check for updates

ASSESSING THE SOFT SKILLS NEEDS OF TEACHER EDUCATION STUDENTS

Ali I. AlHouli[1+]
Abdul Kareem A. Al-Khayatt[2]

[1,2]*PhDs, College of Education, Kuwait University, Kuwait.*
[1]*Email: ali.ismail.kuniv@gmail.com Tel: +96592252856*
[2]*Email: kayyat2@hotmail.com Tel: +96567732760*

(+ Corresponding author)

ABSTRACT

The current study was undertaken to assess the soft skills needs of student teachers at Kuwait University, which led to the authors developing a two-part Likert-type questionnaire. The first part covered 49 soft skills categorized into five skills dimensions: employability, study, social, self-control, and problem-solving. The second part included five different approaches to acquiring soft skills. The results reveal that the medium–high level of need among the respondents for all 49 soft skills and their preference for all 5 acquisition approaches. These findings in the Kuwaiti context correspond to those of similar studies conducted in different locations, which indicates geographical consistency in the soft skills needs of college students. It is thus recommended that future research should focus on investigating the most effective approaches to acquiring soft skills.

Contribution/Originality: The current study's primary contribution is revealing that the real need among college students for acquiring the required soft skills. In addition, the consistency between the results this and similar studies in other countries can inform future research into college and teacher education.

1. INTRODUCTION

Universities are academic-focused, providing solely professional training and information t the expense of other important skills. However, most graduates encounter challenges in their professional careers that require life, also known as soft, skills, which are essential not only for successful professional but also personal lives; Patacsil and Tablatin (2017) thus argued that soft skills should be incorporated into academic programs. In fact, the United Nations Children's Fund (2012) stated that soft, specifically interpersonal and psychological, skills assist individuals with effective communication and informed decision-making, as well as developing the self-management and coping skills required for general well-being and a good quality of life. Moreover, other researchers have found that soft skills enhance constructive and positive personal development (Sandhu, 2014), self-esteem and mental health (Rahmanpour, Teimori, & Momeni Mehmooee, 2011; Sajedi, Attashpour, Kamkar, & Samsam, 2009), and critical-thinking skills (Dixon, Cassady, Cross, & Williams, 2005; Moore, 2004) among students.

In addition, the acquisition of soft skills improves students' communication skills, self-confidence, flexibility (Bob & Roisin, 2010), decision-making abilities, and contribution to society (Francis, 2007). Consequently, to prepare students for modern-day challenges, a range of appropriate opportunities and challenges that encourage the development of high-level soft skills as well as the acquisition of knowledge should be provided during study years. This has implications for teacher education and training, though: Kumari (2014) concluded that little tangible instruction in soft skills was provided as part of teacher education programs, the study of Malaysian novice teachers

416

by Ngang, Hashim, and Yunus (2015) discovered a gap between teacher training programs and the soft skills required in the workplace.

1.1. Study Problem

Due to the importance and benefit of soft skills for students, increasingly, researchers are exploring these skills and students skill levels in different geographical locations. Nevertheless, the soft skills needs of students in Kuwaiti higher education institutions, particularly at the College of Education, Kuwait University (KU), have not yet been assessed. There is therefore a responsibility to investigate the problem.

1.2. Study Aim

The aim of this study is to assess the soft skills needs of student teachers at the College of Education, KU and to identify their preferred approaches to acquiring these skills.

1.3. Research Questions

Q1. What is the level of soft skills need among KU student teachers in terms of: (1.1) employability skills, (1.2) study skills, (1.3) social skills, (1.4) self-control skills, and (1.5) problem-solving skills?

Q2. Is there a statistically significant relationship between the level of soft skills need among KU student teachers and whether they are arts or science majors?

Q3. Is there a statistically significant relationship between the level of soft skills need among KU student teachers and whether they are freshmen/sophomores or juniors/seniors?

Q4. Which approaches to the acquisition of soft skills are preferred by KU student teachers?

1.4. Significance of Study

This study will help student teachers identify the soft skills most needed for success at college and in their future careers. It will also benefit policymakers in schools of education by highlighting appropriate ways to improve the opportunities for students to acquire soft skills as well as the content of direct and indirect teacher education curricula. In addition, it will assist other researchers in using or modifying the study instrument in investigating soft skills further.

1.5. Operational Definitions of the Terms Used in this Study

1.5.1. Soft Skills

Soft skills are non-technical, non-academic competencies that support their performance in academic and career settings or specific social contexts. The competencies investigated in this study are employability, study, social, self-control, and problem-solving skills needed by students at the College of Education, KU to succeed in college, their future workplace, and personal lives.

1.5.2. Year of Study

This term indicates the academic year that students have reached at university: freshman, sophomore, junior, or senior, categorized into the freshmen/sophomores and juniors/seniors groups.

1.5.3. Student Teachers

This term refers to students enrolled at KU's College of Education.

1.5.4. Arts Majors

Arts majors at KU prepare students to become teachers of Islamic education, Arabic, and social studies.

1.5.5. Science Majors

Science majors at KU prepare students to become teachers of science and mathematics.

1.5.6. Student Teachers' Soft Skills

This term refers to the skills needed by student teachers to make the most of their achievements in college and to be successful in their future careers and lives.

1.5.7. Acquisition Approaches

This term refers to the ways of learning or acquiring soft skills.

2. THEORETICAL BACKGROUND AND LITERATURE

2.1. Names, Categories, and Functions of Soft Skills

Soft skills are known by various other namesl: transferable skills, basic skills, core skills, generic skills, key skills, employability skills (Tran, 2013), functional skills (Brolin & Loyd, 2004), 21st Century skills, life skills, career skills, social–emotional skills (Kamenetz, 2015), and thinking disposition (Claxton, Costa, & Kallick, 2016).

