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Abstract

Purpose: Previous studies have shown that soft skills play a significant role in applicants' employability and in the job search, recruitment, selection and hiring process. However, past research indicates a gap in perceptions of soft skills, between employees and employers. The present empirical research aims to explore this gap in perceptions and to suggest effective ways to resolve any mismatch. Demographical factors affecting these perceptions are also taken into consideration for the analysis.

Methodology: A quantitative research design has been applied. The survey undertaken, covers all three main sectors of employment (manufacturing, retail and services), with 151 employee–employer dyads around Greece participating in the survey. Paired sample t-test, independent t-test and One-way ANOVA were used to analyze the data.

Findings: The results show a gap between employees' and their subsequent employers' perceptions of employees' soft skills. Employees seem to regard their skills more highly than do their employers, whereas employers seem to consider employees as not properly equipped with the necessary soft skills. These findings are a worrying sign for business operations and suggest that difficulties in manager–employee co-operation can arise.

Practical Implications: This study has both theoretical and practical implications. It adds to the literature in human resources appraisal process by identifying soft skills perceived differently by employees and employers. It also highlights the reasons for that gap and makes suggestions for the enhancement of required skills.

Originality: The majority of previous studies in the field focus either on employees' or employers' perceptions, without comparing them. In addition, the few former studies attempt a comparison focused on students as employees or trainees, with no previous work experience. The current study focuses on employees whose work experience has already shaped perceptions of their skills and employability.

Paper type: Research paper

Keywords: soft skills, employability, dyadic survey

1. Introduction

Currently innovation, intense competition, globalization and continuous technological change are trends that characterize business activities around the world (Van den Broeck et al., 2015; AbuJbara and Worley, 2018). The international labor market is constantly shifting, moving from an industrial economy to an information and office economy (Robles, 2012). New positions are created and new job descriptions produced, leading to additional requirements and the need to develop qualifications and extra skills. Many employee skills that were desirable in previous years are now considered obsolete and have been replaced (Van Emmerik et al., 2012; Pitan 2017). Thus, job seekers should be well equipped with a long set of up-to-date skills to deal with the demands of the complex global business environment.

Desirable skills in today's job market include both hard and soft skills (Laker and Powell, 2011). Hard skills are mainly academic and technical qualifications that are related to an employee's ability to accomplish a specific goal, activity, task or job (Robles, 2012). These skills are included in a CV and revolve around education, work experience, knowledge and professional skills, such as the ability to use computer programs (Cimatti, 2016). Employees need technical competencies to do their jobs, but these type of skills are not the only requirement for a successful career path. Soft skills not only complement hard skills nowadays, but are also considered essential for a job candidate (Clarke, 2017).

Moss and Tilly (2001, p. 44) defined soft skills as "skills, abilities, and traits that pertain to personality, attitude and behavior rather than to formal or technical knowledge". In the literature several sets of soft skills have been suggested, including in their majority listed communication, problem-solving, conflict resolution, goal setting and planning and task coordination (Muzio et al. 2007; Jolly, 2012; Robles, 2012; Mitchell et al., 2010, Stevens and Campion, 1999). This very combination of personal qualities and interpersonal skills makes individuals employable (Andrews and Higson, 2008) and enhances their performance (Turek and Perek-Bialas, 2013; Ibrahim et al., 2017). Such skills are not linked to academic proficiency and are intangible, personality-specific and difficult to prove (Rao, 2014).

In addition, previous research has indicated that graduates who have good social skills and attributes (i.e., soft skills) are more able to develop technical skills as well (Poon, 2012). Finch et al. (2013) placed social skills in the highest ranking in the list of crucial employability skills, whereas academic reputation (related to knowledge acquired) was in the lowest ranking. Deming (2015) presented evidence of growing demand for social skills over the last decades and noted that workers with high social skills trade tasks at a lower cost and earn a relatively higher wage in return. Despite the importance of soft skills, research in this field is limited. Perhaps because of the difficulty of measuring soft skills in the absence of an objective way to test them (Balcar, 2016; Bak et al., 2019).

Research up to now, highlights the presence of gaps and deficits between employer requirements for soft skills and the actual skills levels of employees or applicants (Rao, 2014; US Chamber of Commerce Foundation, 2016; Ramli et al., 2010; Hurrell, 2016; Stapleton, 2017). These gaps resulting from skills shortages and skills mismatches (Lippman et al., 2015; Seetha, 2014), are reflected in unemployment rates. For instance, in Greece, which has the highest rate of youth unemployment in Europe (55%), 33% of employers declare that they leave vacancies open/unfilled because applicants do not have the required skills (McKinsey report, 2012). Soft skills seem to be missing more frequently among applicants. More specifically employers often complain about

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3 applicants not having the necessary work ethic, verbal and non-verbal communication
4 skills, willingness to participate or positive behavior (Robles, 2012).
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6 Most past studies focused on the views of either job applicants or employers (Albandea
7 and Giret, 2018; Wesley et al., 2017; Wickramasinghe and Perera, 2010; Finch et al. 2013;
8 Taylor, 2016; Ramlan and Ngah, 2015). Oladokun and Gbadegesin (2017) indicated that
9 further study is needed to address the perceptions of both employees and employers to
10 ensure the results are devoid of bias. Brungardt (2011) proposed a 360-degree feedback
11 perspective by recommending that data collection include graduates' supervisors, peers
12 and direct reports, who would all evaluate the graduate's performance in terms of soft
13 skills. By exploring the perception of employee–employer dyads, rather than the
14 perception of only one party, a better understanding of the skill gap is achieved (Gibb,
15 2014). Thus, employees and their employers participated in the current empirical survey,
16 in contrast to the literature in the field, which focuses on one of the two groups.
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19 In addition, previous studies focusing on college students or graduates have found a gap
20 between their skill levels and employers' skill requirements (Wesley et al., 2017;
21 Wickramasinghe and Perera, 2010; Finch et al. 2013; Taylor, 2016; Teng et al., 2019). The
22 current paper concentrates on critical soft skills required in the labor market and
23 explores any discrepancy in employers' and employees' perceptions of employees' soft
24 skill level. Those who have work experience better realize the importance of soft skills
25 (Ziegler, 2007). Specifically, exposure to work situations can help applicants to develop
26 understanding, self-efficacy and critical and reflective thinking (Knight and Yorke, 2002).
27 Work exposure also improves soft skills and increases employees' self-confidence
28 (McMurray et al., 2016).
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31 The practical importance of this study is twofold: first to increase awareness among
32 educational managers and employees of the importance of soft skills and second to reveal
33 and assess the degree of any discrepancy in employer and employee perceptions. This
34 paper empirically confirms the prevailing perception concerning the phenomenon of the
35 "skills gap," which has been widely discussed in the academic literature (Stapleton, 2017;
36 Teng et al., 2019; Chan, 2015). An identified gap could motivate further research on the
37 causes of the gap and the ways it can be addressed. Variation in the perceptions of the two
38 groups offers a significant opportunity to a) motivate employees to rethink their self-
39 evaluation on a more objective basis, b) alert employees to develop their soft skills to
40 close the gap and possibly increase their employability and success at work, c) encourage
41 educational institutions to link education and training to current and future labor market
42 needs, d) push employers to reconsider their employees' evaluations as they become
43 closer to reality and e) assist employers to train their employees.
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47 A discussion of the concept of soft skills and an overview of the literature concerning the
48 employee–employer perception gap follows. Research methodology, data analysis and
49 results are presented in the two subsequent parts. A discussion of the results is given in
50 the fifth section of the paper, outlining the study's contribution to the literature and to the
51 practitioner world. Finally, the limitations and future research directions are reported.
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54 55 56 57 **2. Literature review**

58 In the literature many attempts to define soft skills have been conducted. These skills are
59 considered a combination of personality traits, social graces, facility with language,
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3 personal habits, friendliness and optimism (Pandey and Pandey, 2015) or as goals,
4 motivations and preferences (Heckman and Kautz, 2012). Different researchers also
5 recognized different soft skills, like communication skills (Ilias et al. 2012; Singh and
6 Jaykumar, 2019; Tempone et al. 2012), teamworking (Klibi and Oussii 2013; Freudenberg
7 et al. 2011), leadership (Nusrat and Sultana, 2019; Truong and Laura, 2015), problem-
8 solving skill (de Villiers, 2010), ability to practice ethical attitude (Singh and Jaykumar,
9 2019; Azim et al., 2010) or to work under pressure (Nusrat and Sultana, 2019). Robles
10 (2012) proposed a list of the highest ranked soft skills which includes the following:
11 communication ability, courtesy, flexibility, integrity, interpersonal skills, positive
12 attitudes, responsibility, work ethic, professionalism and teamwork. Although there is no
13 holistic accepted definition of soft skills or a consensus about the dimensions of the
14 concept, researchers agree on its importance in almost every job and at every level of an
15 organization (Grisi, 2014; Stapleton, 2017). Soft skills are interpersonal and widely
16 applied (Chamorro-Premuzic et al., 2010), but they are very difficult to teach (Cimatti,
17 2016). This means that they can be transferred between different jobs and employment
18 sectors and that they are aligned with the employee's general disposition and personality
19 (Cox and King, 2006). However, soft skills are mainly needed for employees who interact
20 with customers, customize products or services and handle customer complaints (Bailly,
21 and Léné, 2012; Christou, 2002).

