

**EMPOWERING EFL STUDENTS WITH 21ST-CENTURY SKILLS AT A SAUDI
UNIVERSITY: CHALLENGES AND OPPORTUNITIES**

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ABSTRACT: *This study aims to examine students' competencies of the 21st century 4Cs skills (Communication, Collaboration, Creativity, and Critical Thinking) among foundation-year students at a Saudi university. A twenty-one-item custom designed questionnaire was utilized to gather quantitative and qualitative data of 379 male and female students. This questionnaire includes two main constructs of self-report and close-ended as well as five open-ended questions. The close-ended questions were analysed through Man-Whitney U on-parametric statistical tests while the open-ended questions were textually analysed for particular themes or shared responses amongst the participants. The findings revealed no statistical significant difference between males and females competencies of the 4Cs skills. However, the frequency analysis of the responses revealed that the participants are still lacking the full potential of the 4Cs skills required to excel in their academic studies and the workplace after graduation. This study has practical implications for curriculum development reforms at higher educational institutions in different contexts to incorporate and integrate designated courses that promote the necessary skills students need to excel during their academic studies and after graduation to achieve current demands of and maintain sustainability in the workplace after graduation.*

KEYWORDS: 21st Century Skills, 4Cs Skills, Competencies, Foundation-Year Students, Saudi Context

INTRODUCTION

The world we live in nowadays has developed rapidly in almost every aspect in our lives over the past decade. The revolution of this development manifests in major economical environments such as technological firms, health sectors, industrial sectors, and even in the workplace. While most of these developments have brought more life facilities to humankind, others have brought challenges. One of these major challenges, for example, exists in the labour market. Consequently, the rapid growth in the job market worldwide, due to technological progress and globalization, results in an increasingly more competitive job application requirement (Kivunja, 2015a). Succeeding in this competitive environment: It is necessary that job applicants meet specific requirements to confront the challenges of the workplace and adapt to its ongoing changes (Carnevale & Smith, 2013). This can be seen in advanced economies, high growth careers and innovative industries and firms that seek skilled and qualified applicants who can easily adapt and successfully contribute to the workplace and meet its expectations. The content knowledge and high GPAs that graduate students receive at higher educational institutions are no longer the only admirable qualifications among employers when evaluating job applications. Therefore, skills advocates believe that it is vital for students to

achieve demanding skills required to survive in the 21st Century (Dede, 2010). Particularly, mastery and competency of specific yet high demanding skills are essential to survive in this modern era. These demanding skills are known as the 21st century skills that revolve around different themes required in the job market. Research highlights communication, both written and verbal, collaboration, and problem-solving skills as the top three demanding skills that regularly recur on most job advertisements in the US (Rios, Ling, Pugh, Baker & Bacall, 2020).

The Statement of the problem

The Saudi context, the central focus of this study, is experiencing rapid changes and developments across the country's different sectors in an aim to meet its strategic blueprint, the Saudi Vision 2030, locally and globally. This vision aims to expand and diversify the country's economical resources by investing in newly proposed services like entertainment and tourism besides the industrial and educational sectors as well as to create more job opportunities for the youth over the upcoming decade (Shabir & Sharma, 2019). Notwithstanding these reforms, the progress has been slow; that is, most of the workplace employers, in both the public and the private sectors, reveal that recent job applicants lack most of the required skills to thrive in the job market (Mishrif & Abdul-Jabbar, 2018; Sharma, 2019). Therefore, integrating these demanding skills in the curriculum of the educational institutions prepare students to achieve a better academic standing and survive in a competitive job market after graduation. Critical thinking, in addition, is one of these top targeted learning skills that are essential to survive in the local job market (Al Zahrani & Elyas, 2017), where this study was conducted. These skills together form the widely coined acronym known as the 4Cs of the 21st century skills. However, research reveals that fresh university graduates lack these demanding skills required in the job market (Shabir & Sharma, 2019). Therefore, this mismatch between the educational outcomes and the workplace requirements results in a gap, which requires a collaborative work between officials in the educational institutions and the labour market sectors.