In 1997, the World Health Organization (WHO) outlined a core set of ten soft skills: self-awareness, empathy, critical thinking, creative thinking, decision-making, problem-solving, effective communication, interpersonal relationship skills, stress-coping techniques, and emotion-focused coping techniques. According to Mangrulkar, Whitman, and Posner (2001), soft skills can be sorted into three general categories: (1) social or interpersonal skills (communication, negotiation, assertiveness, cooperation, and empathy), (2) cognitive skills (problem-solving, understanding consequences, decision-making, critical thinking, and self-reflection), and (3) emotion-focused coping skills (stress management, emotional self-regulation, self-management, and self-monitoring). They demonstrated how each category complements, overlaps, and reinforces the others.

Rakhi, Licy, and Hafiz (2011) revealed how psychosocial and interpersonal abilities within the soft skills enable better decision-making when problem-solving, critical thinking, effective communication, healthier relationships, empathy, and a healthier and more productive approach to everyday challenges. Likewise, Wentz (2012) agreed that individuals use soft skills to think creatively, solve problems, empathize, lead, and communicate. However, there is no consensus on the description rather than function of soft skills (Arat, 2014).

In 2000, the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2000) published a report offering a conceptual basis for a soft skills approach to education. It not only reinforces the definition of soft skills as psychosocial abilities but also proposes an educational framework in which soft skills are grouped into four categories:

1. Cognitive (learning to know), such as critical thinking, decision-making, and problem-solving.
2. Self-management (learning to be), such as self-awareness, self-confidence, self-esteem, and coping skills.
3. Good citizenship (learning to live together), such as living and working with others, using the interpersonal and social skills of communication, negotiating, assertiveness, cooperation, and empathy.
4. Practical (learning to do), such as manual or physical actions that display gross and fine motor skills or control of tools and machines and the like.

Mofrad, Foong, Koh, and Uba (2013), having investigated soft skills among undergraduates at Subang Jaya University in Malaysia, later developed the Life-Skills Development Inventory—College Form, which identified four domains for soft skills: (1) interpersonal communication, (2) decision-making, (3) health maintenance, and (4) identity development.

Meanwhile, Subasree and Radhakrishnan (2014) developed a soft skills assessment scale to explore adolescents' soft skills. This study, by means of 100 items, measured ten dimensions social skills: self-awareness, empathy,

effective communication, interpersonal relationship skills, creative thinking, critical thinking, decision-making, problem-solving, emotion-focused coping skills, and stress-coping skills.

2.2. Dimensions of Soft Skills Used in this Study

The current study explores the following dimensions of soft skills: (1) employability, (2) study, (3) social, (4) self-control, and (5) problem-solving.

2.2.1. Employability Skills

Employability is the qualities and skills that help an individual to gain employment (Yorke, 2004) and maintain a good level of performance in their job (Robinson, 2000). Two studies, conducted in Portugal and the northeast of the USA, found a discrepancy between graduates' perceptions of the soft skills they acquired at college and those required in the workplace (Pereira, 2013; Stewart, Wall, & Marciniec, 2016). Furthermore, another study conducted in the southeast of the USA discovered that graduates lacked the soft skills, especially communication skills, needed to succeed in the workplace (Meeks, 2017).

Indeed, Bartel (2018) emphasized that soft skills, attitudes, and behavior, including verbal and nonverbal skills, enable sound critical decision-making by individuals and teams. Such cooperation and positive benefits inevitably carries over into the workplace, throughout the day, and into the personal lives of individuals with these skills.

2.2.2. Study Skills

A serious concern of both students and their parents is successfully completing their college course and obtaining a degree. Good study skills have been shown by several studies to be crucial to achieving a good cumulative grade point average (GPA; thus, a positive relationship exists between academic success and study skills (Rahim & Meon, 2013).

2.2.3. Social Skills

Those individuals with more well-developed social skills tend to view life experiences as challenges rather than adversarial punishments" (Segrin, Hanzal, Donnerstein, Taylor, & Domschke, 2007). It has also been found that there is a positive relationship conscientiousness and job performance among those with a higher level of social skills (Witt & Ferris, 2003). In fact, these skills are among the most important indicators of an individual's social competence: enabling individuals to build, develop, and nurture important relationships with other individuals and within the wider community (Beauchamp & Anderson, 2010); and positively influencing with one's peers in professional, and academic settings (Gresham, Elliott, Vance, & Cook, 2011). In contrast, a lack of social skills can lead to dissatisfaction, isolation, low self-confidence, melancholy, and an inability to cope (Ozben, 2013). Thus, positive associations have been observed between social skills and life satisfaction skills (Malinauskas, Dumciene, & Lapeniene, 2014), while Fleischmann (2013) found that schoolteachers in the Western Cape, South Africa, with interpersonal soft skills proved to be excellent.

2.2.4. Self-Control Skills

According to DeLisi (2015), self-control is an individual's ability to manage their behavior, emotions, and desires under stress, and thus function better in society. Learning behavioral self-control and secondary coping skills is important for an individual to regulate or suppress negative behaviors in the absence of any external restraints (Ronen, 2003). As a negative association has been observed between self-control and violence—developing lack of self-control can result in violent behavior (Agbaria, 2014; Agbaria & Ronen, 2010; Denson, Capper, Oaten, Friese, & Schofield, 2011)—it is imperative for individuals to exercise self-control to accomplish their goals and resist potentially destructive impulses (Timpano & Schmidt, 2013). As a result, studies have been

undertaken among college students: Erozkan (2013) explored the emotional intelligence and coping soft skills among undergraduates at Muglah Sitki Kocman University, Turkey, discovering that the greater the former, the greater the latter, even in stressful situations; and Allen & Glanzer (2017) examined how college students perceived and understood the development of their self-control.

2.2.5. Problem-Solving Skills

Problem-solving skills, based on cognitive-affective processes, enhance an individual' ability to effectively with daily challenges and social stressors (Yigiter, 2013). These skills are also vital for a leader to find creative solutions to novel and extraordinary organizational problems (Mumford, Zaccaro, Connelly, & Marks, 2000).