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26 Soft skills are linked to employees' attitudes and behaviors and influence their ability to
27 work effectively in the workplace, both individually and in collaboration with others.
28 Specifically, Hawkins (1999) connected soft skills to a person's ability to find work, to
29 succeed and to change jobs in a changing social, economic and political environment.
30 Wesley et al. (2017, p. 81) highlights that "individuals who rank high in soft skills are
31 generally the people that most employers want to hire, setting them apart from other
32 potential employees". Overall, employers' and employees' perceptions of soft skills vary
33 widely. Specifically, Orlando (2013), based on the opinions of 173 students with work
34 experience who assessed the input received throughout their course of study and its
35 usefulness in the company at which they work, concluded that the university's level of
36 dedication to soft skills does not match corporate demands. Wesley et al. (2017)
37 compared the importance of ranking of the seven core soft skills (experience, teamwork,
38 communication, leadership, decision making/problem solving, self-management and
39 professionalism) among college students, faculties and firms in the retailing and tourism
40 industry. They observed a difference in the ranking among these three groups. Another
41 survey conducted by Wickramasinghe and Perera (2010) explored employability skills in
42 three main groups: graduates, university professors and employers. The examined groups
43 ranked problem solving, self-confidence and teamwork as the most important skills for
44 employability. However, the findings suggested that there are differences in the priority
45 order among groups. When comparing the level of skills graduates possessed at the time
46 of applying for their first job and the level of skills employers expected when selecting
47 applicants, the study only identified a gap in problem-solving skills; employers'
48 expectations were significantly higher than the level possessed by graduates. Along the
49 same lines, Swiatek (2000) found evidence supporting differences in the importance
50 graduates and employers give to employability skills overall. For instance, employers
51 recognize social skills as the most critical factor for success in the workplace and believe
52 that university graduates are not as prepared as they think they are. The aforementioned
53 empirical research mainly focused on identifying the core soft skills and uncovering the
54 discrepancy between employee and employer perception of skill ranking (Wesley et al.,
55 2017; Wickramasinghe and Perera, 2010; Swiatek, 2000; Chamorro-Premuzic et al., 2010;
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Ramlan and Ngah, 2015). Another interesting and unexplored issue concerns the level of soft skills employees possess and exhibit in their job according to self-evaluation and employer assessment. Any identified gap may pose a major challenge for the two groups in understanding each other and working together to try to fill the gaps in desired skills.

According to Poon (2012), graduates may over-estimate their abilities, whereas employers have unrealistic expectations. The gap between employers' expectations and graduates' demonstration of knowledge, skills and attributes is broad. Similarly, Mayo (2016) found that MBA students rated themselves higher on each leadership competence than their peers did, supporting the notion that people tend to overestimate their own performance and skills.

The skills gap has led to a mismatch between employers' and job seekers' perceptions. Employers complain that they cannot find an employee with the appropriate skills and experience for the job position, and prospective employees are disappointed that the right job is not out there for them. The present study explores and compares employees' and employers' perceived level of soft skills in a variety of industries. Specifically, this paper examines how employees self-ranked their soft skills in relationship to employment and then compares their rankings to those of their employers. Thus, the first hypothesis is:

H1: Employees have a higher perception of their degree of soft skills than their employers do.

In addition, this study examined whether demographical factors such as gender and education affect employee and employer perceptions. Past studies have brought some evidence of gender differences in soft skills proficiency. Both men and women overestimate their performance (Lundeborg et al., 1994), but it has been found that women score higher than men on social perception and social judgment, which are measures of social skills (Sustein and Hastie, 2014). Women have also been found to have a higher mean score in four out of seven soft skills (leadership skills; teamwork skills; entrepreneurial skills; and values, ethics and professionalism); however, only the soft skill of values, ethics and professionalism has a significant difference between women and men (Ahmad, 2013). Furthermore, research supports that young women are better at soft skills required in the workplace; they are more prepared in the workplace and are more likely to have the soft skills required by businesses (OECD, 2015). A significant gender difference was also found in personality development and communication skills. Ismail et al. (2017) found that female students evaluated their skills as being higher as compared to their male peers. However, no significant difference has been found in management skills, leadership skills, writing skills and professional ethics based on gender.

The aforementioned research yielded different and contradictory findings concerning gender difference within soft skills. Lippman et al. (2015, p. 45) pointed though, that "there is not enough rigorous research on implications of applicants' gender on the utility of soft skills for workforce success". Driven by the lack of evidence and the inconsistencies in the results of prior studies, the second and third hypotheses of the present study are formed as follows:

H2: Employees' perception of soft skills will be moderated by their gender.

H3: Employee-employer perception of soft skills will be moderated by employees' gender.

On another point, it is crucial that the education system ensure that young people have at least the minimum skills needed for success in the workforce. Employers want to feel

reassured that applicants can deploy their knowledge to solve problems, take initiative and communicate with team members, rather than just following prescribed routines (Aring, 2012). These soft skills are not taught but can be acquired through high-quality education (Aring, 2012). Thus, poor-quality education leads to a significant mismatch between labor market needs and the skills of graduates. Research supports that upper levels of education foster proficiency in soft skills (Lippman et al., 2015). The education received and the soft skills acquired through a range of academic activities are expected to give employees opportunities for gainful employment (Nauffal and Skulte-Ouaiss, 2018). A high school diploma works as a proxy for soft skills (Heckman and Rubinstein, 2001). Brunello and Rocco (2017) examined the educational system of seventeen countries and found that academic education provides higher basic skills proficiency (literacy and numeracy) than vocational education does. Vocational schools continue to have outdated curricula and tend to be too specialized in obsolete occupations, providing skills that are of little use in the labor market (Masson and Fetsi, 2007; Bartlett, 2013).

None of the mentioned studies empirically examined the relationship between soft skills possessed by employees and their educational level. Thus, this study hypothesizes the following:

H4: Employee perception of soft skills will be moderated by education.

H5: Employee–employer perception of soft skills will be moderated by employees' education.

3. Methodological frame

3.1. Sample and Procedure

Data for this quantitative study were collected through a survey among employees (and their corresponding employers at the time) enrolled in a training course in management and administration offered, by a vocational training institute. The training course, of a two months duration, took place in 2018. The data collection was conducted, the same year as well. It started towards the end of the training course and lasted for three months. Respondent participation to the survey was voluntary. For the purposes of the study, a convenience sample was used.

A two stage survey was used for the data collection. In the first stage, all the employees (n=178) participating in the training course were asked to provide their perceptions of the level of soft skills they possess. The response rate for the first stage was 84.8% (151 participants). In the second stage, a pairing technique was used so as to come up with a matched sample and analyze, afterwards, the data collected as employee–employer pairs. Using the sample of 151 employees, the corresponding employer (supervisor), was contacted. The immediate supervisors or line managers of the employees were contacted. Thus, all the employers were in the low managerial level. Each employer was provided with the same questionnaire (as the one used in the first stage), for the evaluation of his employee's skills. More specifically, the employers were asked for their perceptions of the soft skills level of their employees. A coding system was used to match the employee–employer responses. The survey reached a 100% response rate (all the 151 employers responded).