Rationale of the study

The 4Cs of the 21st century contribute not only on the future of successful employability among fresh university graduates, but also to their academic success during their university education (Kivunja, 2015b; Rios et al., 2020). Yet, lacking these skills among youths increases the likelihood of the unemployment rate in the job market in the Saudi context and elsewhere. Therefore, in order to address this knowledge gap and better understand whether students' are ready in achieving better academic progress as well as meeting the future demands of the workplace, a close investigation in educational institutions was needed. As such, the aim of this study was to explore the competencies of the 21st century skills: communication, collaboration, problem solving and critical thinking among foundation-year students enrolled in an English as a foreign language course (EFL) at King Abdulaziz University (KAU) in Saudi Arabia.

LITERATURE REVIEW

The current literature on the 21st century skills has taken a more central role in educational debates, emphasizing the importance of these skills for students in gaining successful academic achievement during their university-level education and in preparing them for the workplace when seeking their future jobs (Soland, Hamilton, & Stecher, 2013; Tan, Choo, Kang & Liem, 2017). Therefore, higher educational institutions should enhance students' knowledge with these skills besides the content knowledge they receive in different academic fields. The concept of the 21st century skills is not new; it was first initiated in the US in the first decade

of the 21st century in an aim to respond to the labor market demands and promote educational outcomes of these days generation (Pardede, 2020). Different frameworks of the 21st century skills were developed to meet certain demands. However, the framework designed by the Partnership of the 21st century skills (P21) (2009) is widely adopted among educational institutions and job sectors due to its detailed and comprehensive set of skills. Although this framework has gone through multiple changes over the last decade to meet the rapid changes around the world, the 4Cs remain the central role of debate among researchers, policy makers, business leaders and education experts due to their significance in preparing students for their academic studies and their future careers (Larson & Miller, 2011; Pardede, 2020; Tan et al., 2017).

The P21 Framework of the 21st Century Skills

The P21 developed a comprehensive framework that lists three general kinds of skills: learning skills, literacy skills, and life skills (Partnership for 21st Century Skills, 2008; Van Laar, Van Deursen, Van Dijk & De Haan, 2017). The first list of this framework (the learning and innovation skills) is known as the 4Cs and focuses on communication, collaboration, critical thinking, and creativity. The second list (the literacy skills) focuses on media literacy, information and communications technology literacy, and information literacy. The third list, the life literacy, focuses on initiative and self-direction, flexibility and adaptability, social and cross-cultural skills, leadership and responsibility, and productivity and accountability (Van Laar et al., 2017). Although competencies of the overall skills mentioned are essential to maintain success in the 21st century, the scope and focus of this study is based on students' competencies of the learning and innovation skills, the 4Cs skills. A consideration of such skills is to assure that students have reasonable competencies in the 4Cs skills that enhance their academic studies and yet prepare them for their future careers (Ambarisiwi & Priyana, 2020; Solé & Warrick, 2015).

The Learning and Innovation Skills, the 4Cs

The 21st century skills related to learning and innovation include communication, collaboration, critical thinking, and creativity (Partnership for 21st Century Skills, 2007), which Saxena (2015) refers to as the 'super skills'. They prepare students to: "think, learn, work, solve problems, communicate, collaborate, and contribute effectively" during their lives (Dede et al., 2010, p. 20). The learning and innovation skills, as McTighe, Seif, Bellanca and Brandt (2010) mentioned, are essential for students to gain successful academic progress at the university-level and beyond. It was found that students acknowledge the importance of these skills beyond high school (Landon, 2019). Therefore, because of globalization, students are expected to gain the skills required to communicate and collaborate locally with their peers within their educational institution and globally with others from different parts of the world. This enables them to achieve awareness about current local and global issues and their possible consequences in their daily life and at work (McTighe et al., 2010). The following section discusses major challenges associated with the 4C skills in terms of content, pedagogy, and learning and teaching procedures as well as highlights actual findings from Saudi Arabian university contexts.

Communication

Communication is one of the most important skills and is seen as the gateway to the other 21st century skills (Jacobson-Lundeberg, 2016). It is defined as the ability to understand and share ideas (Kivunja, 2015a). The effectiveness and quality of communication is believed to be linked directly to life quality (Taylor, 2015). There are two types of communication: formal and informal communication. Both types take the form of spoken or written language and each of which depends on the language being used whether formal or informal language (Jacobson-

Lundeberg, 2016). Effective communication depends on “the sender to access formal communication skills” for the ‘receiver’ to fully understand the message being shared (Jacobson-Lundeberg, 2016, p. 88). Effective communication is an essential skill for students to achieve during their academic studies at the university level.