2.3. Importance of Soft Skills for College Students

Developing soft skills can provide important character-building qualities: self-esteem, social capacity, empathy, critical thinking, and problem-solving and informed decision-making, including being open and willing to revise solutions and choices as and when required.

Consequently, appropriate soft skills enable individuals to adapt positively to life's challenges (World Health Organization, 1997)by offering a comprehensive framework that transcends varied range of life issues: substance abuse, good citizenship, national identity, sexual health and well-being, the building a support network, preparing for the future, and anger management (Ozmete, 2011). Hence, the young can develop into responsible and productive adults capable of dealing with everyday challenges (Hanbury & Malti, 2011), and those with higher levels of soft skills will be better at problem-solving and securing employment (Gladwell, 2011).

Moreover, Patil, Mitra, and Mhavan (2013) noted that soft skills help adolescents integrate knowledge, opinions, and values into healthy behaviors that become second nature; otherwise, they may experience difficulties with decision-making and isolation in dealing with life's stressors in future (Mofrad et al., 2013). Arat (2014) similarly concluded that soft skills benefitted university students through creativity, problem-solving, interpersonal communication, and writing and speaking skills *before* embarking on their careers, better preparing them for the inevitable challenges they will face in their personal and professional lives. Likewise, Rendevski and Abdelhadi (2017) observed that physics students at the United Arab Emirates Higher Colleges of Technology with soft skills performed better.

2.4. Soft Skills for Teachers and Teacher Education Students

Recently, several studies have investigated the level of soft skills among students. Patil et al. (2013) revealed that awareness programs enhanced levels of soft skills among student teachers, with Pachauri and Yadav (2014) observing its importance in teacher education programs, in addition to different ways to acquire these skills, in India. However, Hadiyanto et al. (2017) revealed that student teachers of English as a foreign language (EFL) in Jambi, Indonesia, possessed only a medium-level of soft skills, which were not well-integrated or well-practiced. Furthermore, a more recent study by Nwagu, Enebechi, and Odo (2018) found that the levels of self-control among students at a Nigerian college of education were lower than recommended and needed for a good deal of improvement.

Research has also been conducted into the level of soft skills among working teachers. In Western Cape, South Africa, those who possessed soft as well as technical skills were regarded as excellent teachers (Fleischmann, 2013). Similarly, improvements in Thai schoolteachers' soft skills enhanced their work performance, and led to better learning outcomes for their students (Somprach, Popoonsak, & Sombatteera, 2014). Moreover, a study of graduate teachers from five public universities in Malaysia revealed insufficient soft skills learning and training to support them in their workplaces (Ngang, Yunus, & Hashim, 2015). Furthermore, a study of secondary schoolteachers in Kottayam District, India showed how the association between soft skills and accountability indicated soft skills

training to be essential for both pre-and in-service teachers (Kumari, 2014). Finally, a study conducted in Cimahi, Indonesia discovered that mathematics teachers generally exhibited medium–level soft skills (Hendriana, 2017).

2.5. Approaches to Soft Skills Acquisition

A review of the literature uncovered several approaches and methods to help college students acquire soft skills: (1) direct or explicit teaching (Curry, Eakin, Evans, & Forbes, 2006); (2) integrating soft skills into academic studies (Tran, 2013) (3) extramural group and individual college activities and interactions (Meyers, 2011); (4) project-based learning (PBL) (Wurdinger & Qureshi, 2014); (5) informal interactions and exchanges of ideas in relaxed settings (Meyers, 2011); (6) cooperative learning activities, especially for cognitive and social skills (Booysen & Grosser, 2013); (7) writing programs in an internet-based environment(Al Sharadgah, 2014; Grafstein, 2007); and (8) non-academic activities, such as sports, art projects, and voluntary work (Arat, 2014).

3. MATERIALS AND METHODS

3.1. Population and Sample

The target population comprised all the students enrolled at the College of Education, KU for the 2019/2020 academic year (N = 5,516), from which 1,083 student teachers were selected as participants using a stratified random sampling technique: 288 men and 795 women; 437 science majors and 646 arts majors; 642 freshmen/sophomores and 441 juniors/seniors (see Table 1).

Table-1. Participants' characteristics (N = 1,083).

Characteristic		N	%
Gender	Male	288	26.6
	Female	795	73.4
Majors	Science	437	40.4
	Arts	646	59.6
Year of study	Freshman/Sophomore	642	59.3
	Junior/Senior	441	40.7

3.2. Study Instrument

The study instrument, a two-part questionnaire, was developed by the authors following a literature reviews. Part one consisted of two sections: demographics and soft skills. The demographics section determined the student teachers' gender, major, and year of study, while the soft skills section identified their need for soft skills, comparing it with their own perceptions. This second section comprised items covering the five skill dimensions: (1) employability (nine items); (2) study (ten items); (3) social (ten items); (4) self-control (ten items); and (5) problem-solving (ten items), for which each respondent reported their level of need on a 3-point Likert-type scale (1 = Low, 2 = Medium, and 3 = High). Part two included five items focused on different approaches to acquiring soft skills, with respondents again indicating their preferred approaches on a 3-point Likert-type scale.

3.2.1. Validity of the Instrument

At the initial stage of developing the questionnaire, the content and face validities were verified by an expert panel from the Departments of Curriculum and Instruction, and Educational Psychology at the College of Education, KU, whose feedback clarified the wording of some of the items. The concurrent validity was demonstrated by the significant correlation scores ($p < 0.01$) between the student teachers' perceived level of need for soft skills and preferred approaches to their acquisition (see Table 2).

Table-2. Pearson correlation coefficients.