The dyads of employee-employer came from small and medium sized Greek firms, with 87.4% of them employing 0-4 employees, 7.3% employing 5-25 employees and 5.3% employing over 25 employees. The sample came from a variety of organizations across all

three main sectors of employment - namely merchandising, manufacturing and services. In more detail, the dyads of employees-employers came from Retail Trade 41.7%, Food Service Industry - HoReCa (Hotel Restaurant Cafe) 18.5%, Personal Service Activities 14.6%, Manufacturing & Wholesales 12.6% and Health, Education & Cultural Activities 12.6%.

Of the employees participating in the survey, 62.9% were female and 37.1% were male. The majority of the respondents (56.2%) were married. Regarding their age, middle-aged employees predominated: with 28.4% under 34 years, 39.8% between 35-44 years old, 17.9% between 45-54 years old and 13.9% over 55 years old. With respect to education level 36.4% were highly educated (holding a university degree), 40.4% had upper secondary or post education and 23.2% had lower secondary education. In addition, all respondents had previous work experience. A total of 56.9% had a good or excellent command of information technology, and 50.9% had good or excellent knowledge of a foreign language.

3.2. Measures

As mentioned above a survey questionnaire was used as the tool for the data collection. The same questionnaire was administered to both employees and employers, so as to investigate any existing gap between their perceptions of employees' soft skills. Both questionnaires included items, aiming to explore participants' perceptions of eight soft skills: a)communication, b)flexibility, c)interpersonal skills, d)positive attitude, e)professionalism, f)responsibility, g)team-working and h)work ethic (Robles, 2012).

After conducting a thorough literature review, the variables, to be used, were specified and the scales for the survey questionnaire were created, based on the description of soft skills by Muzio et al. (2007) and Robles (2012). Each soft skill was operationalized with a specific description and a number of representative items was linked to each variable, based on the literature (Table I). The soft skills items numbered 56 in total. The questionnaire also, included a number of questions on employees' socio-demographic characteristics, such as gender and education. These characteristics were used so as to aid in explaining the existing perception gaps.

Employees were asked to complete a self-assessment of their soft skills, stressing the level up to which they possessed each skill. Employers on the other hand, assessed the extent to which their employees possessed each of these soft skills. A Likert type scale was used for both questionnaires, where 1 represented "strongly disagree" and 7 represented "strongly agree". A pilot survey was conducted with a small group of employee-employer dyads to test the accuracy of the questionnaire. The pilot verified that the meaning the participants assign to each question matched the intended meaning and that questions were not ambiguous. Modifications were made to the items of the questionnaires, including semantic changes, following the pilot survey. The final version of the questions was also cross-checked by academics in the field.

Table I: Measures: items and reliability estimates

Variable	Number of items	Definition (Muzio et al., 2007; Robles, 2012)	Sample item	Cronbach's alpha	Bibliographical source of variable
Communication	8	ability to convey complex ideas orally, in writing, presenting and listening	I ask questions in order to understand the instructions and opinions of others	EE=0.830 ER =0.875	Chamorro-Premuzic et al., 2010; Ilias et al. 2012; Singh and Jaykumar,

					2019; Robles, 2012; Tempone et al. 2012; Blades et al., 2012; de Villiers, 2010; Succi & Wieandt, 2019; Freudenberg et al. 2011; Klibi and Oussii 2013; Bak et al., 2019; Seetha, 2014; Andrews & Higson, 2008; Azim et al., 2010; Bancino & Zevalkink, 2007
Flexibility	9	ability to readily modify, response and integrate with minimal personal resistance	I manage information using technologies such as: audio messaging, social media, ect.	EE=0.833 ER =0.875	Robles, 2012; Bak et al., 2019; Balaji & Somashekar 2009; Andrews & Higson, 2008; Bancino & Zevalkink, 2007
Interpersonal skills	10	ability to interact with others in a friendly and empathetic manner	I build trust relationships with my colleagues	EE=0.776 ER=0.888	Chamorro-Premuzic et al., 2010; Singh and Jaykumar, 2019; Robles, 2012; Blades et al., 2012; Andrews & Higson, 2008; Bancino & Zevalkink, 2007
Positive Attitude	7	ability to be optimistic and enthusiastic	I transfer positive energy to my surroundings	EE=0.829 ER =0.864	Bak et al., 2019; Robles, 2012; Seetha, 2014
Professionalism	4	ability to businesslike, well-dressed, appearance, on time	I keep the work program and timetables	EE=0.925 ER =0.817	Chamorro-Premuzic et al., 2010; Singh and Jaykumar, 2019; Robles, 2012; Andrews & Higson, 2008; Azim et al., 2010
Responsibility	5	ability to be accountable, reliable and conscientious	I complete the tasks I have been assigned to on time	EE=0.811 Employer=0.710	Robles, 2012; Andrews & Higson, 2008; Gewertz, 2007
Teamworking	5	ability to cooperate with others to meet objectives	I want to contribute to common goals	EE=.800 ER =0.824	Chamorro-Premuzic et al., 2010; Azim et al., 2010; Ilias et al. 2012; Klibi and Oussii 2013; Freudenberg et al. 2011; Singh and Jaykumar, 2019; Robles, 2012; Blades et al., 2012; de Villiers, 2010; Succi and Wieandt, 2019; Bak et al., 2019; Seetha, 2014; Bancino & Zevalkink, 2007
Work Ethic	8	ability to practice ethical attitude	I work without the need for supervision	EE=0.799 ER=0.897	Singh and Jaykumar, 2019; Robles, 2012; de Villiers, 2010; Klibi and Oussii, 2013; Gewertz, 2007; Azim et al., 2010

Note: EE= employee, ER= employer

Construct reliability was estimated with the internal consistency method using the Cronbach alpha (α) coefficient; the most common method for reliability analysis in similar studies. A Cronbach α ranging from 0.77 to 0.92 was obtained for employees, and a value within 0.71 and 0.89 was obtained for employers (Table I). These results are above the cut-off value of 0.70, suggesting that the constructs have adequate internal consistency (Nunnally, 1978).

4. Results

The present study compares the level of skills, employers consider their employees to have, with employees' self-assessments on the level of the same skills. To compare the two groups' perceptions on the same soft skills descriptive statistics (mean differences between the two groups) have been employed. Paired t-test has been used to identify statistical difference between the matched pairs. Independent samples t-test and One-Way ANOVA, have been used to compare the means of soft skills perceptions, among employee subgroups with different characteristics (two and three subgroups accordingly).

Results from employee self-assessments indicate a mean score of more than 5.5 (on a Likert scale of 7 points) for each one of the eight soft skills (communication, flexibility, interpersonal skills, positive attitude, professionalism, responsibility, team-working, work ethic) (Table II). Employees tend to assign themselves higher than average scores for these skills, reflecting a high level of confidence. Professionalism seems to have the highest mean score (6.16), whereas communication has the lowest mean (5.58), followed by interpersonal skills (5.64). On the other hand, the mean scores reflecting employers' perceptions, show a medium level of satisfaction with all eight soft skills; all skills had a mean score above 5.1, but no more than 5.47. Namely, the employees' ratings start higher than the employers' ratings. What is more interesting, is that employees' ratings start above the highest rating given by the employers. Thus, a gap in perceptions of soft skills is identified among employees and employers, ranging from 0.41 (in interpersonal skills and in communication) to 0.69 (in professionalism). The gaps between employer and employee perceptions are negative (employers' scores are lower than employees' scores), which indicates that employees' soft skills levels do not meet their employers' expectations (Figure I). In addition, employers' perceptions appear to have greater standard deviations for each soft skill in comparison to employees' perceptions' standard deviations. This implies that employees tend to provide answers towards specific values of each variable-positive values as it appears; indicating again a optimistic self-view.

A comparison of the employees' self-perceptions and employers' perceptions of the employees' soft skills is of particular interest (Table II). The paired samples statistics were used to highlight the differences between employers' and employees' perceptions of soft skills. Paired samples t-test used to access the significance of the mean difference (gap) in perceptions. A statistically significant difference between the average ratings provided by the two groups exists. A result which confirms Hypothesis (H1). In addition, the average ratings for each of the eight soft skills, show that employee and employer perceptions differ significantly ($p < 0.05$) at a 0.001 confidence level.