Collaboration

The term collaboration is simply known as any work accomplished by a team of workers cooperating with each other (Kivunja, 2015b). Classroom debates among students as they work in pairs or in a group are likely to enhance their collaborative skills than those who work individually on their own (Gulnaz, 2020). That is, the work produced has the quality of a diverse incorporation of knowledge and skills enhanced by each of the team participants. Additionally, the likelihood of productivity to increase is another valuable advantage of work that is performed collaboratively within a team of workers (Kivunja, 2015b). Another important role of collaboration, compared to individual based work, is that it enhances communication skills among the group of workers where they participate in collecting and analysing the required information (Care, Griffin, Claire Scoular, Awwal & Zoanetti, 2015). Numerous studies (Al-Qahtani, 2016; Pardede, 2020) reported that collaboration has essentially been extensively accepted as a teaching and learning approach. EFL teachers for instance, can use this approach by dividing students into groups to complete problem-based or project-based tasks. Klynhout (2018) for instance, suggests the use of thought-provoking questions that activate higher order thinking skills, such as, “Why do you think...?”, “How do you know...?”, “What tells you...?”. Therefore, teachers should not utilize questions with only one right answer; however, they should apply multiple practices aiming to foster students’ personality, thought and performances (Bashraheel, 2020).

Creativity

The term creativity refers to the creation of new ideas that become sufficiently accepted socially and professionally (Lemke, 2010) to add economic and social values (Kivunja, 2015b). Teaching creativity in creative ways is also considered as an essential element of any educational system around the world (Aldujayn & Alsubhi, 2020). The Partnership for the 21st Century has asserted the importance of innovation and creativity as being required for success personally and professionally as well as key drivers in the economical world supported throughout the educational system (Aldujayn & Alsubhi, 2020). There is no doubt that creativity is essential for all students in today’s world: they need to be knowledge creators instead of consumers. In addition, creative thinkers find innovative solutions to solve existing problems. All of which are driven by motivation towards the work they do (Kivunja, 2015b). However, teaching creativity in the classroom has not been much addressed by teachers due to some reasons. These reasons that obstruct teachers from teaching creativity have been highlighted in the literatures. For instance, some studies reported that Saudi EFL teachers, for instance, lack how to use varied creativity teaching methods, how to inspire creative thinking skills in their classes, and how to involve their students in various problem-based activities (Aldujayn & Alsubhi, 2020; Al-Qahtani, 2016; Al-Zahrani & Rajab, 2017).

Critical Thinking

Unlike the previous skills of communication, collaboration, and creativity, the critical thinking skill is a cognitive skill that is embedded in the minds of individuals. The ability to think critically is essential for students and assists them to be more engaged, flexible, and be able to deal and cope with the information that is rapidly evolving. This skill was defined as a: “reflective and reasonable thinking that is focused on deciding what to believe or do” (Ennis, 1985, p. 45). Moreover, according to numerous scholars (Allamnakhrah, 2013; Gbènakpon, 2017; Gulnaz, 2020) critical thinking has been suggested as a pedagogical option to improve English language learning. According to this perspective, students should be able to reflect on

what they learn and ask themselves questions when arriving to new information before reaching final decisions about the content being learned. Saleh (2019) stated that learners at the 21st century should be stimulated to be able to solve any communication, critical issues, or difficulties by themselves. For instance, students at the university level should no longer be passive learners focusing merely on rote learning and memorization. They rather need to think deeply about what they learn to be able to solve problems they encounter during their studies and be active participants in the workplace. However, students may encounter many challenges and thus it would be a challenging procedure to gain from a traditional education practice such advanced skills (Saleh, 2019).

In Saudi Arabia, Al-Kinani (2019) addressed the significance of critical thinking and philosophy to revamp the curriculum for the 21st century at Saudi educational settings. Nevertheless, the fact is that most students in Asian countries urgently need essential critical thinking skills (Rear, 2017). Yet, factors that might impact upon EFL teachers are associated to the curriculum, lack of teachers' training as well as classroom activities that enhance critical thinking skills (Gbènakpon, 2017; Saleh, 2019). As a response to the importance of the 21st century skills in educational settings (Levin-Goldberg, 2012), the Saudi higher education has recently, initiated a program that aims to improve students' self-regulating thinking in which teachers would encourage questions and create an environment helping to appreciate different viewpoints and boosting language learners' confidence (Al-Kinani, 2019). Overall, the literature highlighted the importance of promoting students' competencies of the 21st Century skills to achieve better educational results and thus succeed in securing relevant jobs in the job market. Therefore, this study seeks to explore students' competencies of the skills pertinent to the learning and innovation skills: communication, collaboration, problem solving and critical thinking.

