employers.

Keywords: Professional accountants, professional skills, labour market

1. Introduction

Professional accountants play a very important role since they serve the information needs of a variety of business stakeholders by providing a broad range of financial and non-financial information. It is argued that the accountancy profession "contributes to an efficient economy that creates value to society" (IFAC, 2019, p. 7). Professional accountants are strategic support to management (Belfo & Trigo, 2013, p. 538) and information providers (Doost et al., 2011, p. 62). To fulfil their roles, professional accountants have to demonstrate their competence consisting of technical knowledge as well as professional skills and professional values (IFAC, 2019, p. 10). The accountancy profession is facing many challenges due to altering stakeholder demands as well as legislative and regulatory changes. Changing labour market conditions are causing the evolution of many skills and knowledge required for many jobs. The newest report released by the World Economic Forum (WEF, 2020, p. 4) on opportunities in the emerging labour market states that there is a demand for a "broad variety of skills, inclusive of both disruptive technical skills but also specialised industry skills and core business skills". According to accounting industry research, accountant job descriptions will continue to evolve, especially concerning constant regulatory changes and information technology challenges (Thompson Reuters, 2018; Tsiligiris & Bowyer, 2021).

Professional skills play an important role in the achievement of the overall competence of professional accountants (Crawford et al., 2011) and are an increasingly important area in accounting research, especially in the area of accounting education. This topic can be addressed from different points of view, and previous studies have been conducted on different focus groups, such as accounting educators, students, and accounting employers. Employers' perspective is of special importance since they dictate the profile of professional accountants that are in demand in the labour market. Although various studies have been conducted in the last three decades (Jackling et al., 2013; Bunney et al., 2015; Webb & Chaffer, 2016; Tan & Laswald, 2018), it is argued that there is still a need to conduct further empirical research, since to date there has been little agreement between academic or professional accounting bodies regarding the list of skills accounting professionals should possess. Jackling & De Lange (2009, p. 370) see "the mixture of skills" necessary for future accountants that enable them to "solve the diversity of business challenges".

The main purpose of this paper is to develop a further understanding of professional accountants' attributes and professional skills required by employers. This paper analyses the requirements of the labour market of the Republic of Croatia, responding to calls from previous research (Tan & Laswald, 2018; Tempone et al., 2012; Chaplin, 2017) for further research regarding employers' perceptions of attributes required of professional accountants in different contexts. Most recent studies have mainly been conducted in countries with strong inputs of the accounting industry and professional accounting bodies in designing accounting programmes, such as Australia (Leong & Kavanagh, 2013). In the Republic of Croatia, a framework for accounting education is still developing. Recently, efforts have been made by the academic community to further develop and improve higher education and occupational standards in the field of accounting within the research project "Excellence and efficiency in higher education in the field of economics - E4" (active from 2019 to 2022), which included several national universities as project members. One of the aims of the Accounting working group within the aforementioned project was to develop a Master of Business Economics qualification standard. Within the Croatian Qualifications Framework (CQF), which "regulates the entire qualifications system at all levels of education", there are occupational standards in the CROQF Register for financial forensic accountants (from 2017), bookkeepers (from 2019), and heads of accounting (from 2021). Furthermore, most recent studies have conducted interviews or survey questionnaires with employers (Webb & Chaffer, 2016; Chaplin, 2017; Tempone et al., 2012; Low et al., 2016; Nicolaescu et al., 2017; Atanasovski et al., 2018, etc.) to find out their perspective on desirable skills of accounting professionals. In most cases, researchers identified "oral and written communication skills, teamwork skills, critical thinking, and problem-solving skills, the ability to use information technology, commitment to life-long learning and ethical attitude as important skills" from the employers' viewpoint (Barišić et al., 2021, p. 24).

Previous studies used different frameworks or no frameworks to systematically analyse skills, which makes generalisations difficult. This study focuses on the analysis of job advertisements of the Croa-

tian labour market, following previous research that also analysed job advertisements to comprehend the employers' perspective in this context (Dunbar et al., 2016; Tan & Laswald, 2018). This study uses the framework derived from the International Education Standard (IES) 3 from 2015 to identify specific dimensions of professional skills in job advertisements. This research study also expands its focus by analysing skills required in various stages of the career of professional accountants to identify skills that are important in general, not just for a particular career phase. In addition, it will contribute to a more comprehensive understanding of this topic in the European geographical area.