Skills/Acquisition	1 Job	2 Study	3 Social	4 Self-control	5 Problem-solving	6 Total	7 Acquisition approach
1 Job	1	0.552^{**}	0.461^{**}	0.503^{**}	0.357^{**}	0.664^{**}	0.120^{**}
2 Study	0.552^{**}	1	0.633^{**}	0.706^{**}	0.464^{**}	0.794^{**}	0.185^{**}
3 Social	0.461^{**}	0.633^{**}	1	0.462^{**}	0.294^{**}	0.650^{**}	0.260^{**}
4 Self-control	0.503^{**}	0.706^{**}	0.462^{**}	1	0.766^{**}	0.893^{**}	0.278^{**}
5 Problem-solving	0.357^{**}	0.464^{**}	0.294^{**}	0.766^{**}	1	0.850^{**}	0.352^{**}
6 Total	0.664^{**}	0.794^{**}	0.650^{**}	0.893^{**}	0.850^{**}	1	0.336^{**}
7 Acquisition approach	0.120^{**}	0.185^{**}	0.260^{**}	0.278^{**}	0.352^{**}	0.336^{**}	1

Note: ** $p < 0.01$ (two-tailed).

3.2.2. Reliability of the Instrument

Cronbach's alpha was calculated to test the reliability of the two-part questionnaire, and as can be seen in Table 3, the coefficients for each dimension proved reliability was good.

Table-3. Reliability coefficients.

No.	Dimension	Reliability
1	Employability skills	0.818
2	Study skills	0.850
3	Social skills	0.702
4	Self-control skills	0.962
5	Problem-solving skills	0.747
	Total (49) items	0.667
	Acquisition approaches	0.784

3.3. Data Collection and Analysis

The questionnaire was distributed by the authors to groups of participants in their lectures, when the purpose of the questionnaire and how to use the Likert-type scales to respond to items were explained verbally. The data collected were analyzed using IBM® SPSS® Statistics V23.0 and the descriptive statistics, Pearson's correlation coefficient, Cronbach's alpha, and chi-square calculated.

3.4. Limitations of the Study

The main limitations of this current study are that it surveyed student teachers at KU during the 2019/2020 academic year only and employed a survey instrument developed by the researchers. A larger sample population should be surveyed over a longer period, the study instrument adopted by other researchers, in future studies to verify these findings.

4. RESULTS

4.1. Findings Related to the First Research Question

These findings relate to the level of student teachers' self-reported need for soft skills, as indicated on a 3-point Likert-type scale with equal 0.6 intervals in-between each point. The ranges adopted for the mean values were:

1. 1.0–1.6 indicating a low level of need.

2. 1.7–2.3 indicating a medium level of need.

3. 2.4–3.0 indicating a high level of need.

Tables 4–8 present the results of the nine items covering the fist skill dimension.

Q1.1 What is the level of student teachers' need for employability skills?

Table-4. Student teachers' need for employability skills.

No.	Item	Mean	Std. deviation	Rank	Level of need
1	Teamwork and collaboration	2.28	0.730	7	Medium
2	Organizational skills according to task	2.54	0.711	1	High
3	Effective verbal and nonverbal communication at all levels	2.47	0.652	2	High
4	Resourcefulness	2.41	0.653	4	High
5	Flexibility and adaptability in face of change	2.43	0.770	3	High
6	Continuing professional development strategy	2.33	0.746	5	Medium
7	IT skills	2.15	0.860	8	Medium
8	Skill in negotiation and persuasion	2.30	0.833	6	Medium
9	Maintaining up-to-date paper or digital employment skills portfolio	1.94	0.762	9	Medium
Total job skills		2.32	0.182		Medium

Table 4 shows that the highest level of need is for developing organizational skills specific to each task (mean = 2.54). The lowest, albeit medium, level of need is for maintaining an up-to-date paper or digital employment skills portfolio (mean = 1.94). The overall level of need for employability skills is medium for this sample population(mean = 2.32).

Q1.2 What is the level of student teachers' need for study skills?

Table-5. Student teachers' need for study skills.

No.	Item	Mean	Std. deviation	Rank	Level of need
1	Active listening strategies	2.51	0.718	2	High
2	Prioritization and time management strategies	2.58	0.532	1	High
3	Revision and preparation for tests and exams	2.44	0.808	3	High
4	Memory and recall enhancement strategies	2.35	0.681	5	High
5	Use of apps (computer programs for learning	2.43	0.674	4	High
6	Study group participation	1.82	0.735	10	Medium
7	Note-taking techniques	2.14	0.867	7	Medium
8	Effective reading techniques	2.32	0.777	6	Medium
9	Good writing techniques	2.07	0.845	9	Medium
10	Oral presentation skills	2.09	0.833	8	Medium
Total study skills		2.28	0.238		Medium

Likewise, as shown in Table 5, the need for study skills among the respondents is at a medium level (mean =2.28). The highest levels of need are for, first, prioritization and time management strategies (mean = 2.58) and, second, active listening strategies (mean = 2.51), while with the lowest mean value (1.82), there is a medium level of need for study group participation.

Q1.3 What is the level of student teachers' need for social skills?

As can be seen in Table 6, the level of need ranged from medium for learning methods for nurturing good relationships (mean = 1.84) and responsibility competency (mean = 1.94) to high for respecting and holding a positive attitude toward diversity (mean = 2.59). Once more, an overall medium level of need for social skills.

Q1.4 What is the level of student teachers' need for self-control skills?

Table-6. Student teachers' need for social skills.

No.	Item	Mean	Std. deviation	Rank	Level of need
1	Respecting and holding a positive attitude toward diversity	2.59	0.506	1	High
2	Conflict resolution	2.47	0.681	3	High
3	Strong interpersonal communication skills	2.19	0.868	7	Medium
4	Social-behavior adjustment abilities	2.48	0.788	2	High
5	Responsibility competency	1.94	0.763	9	Medium
6	Building peer relationships	2.43	0.670	4	High
7	Learning and applying social justice principles	2.36	0.656	5	Medium
8	Developing community and group cohesion	2.27	0.793	6	Medium
9	Developing effective leadership	2.00	0.846	8	Medium
10	Learning methods for nurturing good relationships	1.84	0.752	10	Medium
	Total social skills	2.26	0.256		Medium

Table-7. Student teachers' need for self-control skills.