Table II: Paired comparisons on difference scores

Variable	Employee	Employer	Gap between employee- employer perception	t value	p value
	Mean	Mean	Mean Difference		
Communication	5.58(0.70)*	5.17(1.17)	0.41	3.91	0.00
Flexibility	5.71(0.62)	5.19(0.82)	0.52	7.30	0.00
Interpersonal skills	5.64(0.58)	5.23(0.76)	0.41	5.70	0.00
Positive Attitude	5.75(0.66)	5.29(0.81)	0.46	5.71	0.00
Professionalism	6.16(0.86)	5.47(0.97)	0.69	7.57	0.00

Responsibility	5.73(0.77)	5.26(0.89)	0.47	5.43	0.00
Teamworking	5.76(0.74)	5.29(0.84)	0.47	5.48	0.00
Work Ethic	5.74(0.65)	5.31(0.77)	0.43	5.62	0.00

*standard deviation in brackets



Figure I: Comparison between employee and employer perception

Note: black line: employees' perception, grey line: employer perception

As far as, the employee sample is concerned, an independent sample t-test was performed to examine the differences between male and female employees' perceptions (Table III). Female employees were found to report higher levels of soft skills as compared with their male peers, with the mean difference of perceptions, between the two genders, ranging from 0.11 to 0.31. The results were significant ($p < 0.05$) for all variables, with the exception of communication, team-working and positive attitude, at $\alpha = 0.05$ level of confidence. Thus, the second hypothesis (H2), that there is a significant gender difference in the employees' perceptions of their soft skills, is partially and overall supported.

Table III: Employee perceptions differences based on gender

Variable	Male Employee	Female Employee	Mean Difference	t value	p value
	Mean	Mean			
Communication	5.43 (0.72)*	5.66 (0.68)	0.23	-1.922	0.06
Flexibility	5.57 (0.62)	5.79 (0.61)	0.22	-2.214	0.03
Interpersonal skills	5.48 (0.54)	5.74 (0.58)	0.26	-2.762	0.01
Positive Attitude	5.67 (0.66)	5.78 (0.66)	0.11	-1.214	0.23
Professionalism	5.96 (0.93)	6.27 (0.80)	0.31	-2.196	0.03
Responsibility	5.58 (0.76)	5.81 (0.69)	0.23	-2.027	0.04
Teamworking	5.63 (0.78)	5.83 (0.71)	0.20	-1.709	0.09
Work Ethic	5.57 (0.62)	5.82 (0.65)	0.25	-2.443	0.02

*standard deviation in brackets

Results also show that employers, as well, register significantly higher soft skills' scores for female than for male employees (Table IV). Employers seem to perceive women to have significantly more developed soft skills compared to men, which is in line with employees perceptions. However, again employers rate employees' soft skills lower compared to employees' self-ratings. The negative gaps (when employers perceptions are lower than employee perceptions) reach significantly higher levels for men (ranging from 0.57 to 0.87) than for women (ranging from 0.21 to 0.56). Concerning male employees, the highest negative gap is observed for professionalism (0.87), followed by

communication skills (0.72). In the case of women, the highest negative gap is also observed for professionalism (0.56), followed by flexibility (0.39). Results support the third hypothesis (H3), that there is a significant gender difference in the employee-employer perceptions of employees' soft skills ($4.33 < t < 5.74$, for male and $1.50 < t < 5.52$, $p < 0.05$). This does not hold though, for communication as a soft skill for females; where a non significant difference exists between employee's and employer's perceptions.

Table IV: Comparison between employee and employer perception by gender

*standard deviation in brackets

Note: EE= employee, ER= employer

When controlling, employees' self-ratings of soft skills, for employee educational level, results reveal even more differences (Table V). Three categories of educational level were used for purposes of this study: a) lower secondary education, b) upper secondary or post education and c) up to tertiary education. One-way ANOVA analysis is used for the comparison of means of the three employee groups (based on their educational level).

Variable	Male EE (mean)	Male ER (mean)	Mean Differenc e	t valu e	p valu e	Female EE (mean)	Female ER (mean)	Mean Differenc e	t valu e	p valu e
Communication	5.43 (0.72)*	4.71 (0.80)	0.72	5.34	0.00 0	5.66 (0.68)	5.45 (1.27)	0.21	1.50	0.13 0
Flexibility	5.57 (0.62)	4.86 (0.80)	0.71	5.74	0.00 0	5.79 (0.61)	5.40 (0.77)	0.39	4.78	0.00 0
Interpersonal skills	5.48 (0.54)	4.91 (0.71)	0.57	5.04	0.00 0	5.74 (0.58)	5.43 (0.73)	0.31	3.38	0.00 1
Positive Attitude	5.67 (0.66)	4.98 (0.81)	0.69	4.96	0.00 0	5.78 (0.66)	5.48 (0.76)	0.30	3.33	0.00 1
Professionalis m	5.96 (0.93)	5.09 (1.02)	0.87	5.23	0.00 0	6.27 (0.80)	5.71 (0.87)	0.56	5.52	0.00 0
Responsibility	5.58 (0.76)	4.93 (0.86)	0.65	4.60	0.00 0	5.81 (0.68)	5.48 (0.84)	0.33	3.29	0.00 1
Teamworking	5.63 (0.78)	4.98 (0.78)	0.65	4.93	0.00 0	5.83 (0.71)	5.49 (0.82)	0.34	3.20	0.00 2
Work Ethic	5.57 (0.62)	4.99 (0.80)	0.58	4.33	0.00 0	5.82 (0.64)	5.50 (0.69)	0.32	3.68	0.00 0

Employees with undergraduate degrees differ considerably, from those with upper secondary or post education, and from those with lower secondary education, in terms of the soft skills they believe they possess. In particular, employees with tertiary education, register higher scores for all soft skills (above 5.80), compared to the other two educational groups. Employees seem to evaluate their soft skills higher, as the educational level increases. Moreover, employees of all educational levels, report a significantly high score for professionalism.

Table V: Employees' perceptions of soft skills by educational level
(One-way ANOVA analysis)

Variable	Employees with lower secondary education	Employees with upper secondary or post education	Employees with tertiary education	F	p value
	Mean	Mean	Mean		
Communication	5.34 (0.65)	5.48 (0.72)	5.84 (0.65)	7.002	0.001
Flexibility	5.45 (0.57)	5.68 (0.65)	5.90 (0.58)	6.251	0.002
Interpersonal skills	5.47 (0.60)	5.60 (0.54)	5.80 (0.59)	4.190	0.017
Positive Attitude	5.58 (0.71)	5.70 (0.63)	5.89 (0.64)	2.997	0.050
Professionalism	5.75 (0.91)	6.15 (0.93)	6.42 (0.65)	7.034	0.001
Responsibility	5.42 (0.76)	5.70 (0.71)	5.94 (0.65)	8.830	0.003
Teamworking	5.50 (0.68)	5.70 (0.80)	5.98 (0.76)	5.513	0.005
Work Ethic	5.49 (0.64)	5.71 (0.65)	5.90 (0.61)	4.982	0.008

*standard deviation in bracket

Finally, the lowest score is reported for the communication skills (5.34), by employees with lower secondary education. The results support the fourth hypothesis (H4), which assumes a significant difference ($p < 0.05$) in employees' perceptions, of all their soft skills, based on their educational level. F-value ranges from 2.997 to 8.830 for the different soft skills, always with a p -value < 0.05 .

Based on the paired t-tests, run for each educational level, the findings also reveal a significant difference between the employee and the employer perceptions of employee soft skills, when taking into consideration the employees' educational level ($3.72 < t < 5.90$ for lower level education, $2.38 < t < 3.71$ for the upper or secondary education and $2.75 < t < 5.12$ for the tertiary educational level, $p < 0.05$). The negative gaps are significantly lower for employees with tertiary education (ranging from 0.26 to 0.65) than for employees with upper secondary or post education (ranging from 0.43 to 0.72) or lower secondary education (ranging from 0.41 to 0.65), for almost all soft skills. Professionalism seems to be the soft skill for which the greater gaps are observed (ranging from 0.62 to 0.72) (Table VI).

