The soft skills of accounting graduates: perceptions versus expectations

The Soft Skills of Accounting Graduates: Perceptions versus Expectations

AUTHORS: Valentina DOLCE[a,b], Federica EMANUEL[c] Maurizio CISI[d], Chiara GHISLIERI[a]

[a]*University of Turin, Department of Psychology*

[b]*Université de Haute-Alsace (LISEC, Laboratoire Interuniversitaire des Sciences de l'Éducation et de la Communication)*

[c]*University of Turin, Department of Philosophy and Education Sciences*

[d]*University of Turin, Department of Management*

Corresponding author: Federica Emanuel

federica.emanuel@unito.it

Keywords: soft skills; accounting graduates' perceptions; employers' expectations; technical skills

Abstract:

In recent years, changes in business, new technology, and greater competitiveness and dynamism have all resulted in a need for new skills. This study focuses on soft skills in accounting education, exploring the viewpoints of both graduates and employers. Our main question is to better understand if there is a right match between graduates' perceptions and companies' expectations of the skills that are needed. 251 Italian graduates (Department of Management) and 74 Italian joint-stock companies completed a self-report questionnaire. Graduates attributed a higher level of importance to the following macro-areas of skills: task orientation, motivation, self-awareness, valorisation, and interpersonal relationships. Graduates, compared to companies, underestimated the importance of other soft skills and one specific technical skill, and overestimated other technical skills. Graduates'

views are partially in accordance with employers' views; accounting education still needs to progress and the engagement of academics is fundamental to enhance the skills required by employers.

Introduction

Technical skills, also known as hard skills, have played a leading role in business for a long time; today, however, they do not seem to be sufficient to effectively address the challenges of the labour market (Andrews & Higson, 2008; Moore & Morton, 2017; Robles, 2012). The International Education Standards (IES) prescribe an appropriate mix of skills for candidates to succeed as professional accountants. The required professional skillset consists of intellectual skills, technical and functional skills, personal skills, interpersonal and communicative skills, and organizational and business management skills (International Accounting Education Standards Board, IAESB, 2014). This range of skills is also used by professional bodies such as Chartered Accountants Australia and New Zealand (CAANZ) and CPA Australia to define professional accreditation guidelines. A combination of different skills is also recommended by the American Institute of Certified Professional Accountants (AICPA). These skills are grouped under the following three pillars: accounting competencies (e.g. risk assessment analysis and management), business competencies (e.g. process and research management) and professional competencies (e.g. decision making, communication and collaboration) (AICPA, 2018). Italian accounting standards are in line with those defined by the International Federation of Accountants (IFAC). In Italy, the requirement to qualify as a professional accountant is a degree awarded by the Department of Management combined with an 18-month traineeship (Veneziani, Teodori, & Bendotti, 2016).

Although in general compliance with the IAESB, as showed by Crawford, Helliar, Monk and Veneziani (2014), in practice there is not often any real alignment with the IES. In addition to recommendations of international professional organizations, academic scholars have recently discussed this subject in depth (Apostolou, Dorminey, Hassell, & Rebele, 2017). Some authors have paid attention to the gap between the competencies expected by employers and those actually

possessed by accounting graduates (Arquero Montaño, Donoso, Hassall, & Joyce, 2001; Bui & Porter, 2010; Chaffer & Webb, 2017; Howcroft, 2017; Jones, 2014). Therefore, attempts on behalf of researchers to identify the knowledge and abilities required are particularly valuable. These studies may also support the expectations formalised in the Bologna 2020 process (2009), providing higher education institutions with scientific evidence useful to enhance graduate employability.

Training programmes and evaluation tools represent a challenge for higher education institutions that seek to reinforce and monitor the development of soft skills or 'professional skills', that are interpersonal qualities and personal attributes useful for academic performance and success in personal and professional life (Muzio, Fisher, Thomas, & Peters, 2007; Gibb, 2014; Ingols & Shapiro, 2014; European Commission, 2018; Ricchiardi, Ghislieri, & Emanuel, 2018; Ricchiardi & Emanuel, 2018).

Contribution

This study explores the viewpoints of both graduates and employers, by encouraging a reflection on soft skills topic. Our main question is to better understand if there is a possible match between graduates' perceptions and companies' expectations, in order to contribute to an academic education consistent with the expectations of the labour market. In particular, research in Italy in this area is sparse (Luzzatto, Mangano, Moscati & Pieri, 2012; Luzzato, Moscati, Mangano, & Pieri, 2015; Ricchiardi & Emanuel, 2018; Ricchiardi et al., 2018) despite its relevance being recognized in Australia, New Zealand, UK and USA (Stephenson, 2017). Further, this research focuses on accounting graduates rather than accounting students; overall data confirmed the relevance of this study path in relation to the workplace.

To answer to the main question, this study, firstly, analyses the presence of discrepancies between the graduates' estimation of importance and the self-evaluation regarding some soft skills and technical skills and, secondly, investigates if graduates' perceptions of the importance attributed to specific skills and knowledge are in line with those of the company.

The main practical implication of this study is, on the one hand, to provide general guidelines useful for academic institutions, in order to improve academic curricula and better meet employers' requirements and, on the other hand, enhance awareness in students about the skills estimated important by employers.

Furthermore, this study contributes to the existing knowledge base of skills required by Italian candidates to cover accounting roles. Unlike previous studies, the perception of graduates was considered in order to monitor their awareness of actual company requirements.

The interest in this topic is also a result of the demand of Department of Management graduates (which includes graduates in accounting) on the Italian employment market. According to AlmaLaurea data (2017), one year after completing a Master's degree, in the Department of Management of an Italian University in which this study was conducted, only 72% of graduates had a job, and 34% of these had fixed-term contracts. In 2017, of those employed, 21% were employed in the industrial sector and 76% in services (31% in consultancy and 17% in the insurance and credit sector). Differently from previous studies, this paper simultaneously focused on the graduates' estimation of importance and the self-evaluation as well as on the company's expectations providing comparison on diverse levels.

The remainder of the paper is structured as follows: the next section describes the relevant theoretical frameworks concerning soft skills. The section also summarises the literature pertaining to accounting education, which examines the professional skills expected and describes hypotheses. The third section describes the sample, explains the procedure adopted for this study, details the measures used in the questionnaire and, lastly, illustrates the type of data analysis performed. The fourth section outlines the results. The paper concludes with a discussion of the findings, implications for practice, limitations and suggestions for further research.

Theoretical Framework of Soft Skills

Due to the increasing complexity of the labour market, soft skills have become more important for current employment-related challenges, academic success and personal development, and not only in the field of professional accounting (Andrews & Higson, 2008; Chamorro-Premuzic, Arteche, Bremner, Greven, & Furham, 2010; Heckman & Kautz, 2012; Kechagias, 2011; Kember, Leung, & Ma, 2007; Mitchell, Skinner, & White, 2010; Ritter, Small, Mortimer, & Doll, 2018; Robles, 2012; Winstead, Adams, & Sillah, 2009).