No.	Item	Mean	Std. deviation	Rank	Level of need
1	Anxiety- and stress-coping strategies	2.55	0.690	2	High
2	Resilience to criticism	2.45	0.648	5	High
3	Self-restraint	2.49	0.795	4	High
4	Learned optimism	2.54	0.703	3	High
5	Enhancing self-confidence and self-esteem	2.04	0.836	8	Medium
6	Anger management strategies	2.27	0.787	6	Medium
7	Strengthening spirituality	2.60	0.501	1	High
8	Relaxation techniques	2.15	0.869	7	Medium
9	Willpower in face of negative incentives	1.78	0.714	10	Medium
10	Priority-setting techniques	2.01	0.854	9	Medium
	Total self-control skills	2.29	0.281		Medium

Table 7 shows a high level of need for half of the self-control skills and medium level for the other, with a medium level of need overall (mean = 2.29). The highest need is for strengthening spirituality (mean = 2.60), and the lowest, but medium, for willpower in face of negative incentives (mean = 1.78).

Q1.5 What is the level of student teachers' need for problem-solving skills?

Table-8. Student teachers' need for problem-solving skills.

No.	Item	Mean	Std. deviation	Rank	Level of need
1	Identifying problem accurately by splitting it into subproblems	2.55	0.692	1	High
2	Enhancing brainstorming abilities	2.55	0.689	1	High
3	Relating new problems to previously successful approaches	2.15	0.869	6	Medium
4	Collecting and applying relevant information sources	2.33	0.666	4	Medium
5	Generating new ideas and creative solutions	2.04	0.836	9	Medium
6	Analyzing and interpreting evidence	2.04	0.837	9	Medium
7	Categorizing information collected	2.29	0.782	5	Medium
8	Examining potential solutions before selecting	2.15	0.868	6	Medium
9	Visualizing and describing the problem's setting	2.15	0.870	6	Medium
10	Dealing with different problems (e.g., day-to-day, academic, and ill-defined)	2.46	0.640	3	High
	Total problem-solving skills	2.27	0.196		Medium

Table 8 reveals that identifying a problem accurately by splitting it into subproblems and enhancing brainstorming abilities joint-highest for level of need (mean = 2.55). Meanwhile, joint-lowest, with a medium level of need, are generating new ideas and creative solutions, and analyzing and interpreting evidence (mean = 2.04). Overall, the respondents' level of need for problem-solving skills is again medium.

Across all five skills dimensions the greatest soft skills needs in this study were: (1) strengthening spirituality (self-control skills, mean = 2.60); (2) respecting and holding a positive attitude toward diversity (social skills, mean = 2.59); and (3) prioritization and time management strategies (study skills, mean = The least were: (47) learning methods for nurturing good relationships (social skills, mean = 1.84); (48) study group participation (study skills, mean = 1.82); and (49) willpower in face of negative incentives (self-control skills, mean = 1.78). Although ranked lowest, these soft skills were not perceived as unnecessary.

4.2. Findings Related to the Second Research Question

These findings relate to whether there is a statistically significant relationship between these student teachers' level of soft skills needs and their major being arts or science.

Table-9. Student teachers' level of need for soft skills according to major.

Scale	Specialization	N	χ^2 value	Two-tailed sig.
Need for soft skills	Arts majors	646	41.529	0.492
	Science majors	437		

Table 9 shows that no such relationship exists regardless of the participants' major (χ^2 = 41.529, p > 0.492).

4.3. Findings Related to the Third Research Question

These findings relate to whether there is a statistically significant relationship between student teachers' level of soft skills needs and their year of study (freshman/sophomore and junior/senior).

Table-10. Student teachers' level of need for soft skills according to year of study.

Scale	Year of study	N	χ^2 value	Two-tailed sig.
Need for soft skills	Freshman/Sophomore	642	47.827	0.248
	Junior/Senior	441		

Table 10 shows no such relationship regardless of their year of study (χ^2 = 47.827, p > 0.248).

4.4. Findings Related to the Fourth Research Question

These findings reveal the participants' preferences of approaches for acquiriing soft skills.

Table-11. Student teachers' preferred approaches to the acquisition of soft skills.

No.	Soft skills acquisition approach	Mean	Std. deviation	Rank	Level of preference
1	Customized training workshops	2.38	0.700	3	Medium
2	Dedicated independent courses	2.52	0.717	1	High
3	Integration with different college courses	2.44	0.671	2	High
4	Integration with university's artistic, sports, and social activities	1.82	0.719	5	Medium
5	General lectures	2.25	0.799	4	Medium

Table 11 shows how these student teachers preferred to acquire soft skills through independent courses (mean = 2.52) the most, and through other non-academic university activities (mean = 1.82) the least.

5. DISCUSSION

The current study's main aim was to determine the level of soft skills needs related to their college education, future careers, and everyday lives perceived by student teachers at KU. Its secondary aim was to identify their preferred approach to acquiring these skills.

5.1. Research Question One

The findings from this study show that KU student teachers had medium–high levels of need for soft skills overall, which corresponds to the findings of Sandhu (2014). It should be remembered that Tran (2013) and Hadiyanto et al. (2017) reported that very few higher education students had acquired a satisfactory level of soft skills for the demands of their future careers.

The results also indicate that the student teachers required soft skills from all five of the dimensions studied: employability, study, social, self-control, and problem-solving skills. This study therefore supports Pereira (2013) and Meeks (2017) for employability skills, Rahim and Meon (2013) for study skills, Fleischmann (2013) and Malinauskas et al. (2014) for social skills, Erozkan (2013), Allen and Glanzer (2017), and Nwagu et al. (2018) for self-control skills.

In descending order, the need for the five skills dimensions was employability, self-control, study, problem-solving, and social, with little difference between each. Of the 49 soft skills within those dimensions, 28 skills were at a medium and 21 at a high level of need.

The current study suggests that the College of Education at KU is either providing insufficient opportunities for students to develop soft skills or, at least, should be paying more attention to their skills levels. Furthermore, as the independent variables of gender, major, and year of study did not affect the results, the same applies to a range of students. The College of Education currently offers an optional life (soft skills) program, but it may be proving inadequate because of either its content, method of instruction, or non-mandatory status. Thus, further research is required to investigate the issue.