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Table VI: Comparison between employee and employer perceptions by educational level

Variable	Lower EE (mean)	lower ER (mean)	Mean difference	t value	p value	Upper EE (mean)	Upper ER (mean)	Mean difference	t value	p value	Tertiary EE (mean)	Tertiary ER (mean)	Mean difference	t value	p value
Communication	5.34 (0.64)*	4.93 (1.87)	0.41	5.90	0.000	5.48 (0.72)	5.01 (0.83)	0.47	2.84	0.016	5.84 (0.65)	5.51 (0.81)	0.33	2.76	0.009
Flexibility	5.45 (0.56)	4.80 (0.68)	0.65	5.80	0.000	5.68 (0.64)	5.11 (0.82)	0.57	3.71	0.003	5.90 (0.57)	5.57 (0.78)	0.33	3.60	0.001
Interpersonal skills	5.47 (0.60)	4.96 (0.65)	0.51	4.40	0.000	5.60 (0.54)	5.14 (0.76)	0.46	2.69	0.021	5.80 (0.58)	5.54 (0.74)	0.26	2.75	0.010
Positive Attitude	5.58 (0.71)	4.93 (0.62)	0.65	5.05	0.000	5.70 (0.63)	5.24 (0.87)	0.46	2.45	0.032	5.89 (0.63)	5.60 (0.73)	0.29	3.73	0.001
Professionalism	5.75 (0.90)	5.13 (0.96)	0.62	4.73	0.000	6.15 (0.93)	5.43 (1.05)	0.72	2.58	0.025	6.42 (0.65)	5.77 (0.81)	0.65	5.12	0.000
Responsibility	5.42 (0.76)	4.92 (0.69)	0.50	3.87	0.000	5.70 (0.70)	5.27 (1.00)	0.43	3.10	0.010	5.94 (0.64)	5.52 (0.78)	0.42	3.56	0.001
Teamworking	5.50 (0.67)	4.99 (0.76)	0.51	3.72	0.000	5.70 (0.79)	5.20 (0.84)	0.50	2.38	0.036	5.98 (0.66)	5.61 (0.80)	0.37	3.06	0.004
Work Ethic	5.49 (0.63)	5.00 (0.66)	0.49	4.71	0.000	5.71 (0.65)	5.23 (0.84)	0.48	2.58	0.025	5.90 (0.60)	5.61 (0.65)	0.29	3.75	0.001

*standard deviation in brackets
Note: EE= employee, ER= employer

5. Conclusions and practical implications

Human Resource (HR) managers running the recruitment process, are concerned with applicants' soft skills and attitudes, apart from hard technical skills. Managers and employers seek employees who possess that essential set of skills, so as to respond well to their complicated work responsibilities. Nowadays, employees have more autonomy in their work, make more decisions and interact with customers and clients more often, than employees in the past used to. Employees, in the past, had mainly repetitive tasks to perform (Brungardt, 2011). These days, soft skills highly affect employability and career progression (Nickson et al., 2012; Orlando, 2013; Nilsson, 2010). Thus, employees should be well equipped with soft skills to increase their chances of getting employed, enhance their individual productivity and succeed in the workforce (Finch et al., 2013; Seetha, 2014).

Seminal studies in the field, support that most people tend to evaluate themselves positively and high enough (Mayo, 2016; Poon, 2012; Wickramasinghe and Perera, 2010). The findings of the present research confirm this and add to previous studies by indicating significant differences between employees' and employers' perceptions regarding employees' soft skills. Employees seem to overestimate their soft skills and believe that they possess them in a higher level than their employers perceive. The greatest difference between employee and employer perception can be seen for professionalism, whereas the smallest margin of difference is reported for interpersonal skills and communication. Based on the results and according to their employers, employees are not properly equipped with the necessary soft skills to perform effectively in the workplace. Employees' proficiency levels are inconsistent with the levels their employers require, raising questions regarding how well-equipped graduates are and the extent to which they are able to implement their soft skills to the workplace. Thus, based on these findings, employees' efforts to develop themselves should be more focused on the soft skills for which they score lower.

Findings regarding the impact of employee gender and employee educational level on the perceived soft skills levels, aid in the identification of these groups that need more guidance and training and in the identification of the specific soft skills needed for each educational level. Therefore, male employees seem to be in need of training, as women outperform them in all the soft skills examined, based on self- and employer's evaluations. Professionalism still appears to be that soft skill which employees (no matter the gender) perceive they have it in higher levels, than their corresponding employers believe. These findings add to the findings by Arraj (2018), who empirically examined the level of professionalism among civil servants in Lebanon, finding a low level of professionalism among them. Professional employees dress appropriately for the job, manage their time effectively, speak politely and positively and show initiative. This kind of soft skills is not easy to be reinforced and tends to take years of experience to be developed. Social perception rather than gender difference, could be the reason though (Sustein and Hastie, 2014). Gender differences in the soft skills, seem to come from employers' expectations rather than genetics. Men may respond to the rising price of such skills by increasing their investment in them (Kato and Kodama, 2017). However, "these endowment gender differences, combined with rising value of such skills ... will result in narrowing gender gap in wage and in more women in the workplace" (Kato and Kodama (2017, p. 10).

In terms of educational levels, employee-employer perception gaps are significantly lower for employees with tertiary education than for employees with upper secondary or

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3 post education or lower secondary education. This likely means that the level and type of
4 competence that comes from universities, is more similar to workplace exposure, but still
5 lower. However, at the level of upper secondary or post education and lower secondary
6 education, the differences, between the level of competencies acquired by graduates and
7 the level required by the labor market, are greater. The main cause of this gap between
8 employee and employer perceptions, could be the fact that most academic programs
9 neglect the development of their students' soft skills, and thus, students lack the required
10 competencies (Orlando, 2013; Robles, 2012; Nusrat and Sultana, 2019). Recently Succi
11 and Canovi (2019) found that the large majority of employers (60.2%) agreed that
12 students are not well or very well prepared by higher education institutions. The
13 differences highlighted could help education units to reconsider the importance of soft
14 skills and include them in their curricula, leading to the acquirement of skills in levels,
15 closer to employers' standards (Teng et al., 2019).
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19 A reason for the non inclusion of soft skills in the curricula, could be the fact be that soft
20 skills development are not part of their educational approach and strategies. Higher
21 education managers seem not to believe in the high importance of soft skills for students'
22 future employment (i.e., higher education institutions have curricula that focus mainly on
23 hard skills). This view needs to change though. Higher education institutions curricula
24 need to be reformed, by incorporating alternative approaches, in terms of enhancing soft
25 skills. The study program, learning methods, teaching content and assessment process
26 should be oriented toward the development of students' soft skills (Sethi, 2018; Anthony
27 and Garner, 2016). In addition, experiences through internships or apprenticeships
28 during the study years, would effectively boost students' soft skills (Jackson et al., 2016).
29 Soft skills seem to be more easily and faster developed and acquired at earlier life stages,
30 and before the entry into the labor market (Robles, 2012). Similarly, researchers have
31 highlighted the need for a curriculum reform in primary and secondary education
32 (Cravens et al., 2011; Forlin, 2010). Specifically, they stressed the importance of curricula
33 being well-balanced and more vocationally challenging (Toremén et al. 2009). Curriculum
34 content should provide the "right" knowledge to the student (Ibrahim et al., 2017),
35 emphasizing skills development (Bunyi, 2013).
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39 Another cause of the soft skills gap between employees and employers perceptions, is that
40 some employees may underestimate the value of soft skills proficiency and be reluctant
41 to develop them. The findings of this study could help students, before entering the labor
42 market, to understand their deficiencies and motivate them to improve their soft skills.
43 People with soft skills proficiency can not only effectively fit into their working
44 environment and achieve personal and organizational goals, but also advance their
45 academic knowledge through graduate, postgraduate or doctoral studies (OECD, 2015).
46 In addition, employees should be encouraged to self-assess their skills effectively, so as to
47 have more accurate perceptions of their own skills, which can then be applied throughout
48 their working lives (Saunders and Zuzel, 2010). In this way, employees could perform a
49 better self-evaluation, and employers could understand employees' reactions and way of
50 thinking regarding their soft skills. Deatiled and focused on skills feedback from
51 supervisors, would help employees to compare their self-evaluation to employer
52 evaluations and focus on readjusting their own inflated views to align with the more
53 realistic evaluations of their supervisors (Mayo, 2016).
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57 On the other hand, employers should support employees who have had fewer educational
58 opportunities to develop their soft skills in their previous working environment. Firms
59 should provide development opportunities through seminars, job rotation, coaching,
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3 sensitivity training or experiential learning, to further employees' soft skills. However,
4 micro firms (accounting for 96.2% of the Greek business sector and employing one to ten
5 employees) do not have such financial or technical capability, and their employees have
6 fewer opportunities to acquire new skills.
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8 Finally, employers should reconsider their evaluation of employees' soft skills, so as to get
9 closer to the existing reality and to form more reasonable expectations. In addition,
10 employers' perceptions of employees' soft skills, may not reflect employees' real abilities
11 and may be biased by ignorance, personal relations or stereotypes (Turek and Perek-
12 Bialas, 2013). Employers especially in micro firms lack specific knowledge in conducting
13 employee skills' evaluations, making training necessary.
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16 17 18 **6. Limitations and Future Research Directions**