Research Questions

This study is guided by the following three research questions:

RQ1: How do foundation-year students perceive the importance of the 21st Century 4Cs skills for their academic studies and for the workplace after graduation from the university?

RQ2: What experiences do foundation-year students have about the utilisation of 21st Century 4Cs skills during their academic studies at university?

RQ3: Are there any differences between male and female foundation-year students in terms of their overall competencies of the 21st Century 4Cs skills?

METHODOLOGY

According to Soland et al. (2013), measuring 21st century competencies can be carried out through surveys. Therefore, this study used a survey for data collection where students were given five multiple-choice items and asked to rate themselves on a scale of five possible answers. The questionnaire was designed based on recommendations of standards to follow from previous research (see Soland et al., 2013 for detailed discussion) as well as from efforts made by the researcher to make it relevant to the context where this study was conducted. For instance, issues related to the respondents' age group, cultural background, and first language were considered when developing the question items of the questionnaire. Additionally, the questionnaire items were written in English then translated into Arabic to assure students understanding of the questions given and avoid any bias of misunderstanding.

Research Design

To fulfil the aim of this study, a custom designed questionnaire with twenty-one items was designed. The question items were designed, categorized into three sections with the main construct having a 4-point Likert items questionnaire, ranging from: "Strongly agree" to "strongly disagree" then was distributed among the students. This questionnaire includes two main constructs of self-report (identifying self-strong skills by the students themselves) and

close-ended questions as well as the five open-ended questions where the participants can present insights of their competencies of the intended 21st century 4Cs skills (Competencies and experiences of the 4Cs skills at university).

Participants

The study was conducted at the English Language Institute (ELI) at KAU in Jeddah, Saudi Arabia. At the ELI, students who are accepted at KAU undergraduate programs are enrolled in a foundation-year program. In this program, students take English language courses of four different proficiency levels (A1, A2, B1, B2) based on the Common European Framework of Reference (CEFR) as well as variety of other prerequisite courses to fulfil the requirements of university undergraduate programs. The study sample comprised Saudi EFL male and female learners (N = 379) at a Saudi university. The participants were asked to complete the questionnaire on various aspects of their competencies and experiences of utilising the 4Cs skills. Dichotomous yes/no responses were designated 1 and 0 representative values; the Likert scale items responses were scored from 1 (strongly disagree) to 4 (strongly agree).

Validity and Reliability of the Questionnaire

The face validity of the questionnaire was assessed by two associate professors and they both approved the items of the questionnaire as a measurement for the intended constructs. Furthermore, the questionnaire was initially piloted in order to consolidate the validity measurement of the data collection intended by the questionnaire tool. Twenty participants completed the questionnaire in the piloting stage, and they all indicated no issues with the questionnaire. Their data was discarded and was not taken into the consideration in the data analysis of this study.

Data Collection Procedures

An ethical approval form for conducting this research study was approved and obtained from the Research Unit at the ELI. To assure the participants' acknowledgement of their confidentiality, anonymity, and rights as well as the fact of their participation as to be voluntary, a consent form was embedded into the online questionnaire. The questionnaire was distributed during the beginning of the second module of the academic year 2019. The participants received the consent form and the questionnaire electronically through a link that was sent to them via the university-designated mobile phone application called (MY KAU®). Data was collected at the end of the same module of the same year. Retrieval of the data was established via the acquiring soft copy of the whole data collected on the questionnaire web host www.surveymonkey.com®. Raw data was fed into MS Excel and SPSS for processing and both, descriptive and inferential statistical analyses were carried out accordingly. The exploratory, open-ended items of the questionnaire provided the qualitative data which the researcher identified and organised the repeated and common categories of those responses.

Demographics

The distributions of participants' gender and high school GPAs are illustrated in figures 1 and 2, respectively.