5.2. Research Question Two

No difference was observed between the soft skills needs of arts major and science major students in this study. The inference is thus that formal classes across all specialties offer few opportunities for college students to acquire the required soft skills required for future academic and professional success.

5.3. Research Question Three

The finding that no difference existed between KU students' soft skills needs regardless of their year of study suggests that no graduate had acquired the necessary skills for future success—perhaps due to the ineffectiveness of College of Education programs, either academically or socially, or possibly both. Although consistent with Dilekmen, Başçi, and Bektaş (2008), who also reported no significant difference in communication skills between year of study, this study contradicts other studies. Mamak (2013) did discover a significant difference between university students' perceptions of their communication skills according to their study year, while both Selahattin, Temel, and Nas (2012) and Malinauskas et al. (2014) revealed, respectively, that seniors' social skills were above average and better than those of freshmen.

It is surprising that all 49 of the soft skills examined by this study carried a medium–high level of need. It demonstrates that the College of Education must provide more than simply teaching traditional academic and professional knowledge if their student teachers are to acquire the required level of soft skills.

5.4. Research Question Four

In this study, KU student teachers displayed a medium/high preference for all five approaches to acquiring soft skills, which were ranked in descending order: (1) dedicated independent courses; (2) integration with different college courses; (3) customized training workshops; (4) general lectures; and (5) integration with university's artistic, sports, and social activities. These findings confirm those of other studies that investigated similar acquisition approaches (Arat, 2014; Meeks, 2017; Mofrad et al., 2013; Patacsil & Tablatin, 2017; Tran, 2013; Wurdinger & Qureshi, 2014). In addition, Patil et al. (2013) observed that soft skill awareness programs enhanced the skills levels among bachelor's education degree students.

6. CONCLUSIONS

This study reveals that student teachers at KU had a medium–high level of need for the 49 soft skills investigated and that they preferred the five acquisition approaches. The research problem has thus been addressed: KU student teachers are in real need of soft skills. This finding corresponds to those of similar studies conducted in different countries—Australia, Canada, India, Indonesia, Ireland, Lithuania, Malaysia, Nigeria, the Philippines, Portugal, South Africa, Thailand, Turkey, the United Arab Emirates, the USA, and Vietnam—indicating a good level of geographical consistency for college students' and student teachers' soft skills needs. Therefore, future research should focus on the implementation and effectiveness of various approaches to acquiriing soft skills.

6.1. Study Limitations

As this study focuses on student teachers attending the College of Education at KU, the results cannot be directly generalized to students studying other majors in other colleges, at either KU or any other university, since the means of developing soft skills may differ. Likewise, the findings cannot be generalized to soft skills or acquisition approaches other than the 49 skills and 5 approaches investigated in this study.

6.2. Practical Implications

Policymakers, faculty members, and other bodies at KU's College of Education should pay greater attention to the type, development, and improvement of the soft skills acquired by their student teachers. This could be achieved in several ways: (1) early introduction of soft skills (i.e., to freshmen), emphasizing the importance for college and work life; (2) integration of the five acquisition approaches into various programs and activities for student teachers; and (3) workshops or training programs to highlight the importance of soft skills to teaching staff at the College of Education and demonstrate how to include them in their courses.

6.3. Implications for Future Research

It is recommended that similar studies be conducted among different major students, at not only other KU colleges but also other universities, to produce comparable results. In addition, it is important to explore soft skills other than those included in this study here, enabling the level of need for a wide range of soft skills to be determined. Finally, future studies should identify different approaches to acquiring soft skills and examine which are most effective for student teachers.

REFERENCES

Agbaria, Q. A. (2014). Religiosity, social support, self-control and happiness as predictors of violence among Arab adolescents in Israel. *Creative Education, 5*(2), 75-85.Available at: http://doi.org/10.4236/ce.2014.52013.

Agbaria, Q., & Ronen, T. (2010). Self control and a sense of social belonging as moderators of the link between poor subjective wellbeing and aggression among Arab Palestinian adolescents in Israel. *Procedia-Social and Behavioral Sciences, 5*, 1334-1345.Available at: https://doi.org/10.1016/j.sbspro.2010.07.284.

Al Sharadgah, T. A. (2014). Developing critical thinking skills through writing in an internet-based environment. *International Journal of Humanities and Social Science, 4*(1), 169-178.

Allen, C. C., & Glanzer, P. (2017). How college students understand their self-control development: A qualitative analysis. *Journal of College and Character, 18*(3), 187-201.Available at: https://doi.org/10.1080/2194587x.2017.1338580.

Arat, M. (2014). Acquiring soft skills at university. *Journal of Educational and Instructional Studies in the World, 4*(3), 46-54.

Bartel, J. (2018). Teaching soft skills for employability. *TESL Canada Journal, 35*(1), 78-92.Available at: https://doi.org/10.18806/tesl.v35i1.1285.

Beauchamp, M. H., & Anderson, V. (2010). Social: An integrative framework for the development of social skills. *Psychological Bulletin, 136*(1), 39-64.Available at: https://doi.org/10.1037/a0017768.

Bob, L., & Roisin, D. (2010). Using podcasts to support communication skills development: A case study for content format preferences among postgraduate research students. *Computers & Education, 54*(4), 962-971.Available at: https://doi.org/10.1016/j.compedu.2009.09.031.

Booysen, R., & Grosser, M. (2013). The effect of cooperative learning on the thinking skills development of foundation phase learners. *Education as Change, 18*(1), 47-71.Available at: https://doi.org/10.1080/16823206.2013.847010.

Brolin, D. E., & Loyd, R. J. (2004). *Career development and transition services: A functional life skills approach* (4th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice-Hall.

Claxton, G., Costa, A., & Kallick, B. (2016). Hard thinking about soft skills. *Educational Leadership, 37*(6), 60-64.