19 Despite this study's contributions, some limitations still exist and should be taken into
20 consideration for future research. The present study highlighted the importance of soft
21 skills, as they determine an applicant's employability, job performance and career
22 prospects. However, it is quite difficult to determine exactly which soft skills are needed
23 in each workplace and at which level. Different employers require different skills, which
24 depend on the job position, the employment sector, the organizational or social culture,
25 the size of the firm and the market orientation of the organization (Atkins, 1999; Mitchell
26 et al., 2010; Cox and King, 2006). The list of soft skills, used in studies (including the
27 present study), deemed critical for workforce success. This list is not shared and diverges
28 from one study to another in terms of the number of soft skills, the terminology and
29 definitions. Future research should be conducted to standardize soft skills measurement
30 and establish common definitions.
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34 The present study focuses on Greece, which is characterized by a high rate of youth
35 unemployment (38.5% as of 12/2018), an important contribution of the services sector
36 to the country's economy and an educational system with gaps in terms of soft skills
37 development (Statista Official Website). The fastest growing and largest part of the
38 country's economy is the services sector, which accounts for 68.88% of GDP and
39 contributes to employment, by employing 72.57% of the working population (Statista
40 Official Website). Soft skills are also core to the success of the services sector. The
41 increasing emphasis on customer needs, customer satisfaction and personalized services,
42 has further underscored the need for this kind of skills. In addition, the Greek educational
43 system, although acknowledging that students should be prepared for a demanding local
44 and international labor market, seems considerably confused over how soft skills should
45 be defined and taught. Due to the country-specific focus, the current conclusions cannot
46 be generalized to other countries, though. Future studies should seek to explore a broader
47 population and to conduct comparative research across different countries.
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51 In addition, the present study examines and compares employees' and employers'
52 perceived level of soft skills in a variety of industries. The specific nature of the work of
53 the employees having participated in the survey, might have influenced the results of this
54 study. The level of employees' soft skills proficiency may differ between office and
55 manufacturing workers, considering the different levels of customer service provision
56 and customer interaction.
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59 Another limitation, is the level of data subjectivity, as the data stem from self-reported
60 scales. Soft skills may be assessed in a subjective way, in the absence of an objective test,

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3 to evaluate all the different soft skills possessed by employees and required by employers
4 (Chamorro-Premuzic et al., 2010). The common method bias problem could be avoided
5 in the future, by using objective data in addition to subjective data.
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7 **References**

8
9
10 AbuJbara, N. and Worley, J.A. (2018), "Leading toward new horizons with soft skills", *On*
11 *the Horizon*, Vol. 26 No. 3, pp. 247-259.
12

13 Ahmad, S.B.S. (2013), "Soft skills level of Malaysian students at a tertiary institution: a
14 comparative case study based on gender, area of residence and type of schools?",
15 *International Journal of Asian Social Science*, Vol. 3 No. 9, pp. 1929-1937.
16

17 Albandea, I. and Giret, J.-F. (2018), "The effect of soft skills on French post-secondary
18 graduates' earnings", *International Journal of Manpower*, Vol. 39 No. 6, pp. 782-799.
19

20 Andrews, J. and Higson, H. (2008), "Graduate Employability, 'Soft Skills' Versus 'Hard'
21 Business Knowledge: A European Study", *Higher Education in Europe*, Vol. 33 No. 4, pp.
22 411-420.
23

24 Anthony, S. and Garner, B. (2016), "Teaching soft skills to business students: an analysis
25 of multiple pedagogical methods", *Business and Professional Communication Quarterly*,
26 Vol. 79 No. 3, pp. 360-370.
27

28 Aring, M. (2012), "Youth and skills: Putting education to work", *EFA Global Monitoring*
29 *Report*.
30

31 Arraj, H.A. (2018), "Professionalism among employees in Lebanon: the Lebanese
32 University", *World Journal of Entrepreneurship, Management and Sustainable*
33 *Development*, Vol. 14 No. 4, pp. 385-392.
34

35 Atkins, M.J. (1999), "Oven-ready and self-basting: Taking stock of employability skills",
36 *Teaching in Higher Education*, Vol. 4 No. 2, pp. 1356-2517.
37

38 Azim, S., Gale, A., Lawlor-Wright, T., Kirkham, R., Khan, A. and Alam, M. (2010), "The
39 importance of soft skills in complex projects", *International Journal of Managing Projects*
40 *in Business*, Vol. 3 No. 3, pp. 387-401.
41

42 Bailly, F. and Léné, A. (2012), "The personification of the service labour process and the
43 rise of soft skills: a French case study", *Employee Relation*, Vol. 35 No. 1, pp. 79-97.
44

45 Bak, O., Jordan, C. and Midgley, J. (2019), "The adoption of soft skills in supply chain and
46 understanding their current role in supply chain management skills agenda: A UK
47 perspective", *Benchmarking: An International Journal*, Vol. 26 No. 3, p. 1063-1079.
48

49 Balaji, K.V.A. and Somashekar, P. (2009), "A Comparative study of soft skills among
50 engineers", *The IUP Journal of Soft Skills*, Vol. III No. 3 & 4, pp. 50-57.
51

52 Balcar, J. (2016), "Is it better to invest in hard or soft skills?", *The Economic and Labour*
53 *Relations Review*, available at: <https://doi.org/10.1177/1035304616674613>
54

55 Bancino, R. and Zevalkink, C. (2007), "Soft skills: The new curriculum for hard-core
56 technical professionals", *Techniques: Connecting Education and Careers*, Vol. 82 No. 5 pp.
57 20-22.
58
59
60

1
2
3 Bartlett, W. (2013), "Skill Mismatch, Education Systems, and Labour Markets in EU
4 Neighbourhood Policy Countries", working Paper, The Sharing Knowledge Assets:
5 Interregionally Cohesive Neighborhoods.

6
7 Blades, R., Fauth, B. and Gibb, J. (2012), "Measuring employability skills: A rapid review to
8 inform development of tools for project evaluation", available at:
9 <http://britishcouncil.org/voices-magazine/china-creating-workforce-no-soft-skills>
10 (accessed 28 April 2018).

11
12 Brunello, G. and Rocco, L. (2017), "The effects of vocational education on adult skills,
13 employment and wages: What can we learn from PIAAC?", *SERIEs*, Vol. 8 No. 4, pp. 315-
14 343.

15
16 Brungardt, C. (2011), "The intersection between soft skills development and leadership
17 Education", *Journal of Leadership Education*, Vol. 10 No. 1, pp. 1-21.

18
19 Bunyi, G.W. (2013), "The quest for quality education: the case of curriculum innovations
20 in Kenya", *European Journal of Training and Development*, Vol. 37 No. 7, pp. 678-691.

21
22 Chamorro-Premuzic, T., Arteche, A., Bremmer, A.J., Greven, C. and Furnham, A. (2010),
23 "Soft skills in higher education: Importance and improvement ratings as a function of
24 individual differences and academic performance", *Educational Psychology: An*
25 *International Journal of Experimental Educational Psychology*, Vol. 30 No. 2, pp. 221-241.

26
27 Chan, J. (2015), "Is China creating a workforce with no soft skills? British council",
28 available at: [https://www.britishcouncil.org/voices-magazine/china-creating-workforce-](https://www.britishcouncil.org/voices-magazine/china-creating-workforce-no-soft-skills)
29 [no-soft-skills](https://www.britishcouncil.org/voices-magazine/china-creating-workforce-no-soft-skills) (accessed 1 August 2019).

30
31 Christou, E. (2002), "Revisiting competencies for hospitality management: contemporary
32 views of the stakeholders", *Journal of Hospitality & Tourism Education*, Vol. 14 No.1, pp.
33 25-32.

34
35 Cimatti, B. (2016), "Definition, Development, Assessment of Soft Skills and their Role for
36 the Quality of Organizations and Enterprises", *International Journal for Quality Research*,
37 Vol. 10 No. 1, pp. 97-130.