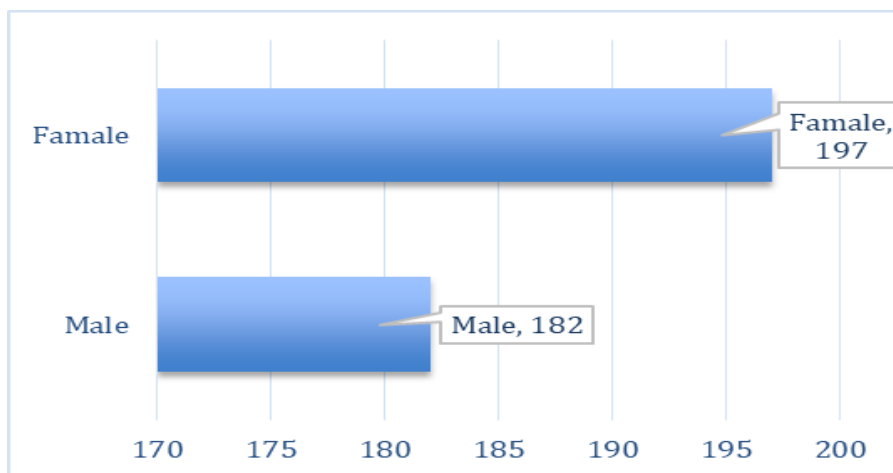


Figure 1. Participants' Gender Distribution.

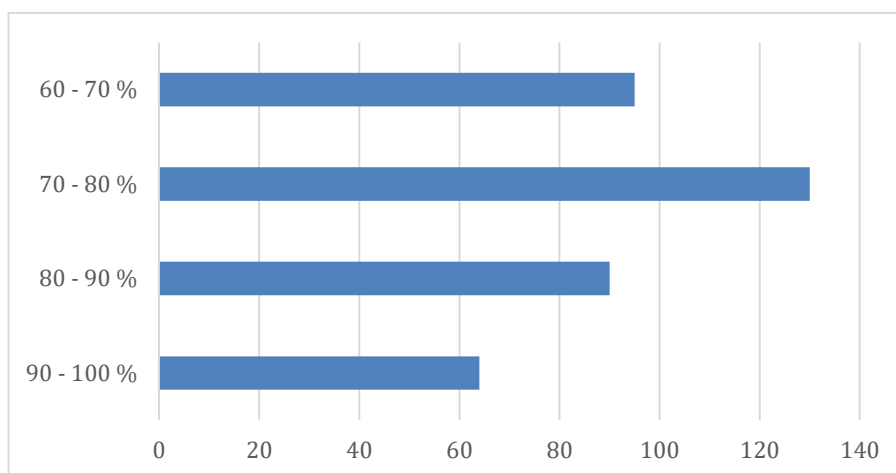


Figure 2. Participants' High School GPAs Distribution

RESULTS

Man-Whitney U Parametric Statistical Tests

The scores distribution of each item of the questionnaire were tested for normality and were found to be non-normal as per the values of skewness that were below zero since the skew value of a normal distribution is zero. In addition, conducting a Shapiro-Wilk test for normality generated a p-value of .004 (significance level of $\alpha = 0.05$), indicating that the data is not normally distributed and thus, non-parametric statistical analyses needed to be used. The Mann-Whitney tests conducted on the two constructs: identifying self-strong skills by the students themselves and competencies and experiences of the 4Cs skills at university, did not reveal any statistically significant difference between the responses of the students from the same gender ($p > 0.57$).

Man-Whitney U Non-Parametric Statistical Tests – Gender Specific

Table 1 The gender-specific statistical tests on 4Cs skills competencies for items 7, 8, 14, 21

Questionnaire Item	Teaching Experience	N	Mean Ran	Sum of Ranks	U	Z	P
7. How confident are you when you want to communicate face-to-face in a professional way with your professors and other leading faculties at university (for example, the president, vice deans, administrators, etc...).	- Very confident - Confident - Somehow confident - Not confident	M*: 182	246.5 9	44879.00	7628.000	-10.034	.000
		F**: 197	137.7 2	27131.00			
8. How confident can you communicate professionally through emails with your professors at university and other leading faculties (for example, the dean, vice dean, administrators, etc...) whenever I need to.	- Very confident - Confident - Somehow confident - Not confident	M: 182	242.0 3	44049.00	8458.000	-9.259	.000
		F: 197	141.9 3	27961.00			
14. Choose from the following the one that best describes how confident you are with your study skills and communication skills to be a successful student	- I am confident with both skills. - I am confident with my study skills but not confident with my communication skills. - I am not confident with my study skills, but I am confident with my communication skills. - I am not confident with both skills and I need to improve them	M: 182	225.4 8	41037.00	11470.00 0	-6.267	.000
		F: 197	157.2 2	30973.00			
21. How confident are you in using your critical thinking skills to solve academic and social life tasks?	- Very confident - Confident - Somehow confident - Not confident	M: 182	230.6 6	41979.50	10527.500	-7.212	.000
		F: 197	152.4 4	30030.50			

Note: *M stands for male participants; **F stands for female participants

Table 1 revealed that the female students' responses to items 7, 8, 14 and 21 based on their competencies and experiences of the 4Cs skills at university were statistically significantly different than those of the male student responses ($p < 0.05$).