Curry, C., Eakin, A., Evans, C., & Forbes, P. (2006). Building thinking skills in thinking classrooms ACTS (Activating Children's Thinking Skills) in Northern Ireland. *Teaching, and Learning Research Programme, 18*, 1-4.

DeLisi, M. (2015). *Low self-control is a brain-based disorder. In the Nurture versus Biosocial Debate in Criminology: On the Origins of Criminal Behavior and Criminality; Beaver, K. M., Barnes, J. C., Boutwell, B. B., Eds*: Sage Publications Ltd. Retrieved from: https://www.researchgate.net/publication/273970906_Low_Self-Control_is_a_Brain.

Denson, T. F., Capper, M. M., Oaten, M., Friese, M., & Schofield, T. P. (2011). Self-control training decreases aggression in response to provocation in aggressive individuals. *Journal of Research in Personality, 45*(2), 252-256.Available at: https://doi.org/10.1016/j.jrp.2011.02.001.

Dilekmen, M., Başçi, Z., & Bektaş, F. (2008). Communication skills of the students in the faculty of education. *Ataturk University Journal of Institute of Social Sciences, 12*(2), 223-231.

Dixon, F., Cassady, J., Cross, T., & Williams, D. (2005). Effects of technology on critical thinking and essay writing among gifted adolescents. *Journal of Secondary Gifted Education, 16*(4), 180-189.Available at: https://doi.org/10.4219/jsge-2005-482.

Erozkan, A. (2013). Exploring the relationship between perceived emotional intelligence and coping skills of undergraduate students. *International Journal of Human Sciences, 10*(1), 1537-1549.Available at: https://doi.org/10.1111/j.1365-2850.2007.01059.x.

Fleischmann, E. M. (2013). *Soft skills of excellent teachers in diverse South African schools in the Western Cape*. Unpublished Master's Thesis, Stellenbosch University, South Africa.

Francis, M. (2007). Life skill education. Unpublished article. Retrieved from https://studylib.net/doc/7360186/life-skill-education. [Accessed 07 December 2019].

Gladwell, M. (2011). *Outliers: The story of success*. New York: Back Bay.

Grafstein, A. (2007). Information literacy and technology: An examination of some issues. *Portal: Libraries and the Academy, 7*(1), 51-64.Available at: https://doi.org/10.1353/pla.2007.0006.

Gresham, F. M., Elliott, S. N., Vance, M. J., & Cook, C. R. (2011). Comparability of the social skills rating system to the social skills improvement system: Content and psychometric comparisons across elementary and secondary levels. *Psychology Quarterly, 26*(1), 27-44.Available at: https://doi.org/10.1037/a0022662.

Hadiyanto, H., Mukminin, A., Failasofah, F., Arif, N., Nunung, F., & Habibi, A. (2017). In search of quality student teachers in a digital era: Reframing the practices of soft skills in teacher education. *The Turkish Online Journal of Educational Technology, 16*(3), 71-78.

Hanbury, C., & Malti, T. (2011). *Monitoring and evaluating life skills for youth development.* Switzerland: Jacobs Foundations.

Hendriana, H. (2017). Teachers' hard and soft skills in innovative teaching of mathematics. *World Transactions on Engineering and Technology Education, 15*(2), 145-150.

Kamenetz, A. (2015). Nonacademic skills are key to success. But what should we call them? Retrieved from National Public Radio Education Website: www.npr.org/sections/ed/2015/05/28/404684712/non-academic-skills-are-key-tosuccess-but-what-should-we-call-them. [Accessed 08 December 2019].

Kumari, V. (2014). Soft skills and teacher accountability in the context of quality education. *International Journal of Education and Psychological Research, 3*(1), 78-81.

Malinauskas, R., Dumciene, A., & Lapeniene, D. (2014). Social skills and life satisfaction of Lithuanian first-and senior-year university students. *Social Behavior and Personality: An international journal, 42*(2), 285-293.Available at: https://doi.org/10.2224/sbp.2014.42.2.285.

Mamak, H. (2013). Analysis of communication skills levels of university students who play and do not play sport. *International Journal of Academic Research Part B, 5*(5), 369-372.Available at: https://doi.org/10.7813/2075-4124.2013/5-5/b.57.

Mangrulkar, L., Whitman, C. V., & Posner, M. (2001). *Life skills approach to child and adolescent healthy human development.* Washington, DC: PAHO.

Meeks, G. A. (2017). Critical soft skills to achieve success in the workplace (Doctoral Dissertation, Walden University). Retrieved from: https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=5180&context=dissertations. [Accessed 08 December 2019].

Meyers, S. (2011). Life skills training through situated learning experience: An alternative instructional model. *International Journal of Special Education, 26*(3), 142-149.

Mofrad, S., Foong, C. K., Koh, A. E., & Uba, I. (2013). Life skills development among freshmen students. *International Review of Social Sciences and Humanities, 5*(1), 232-238.

Moore, T. (2004). The critical thinking debate: How general are general thinking skills? *Higher Education Research & Development, 23*(1), 3-18.Available at: https://doi.org/10.1080/0729436032000168469.

Mumford, M. D., Zaccaro, S. J., Connelly, M. S., & Marks, M. A. (2000). Leadership skills: Conclusions and future directions. *The Leadership Quarterly, 11*(1), 155-170.

Ngang, T. K., Hashim, N. H., & Yunus, H. M. (2015). Novice teacher perceptions of the soft skills needed in today's workplace. *Procedia-Social and Behavioral Sciences, 177*, 284-288.Available at: https://doi.org/10.1016/j.sbspro.2015.02.338.

Ngang, T. K., Yunus, H. M., & Hashim, N. H. (2015). Soft skills integration in teaching professional training: Novice teachers' perspectives. *Procedia-Social and Behavioral Sciences, 186*, 835-840.Available at: https://doi.org/10.1016/j.sbspro.2015.04.204.

Nwagu, E., Enebechi, J., & Odo, A. (2018). Self-control in learning for healthy living among students in a Nigerian college of education. *Sage Open, 8*(3), 1-9.Available at: https://doi.org/10.1177/2158244018793679.