38
39 Clarke, M. (2017), "Rethinking Graduate Employability: The Role of Capital, Individual
40 Attributes and Context", *Studies in Higher Education*, Vol. 43 No. 11, pp. 1923-1937.

41
42 Cox, S. and King, D. (2006), "Skill sets: an approach to embed employability in course
43 design", *Education + Training*, Vol. 48 No. 4, pp. 262-274.

44
45 Cravens, X.C., Chu, H. and Zhao, Q. (2011), "Defining School Effectiveness in the
46 Reform for Quality-Oriented Education", *The Impact and Transformation of Education*
47 *Policy in China*, Vol. 15, pp. 153-185.

48
49 de Villiers, R. (2010), "The incorporation of soft skills into accounting curricula: preparing
50 accounting graduates for their unpredictable futures", *Meditari Accountancy Research*,
51 Vol. 18 No. 2, pp. 1-22.

52
53 Deming, D. (2015), "The growing importance of social skills in the labor market", working
54 Paper 21473, Cambridge University, MA: National Bureau of Economic Research(NBER),
55 Cambridge.

1
2
3 Finch, D.J., Hamilton, L.K., Baldwin, R. and Zehner, M. (2013), "An exploratory study of
4 factors affecting undergraduate employability", *Education + Training*, Vol. 55 No. 7, pp.
5 681 – 704.
6

7 Forlin, C. (2010), "Developing and implementing quality inclusive education in Hong
8 Kong, implications for teacher education", *Journal of Research in Special Educational*
9 *Needs*, Vol. 10 No. 1, pp. 177–184.
10

11 Freudenberg, B., Brimble, M. and Cameron, C. (2011), "WIL and generic skill development:
12 the development of business students' generic skills through work-integrated learning",
13 *Asia-Pacific Journal of Cooperative Education*, Vol. 12 No. 2, pp. 79-93.
14

15 Gewertz, C. (2007), "Soft skills in big demand", *Education Week*, Vol. 26 No. 40, pp. 25-27.
16

17 Gibb, S. (2014), "Soft skills assessment: theory development and the research agenda",
18 *International Journal of Lifelong Education*, Vol. 33 No. 4, pp. 455- 471.
19

20 Grisi, C.G.A., (2014), "Soft Skills: a close link between enterprises and ethics. Speech at
21 "Soft Skills and their role in employability – New perspectives in teaching, assessment and
22 certification", workshop in Bertinoro, FC, Italy.
23

24 Hawkins, P. (1999), "The art of building windmills", *Liverpool: Graduate IntEmployment*
25 *Unit*.
26

27 Heckman, J.J. and Kautz, T. (2012), "Hard evidence on soft skills", *Labour Economics*, Vol.
28 19 No. 4, pp. 451-464.
29

30 Heckman, J.J. and Rubinstein, Y. (2001), "The Importance of Noncognitive Skills: Lessons
31 from the GED Testing Program", *American Economic Review*, Vol. 91 No. 2, pp. 145-149.
32

33 Hurrell, S.A. (2016), "Rethinking the Soft Skills Deficit Blame Game: Employers, Skills
34 Withdrawal and the Reporting of Soft Skills Gaps", *Human Relations*, Vol. 69 No. 3, pp.
35 605–628.
36

37 Ibrahim, Y., Arshad, R. and Salleh, D. (2017), "Stakeholder perceptions of secondary
38 education quality in Sokoto State, Nigeria", *Quality Assurance in Education*, Vol. 25 No. 2,
39 pp.248-267.
40

41 Ibrahim, R., Boerhannoeddin, A. and Bakare, K.K. (2017), "The effect of soft skills and
42 training methodology on employee performance", *European Journal of Training and*
43 *Development*, Vol. 41 No. 4, pp. 388-406.
44

45 Ilias, A., Razak, M.Z.A., Yunus, N.K.Y. and Razak, S.F.F.A. (2012), "How accounting students
46 perceived towards teamwork skills", *Journal of Education and Vocational Research*, Vol. 3
47 No. 12, pp. 387-398.
48

49 Ismail, I., Ahmad, A.R. and Awang, M.M. (2017), "A Study of Soft Skills among Polytechnic
50 Students", *Open Journal of Social Sciences*, Vol. 5, pp. 295-231.
51

52 Jackson, K., Lower, C.L. and Rudman, J.W. (2016), "The Crossroads between Workforce
53 and Education", *Perspectives in Health Information Management*, Vol. 5 No. 1, pp. 1-11.
54

55 Jolly, S.S. (2012), "Developing soft skills for enhancing employability of engineering
56 graduates", *International Journal of Engineering and Management Research*, Vol. 2 No. 5,
57 pp. 54-56.
58
59
60

1
2
3 Kato, T. and Kodama, N. (2017), "Women in the Workplace and Management Practices:
4 Theory and Evidence", *IZA – Institute of Labor Economics, DP No. 10788*, available at:
5 <http://ftp.iza.org/dp10788.pdf>
6

7 Klibi, M.F. and Oussii, A.A. (2013), "Skills and attributes needed for success in accounting
8 career: do employers' expectations fit with students' perceptions? Evidence from
9 Tunisia", *International Journal of Business and Management*, Vol. 8 No. 8, pp. 118-132.
10

11 Knight, P.T. and Yorke, M. (2002), "Employability through the curriculum", *Tertiary
12 Education and Management*, Vol. 8 No. 4, pp. 261-276.
13

14 Laker, D.R. and Powell, J.L. (2011), "The differences between hard and soft skills and their
15 relative impact on training transfer", *Human Resource Development Quarterly*, Vol. 22 No.
16 1, pp. 111-122.
17

18 Lippman, L., Ryberg, R., Carney, R., and Moore, K.A. (2015), "Key "Soft Skills" that foster
19 Youth Workforce Success: Toward a Consensus Across Fields", available at:
20 [https://www.childtrends.org/publications/key-soft-skills-that-foster-youth-workforce-
21 success-toward-a-consensus-across-fields](https://www.childtrends.org/publications/key-soft-skills-that-foster-youth-workforce-success-toward-a-consensus-across-fields).
22
23

24 Lundeberg, M.A., Fox, P.W., and Puncchohar, J. (1994), "Highly confident but wrong: Gender
25 differences and similarities in confidence judgments", *Journal of Educational Psychology*,
26 Vol. 86 No. 1, pp. 114-121.
27

28 Masson, J. R. and Fetsi, A. (2007). "Human Capital and Education Reforms in the Western
29 Balkans", in Fetsi, A. (ed), *Labour Markets in the Western Balkans: Challenges for the
30 Future*, Office for Official Publications of the European Communities, Luxembourg, pp. 71-
31 110.
32

33 Mayo, M. (2016), "The gender gap in feedback and self-perception", available at:
34 <https://hbr.org/2016/08/the-gender-gap-in-feedback-and-self-perception>.
35

36 McKinsey and Company (2012), "The state of human capital 2012: false summit – why the
37 human capital function still has far to go", Research Report No. R-1501-12-RR, McKinsey
38 and Company.
39

40 McMurray, S., Dutton, M., McQuaid, R. and Richard, A. (2016), "Employer demands from
41 business graduates", *Education + Training*, Vol. 58 No. 1, pp. 112-132.
42

43 Mitchell, G.W., Skinner, L.B. and White, B.J. (2010), "Essential soft skills for success in the
44 twenty-first century workforce as perceived by business educators", *The Journal of
45 Research in Business Education*, Vol. 52 No. 1, p. 43.
46

47 Moss, P. and Tilly, C. (2001), "Stories Employers Tell: Race, Skill, and Hiring in America",
48 *Russell Sage Foundation*.
49

50 Muzio, E., Fisher, D.J., Thomas, E. R. and Peters, V. (2007), "Soft skills quantification (SSQ)
51 for project manager competencies: improved approach to incorporate uncertainty using
52 Bayesian networks", *Project Management Journal*, Vol. 38 No. 2, pp. 30-38.
53

54 Nauffal, D. and Skulte-Ouass, J. (2018), "Quality higher education drives employability in
55 the Middle East", *Education + Training*, Vol. 60 No. 9, pp. 1057-1069.
56

57 Nickson. D., Warhurst, C., Commander, J., Hurrell, S. and Cullen, A.M. (2012), "Soft skills
58 and employability: evidence from UK Retail", *Economic and Industrial Democracy*, Vol. 3
59 No. 1, pp. 62-81.
60

1
2
3 Nilsson, S. (2010), "Enhancing employability: The perspectives of engineering graduates",
4 *Education + Training*, Vol. 52 No. 6/7, pp. 540-551.