This study aimed to address the following research questions:

- Which dimension of professional accountants' skills is the most required by employers?
- What are the attributes most required of professional accountants?
- Is there a difference between job functions in terms of required skills?
- Is there a difference between different levels of job experience in terms of required skills?

This paper aims to contribute to this area of research by exploring the attributes and skills of professional accountants, which will enable the synthesis of a profile of professional accountants regarding the skills requirements of employers of the Croatian labour market. Data were collected for this study from online job advertisements of accounting employers in the period from February to March 2020. The results can be used by accounting academics as well as accounting educators as a reference point to determine the importance of certain skills to accounting employers in a European context. Previous studies identified a "wide gap between the skills and capabilities of graduates and the requirements and demands of the work environment" (Andrews & Higson, 2008, p. 411) in some European countries, and the need that "business graduates are equipped with more than hard business-focused skills and competencies" (Andrews & Higson, 2008, p. 20). Therefore, there is a need to conduct further research on this topic from the accounting perspective. There is no systematic research into this subject matter in the Republic of Croatia, and we believe that the results of this study can provide important insight from the perspective of the accounting industry. There is global criticism regarding accounting education not including demands from employers and differences between accounting employers' expectations and those of accounting educators regarding professional/generic skills and competencies (Bui & Porter, 2010). Research efforts have also been made to develop a curriculum design proposal to better prepare accounting graduates for the workplace demands (Willcoxson et al., 2010; Tsiligiris & Bowyer, 2021). Accounting education, especially at universities, has an important role in forming competent professional accountants since it provides professional knowledge, but also enables requiring skills that are an essential part of professional competence. Howcroft (2017, p. 464) argues that university accounting education is a competitive market and that there is pressure upon university accounting educators to "pay attention and give serious consideration to the professional accountancy bodies' and practitioner employers' expectations of business schools to provide vocational training". Various teaching methods could be employed to support the development of the required skills according to the needs of the labour market.

The next section of the paper provides a literature review, followed by the methodology section. The fourth part of the paper analyses results and the conclusion is provided in the last section of the paper.

2. *Literature overview*

Professional skills have been an important part of accounting research in the last decades, as well as various competency frameworks of the accountancy profession. They are considered part of a multidimensional construct of professional accountants' competence (IFAC, 2019, p. 134; AICPA, 2018). Professional skills are also promulgated by prominent professional accounting bodies within competency frameworks. Palmer et al. (2004, p. 892) compared various competency studies, completed from 1989 to 2003, mostly US-based. According to the results, entry-level accountants were mainly required to possess "communication skills, interpersonal skills, general business knowledge, accounting knowledge, problem-solving skills, information technology, personal attitudes and capabilities, and computer skills" (p. 892). Recent competency frameworks that contain expected competen-

cies of professional accountants in various fields of the accountancy profession such as the ACCA Competency Framework, the AICPA Pre-certification Core Competency Framework, the IMA Accounting Management Competence Framework, the Chartered Global Management Accountant (CGMA) Competency Framework, the INTOSAI Competency Framework, also articulate skills like communication skills, personal organisation and teamwork, decision making, leadership and digital skills (Barišić et al., 2020).