The majority of the female students' responses to the previous items 7, 8, 14 and 21 were 92% with the answer choice of 'very confident' to items 7, 8 and 21 and with the answer choice of 'I am confident with both skills' to item 14 when they were asked to identify whether or not they have mastery of their study skills and communication skills or need improvements in either or both of them to be successful during their academic studies. However, the male students' responses of the same items were 88% with the answer choice of 'confident' to items 7, 8 and 21 and with the answer choice of 'I am confident in one of the 4Cs skills' to item 14. In terms of responses to item 21, the majority of the female participants felt 'very confident' about their communication skills whereas the majority of the male participants responded with 'confident' regarding their communication skills.

According to participants responses to items 3 and 4, as illustrated below:

Do you have a particular major in mind that you would like to study after finishing your preparatory year program? If yes, write down the major name.

(Yes – No – Not sure yet – Others: _____).

Name three possible jobs that are relevant to your intended major after graduating from university?

91% of the female students' responses to items 3 and 4 revealed that they were certain about their future career aims as well as the possible jobs they intend to pursue after graduation from KAU. However, the male students' responses to the same items were much less expressed with confidence, with 49% of the responses selecting their uncertainty about their intended job and future careers.

With regards to items 5 and 6:

5. Name three skills that you are confident with, and you then will make you a strong competitor in the job market after graduating from the university?

6. What other skills you need to improve in order to succeed in securing your future job?

The majority of the female participants responded with 'communication' and 'English language proficiency' as their main top skills, respectively. However, the majority of the male students' top responses to items 5 and 6 were 'collaboration' and 'teamwork', respectively.

The following table illustrates the statistical analysis figures from the Man-Whitney U Nonparametric tests with gender specific grouping variable for responses to items 17, 18, 19 and 20:

Table 2. The gender-specific statistical tests on 4Cs skills competencies for items 17-20

Questionnaire Item	Teaching Experience	N	Mean Rank	Sum of Ranks	U	Z	P
17. My success at university depends highly on my understanding and application of good study skills and communication skills,	-Extremely agree - Agree - Disagree - I don't Know	M*: 182	190.45	34661.00	17846.000	-.092	.927
		F**: 197	189.59	37349.00			
18. I find difficulties to engage and succeed in the academic life because of my weak communication and collaboration skills	- Extremely agree - Agree - Disagree - I don't Know	M: 182	187.95	34206.00	17553.000	-.401	.688
		F: 197	191.90	37804.00			

19. I would like to study a subject that teaches me necessary academic skills and communication skills to be successful in my academic studies and beyond	- Yes - NO	M: 182	190.85	34734.50	17772.500	-.181	.856
		F: 197	189.22	37275.50			
20. Which do you prefer from the following two lists of activities and assignments.	a. Activities and assignments that improve my critical thinking and creativity. b. Activities and assignments that requires memorizing and recalling	M: 182	191.35	34826.50	17680.500	-.313	.755
		F: 197	188.75	37183.50			

Note: *M stands for male participants; **F stands for female participants

According to Table 2, the Mann Whitney U test of the female and male students' responses did not generate any statistically significant difference ($p > 0.05$). That is, most of the responses from all participants was 'extremely agree' to item 17 at 92% whereas the majority of all the responses from all participants was 'I don't know' to item 18 at 88%. Similarly, the majority of all the responses from all the participants was 'yes' to item 19 whereas the majority of all the responses from all participants was 'activities and assignments that improve my critical thinking and creativity' to item 20 at 91%.

Analysis of the Open-Ended Questions

This research study is mainly based on a quantitative research design. However, it is also the belief of the researchers that the primary data collected from the Likert items questions can be consolidated by a qualitative data in the form of two open-ended questions in the questionnaire. As such, the responses collected from the participants were textually analysed for themes or shared responses amongst the participants following the grounded theory of qualitative data analysis (Becker, 2016).