If hard skills can be defined as technical abilities specific to a professional sector (Robles, 2012), defining soft skills is more challenging for a host of reasons. Firstly, for semantic reasons: often adjectives such as "generic", "key", "basic", "personal" and "transferable", and "vocational" are used instead of "soft"; and, the term "skills" is often replaced by notions such as "competences", "attributes", "qualities" and "capabilities" (Bennett, Dunne, & Carré, 1999; Chamorro-Premuzic et al. 2010; Kechagias, 2011; Levenson, 2000).

Secondly, soft skills consist of an extensive list of abilities, ranging from operational to interpersonal (Bennett et al., 1999; Chamorro-Premuzic et al., 2010): these include, but are not limited to, communication skills, teamwork, good decision-making, problem-solving, conflict management, working under pressure, empathy and critical thinking (Bennett, et al., 1999; Chamorro-Premuzic et al., 2010; Luzzatto et al., 2012; Ritter et al., 2018; Robles, 2012).

Thirdly, soft skills may be conceptualised as qualities useful to enhance graduates' quests for lifelong personal development, to promote global citizenship and interest in social good, and to increase employability (Andrews & Higson, 2008; Kavanagh & Drennan, 2008; Jackson 2013).

In order to address this inherent complexity, several models have been developed over the years (Andrews & Higson, 2008; Bennett et al., 1999; Chamorro-Premuzic et al., 2010; Cimatti, 2016; Gallivan, Truex, & Kvasny, 2004; Heckman & Kautz, 2016; Luzzato et al., 2015; Mangano, 2014; Robles, 2012).

In 2004, Gallivan et al. analysed the trends of required skills for IT professionals and identified the following six subcategories for non-technical skills: communication, interpersonal skills, leadership,

organisation, independence, motivation and creativity. In 1999, Bennett et al. (1999) had distinguished four broad management skills underlying more generic skills, namely the management of self, of others, of information and of tasks. The management of self includes skills such as time management, coping strategies, planning skills, etc. Some examples relating to the management of others are the ability to give feedback, to lead a group, and to respect the views and values of others. The management of information concerns the use of appropriate media and other supports or devices, but also a critical approach. Finally, the management of tasks relates to identifying key features, organising tasks into sub-tasks, identifying alternative strategic options, and assessing outcomes. Thereafter, Heckman & Kautz (2012; 2016) focused on personality, referring to the "Big Five" factors: openness, conscientiousness, extraversion, agreeableness and emotional stability (Costa & McCrae, 1992).

Starting from Bennett et colleagues' four-factor model (1999), and Heckman and Kautz's framework (2012; 2016), a model was developed by the University of Turin to monitor and promote soft skills and, also, to enhance students' professional readiness and academic success (Ricchiardi et al., 2018; Ricchiardi & Emanuel, 2018). This model examined soft skills and distinguished the following four macro-areas: task orientation, self-awareness and valorisation, motivation and interpersonal relationships.

Firstly, if we refer specifically to Bennett and colleagues' framework (1999), task orientation includes the ability to set and maintain priorities through time management and to use suitable work and study spaces to stay focused (Claessens, Van Eerde, Rutte, & Roe, 2007), the ability to solve problems, to make decisions and to identify different strategies in complex situations in which rational and critical thinking becomes necessary to achieve goals (Simon et al., 1987; Nijhuis, Segers, & Gijselaers, 2008). Secondly, skills which relate to self-awareness are emotional self-regulation, proactivity and self-valorisation. Specifically, emotional self-regulation largely concerns the recognition of both one's own and others' feelings and the ability to express them (Bar-On, 2005; Di Pietro, 2016). As stated above, soft skills do not only apply to a specific professional field: in this respect, as suggested by Molino

and colleagues (2018), emotional self-regulation has a relation with entrepreneurial intention mediated by general self-efficacy. Proactivity is the ability to act without request, show initiative, change situations and display adaptability (Trifiletti, Capozza, Pasin & Falvo, 2009). Self-valorisation is the ability to reflect, accept oneself and give value to one's own attributes, knowledge and competences, emotional self-regulation and proactivity.

Thirdly, motivation refers to objective guidance, locus of control and resilience. More precisely, objective guidance is the ability to focus emotional and cognitive resources in order to achieve a goal (Borgogni, Petitta & Barbaranelli, 2004). Locus of control, instead, is defined as a consolidated attitude towards explaining events and facts and to finding causes and responsibilities. If the tendency to explain situations is largely based on one's own behaviours, then internal locus of control prevails. If situations are mainly explained by factors beyond our control, such as fate or destiny, then external locus of control prevails (Rotter, 1966). Resilience is related to one's attitude when facing difficulties and maintaining self-confidence; it helps to transform difficult situations, crises and conflicts into opportunities for change (Connor & Davidson, 2003; Di Fabio & Palazzeschi, 2012).

Lastly, there are interpersonal skills, defined by Bennett et al. (1999) as the skills useful to manage other and co-exist harmoniously with others. The ability to work in a team, that is to be cooperative, agreeable, supportive and helpful (Robles, 2012), is an example of strong interpersonal skills. The ability to effectively communicate at all levels (Robles, 2012), to manage conflict, to understand and cope with relational issues (Merlone, 2015; Wall & Callister, 1995), and to lead collaborators, are other examples.

The list above is extensive but not exhaustive. Based on the interests of their research, authors select and focus on specific skills. In this respect, for example, Bennett et al. (1999) focused on skills related to information management, such as the conscious and critical use of media and technology.

A relevant question is how much these skills are developed at university. There has been much debate, particularly in some countries, regarding the set of professional skills required by management accountants in order to modify accounting curricula and develop skills (Arquero Montaño et al., 2001; Hassall, Joyce, Montano, & Anes, 2005; Howcroft, 2017; Pratama 2015; Tan & Laswand, 2018).

Some studies in accounting show the presence of different expectations on behalf of employers and educators regarding the skills accounting graduates should possess (Bui & Porter, 2010; Howcroft, 2017; Pratama, 2015). For instance, Howcroft (2017) explored the conflicting views between practitioner employers, university educators and the Chartered Institute of Management Accountants (CIMA), and cited the problem of the increase in student numbers and the consequent deterioration of staff-to-student ratios and there is a concentration on technical knowledge rather than vocational skills, such as critical thinking and problem-solving skills.

Similarly, in Indonesia, Pratama (2015) concluded that there is a gap between the expectations of accounting academics and practitioners. Academics privilege the acquisition of theoretical concepts, while practitioners place more emphasis on practical experience.