Professional accountants are expected to possess specific knowledge of various competence areas such as financial accounting, management accounting, taxation, and audit, but employers also require professional accountants to possess certain professional skills. In this paper, professional skills are regarded as skills that are not subject-specific and are often defined as "skills that are transferable, i.e., they can be transferred from one job or career to another, and are skills that are required for employability" (Crawford et al., 2011, p. 117). Many interchangeable terms are used to describe professional skills such as generic skills, transferable skills, personal transferable skills, core skills, key skills, graduate attributes, generic attributes (Jones, 2010), employability skills, soft skills, underpinning skills (Tempone et al., 2012), non-technical skills, personal transferable skills, soft skills and attributes (Tan & Laswald, 2018), and employability skills (Webb & Chaffer, 2016). Many authors (Jones, 2010; Bunney et al., 2015) argue that there is certain ambiguity not only regarding its "definitional confusion" but also regarding lack of consensus on the issue of what skills are most important in this regard. Howcroft (2017) argues that there is no "real likelihood" of a consensus between accounting employers regarding expected skills of accounting graduates since they vary in sizes and organisational types, and thus in the required skills and knowledge. In the International Education Standard 3 (IES 3), the International Federation of Accountants (IFAC) promulgated four competence areas of professional skills, which are also used as a framework in this paper. First of all, *intellectual* refers to the "ability of a professional accountant to solve problems, make decisions, adapt to change, and exercise professional judgment". Secondly, *interpersonal and communication* refers to the "ability of a professional accountant to work and interact effectively with others". Then, *personal* "relates to the personal attitudes and behaviour of a professional accountant", and finally *organisational* "relates to the ability of a professional accountant to work effectively with or within an organisation to obtain the optimal results or outcomes from the people and resources available" (IFAC, 2019, p. 134).

In their review of previous research of accounting academics, Tan and Laswald (2018) identified a large volume of studies dating from the mid-1980s from different geographical areas, largely Australia and New Zealand. The authors argued that the professional skills "issue is not unique to a country but is an area of growing concern worldwide", and that it concerns many disciplines, including accounting (p. 4). They analysed a growing body of research from late 1990 to 2016 and identified communication skills and personal, interpersonal, and intellectual capabilities as the most required generic skills. Recently, more research efforts have been made to gain an understanding of employers' perceptions, especially in Australia. Tempone et al. (2012) interviewed employers in Australia that ranked communication and presentation, teamwork, and self-management attributes in the graduates they were employing as the most required skills for accounting graduates entering the labour market. Similarly, Chaplin (2017) classified the requisite skills of accounting graduates in Australia. Respondents were questioned via an email survey questionnaire, and analytic skills followed by creative thinking skills and computer skills were the most important prerequisite skills for new junior employees. Dunbar et al. (2016) collected data from job advertisements over a four-year period (2006 to 2009) in Queensland Australia, and concluded that there was greater emphasis on soft skills, rather than on technical skills, and that the most required soft skills were communication skills. Low et al. (2016) interviewed accounting employers in New Zealand and concluded that employers find "non-technical skills more important or at least equally important as technical skills" (p. 52). Interpersonal skills, the ability to work with organisational culture of the firm as well as oral communication skills were found to be the most important among identified non-technical (generic) skills. Tan & Laswald (2018) criticised previous studies that just identified broad categories of professional skills (they were referred to as employability skills) and offered more information about what each skills category consisted of using Birkett's taxonomy of skills and IFACs IES 3 from 2015. They analysed job advertisements in Australia from 2015 to 2016. The study also ana-

lysed skills depending on various experience levels and in terms of different accounting sub-groups. In Indonesia, Aryanti & Adhariani (2020) analysed students' perceptions and employers' expectations regarding skills, measured through attributes identified in previous studies. In this regard, employers in Indonesia emphasised work ethics, teamwork, and time management. Mhlongo (2020) analysed accounting job advertisements in South Africa. Skills selection was based on the skills that were prescribed by national professional accounting bodies. According to the results, employers valued oral and written communication, critical thinking, and computer literacy as the most important skills for the employment of accounting graduates, and there was no difference in their rank when they were analysed across levels of employment, except in the case of critical thinking. Critical thinking was more preferred in the higher levels of accounting job functions.