The following items (15 & 16) were constructed to explore the skills that the participants already possess, or need improvements, for successful academic attainment: (15) Name the study skills that you are not confident in or need to improve which make you successful at university (If you don't know what study skills that make you successful just write: (I do not know). (16) Name the type of communication skills (spoken or written) that you are confident with or want to improve to be a successful student at university.

Analysis of the responses of the female participants to item 15 revealed that the main skill which they need to improve is 'time management', which also corresponded to the first top responses by the female participants to item 6 in the questionnaire, where the top answer they responded with was time management.

Two sample responses from female student participants were:

"I always find it difficult to cope with assignments and deadlines. Every time I think I have enough time to complete an assignment, review for exams, I suddenly realise that there is actually little time" (Student A - Female).

"I wish there is more time to do all the work" (Student B – Female).

However, the analysis of the responses of the male participants to item 15 revealed that the majority responded with 'English speaking', which also corresponded to the first top responses to item 6, which they gave as 'communication in English language'. A sample of the responses of the male participants was: *"I feel that without English, I will not get the good job" (Student C - Male).*

Item 16 revealed that most of the female participants wrote 'communication through speaking' and 'customer services' as the skills they feel confident with, and 'collaboration' as the skill they need to improve. A sample response to this item was:

"I feel that in order to be able to reach a broader base of customers who may not speak Arabic is to master speaking and communicating in English" (Student D - female).

These responses match the top ones they gave to item 5, which were 'communication' and 'English language proficiency', as mentioned earlier. The male participants top responses to item 16 were 'group work' as the skill they feel confident with, which corresponded to their top responses to item 5, and 'communication' as the skill they need to improve. A sample response to this item was:

"Working as a good team and achieving goals together makes the success of company much better and if this is to be achieved, then team members need to communicate effectively and in a productive manner" (Student E - male).

DISCUSSION AND CONCLUSION

It is quite evident that both of the male and female students' acknowledged the importance of the 21st century 4Cs skills since they indicated their confidence about these skills, which ultimately highlighted their awareness of their importance. This is in line with similar findings by Landon (2019) in a recent study where she affirmed the students' participants' views on the importance of the 4Cs skills beyond high school. However, it is also worth noting that the majority of the participants have also indicated they need to improve and master other skills which they need in their future careers. The participants gave clear indication of their awareness of the current job market demands for certain skills and expertise and they highlighted their

ambitions and aspirations to master the skills they already know and improve those they are not very confident with. The responses of the students also indicated that they do acknowledge the importance of gaining favourable skills in order to meet the demands of the job market and secure their aspired jobs in their future. This was evident from the responses of the students to items 5, 6, 15 and 16. These are in line with recent research studies, which affirm the need for the classroom instruction to equip the learners with 21st 4Cs skills, which are transferrable between jobs (Ambarisiwi & Priyana, 2020; Levin-Goldberg, 2012; Solé & Warrick, 2015). The students also showed some confidence in their future plans for the specific job they aspire to have after they graduate from the university.

As we move into the 21st century the influence of globalisation and technology on the job market is undeniable. As such, the demands of today's job market are for those who are highly skilled, excellent communicators in more than one language, critical thinkers and tech savvy. In addition, holding an undergraduate certificate but lacking additional skills, such as the 4Cs skills, is unlikely a privilege these days to secure a job opportunity in the face of possessing additional skills that are required by the majority of employers worldwide. This research study revealed that students are aware of the need to master additional and beneficial skills, which they will need in their future careers. Furthermore, they indicated that they need additional training to develop important skills, such as the 4Cs skills. Universities need to address such needs by incorporating and integrating designated courses or training programs to meet such demands and to equip the students with the much-needed skills to go hand in hand with their qualifications. Requirement of such courses and training programs are very essential in today's globalised world and it will certainly improve the work and production qualities of undergraduate students who possess those favourable skills. It will certainly be a profitable investment in our university students to be successful competitors in the job market with so much potential and asset to their future employers.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study can form the cornerstone of a much wider and more comprehensive research study where a full-fledged mixed methods research design with foundation-year students as well as undergraduate students at senior levels from different universities. The students can elaborate more extensively on their knowledge and experience of the 4Cs skills and other demanding skills. Furthermore, if similar studies are conducted in different contexts in different countries, they can present a certain level of comparison with the results presented in this study.

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