Very little research considers graduates' expectations. An example of this research was conducted by Kavanagh and Drennan (2008) on a sample of employers and accounting students whose findings showed that many non-technical skills are not being developed sufficiently. Although employers attribute importance to soft skills and not just to technical skills, graduates report that these competences were not well taught on their accounting courses at university. Furthermore, graduates felt that their degree did not meet the demands and needs of the labour market and may be widespread across the globe (Tomlinson, 2008). In recent years, researchers have highlighted discrepancies between workplace demands and academic training in different fields, not only in accounting (Andrew & Higson, 2008; Harvey, Moon, & Gheall, 1997; Hernández-March, Martín del Peso & Leguey, 2009).

Starting from this evidence, out first hypothesis is:

> Hypothesis 1. Graduates attribute a higher level of importance to soft skills compared to their perceptions to how much they possess them.

As regards the possible gap between graduates' perceptions and employers' expectations of technical and soft skills, Kavanagh and Drennan (2008) found that accounting students are only partially aware of employers' expectations. Although Gabric and McFadden (2000) do not specifically refer to accounting but to business in general, their study also confirmed a partial communality between students and employers too, in terms of the importance attributed to general business skills. Thus, our second hypothesis is:

> Hypothesis 2. Graduates' perceptions of the skills needed by employers only partially matches employers' expectations.

Soft skills have been examined in a variety of ways in different fields (Andrews & Higson, 2008; Moore & Morton, 2017; Robles, 2012; Ritter et al., 2018). As stated above, many international professional organizations (CIMA, AICPA, IFAC) recommend an appropriate mix of skills, which includes soft skills. More precisely, Arquero Montano et al. (2001), in a study involving the Chartered Institute of Management Accountants (CIMA) in the UK, concluded that employers perceive deficiencies in communication skills, group working, problem-solving and time management. Considering the current key role played by soft skills and the evidence in the accounting literature, we hypothesise that:

> Hypothesis 3. Employers often prioritise soft skills over technical ones.

Hassall et al. (2005) found that Spanish and UK employers ranked the importance of skills and knowledge differently. Items relating to communication skills were ranked higher by UK employers; items relating to strategic skills (such as having a comprehensive and global vision of the organisation) were ranked higher by Spanish employers. Despite these differences, there is a common, generally-accepted recognition of the importance of non-technical skills and knowledge for the accounting curricula. Similarly, Tan and Laswad (2018) showed the presence of differences

between Australian and New Zealand job advertisements, but in both cases, personal and interpersonal skills were emphasized.

Among soft skills, teamwork received particular attention (Gibert, Tozer, & Westoby, 2017; Goltz, Hietapelto, Reinsch, & Tyrell, 2008; Halfhill & Nielsen, 2007; Kemery & Stickney, 2014; Ritter et al., 2018). This interest is supported by the fact that teamwork is an attribute that employers particularly wish for, as reported by Ritter et al. (2018). Communication skills also seem to be relevant to employers (Levenson, 2000). These considerations are corroborated by the rankings of the National Association of Colleges and Employers (NACE, 2016), in which the ability to work in a team and to communicate (both orally and in written form) are recognised as being among the most frequent attributes sought in a resume (Ritter et al., 2018).

As regards the accounting field, Kennedy and Dull (2008) stressed the importance of transferable team skills for accounting students; this is emphasized by the Accounting Education Change Commission (1990) and also Avery's work (2001). The ability to work collaboratively and to use appropriate communication seem to be industry expectations (e.g. De Lange, Jackling & Gut, 2006; Morgan 1997; Kavanagh & Drennan, 2008; Siriwardane & Durden, 2014). In consideration of this evidence pertaining to interpersonal skills, we hypothesise that for Italian employers:

> Hypothesis 4. Teamwork and communication skills are considered to be among the most sought-after skills.

Method

Participants and procedure

This study involved 251 graduates at Department of Management from a university in north-west Italy and 74 Italian joint-stock companies. As regards the graduates' sample (*Table 1*), participants were aged 21 to 34 years ($M = 25.22$; $SD = 2.05$), 54.6% of them were female. The sample consisted of students who had graduated between 2015 and 2016, 33% of whom were bachelor's graduates

whilst 67% were master's graduates. The questionnaire was sent to all students graduated in 2015 and 2016 (around 1600 students) from the Department of Management of the Italian University, the response rate was 15%. 29.9% of subjects of sample were looking for a job, 52.6% worked, 18% were studying and only 1.6% did not work or study. Among the employed participants, 74% worked in a company, 19% in a private practice, 4% were self-employed, 2% in public administration and 1% in co-operative societies.

Table 1. Graduates descriptive data (n = 251)

Gender	%
Female	54.6
Male	45.4
Age	%
21-23	16.3
24-28	77.3
29-34	6.4
Occupational condition	%
Employed	52.6
Looking for a job	29.9
Students	18
Neither employed nor in education	1.6

As regards the company sample (*Table 2*), all were joint-stock companies with registered offices in Italy, 92% of whom were located in North Italy and 8% in Central Italy. 54% belonged to the manufacturing sector, 19% to the information and communication field, 8% offered professional, scientific and technical services, 5% serviced the travel and rental sectors, 3% were in the insurance and credit sector and 3% offered wholesale trade services/retail trade or automotive repair services (8% belonged to other sectors). 22% of enterprises had less than 50 employees, 32% had between 50 and 250 employees, 18% between 250 and 500 employees, 16% had between 500 and 1000 employees and, finally, 12% had more than 1000 employees. This sample, therefore, mainly represents medium and large businesses. In 2016, 12% of the enterprises declared a turnover of less

than EUR 10 million, 41% between 10 and 50 million, 14% between 50 and 100 million, 25% between 100 and 500 million and 8% declared more than 500 million.

In 64% of cases, the questionnaire was filled out by human resources or a human resources employee; 15% of the time, the employee responsible for training completed the questionnaire, in 7%, the employee responsible for administration completed the questionnaire, 5% of the time the questionnaire was filled out by the employer and 9% by others. They filled out the questionnaire considering the general new graduates profile.

Participants completed an online self-report questionnaire on Limes Survey Platform in the context of a project founded by the CRT Foundation. The voluntary and not paid participation to the research and the confidentiality of the data were emphasized in the cover letter of the questionnaire. The study observed the Helsinki Declaration (World Medical Association, 2001); since it did not involve medical treatment or other procedures capable of causing psychological or social discomfort to participants, no further ethical approval was required. Students and companies were contacted by the Job Placement Office of the University. The selected companies were those accredited by the University. In order to contact graduates, the academic mail was used to contact them and send the questionnaire link.