Ozben, S. (2013). Social skills, life satisfaction, and loneliness in Turkish university students. *Social Behavior and Personality: An International Journal, 41*(2), 203-213.Available at: https://doi.org/10.2224/sbp.2013.41.2.203.

Ozmete, E. (2011). Building life skills for empowerment of young people: A conceptual analysis. *Hacettepe Üniversitesi Sosyolojik Araştırmalar e- Dergisi, 28 Mart: 1-10.*

Pachauri, D., & Yadav, A. (2014). Importance of soft skills in teacher education programme. *International Journal of Educational Research and Technology, 5*(1), 22-25.

Patacsil, F. F., & Tablatin, C. L. S. (2017). Exploring the importance of soft and hard skills as perceived by IT internship students and industry: A gap analysis. *Journal of Technology and Science Education, 7*(3), 347-368.Available at: https://doi.org/10.3926/jotse.271.

Patil, P., Mitra, G., & Mhavan, N. (2013). Study of life skill's level. *Scholarly Research Journal for Interdisciplinary Studies, Special Issue 9-10 February*.

Pereira, O. P. (2013). Soft skills: from university to the work environment. Analysis of a survey of graduates in Portugal. *Regional and Sectoral Economic Studies, 13*(1), 105-118.

Rahim, N., & Meon, H. (2013). *Relationships between study skills and academic performance*. Paper presented at the 20th National Symposium on Mathematical Sciences AIP Conf. Proc. AIP Publishing, LLC.

Rahmanpour, M., Teimori, S., & Momeni Mehmooee, H. (2011). Examining the effects of life skills training on mental health and self-esteem of fifth-grade female elementary students. *Journal of New Thoughts on Education, 6*, 102-112.

Rakhi, N., Licy, A. D., & Hafiz, M. N. P. (2011). *Theoretical perspectives in sociology*. Malappuram Kerala, India: University of Calicut.

Rendevski, S. J., & Abdelhadi, A. (2017). Teaching and learning soft skills in university physics courses: Perspectives of the UEA higher colleges of technology. *International Journal of Physics & Chemistry Education, 9*(4), 1-8.Available at: https://doi.org/10.12973/ijpce/79192.

Robinson, J. P. (2000). The workplace: A fact sheet. *Alabama Cooperative Extension System, 1*(3), 1-3.

Ronen, T. (2003). *Cognitive- constructivist psychotherapy with children and adolescent*. New York: Kluer Academic/ Plenum Publishers.

Sajedi, S., Attashpour, H., Kamkar, M., & Samsam, S. M. R. (2009). The impact of life skills training on interpersonal relations and self-esteem and self-expression of blind girls. *Knowledge and Research in Applied Psychology, 11*, 96-102.

Sandhu, R. (2014). A study of life skills of pupil teachers. *Indian Journal of Fundamental and Applied Life Sciences, 4*(3), 389-395.

Segrin, C., Hanzal, A., Donnerstein, C., Taylor, M., & Domschke, T. J. (2007). Social skills, psychological well-being, and the mediating role of perceived stress. *Anxiety, Stress, & Cooping: An International Journal, 20*, 321-329.Available at: https://doi.org/10.1080/10615800701282252.

Selahattin, A., Temel, V., & Nas, K. (2012). An exploration of candidate teachers' social skills levels: Age, gender and other differences. *Ovidius University Annals, 12*, 210-215.

Somprach, K., Popoonsak, P., & Sombatteera, S. (2014). Soft skills development to enhance teachers' competencies in primary schools. *Procedia-Social and Behavioral Sciences, 112*, 842-846.Available at: https://doi.org/10.1016/j.sbspro.2014.01.1240.

Stewart, C., Wall, A., & Marciniec, S. (2016). Mixed signals: Do College graduates have the soft skills that employers want? *Competition Forum, 14*(2), 276-281.

Subasree, R., & Radhakrishnan, N. A. (2014). The life skills assessment scale: The construction and validation of a new comprehensive scale for measuring life skills. *Journal of Humanities and Social Science (IOSR-JHSS), 19*(1), 50-58.Available at: https://doi.org/10.9790/0837-19195058.

Timpano, K. R., & Schmidt, N. B. (2013). The relationship between self control deficits and hoarding: A multi-method investigation across three samples. *The Journal of Abnormal Psychology, 122*(1), 13–25.Available at: https://doi.org/10.1037/a0029760.

Tran, T. T. (2013). Limitation on the development of skills in higher education in Vietnam. *Higher Education, 65*(5), 631-644.Available at: https://doi.org/10.1007/s10734-012-9567-7.

UNESCO. (2000). *The Dakar framework for action, education for all: Meetings our collective commitments*. Dakar- Senegal: World Education Forum.

United Nations Children's Fund. (2012). *Global evaluation of life skills education programmes: Final report*. New York: Author.

Wentz, F. H. (2012). *Soft skills training: A workbook to develop skills for employment.* Scotts Valley, CA: Create Space Independent Publishing Platform.

Witt, L., & Ferris, G. (2003). Social skill as moderator of the conscientiousness-performance relationship: Convergent results across four studies. *The Journal of Applied Psychology, 88*(5), 809-821.Available at: https://doi.org/10.1037/0021-9010.88.5.809.

World Health Organization. (1997). *Life skills education for children and adolescents in schools: Introduction and guidelines to facilitate the development and implementation of life skills programmes.* Geneva, Switzerland: World Health Organization.

Wurdinger, S., & Qureshi, M. (2014). Enhancing college students' life skills through project based learning. *Innovative Higher Education, 40*(3), 279-286.

Yigiter, K. (2013). Investigation of the problem solving-skill, self-esteem and preferences of the university students regarding sport and social activity in Turkey. *International Journal of Academic Research Part B, 5*(4), 220-226.

Yorke, M. (2004). *Employability in higher education: What it is – what it is not, learning and employability? Series no 1.* York: Higher Education Academy, LTSN.