Regarding research in other countries at European level, in the UK, Howcroft (2014) analysed vocational skills expected from novice management accountants and the expectation-performance gap by conducting a survey and interviewing students, practitioner employers, and university educators. Employers emphasised verbal communication and written communication skills as the most important skills for management accountants. Jones (2014) analysed accounting employers' views on key personal and professional skills engaging employers' panels in England. The study identified the importance of generic skills as well as the "professional credibility with colleagues and clients". The idea was to study the skills/personal attributes required of an early career accountant. Nicolaescu et al. (2017) analysed the importance of transversal competencies based on the perception of accounting graduates and employers from Western Romania. Employers placed the use of IT technology and communication, readiness for life-long learning as well as the learning autonomy, teamwork, decision-making and problem-solving ability as the five most important transversal competencies. The study was based on the national classification of competencies. Atanasovski et al. (2018) surveyed accounting employers and accounting students in Romania regarding generic skills as well as technical skills considered important for future accountants. There was no specific framework used in the study but an extended list of skills that had been considered important in previous studies. Both groups of respondents emphasised the importance of generic skills over technical skills for future accountants, and employers emphasised "personal and interpersonal skills of oral communication, knowledge of foreign languages, ethical attitude, credibility, and commitment to life-long learning" (p. 64). Dolce et al. (2020) analysed soft skills of Italian accounting graduates and employers' expectations via a questionnaire. Italian employers prioritised soft skills over technical skills, and teamwork and communication were considered most important. Cernușca (2020) used IFAC's IES 3 (2015) skills taxonomy to survey students majoring in accounting and accounting employers in Romania to analyse the importance of hard and soft skills required for entering the labour market. Accounting employers who took part in the survey ranked hard and soft skills as follows: personal skills, interpersonal and communication skills, technical and functional skills, organisational and business management skills, and intellectual skills.

3. Methodology

This study uses a qualitative data collection method to analyse the professional skills required of professional accountants from the accounting employers' perception. We used Internet research to collect primary data by analysing job advertisements. As previously mentioned, job advertisement analyses have been used in some previous studies of this subject matter in the field of accounting. It is also a well-known and frequently used method in other fields, especially "to examine the changing nature of skills which are required in the workplace" (Harper, 2012, p. 29), and to understand employers' preference regarding the "distribution of the need for a certain skill" (Kurekova et al., 2015, p. 14).

We have used the purposive sampling technique, which is often used when analysing job adverts (Harper, 2012) with several sampling criteria described in the next section of the paper. After that, content analysis was used to analyse job adverts, where data were coded manually and extracted using Microsoft Excel. It is argued that the advantage of human reading instead of using textual software analysis is that it "may ensure that words are analysed in terms of their context as well as their frequency" (Harper, 2012, p. 42). In addition, descriptive and inferential statistics have been employed to analyse the results.

4. Results and discussion

4.1 Sample description

We collected job advertisements available in the Republic of Croatia, during the period of one month in 2020 (between 10 February 2020 and 10 March 2020) that included job functions within the accountancy profession. All job advertisements that were analysed were active at the time of sample collection. As presented in Table 1, job advertisements were collected from the web pages of the following job search sites: Burza rada, Moj Posao, Posao, and LinkedIn, as well as from the web pages of the accounting firms that are part of the "Big Four".

Table 1 Job sites used for job advertisement collection

Job advertisement site	f	%
Moj Posao	45	62
Posao	10	14
LinkedIn	9	12
"Big Four"	3	4
Burza rada	6	8
Total	73	100

Source: Authors

As presented in Table 2, most collected job adverts were from companies in the services industry (37%) and the production industry (31%), followed by trade (19%), and the accounting industry (12%). Concerning the size of the companies, as can be seen in Table 3, the sample mostly comprises small (36%) and medium-sized companies (31%).

Table 2 Company industry

Industry	f	%
Production	18	31%
Services	22	37%
Trade	11	19%
Accounting	7	12%
N/A	1	2%
Total	59	100

Source: Authors, based on empirical research results

Table 3 Company size

Size	f	%
Micro	14	24%
Small	21	36%
Medium	18	31%
Big	4	7%
N/A	2	3%
Total	59	100

Source: Authors, based on empirical research results

Table 4 indicates that most collected job advertisements searched for a bookkeeper (29%) and an accountant (25%), followed by an accounting assistant (16%) and a senior accountant (10%). Very few job adverts searched for the auditing job functions (overall, 5%).