Table 2. Companies' descriptive data (n = 74)

Company Sector	%
Manufacturing	54
Information and communication	19
Professional, scientific and technical services	8
Services of support companies, travel agencies, rental	5
Insurance and credit	3
Wholesale trade services/retail trade or automotive repair services	3
Other	8
Total	100
Employees	**%**
<50	22
50-250	32
250-500	18
500-1000	15

> 1000	12
Total	100
Sales volumes	%
< 10,000,000 €	12
10,000,000 - 50,000,000 €	41
50,000,000 - 100,000,000 €	14
100,000,000 - 500,000,000 €	25
> 500,000,000 €	8

Measures

The study involved the same scales being administered to both graduates and companies. For all items, a 5-point Likert scale was used. In particular, in the questionnaire administered to companies, firms were asked how many specific technical and soft skills were important, thinking of graduates (1 = not at all; 5 = completely). On the other hand, the questionnaires administered to graduates asked them to answer the same items about technical and soft skills twice. Firstly, the participants were asked to think about the importance that companies attributed to the skills and knowledge; secondly, they were asked to evaluate how much they owned these skills.

The measures used in the study were the following:

Soft skills: measured by 12 items (a short version of the tool developed by Ricchiardi et al., 2018) representing the following competences: time management, problem-solving and decision-making, the capability to find a suitable solution to deal with a problem, objective guidance, locus of control, resilience, the ability to work under stress, self-valorisation, emotional self-regulation, proactivity, the ability to work in a team, effective communication and conflict management. An example item is: "*to collaborate positively with other people in order to reach a common objective*".

Technical skills: measured by 5 ad hoc items, representing the following competences: knowledge about a sector from a local perspective, knowledge about a sector from an international perspective, awareness and specialised skills regarding the professional integration sector, the ability to use information technology, and the ability to communicate in both an oral and written way using a foreign language.

Generic skills: measured by 3 ad hoc items, representing the following competences: public speaking, the ability to respect the cultural norms and procedures of a company, and the ability to work safely and securely.

Statistical Analysis

The statistic software SPSS 25 was used to perform descriptive data analysis. The normality assumptions were not met by data; therefore data were tested using non parametric-test. Wilcoxon test was used to point out possible discrepancies between graduates' expectations about the importance attributed to specific skills by companies and by graduate's perception to own them. Mann-Whitney test was also performed to analyse possible differences in terms of graduates' expectations about the importance attributed to specific skills and knowledge by companies and the effective evaluation of the importance given to these same skills by companies. In order to monitor a possible relationship between companies' dimensions and the skills required, we controlled, using correlation analyses, the presence of a relationship between the number of employees and the importance attributed to soft and technical skills.

Results

The results of this study are discussed in this section for each of the hypothesis posed.

Hypothesis 1. Graduates attribute a higher level of importance to soft skills compared to their perceptions to how much they possess them.

Wilcoxon test showed significant differences in terms of graduates' expectations of the skills considered important by companies and perception to possess them (*Table 3*).

In particular, as regards task skills (time management, problem-solving and decision-making, adaptive strategies to tackle tasks), a significant difference was found. Specifically, findings showed a higher level of importance attributed to problem solving and decision-making (*Mdn* = 5.00), than of self-evaluation (*Mdn* = 4.00), [$Z = -6.932$, $p < .001$]. In addition, for both time management [Z = -

5.195, p < .001] and the ability to use adaptive strategies to tackle tasks [Z = -6.097, p < .001], graduates reported a lower level of perception to possess it than of importance attributed to it.

Regarding self-dimension (self-valorisation, emotional self-regulation and proactivity), emotional self-regulation was the only item that presented a significant difference of importance attributed to this skill that, contrary to the trend of previous soft skills, was lower (*Mdn* = 3.00), than the perception to possess it (*Mdn* = 4.00) [*Z* = -3.275, *p* < .01].

As regards motivational dimension skills (objective guidance locus of control, resilience), the importance attributed to objective guidance (*Mdn* = 4.00), appeared to be in line with the self-evaluation (*Mdn* = 4.00) [*Z* = -1.667, *p* = .093].

Instead, as regards locus of control, graduates reported a higher level of possess than of importance [Z = -2.232, *p* < .05]; as regards resilience, graduates reported lower level of perception to possess it than of importance attributed [*Z* = -3.004, *p* < .01].

As regards interpersonal relations skills (teamwork, communication and conflict management), all items appeared to be evaluated with higher level of importance attributed than of owning. Specifically, graduates' perception of the importance given by companies to teamwork ability was higher (*Mdn* = 5.00) than the evaluation to possess this skill (*Mdn* = 4.00). Furthermore, as regards oral and written communication ability [*Z* = -6.852, *p* < .001] and conflict management skills [*Z* = -3.098, *p* < .001], graduates reported for both a lower level of perception to own it than of importance attributed.

Table 3. Wilcoxon test results for soft skills

Soft skills	*Z*	Sign lev.
Problem-solving and decision-making	-6.932	.001***
Time management	-5.195	.001***
Adaptive strategies to tackle tasks	-6.097	.001***
Self-valorisation	-1.764	.078
Emotional self-regulation	-3.275[a]	.01**
Proactivity	-1.915	.055
Objective guidance	-1.677	.093
Locus of control	-2.232[a]	.05*
Resilience	-3.004	.001**

Teamwork	-4.682	.001***
Written and oral communication	-6.852	.001***
Conflict management	-3.098	.001***

Note * p < .05. ** p < .01. *** p < .001; [a] calculated on negative ranks

For what concern some technical skills, *Table 4* showed the presence of some significant differences between the perception of importance attributed to them and the estimation to own them by graduates. In particular, the findings showed a higher level of importance attributed to awareness and specialised skills regarding the sector of professional integration than of possess [Z = -2.249, p < .05]. In line with the general trend of other results, ability to use information technology was evaluated more important than the perception to own it [Z = -4.223, p < .001]. In addition, the importance attributed to ability in foreign language use was higher than the possess [Z = -8.902, p < .001].

As shown in *Table 4*, other generic skills were generally perceived as relevant; comparisons between the level of importance attributed and the self-evaluation highlighted significant differences. Contrary to the general trend of previous results, ability to work in safety and security was estimated with higher level of owning than of importance attributed by companies [Z = -6.145, p < .001].

Table 4. Wilcoxon test results for technical and generic skills.

	Z	**Sign lev.**
Technical skills		
Knowledge about sector from a local perspective	-1.316[a]	.216
Knowledge about sector from an international perspective	-1.099	.228
Awareness and specialised skills regarding the professional integration sector	-2.249	.05*
Ability to use information technology	-4.223	.001***
Ability to communicate orally and in writing using a foreign language	-8.902	.001***
Generic skills		
Ability to public speaking	-2.671	.01**
Ability to work in respect of cultural norms and procedures of the company	-.051	.960
Ability to work in safety and security	-6.145[a]	.001***

Note * p < .05. ** p < .01. *** p < .001; [a] calculated on negative ranks

Hypothesis 2. Graduates' perceptions of the skills needed by employers only partially matches employers' expectations.