5
6 Nunnally, J.C. (1978), "Psychometric theory", in 2nd (Ed), McGraw-Hill, New York.

7
8 Nusrat, M. and Sultana, N. (2019), "Soft skills for sustainable employment of business
9 graduates of Bangladesh", *Higher Education, Skills and Work-Based Learning*, Vol. 9 No.
10 3, pp. 264-278.

11
12 OECD, PISA (2015), Results (Volume V): Collaborative Problem Solving,
13 <http://www.oecd.org/education/pisa-2015-results-volume-v-9789264285521-en.htm>

14
15 Oladokun, S.O. and Gbadegesin, J.T. (2017), "Adequacy of core knowledge and soft skills
16 in the performance of professional employees of real estate firms in Nigeria", *Property*
17 *Management*, Vol. 35 No. 2, pp.132-149.

18
19 Orlando P. (2013), "Soft Skills: From University to the Work Environment. Analysis of a
20 Survey of Graduates in Portugal", *Regional and Sectoral Economic Studies*, Vol. 13 No. 1,
21 pp. 105-118.

22
23 Pandey, M. and Pandey, P. (2015), "Global employability of unemployed youth through
24 soft skills", *International Journal of Multidisciplinary Approach and Studies*, Vol. 2 No. 2,
25 pp. 73-77.

26
27 Pitan, O.S. (2017), "Graduate employees' generic skills and training needs", *Higher*
28 *Education, Skills and Work-Based Learning*, Vol. 7 No. 3, pp. 290-303.

29
30 Poon, J. (2012), "Real estate graduates' employability skills: The perspective of human
31 resource managers of surveying firms", *Property Management*, Vol. 30 No. 5, pp. 416-434.

32
33 Ramlan, R. and Ngah, S. (2015), "Student perception on the importance of soft skills for
34 education and employment", *PEOPLE: International Journal of Social Sciences*,
35 *International Journal of Social Sciences*, Vol. 1 No. 1, pp. 696-708.

36
37 Ramli, A., Nawawi, R., Poh, M. and Chun, P. (2010), "Employees' Perception of
38 Employability Skills Needed in Today's Workforce among Physiotherapy Graduates",
39 *Procedia Social and Behavioral Sciences*, Vol. 7 No. C, pp. 455-463.

40
41 Rao, M.S. (2014), "Enhancing employability in engineering and management students
42 through soft skills", *Industrial and Commercial Training*, Vol. 46 No. 1, pp.42-48.

43
44 Robles, M. (2012), "Executive Perceptions of the Top 10 Soft Skills Needed in Today's
45 Workplace", *Business Communication Quarterly*, Vol. 75 No. 4, pp. 453-465.

46
47 Saunders, V. and Zuzel, K. (2010), "Evaluating Employability Skills: Employer and Student
48 Perceptions", *Bioscience Education*, Vol. 15 No. 1, pp. 1-15.

49
50 Seetha, N. (2014), "Are Soft skills important in the workplace? A preliminary investigation
51 in Malaysia", *International Journal of Academic Research in Business and Social Sciences*,
52 Vol. 4 No. 4, pp. 44-56.

53
54 Sethi, D. (2018), "Self-facilitation framework for developing soft skills - FSIAR",
55 *Development and Learning in Organizations: An International Journal*, Vol. 32 No. 6, pp. 5-
56 7.
57
58
59
60

1
2
3 Singh, A. and Jaykumar, P. (2019), "On the road to consensus: key soft skills required for
4 youth employment in the service sector", *Worldwide Hospitality and Tourism Themes*, Vol.
5 11 No. 1, pp. 10-24.

6
7 Stapleton, K. (2017), "Inside the world's largest higher education boom", available at:
8 <https://www.statista.com>
9

10 Stevens, M.J. and Campion, M.A. (1999), "Staffing work teams: development and validation
11 of a selection test for teamwork settings", *Journal of Management*, Vol. 25 No. 2, pp. 207-
12 228.

13
14 Succi, C. and Canovi, M. (2019), "Soft skills to enhance graduate employability: comparing
15 students and employers' perceptions", *Studies in Higher Education*,
16 <https://doi.org/10.1080/03075079.2019.1585420>.

17
18 Succi, C. and Wieandt, M. (2019), "Walk the talk: soft skills' assessment of graduates",
19 *European Journal of Management and Business Economics*, Vol. 28 No. 2, pp. 114-125.

20
21 Sustain, C.R. and Hastie, R. (2014), "Great teams need social intelligence, equal
22 participation and more women", *Harvard Business Review*, available at:
23 [https://www.linkedin.com/pulse/forget-myers-briggs-b-build-great-team-focus-factor-
24 c-cass-sunstein?trk=prof-pos](https://www.linkedin.com/pulse/forget-myers-briggs-b-build-great-team-focus-factor-c-cass-sunstein?trk=prof-pos).

25
26 Swiatek, J. (2000), "Student and Employer Expectation", available at:
27 www.ineer.org/Events/ICEE2000/proceedings/title_index.htm (accessed January
28 2008).

29
30 Taylor, E. (2016), "Investigating the perception of stakeholders on soft skills development
31 of students: Evidence from South Africa", *Interdisciplinary Journal of e-Skills and Life Long
32 Learning*, Vol. 12 No. 1, pp. 1-18.

33
34 Tempone, I., Kavanagh, M., Segal, N., Hancock, P., Howieson, B. and Kent, J. (2012),
35 "Desirable generic attributes for accounting graduates into the twenty-first century: the
36 views of employers", *Accounting Research Journal*, Vol. 25 No. 1, pp. 41-55.

37
38 Teng, W., Ma, C., Pahlevansharif, S. and Turner, J.J. (2019), "Graduate readiness for the
39 employment market of the 4th industrial revolution: The development of soft
40 employability skills", *Education + Training*, available at: [https://doi.org/10.1108/ET-07-
41 2018-0154](https://doi.org/10.1108/ET-07-2018-0154).

42
43 Toremén, F., Karakuş, M. and Yasan, T. (2009), "Total quality management practices in
44 Turkish primary schools", *Quality Assurance in Education*, Vol. 17 No. 1, pp.30-44.

45
46 Truong, H. and Laura, R. (2015), "Essential Soft Skills for Successful Business Graduates
47 in Vietnam", *Sociology Study*, Vol. 5 No. 10, pp. 759-763.

48
49 Turek, K. and Perek-Bialas, J. (2013), "The role of employers opinions about skills and
50 productivity of older workers: example of Poland", *Employee Relations*, Vol. 35 No. 6, pp.
51 648-664.

52
53 US Chamber of Commerce Foundation (2016), "Bridging the Soft Skills Gap", available at:
54 <https://www.uschamberfoundation.org/reports/soft-skills-gap>.

1
2
3 Van den Broeck, A., Schreurs, B., Guenter, H. and Emmerik I.J.H. (2015), "Skill utilization
4 and well-being: a cross-level story of day-to-day fluctuations and personal intrinsic
5 values", *Work & Stress*, Vol. 29 No. 3, pp. 306-323.
6

7 Van Emmerik, I.J.H., Schreurs, B., De Cuyper, N., Jawahar, I.M., and Peeters, M.C.W. (2012),
8 "The Route to Employability: Examining Resources and the Mediating Role of Motivation",
9 *Career Development International*, Vol. 17 No. 2, pp. 104-19.
10

11 Wesley, S.C., Jackson, V.P. and Lee, M. (2017), "The perceived importance of core soft skills
12 between retailing and tourism management students, faculty and businesses", *Employee*
13 *Relations*, Vol. 39 No. 1, pp. 79-99.
14

15 Wickramasinghe, V. and Perera, L. (2010), "Graduates', university lecturers' and
16 employers' perceptions towards employability skills", *Education + Training*, Vol. 52 No. 3,
17 pp. 226-244.
18

19 Ziegler, R. (2007), "Student perceptions of "soft" skills in mechanical engineering", paper
20 presented at the International Conference on Engineering Education - ICEE 2007,
21 September 3 - 7, Coimbra, Portugal.
22
23
24
25
26
27
28
29
30
31
32
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