Table 4 Accounting/Auditing job function

Accounting/Auditing job function/ position	f	%
Accountant	18	25
Accounting assistant	12	16
Auditor	1	1
Auditor analyst	1	1
Internal auditor	1	1
Auditor - IT specialist	1	1
Bookkeeper	21	29
Bookkeeper assistant	3	4
Chief accountant	6	8
Financial controller	2	3
Senior accountant	7	10
Total	73	100

Source: Authors, based on empirical research results

4.2 Analysis of the collected job advertisements

This study uses IFAC's IES 3 Initial Professional Development - Professional Skills taxonomy from 2015 as a reference for professional skills analysed in the job advertisements. IES 3 was slightly revised in 2019, but changes were effective from 2021, and since the time frame for this study was 2020, the revised 2019 IES 3 taxonomy was not used. Job ad-

vertisements also contained requirements regarding specific accounting knowledge, but that was not included in the analysis since it is not the focus of this research.

Learning outcomes contained in the 2015 IES 3 (IFAC, 2019, pp. 45-46) related to four skills dimensions, intellectual, interpersonal and communication, personal, and organisational were used to extract attributes (characteristics) for each professional skills dimension. Those attributes were then used as the reference to categorise the required attributes from the collected job advertisements into four aforementioned professional skills dimensions. In the cases where attributes could not be identified directly from the framework used, English synonyms were used to enable more precise coding.

Attributes extracted from the collected job advertisements and categorised into four professional skills dimensions are presented in tables 5-9.

It can be seen from Table 5 that the most required attribute categorised as the intellectual skills dimension is "responsible", which was identified in almost 30 collected job adverts, with 27.8% frequency in comparison to all other attributes in that professional skills dimension. It was followed by "work independently", with a relative frequency of 23.1%. Employers also highly value professional accountants with problem-solving attributes, with a relative frequency of 12%.

Table 5 Frequency of attributes of the intellectual skills dimension (category)

Attributes of the intellectual skills dimension	f	%
analytical skills	16	14.8
creative	1	0.9
decision making	3	2.8
evaluate data	1	0.9
inventive	1	0.9
proactive	12	11.1
problem-solving	13	12.0
responsible	30	27.8
self-initiative	6	5.6
work independently	25	23.1
Total	108	100

Source: Authors, based on empirical research results

As presented in Table 6, teamwork is the most in-demand attribute in the interpersonal and communications skills dimension (relative frequency of 53.8%), followed by communication skills (relative frequency of 18.5%).

Table 6 Frequency of attributes of the interpersonal and communication skills dimension (category)

Attributes of the interpersonal and communication skills dimension	f	%
communication skills	12	18.5
communicative	8	12.3
helpful	1	1.5
interpersonal skills	1	1.5
oral presentation skills	3	4.6
positive attitude	4	6.2
teamwork	35	53.8
written presentation skills	1	1.5
Total	65	100

Source: Authors, based on empirical research results

A requirement that professional accountants should be able to use appropriate IT is the most required attribute categorised as the organisational skills dimension, as can be seen in Table 6. It is required in almost all of the analysed job adverts (69 out of 73), with a relative frequency of 35.4%. Most employers required IT proficiency in using MS Office, in particular Excel. They also mainly required an advanced level of proficiency. Interestingly, there were only a few requirements regarding proficiency in using specific accounting software, such as Synesis and Pantheon. Detail-oriented (relative frequency of 7.7%) and precision (7.2%) followed as the most required attributes in this professional skills dimension.

Table 7 Frequency of attributes of the organisational skills dimension (category)

Attributes of the organisational skills dimension	f	%
ability to comply with prescribed standards	2	1.0
ability to meet deadlines	10	5.1
ability to meet prescribed goals	5	2.6
ability to set priorities	5	2.6
ability to work under pressure	4	2.1
accurate	10	5.1
uses appropriate IT	69	35.4
detail-oriented	15	7.7
leadership skills	3	1.5
neat person	4	2.1
organisational skills	13	6.7
organised	9	4.6
precise	14	7.2
punctual	2	1.0
structured	2	1.0
systematic	13	6.7
time management	2	1.0
timeliness	13	6.7
Total	195	100

Source: Authors, based on empirical research results

Regarding the attributes categorised as personal skills, which are presented in Table 8, commitment to learning is the most required attribute (relative frequency of 33.3%), followed by the attribute 'reliable' (relative frequency of 22.9%), and 'flexible' (relative frequency of 14.6%).