Mann-Whitney test was performed to verify possible discrepancies in terms of graduates' expectations about the importance attributed to specific skills and knowledge for companies and the effective evaluation of importance given for these same ones by companies. Globally, no significant relationships emerged between companies' number of employees and the importance attributed to soft skills. As shown by *Table 5* the importance attributed to teamwork skill by companies (*Mean Rank* = 186.52) was higher than the graduates' expectations (*Mean Rank* = 156.07) [$U = 7546.500$, $p < .01$].

Table 5 Mann-Whitney test for graduates (n = 251) and companies (n = 74) for soft skills.

Soft skills	Graduates	Companies	*U*	Sign lev.
	Mean Rank	Mean Rank		
Problem-solving and decision-making	164.72	152.80	8532.000	.291
Time management	164.43	158.14	8927.500	.583
Adaptive strategies to tackle tasks	162.49	164.73	9159.000	.845
Self-valorisation	162.31	163.13	9203.500	.994
Emotional self-regulation	160.18	170.13	8669,000	.389
Proactivity	157.21	180.36	7928.000	.045
Objective guidance	158.07	177.46	8143.000	.091
Locus of control	160.00	173.13	8534.500	.260
Resilience	161.11	167.19	8903.000	.602
Teamwork	156.07	186.52	7546.500	.01**
Written and oral communication	160.52	171.42	8664.000	.343
Conflict management	161.46	168.23	8900.000	.559

Note * $p < .05$. ** $p < .01$. *** $p < .001$

As regards technical skills (*Table 6*), a significant difference was found in relation to ability to use a foreign language; in this case, the findings showed that companies ranked this as less important (*Mean Rank* = 188.39) than what graduates perceived it to be (*Mean Rank* = = 73.47) [$U = 2662.000$, $p < .001$].

No differences were found in relation to knowledge of the sector from either an international or local perspectives, nor in specialised skills.

For generic skills, as shown by *Table 6*, the importance attributed to ability to public speaking [$U = 5089.000$, $p < .001$] and ability to work in safety and security [$U = 4362.000$, $p < .001$] was effectively

higher than what graduates expected. On the contrary, ability to work in respect of cultural norms and procedures was less important for companies (*Mean Rank* = 137.42) than what graduates thought it would be (*Mean Rank* = 169.79) [$U = 7331.000$, $p < .01$].

Table 6. Item means, item standard deviation, t-test results for graduates (n = 251) and companies (n = 74) for technical and generic skills.

	Graduates	Companies	*U*	Sign lev.
	Mean Rank	Mean Rank		
Technical skills				
Knowledge about sector from a local perspective	159.03	174.22	8383.000	.197
Knowledge about sector from an international perspective	159.54	172.66	8418.000	.267
Awareness and specialised skills regarding the professional integration sector	155.83	185.04	7582.000	.05*
Ability to use information technology	165.11	155.11	8756.500	.421
Ability to communicate orally and in writing using a foreign language	188.39	73.47	2662.000	.001***
Generic skills				
Ability to public speaking	146.27	219.73	5089.000	.001***
Ability to work in respect of cultural norms and procedures of the company	169.79	137.42	7331.000	.01*
Ability to work in safety and security	142.95	228.55	4362.000	.001***

Note * $p < .05$. ** $p < .01$. *** $p < .001$

Hypothesis 3. Employers often prioritise soft skills over technical ones.

Considering generic technical and specific soft skills, *Table 7* presents the rankings of the ten skills considered more relevant by both companies and graduates. The extent of overlap is rather considerable, the first three skills recognised to be important by companies were related to teamwork, attention to safety and security and public speaking ability. Instead, according to graduates, companies gave generally importance firstly to teamwork ability (in line with the effective company

evaluation) and problem-solving and decision-making skills, secondly to time management and thirdly to adaptive strategies to tackle tasks and ability to use information technology (in seventh and eleventh positions, respectively, according to company rankings).

Hypothesis 4. Hypothesis 4. Teamwork and communication skills are considered to be among the most sought-after skills.

Table 7 showed that teamwork and ability to public speaking are in the first and third position.

Table 7. Rankings of most important attributes (based on average scores) by companies and graduates

	Overall ranking companies	**Overall ranking graduates**
Teamwork	1	1
Ability to work in safety and security	2	
Ability to public speaking	3	
Objective guidance	4	4
Written and oral communication	5	4*
Problem-solving and decision-making	6	1*
Adaptive strategies to tackle tasks	7	3
Time management	8	2
Resilience	9	6
Proactivity	10	9
Ability to use information technology		3*
Conflict management		8
Awareness and specialised skills regarding the professional integration sector		
Self-valorisation		10
Ability to work in respect of cultural norms and procedures of the company		7
Locus of control		
Knowledge about sector from a local perspective		
Emotional self-regulation		
Knowledge about sector from an international perspective		
Ability to communicate orally and in writing using a foreign language		5

Note *there are two equal value mean

Conclusions

This study aimed to verify the presence of a possible match between graduates' perceptions and companies' expectations regarding soft and technical skills. Results did not confirm the presence of

a match of these perceptions and expectations. Furthermore, findings showed the effective discrepancy between importance estimation and self-evaluation of these technical and soft skills.

As regards graduates, we assumed that they attributed a higher level of importance to soft skills than their self-evaluation of possessing them (Hypothesis 1). Findings confirmed the first hypothesis for the following soft skills: teamwork, problem-solving and decision-making, time management, adaptive strategies to tackle tasks, resilience, communication, and conflict management. Thus, the data is in line with other research in the accounting field (Kavanagh & Drennan, 2008; Jackling & De Lange, 2009) and it seems to suggest that graduates perceive their degree as not being sufficient to thrive in today's workplace (Tomlinson, 2008).

Among graduates, only the area of self showed less discrepancies between importance and self-evaluation; there were no differences pertaining to proactivity and self-valorisation. Contrary to trend, emotional self-regulation and attribution styles showed a significantly higher level of self evaluation than of the estimation of their importance. In terms of objective guidance, that is the ability to focus one's emotional and cognitive resources in order to achieve a goal (Borgogni et al., 2004), graduates did not report a significant difference between importance attributed and self-evaluation.

As regards graduates' awareness of the importance of technical and soft skills, we assumed that graduates' perceptions only partially matched employers' actual expectations (Hypothesis 2). In line with other evidence (Kavanagh & Drennan, 2008; Gabric & McFadden, 2009), this hypothesis was fully confirmed.

With regard to teamwork ability, graduates underestimated the importance of these skills. The results showed that companies attributed more importance to these skills than graduates did. Public speaking was another skill that graduates scored higher in terms of importance estimation than of self-evaluation, as well as teamwork ability, its importance was underestimated when compared to company estimations. The importance attributed to ability to work safely appeared to be underestimated compared to company considerations; however, contrary to previous results, in this case, graduates perceived a higher level of possession of this skill than of the importance attributed

to it. Companies are particularly sensitive to safety and security for legal reasons; for them, it is mandatory to pay attention to the issue.

Graduates overestimated the importance attributed to the ability to use a foreign language.

In line with recent reflections (e.g., Kavanagh & Drennan, 2008; Winstead et al., 2009), these results confirm that graduates are not totally aware of what employers consider to be important, particularly those who pay attention to soft skills, rather than to technical ones. Kavanagh & Drennan's study (2008) stressed that students were still focused on technical skills, while employers were more concentrated on general business awareness, knowledge of ethics, and the ability to be interdisciplinary.

According to our third hypothesis, employers often prioritise soft skills over technical ones. In this case, hypothesis 3 was also verified. According to the company rankings, the top ten positions were represented by soft skills. These findings corroborated previous research (Hassall et al., 2005; Tan & Laswad, 2018). Although the ability to use information technology was not among the top ten skills, Spraakman and colleagues (2015) stressed the need to maintain appropriate familiarity with Information Technology and especially with Microsoft tools such as Excel.

Hypothesis 4 was also confirmed: teamwork and communication are considered to be the most important soft skills, in line with other evidence (NACE, 2016; De Lange et al., 2006; Morgan 1997; Kavanagh & Drennan, 2008; Siriwardane & Durden, 2014). In particular, and in consideration of company rankings, teamwork was in first place, while public speaking and written/oral communication abilities were in third and fifth, respectively.

For practical implications, this data suggests an intervention on academic accounting curricula, firstly on those skills deemed important by employers and perceived by graduates with low levels of self-evaluation, such as teamwork ability, proactivity and public speaking. As suggested by Jackson (2013), the gaps in graduates' skills could have a negative impact on their productivity and organisational performance. Human capital seems to play a key role in today's workplace in consideration of global competitiveness; therefore, it appears important to promote these transferable

skills to ensure that tomorrow's leaders are able to manage this complexity (Jackson, 2013). In addition, the development of these skills may have a positive impact on academic success and performance (Chamorro-Premuzic et al., 2010; Kember et al., 2007).

In order to continuously monitor the self-evaluation of these skills on behalf of students, the administration of proper tools (for example a brief questionnaire) could be implemented; moreover, this reflection should be considered a priority for the management of accounting courses.

In so doing, specific training programmes for the less developed skills could be created. Moreover, a proper linkage between theory and practice could be developed (different methods could be used, such as case studies, role-plays, experiential learning, teamwork tasks and extracurricular activities) (Wats & Wats, 2009). The objective is to effectively transfer the skills of accounting graduates to the workplace (Jackson, 2016), developing appropriate tools and interventions strategies.

Stanley and Marsden (2012) found that problem-based learning (PBL) can be effective for accounting students, especially to develop skills like teamwork and problem-solving. Similarly, Leong and Kavanagh (2013) described the implementation of the Accounting Work-Integration Learning Framework (WIL) in an Australian university. The WIL framework would facilitate the learning of generic transferable skills, such as teamwork, problem-solving and communications. Kennedy and Dull (2008) discussed appropriate meeting management techniques (e.g. flowcharting, storyboarding, brainstorming, action plans, nominal group technique). These could be promoted in educational environments in order to improve performance in teams (Kennedy & Dull, 2008). Furthermore, considering the requirement of personal skills development in the accounting curriculum, Gammie, Gammie & Cargil (2002) created the *Business Enterprises Skills* module for the Scottish accounting degree programme. Time management, presentation skills, team working, oral communication skills, attention to health and safety are only some of the themes identified for the module. This module envisages the use of a combination of approaches, deliveries and training assessments (Gammie et al., 2002).

Our findings have confirmed the growing demand for accounting graduates who possess teamwork abilities, good communication and interpersonal skills. Ballantine and McCourt Larres (2009) supported the efficacy of cooperative learning to promote interpersonal and communication skills.

Although academies can improve their accounting programs, as suggested by Chaffer and Webb (2017), the deficiencies in graduate competency cannot be entirely attributed to a failure of accounting higher education programmes and, thus, the use of different strategies, such as real-life scenarios, is recommended. Our study provides guidance on the specific soft skills perceived important both by graduates and companies, in Italy; results also provide information about the skills self-evaluated as weak by students. Moreover, the results are certainly useful for identifying strategies to monitor, evaluate and support the development of soft skills, to be developed both in the academic and company's context.

Future studies could use longitudinal or diary approaches in order to monitor the acquisition of skills through specific academic training or other types of learning methods.

In spite of its contribution, the results of this study should not be interpreted without taking into account some limitations. Firstly, the two convenience subgroups are not representative. Secondly, the study only measured single-source self-report data (Conway, 2002), which means that common method bias is possible. Thirdly, the cross-sectional design does not allow for the establishment of causal relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Acknowledgements

The authors are grateful to the University's Job Placement Service for their help and cooperation.

As a whole, the Job Placement Service serves an intermediary function, at once helping students in their careers choices and in making preliminary contact with companies and helping companies, public bodies and international institutions to find and choose students and recent graduates.

REFERENCES

1. Accounting Education Change Commission (AECC) (1990*). Objectives of Education for Accountants: Position Statement Number One.* Bainbridge Island, WA: AECC.
2. AlmaLaurea (2017), XIX Indagine - Condizione occupazionale dei laureati. Available at: http://www.almalaurea.it/universita/occupazione/occupazione15 (accessed 22 October 2018).
3. American Institute of Certified Public Accountants (AICPA) (2018). Core Competency Framework. https://www.aicpa.org/content/dam/aicpa/interestareas/accountingeducation/resources/downloadabledocuments/aicpa-pre-certification-core-compentency-framework.pdf. (Accessed 1 Avril 2019).
4. Andrews, J., & Higson, H. (2008). Graduate employability, 'soft skills' versus 'hard' business knowledge: A European study. *Higher Education in Europe, 33*(4), 411–422.
5. Ballantine B., Dorminey, J. W., Hassell, J.M., & Rebele, J.E. (2018). Accounting education literature review (2017). *Journal of Accounting Education*, *43*, 1–23.
6. Arquero Montano, J. L. A., Donoso, J. A., Hassall, T., & Joyce, J. (2001). Vocational skills in the accounting professional profile: The Chartered Institute of Management Accountants (CIMA) employers' opinion. *Accounting Education*, *10*(3), 299–313.
7. Avery, C.M. (2001). *Teamwork is an Individual Skill*. San Francisco: Barrett-Koehler.
8. Ballantine, J., & Mccourt L. P. (2009). Accounting undergraduates' perceptions of cooperative learning as a model for enhancing their interpersonal and communication skills to interface successfully with professional accountancy education and training. *Accounting Education: an international journal*, *18* (4-5), 387–402.
9. Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18*, 13–25.
10. Bennett, N., Dunne, E., & Carré, C. (1999). Patterns of core and generic skill provision in higher education. *Higher Education*, *37*(1), 71–93.