Table 8 Frequency of attributes of the personal skills dimension (category)

Attributes of the personal skills dimension (category)	f	%
agile	1	2.1
committed to learning	16	33.3
conscientious	1	2.1
flexible	7	14.6
motivated	6	12.5
open-minded to new opportunities	4	8.3
professional	2	4.2
reliable	11	22.9
Total	48	100

Source: Authors, based on empirical research results

Attributes from the job adverts that could not be categorised into any of the four professional skills dimensions were classified as other (Table 9).

Table 9 Frequency of attributes of the "other" skills dimension (category)

Attributes of the "other" skills dimension	f	%
accessible	1	7.1
brave heart who dares to "think outside the box"	1	7.1
diligence	3	21.4
entrepreneurship	1	7.1
focused	1	7.1
multitasking	1	7.1
open-minded	1	7.1
practical	1	7.1
resourceful	1	7.1
simple	1	7.1
takes other responsibilities	1	7.1
truthful	1	7.1
Total	14	100

Source: Authors, based on empirical research results

In order to answer the first research question, i.e., which dimension of professional accountants' skills is the most required dimension by employers, we analysed frequencies of attributes required in collected job advertisements that had previously been categorised into four professional skills dimensions. According to the results presented in Table 10, employers mostly required professional accountants with attributes that were categorised as the organisational skills dimension (45% of all required attributes). They were followed by attributes categorised as the intellectual skills dimension (25%), interpersonal and communication (15%), and personal (11%).

Table 10 Frequency of attributes per skills dimensions

Skills dimension (category)	f	%
Intellectual	108	25
Interpersonal and communication	65	15
Organisational	195	45
Personal	48	11
Other	14	3
Total	430	100

Source: Authors, based on empirical research results

Considering the second research question, the goal was to analyse what the most required attributes are for professional accountants, regardless of the professional skills dimension they were categorised into. As can be seen in Table 11, taking into consideration the rank of all attributes extracted from the collected job advertisements, employers mostly require professional accountants that use appropriate IT, have teamwork skills, are responsible, possess the ability to work independently, possess analytical skills and are committed to learning. The aforementioned attributes are top five ranked attributes in terms of the frequency of their requirement in all collected job advertisements.

Table 11 Ranks of attributes

Attribute	Frequency	%	Rank
use appropriate IT	69	94.52%	1
teamwork	35	47.95%	2
responsible	30	41.10%	3
work independently	25	34.25%	4
analytical skills	16	21.92%	5
committed to learning	16	21.92%	5
detail-oriented	15	20.55%	7
precise	14	19.18%	8
problem solving	13	17.81%	9
organisational skills	13	17.81%	9
systematic	13	17.81%	9
timeliness	13	17.81%	9
proactive	12	16.44%	13
communication skills	12	16.44%	13

Source: Authors, based on empirical research results

To analyse further if there is a difference between job functions in terms of required skills (categories of professional skills), which was the third research question, we conducted a chi-squared test. According to the results, presented in Table 12, there is no statistically significant difference (χ^2=4.08, p=0.90) between accounting job functions (accountant, accounting assistant, bookkeeper, bookkeeper assistant, chief and senior accountant) in terms of different professional skills dimensions. Overall, organisational skills and intellectual skills are mostly required, then there follow interpersonal and communication, and personal skills, but those differences are not statistically significant when different accounting jobs are taken into consideration. So we can conclude, regardless of the accounting job position, that accounting employers require attributes from all four professional skills dimensions. In comparison, when analysing differences between accounting sub-groups in job advertisement analyses in Australia and New Zealand, Tan & Laswald (2018) identified interpersonal and personal skills as top skills in demand in all sub-groups in both countries.