11. Bologna Process (2009). The Bologna Process 2020 - The European Higher Education Area in the new decade. Retrieved from: http://www.aqu.cat/doc/doc_39125624_1.pdf
12. Borgogni, L., Petitta, L., & Barbaranelli, C. (2004). Il Test di Orientamento Motivazionale (TOM) come strumento per la misurazione della motivazione al lavoro. *Bollettino di Psicologia Applicata, 243*, 43–52.
13. Bui, B., & Porter, B. (2010). The expectation-performance gap in accounting education: An exploratory study. *Accounting Education: An International Journal*, *19*(1-2), 23–50.
14. Chaffer, C., & Webb, J. (2017). An evaluation of competency development in accounting trainees. *Accounting Education*, *26*(5-6), 431-458
15. Chamorro-Premuzic, T., Arteche, A., Bremner, A. J., Greven, C., & Furnham, A. (2010). Soft skills in higher education: Importance and improvement ratings as a function of individual differences and academic performance. *Educational Psychology, 30*(2), 221–241.
16. Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for Quality Research*, *10*(1), 97–130.
17. Claessens, B. J., Van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of the time management literature. *Personnel Review*, *36*(2), 255–276.
18. Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety, 18*(2), 76–82.
19. Conway J. M. (2002). Method variance and method bias in I/O psychology. In S.G. Rogelberg (Eds). *Handbook of research methods in industrial and organizational psychology* (pp. 344–365). Oxford: Blackwell Publishers.
20. Costa Jr, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, *13*(6), 653–665.
21. CPA Australia and Chartered Accountants Australia and New Zeland. Professional Accreditation Guidelines for Higher. https://www.cpaaustralia.com.au/academics/accreditation-guidelines-for-

higher-education-programs/professional-accreditation-guidelines/section-3-professional-skills-competency-areas-and-learning-outcomes# (accessed 1 Avril 2019).

22. Crawford, L., Helliar, C., Monk, E., & Veneziani, M. (2014). International Accounting Education Standards Board: Organisational legitimacy within the field of professional accountancy education. *Accounting Forum, 38*, 67-89.
23. DeLange, P., B. Jackling, & Gut, A. (2006). Accounting graduates' perceptions of skills emphasis in Australian undergraduate accounting courses: an investigation from 2 Victorian universities, *Accounting and Finance*, *46*(3), 365–386.
24. Di Fabio, A., & Palazzeschi, L. (2012). Connor-Davidson Resilience Scale: Proprietà psicometriche della versione italiana. *Counseling. Giornale Italiano di Ricerca e Applicazioni*, 5, 101–110.
25. Di Pietro, M. (2016). *L'educazione razionale-emotiva. Per la prevenzione e il superamento del disagio psicologico dei bambini*. Trento: Erickson.
26. European Commission (2018). Proposal for a COUNCIL RECOMMENDATION on Key Competences for Lifelong Learning. Retrieved from https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf
27. Gabric, D., & McFadden, K. L. (2001). Student and employer perceptions of desirable entry-level operations management skills. *American Journal of Business*, *16*(1), 5–60.
28. Gallivan, M., Truex, D., & Kvasny, L. (2004). Changing patterns in IT skill sets 1988–2003: a content analysis of classified advertisements. *The Database for Advances Systems, 35*(1), 64–87.
29. Gammie, B., Gammie, E., & Cargill, E. (2002). Personal skills development in the accounting curriculum. *Accounting Education*, *11*(1), 63-78.
30. Gibb, S. (2014). Soft skills assessment: theory development and the research agenda. *International Journal of Lifelong Education, 33*(4), 455–471.

31. Gibert, A., Tozer, W. C., & Westoby, M. (2017). Teamwork, soft skills, and research training. *Trends in Ecology & Evolution*, *32*(2), 81–84.
32. Goltz, S. M., Hietapelto, A. B., Reinsch, R. W., & Tyrell, S. K. (2008). Teaching teamwork and problem solving concurrently. *Journal of Management Education*, *32*(5), 541–562.
33. Halfhill, T. R., & Nielsen, T. M. (2007). Quantifying the "softer side" of management education: An example using teamwork competencies. *Journal of Management Education, 31*(1), 64–80.
34. Harvey, L., Moon, S., & Gheall, V. (1997), *The graduates work: Organisational change and students attributes*. Birmingham, UK: Centre for Research into Quality, University of Central England.
35. Hassall, T., Joyce, J., Montano, J. L. A., & Anes, J. A. D. (2005). Priorities for the development of vocational skills in management accountants: A European perspective. *Accounting Forum, 29,* 379–394.
36. Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics, 19*(4), 451–464.
37. Heckman, J. J., & Kautz, T. (2016). *Formazione e valutazione del capitale umano.* Bologna: Il Mulino.
38. Hernández-March, J., Martín del Peso, M., & Leguey, S. (2009). Graduates' skills and higher education: The employers' perspective. *Tertiary education and management, 15*(1), 1–16.
39. Howcroft, D. (2017). Graduates' vocational skills for the management accountancy profession: Exploring the accounting education expectation-performance gap. *Accounting Education*, *26*(5–6), 459–481.
40. Ingols, C., & Shapiro, M. (2014). Concrete steps for assessing the "soft skills" in an MBA program. *Journal of Management Education, 38*(3), 412–435.
41. International Accounting Education Standards Board (IAESB) (2014). IES3 Professional Skills and General Education Contents in IAESB Handbook of International Education Pronouncements. New York: International Federation of Accountants.

http://www.ifrs.org.ua/wp-content/uploads/2014/11/Handbook-of-International-Education-Pronouncements-2014.pdf. Retrieved 2.04.19.

42. Jackling, B., & De Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education: an International Journal*, *18*(4-5), 369–385.
43. Jackson, D. (2013). Business graduate employability–where are we going wrong?. *Higher Education Research & Development, 32*(5), 776–790.
44. Jackson, D. (2016). Modelling graduate skill transfer from university to the workplace. *Journal of Education and Work*, *29*(2), 199–231.
45. Jones, R. (2014). Bridging the gap: Engaging in scholarship with accountancy employers to enhance understanding of skills development and employability. *Accounting Education: an International Journal*, *23*(6), 527-541.
46. Kavanagh, M. H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance, 48*(2), 279–300.
47. Kechagias, K. (2011). *Teaching and assessing soft skills. MASS Project*. Retrieved from http://research.education.nmsu.edu/files/2014/01/396_MASS-wp4-final-report-part-1.pdf.
48. Kember, D., Leung, D. Y., & Ma, R. S. (2007). Characterizing learning environments capable of nurturing generic capabilities in higher education. *Research in Higher Education, 48*(5), 609–632.
49. Kemery, E. R., & Stickney, L. T. (2014). A multifaceted approach to teamwork assessment in an undergraduate business program. *Journal of Management Education, 38*(3), 462–479.
50. Kennedy, F. A, & Dull, R. B. (2008) Transferable team skills for accounting students. *Accounting Education: an international journal, 17*(2), 213-224.
51. Leveson, L. (2000). Disparities in perceptions of generic skills: Academics and employers. *Industry and Higher Education, 14*(3), 157–164.

52. Luzzatto, G., Mangano, S., Moscati, R., & Pieri, M. (2012). Occupabilità e competenze dei laureati in Italia. In *International Conference Employability of Graduates & Higher Education Management Systems. Ljubljana* (pp. 27–28).
53. Luzzatto, G., Moscati, R., Mangano, S., & Pieri, M. T. (2015*). Le competenze trasversali nell'impianto didattico dei Corsi di Studio. I risultati di un questionario rivolto ai Responsabili dei Corsi di Laurea e di Laurea Magistrale, CARED.* Retrieved from http://www.dafist.unige.it/wp-content/uploads/2015/09/Risultatiquestionariocompetenze.pdf
54. Mangano, S. (2014). *Un confronto tra ricercatori e mondo del lavoro sulle competenze trasversali dei laureati.* Retrieved from http://www.fondazioneagnelli.it/2014/04/17/un-confronto-ricercatori-mondo-del-lavoro-sulle-competenze-trasversali-dei-laureati-stefania-mangano/
55. Merlone U. (2015). *Negoziare in modo efficace.* Bologna: Il Mulino
56. Mitchell, G. W., Skinner, L. B., & White, B. J. (2010). Essential soft skills for success in the twenty-first century workforce as perceived by business educators. *The Journal of Research in Business Education, 52*(1), 43–53.
57. Molino, M., Dolce, V., Cortese, C.G. and Ghislieri, C. (2018). Personality and social support as determinants of entrepreneurial intention. Gender differences in Italy. *PLoS ONE,* 13 (6), 1–19.
58. Moore, T., & Morton, J. (2017). The myth of job readiness? Written communication, employability, and the 'skills gap' in higher education. *Studies in Higher Education, 42*(3), 591–609.
59. Morgan, G. J. (1997). Communication skills required by accounting graduates: practitioner and academic perceptions. *Accounting Education, 6*(2), 93–107.
60. Muzio, E., Fisher, D. J., Thomas, E. R., & Peters, V. (2007). Soft skills quantification (SSQ) for Project Manager Competencies. *Project Management Journal, 38*(2), 30–38.
61. National Association of Colleges and Employers. (2016). *Job Outlook 2016: Attributes employers want to see on new college graduates' resumes*. Retrieved from

http://www.naceweb.org/s11182015/employers-look-for-in-new-hires.aspx (accessed 22 October 2018).

62. Nijhuis, J., Segers, M., & Gijselaers, W. (2008). The extent of variability in learning strategies and students'perceptions of the learning environment. *Learning and Instruction, 18*, 121–134.
63. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
64. Pratama, A. (2015). Bridging the Gap between Academicians and Practitioners on Accountant Competencies: An Analysis of International Education Standards (IES) Implementation on Indonesia's Accounting Education. *Procedia-Social and Behavioral Sciences*, *211*, 19-26.
65. Ricchiardi, P., & Emanuel, F. (2018). Valutare le soft skill in università [Soft skill assessment in Higher Education]. *Journal of Educational, Cultural and Psychological Studies (ECPS Journal)*, *18*, 21-53.
66. Ricchiardi, P., Ghislieri, C., & Emanuel, F. (2018). *Promuovere e valutare le soft skill in Università. Il progetto Passport [Promote and assess soft skills in Higher Education: the Passport project]*. Lecce: Pensa Multimedia.
67. Ritter, B. A., Small, E. E., Mortimer, J. W., & Doll, J. L. (2018). Designing Management Curriculum for Workplace Readiness: Developing Students' Soft Skills. *Journal of Management Education*, *42*(1), 80–103.
68. Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today's workplace. *Business Communication Quarterly, 75*(4), 453–465.
69. Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied*, *80*(1), 1–28.
70. Simon, H. A., Dantzig, G. B., Hogarth, R., Plott, C. R., Raiffa, H., Schelling, T. C., ... & Winter, S. (1987). Decision making and problem solving. *Interfaces*, *17*(5), 11–31.

71. Siriwardane, H. P., & Durden, C. H. (2014). The communication skills of accountants: what we know and the gaps in our knowledge. *Accounting Education: an International Journal, 23*(2), 119-134.

72. Spraakman, G., O'Grady, W., Askarany, D., & Akroyd, C. (2015). Employers' perceptions of information technology competency requirements for management accounting graduates. *Accounting Education: an International Journal, 24*(5), 403-422.

73. Stanley, T., & Marsden, S. (2012). Problem-based learning: Does accounting education need it? *Journal of Accounting Education*, *30*(3-4), 267-289.

74. Stephenson, S. S. (2017). Accounting community of practice pedagogy: A course management invention for developing personal competencies in accounting education. *Accounting Education*, *26*(1), 3–27.

75. Tan, L. M., & Laswad, F. (2018). Professional skills required of accountants: what do job advertisements tell us? *Accounting Education*, 2018, *27*(4), 403-432.

76. Tomlinson, M. (2008). 'The degree is not enough': students' perceptions of the role of higher education credentials for graduate work and employability. *British Journal of Sociology of Education, 29*(1), 49–61.

77. Trifiletti, E., Capozza, D., Pasin, A., & Falvo, R. (2009). A validation of the proactive personality scale. *Testing, Psychometrics, Methodology in Applied Psychology*, 16, 77–93.

78. Veneziani, M., Teodori, C., Bendotti, G. (2016). The role of university in the education of professional accountants: degree of IES 2 Application. *Journal of Modern Accounting and Auditing, 12*(3), 126-146.

79. Wall Jr, J. A., & Callister, R. R. (1995). Conflict and its management. *Journal of Management, 21*(3), 515–558.

80. Wats M., & Wats R. K. (2009). Developing Soft Skills in Students. *The International Journal of* Learning, 15(12), 1–10.

81. Winstead, A. S., Adams, B. L., & Sillah, M. R. (2009). Teaching the" Soft Skills": A Professional Development Curriculum to Enhance the Employability Skills of Business Graduates. *American Journal of Business Education, 2*(5), 35–44.

82. World Medical Association of Helsinki (2001). Ethical principles for medical research involving human subjects. *Bulletin of the World Health Organization*, *79*(4), 373–374.