Table 12 Analysis of interdependence between accounting job functions and professional skills dimensions

Accounting job functions	Total	Skills				
		Intellectual	Interpersonal and communication	Organisational	Personal	Other
Accountant*	18	17 (94.4%)	9 (50%)	18 (100%)	6 (33.3%)	1 (5.6%)
Accounting assistant*	12	11 (91.6%)	7 (58.3%)	12 (100%)	4 (33.3%)	4 (33.3%)
Auditor (analyst, internal, IT spec.)	4	4 (100%)	3 (75%)	4 (100%)	4 (100%)	1 (25%)
Bookkeeper (and assistant)*	24	17 (70.8%)	10 (41.6%)	23 (95.8%)	14 (58.3%)	1 (4.2%)
Chief accountant (and senior acc.)*	13	11 (84.6%)	8 (61.5%)	13 (100%)	4 (30.8%)	2 (15.4%)
Financial controller	2	2 (100%)	0 (0%)	2 (100%)	2 (100%)	0 (0%)
Total	73	62 (84.9%)	37 (50.7%)	72 (98.7%)	34 (46.6%)	9 (12.3%)

χ^2=4.08, p=0.90 (p>0.05)

Source: Authors, based on empirical research results

We have also tested interdependence between accounting job functions and professional skills dimensions to see if there is a difference between different levels of job experience in terms of required skills (professional skills dimensions), which is the fourth research question. Groups based on work experience are presented in Table 13. According to the results presented in Table 14, there is no statistically significant difference (χ^2=1.30, p=0.72) between the groups regarding work experience concerning different professional skills dimensions. Although intellectual skills are more in demand in both work experience groups, that difference is not statistically significant in relation to all other professional skills dimensions. In contrast, Tan & Laswald (2018) identified that interpersonal skills were considered more important for more experienced professional accountants.

Table 13 Groups based on work experience

Work experience	f	%
1. Group (up to 1 year - min. 2 years)	26	41
2. Group (min. 3 years - min. 5 years)	38	59
Total	64	100

Source: Authors, based on empirical research results

Table 14 Analysis of interdependence between work experience and professional skills dimensions

Skills dimensions	Work experience		
	1	2	Total
Intellectual	14 (53.8%)	24 (66.7%)	38
Interpersonal and communication	4 (15.4%)	3 (8.3%)	7
Organisational	4 (15.4%)	5 (13.9%)	9
Personal	4 (15.4%)	4 (11.1%)	8
Total	26	36	62

χ^2=1.30, p=0.72 (p>0.05)

Source: Authors, based on empirical research results

5. Conclusion

The contribution of this paper is in identifying the required skills of professional accountants in a different context and further investigating the importance of professional skills regarding different accounting jobs and levels of work experience. The evidence suggests that employers mostly required professional accountants with attributes categorised as the organisational skills dimension. The most required attribute from the organisational

skills dimension according to the frequency of appearance in job advertisements was the ability to use appropriate IT. Furthermore, employers mostly required an advanced level of IT proficiency, which indicated the importance of digital competency for professional accountants. Intellectual skills were the second most in-demand skills by the Croatian employers, and "responsible" was the most required attribute in the professional skills dimension, followed by the ability to work independently. This study also revealed the 'profile' of the professional accountant considering the requirements of employers. Taking into account the professional skills dimension, a professional accountant is required to possess the ability to use appropriate IT, have teamwork and analytical skills, be responsible, possess the ability to work independently, and be committed to learning, since those were most highly ranked attributes in the collected job advertisements. Additionally, according to other results, no statistically significant difference was found in the required skills dimensions comparing different accounting jobs/positions or levels of work experience. Results suggest that employers equally require skills within the scope of all four professional skills dimensions, which is in contrast to some previous research. It is also interesting to point out that we identified only a few attributes that were not categorised into four professional skills dimensions which were used as the framework for this research, indicating that employers mostly require skills promulgated by prominent accounting bodies.

Generalisability of these results has certain limitations. The first limitation refers to sample size and sample structure since companies from the sample were mainly small and medium-sized companies. Furthermore, there are some limitations concerning the source of data as we extracted attributes from online job advertisements over a certain period. Online job advertisements can give a glimpse into employers' perspectives but they lack a critical perspective. Future research should take into consideration further analysis regarding required skills using different data sources. It would also be interesting to further explore required skills of different types of jobs within the accountancy profession and various accounting employers' sectors and sizes.

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