

Bridging The Gap Between Higher Education And The Labour Market Needs In Saudi Arabia: The Role Of High Education Institutions

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Article Info	Abstract
<p>Article History</p> <p>Received: May 13, 2021</p> <p>Accepted: August 27, 2021</p> <hr/> <p>Keywords : High Education Institutions, Knowledge, Skills, Attitudes, Labour Market Needs</p> <p>DOI: 10.5281/zenodo.5294204</p>	<p><i>This paper presents the results of a foresight study examined the future knowledge, skills, and attitudes required by Saudi Private sector leaders (SPSLs) to achieve the objectives of the Saudi Vision 2030 and comply with COVID-19 pandemic new work style as well as workforce requirement. This study ultimately, aims to bridge the Gap between Saudi Higher Education Institutions (SHEIs) and the labour market needs by enhancing the role of High Education Institutions. However, Data collection was gathered through interviews twenty Private Sector leaders plus designed a web-based questionnaire that was distributed online to SPSLs of Energy, services, Health Care, telecommunication, education and other. The questions consisted of four sections aiming to identify the necessary knowledge, skills, and attitudes that SHEIs should be provided to deal with the change of business environments. The validity and reliability of the questionnaire were confirmed by Cronbach's alpha and the data were analyzed using descriptive tests (mean and standard deviation). Moreover, Randomized blocks ANOVA method was also used to test the significant differences in participants' attitudes. The results of the study clearly emphasize on crucial needs for new effective knowledge, skills, and attitudes to fulfil this new era of the rapid pace of Saudi labour market changes. The outcomes of this study may be used by local authorities, employers, academics, and researchers to set up future-oriented education curricula and policies to bridge the gap between knowledge, skills, and attitudes demand and supply which arises out of recent labor market changes.</i></p>

Introduction

A mismatch between high education outcome and labour market needs are considered as one of the major threat to economic growth over the world[1]. The discrepancy between supply and demand for labour market results in inadequate use of human capital, increase the percentage of unemployment and end up with impact GDP negatively[2]. However, the gap between SHEIs graduates and job opportunities in the Saudi market remains a major challenge. Despite many graduates being churned out for the job market, most of Saudi graduates are unable to find jobs because what they have studied is not appropriate to job vacancies. Therefore, this paper aims to narrow the gap between higher education institutes and labour market needs by enhancing the role of SHEIs with concentration on the main factors draws the future workforce characteristics were Saudi ambitious 2030 vision as well as Covid-19 pandemic.

a) Kingdom of Saudi Arabia Vision 2030

Kingdom of Saudi Arabia Vision 2030 had set goals and strategies geared towards taking the nation to the further level in terms of socio-economic growth. However, the vision has been launched in the second quarter of 2016, it intends to build a diversified and sustainable economic model away from the dependence on oil and making the Saudi Private sectors the key generator of growth and jobs as well as bridging the Gap between SHEIs outcome and labour market needs. Moreover, the Saudi Arabia vision aims to have at least five universities, among the top 200 universities in international rankings [3]. As a result, public and private SHEIs need to up-skill their students and formulate a modern curriculum to prepare them for the tasks and competencies required. In addition it's widely agreed that knowledge and skills are the key factors for employability and economic growth of countries [4]. It is worth mentioning that, Saudi Vision 2030 recognizes citizens as the main resource for development and progress, which makes Saudi Arabia's citizens most important valuable asset. Furthermore, provided plentiful job opportunities in different Saudi Private Sectors such as tourism and medical and services sectors driving employment opportunities for citizens[5].

b) COVID-19 pandemic and the Future workforce

Recently, COVID-19 presents one of the major challenges of our lifetime[6]. It has accelerated digital transformation across the majority of businesses as firms invest heavily in remote working capabilities and ensuring employees can work from home productively[7]. There are many staff estimated to remain home-based post-crisis, the questions are being raised around the

future of our workforce. The COVID-19 pandemic was disrupted labor markets globally started in the beginning of 2020. The short-term consequences were sudden and often severe: Millions of people were unpaid or lost jobs, and others were quickly adjusted to working from home, other workers were deemed essential and continued to work in grocery stores, in warehouses and/or hospitals under the new protocols to reduce the spread of the coronavirus [8].

According to International Labour Organization, COVID-19 pandemic had shown how businesses are utilizing their workforce's Network skills and knowledge to adapt their business models and consumer demand[9]. The Network businesses will require the huge development of skills, knowledge and attitudes in the workforce, specifically: Digital Skills, Adaptability, and innovation. Presently, these skills should mainly emphasize and developed in post-secondary education programs. Moreover, World Economic Forum's 2020 Job report stated that, there are seven key professional clusters emerging. These reflect the adoption of new technologies. Which giving rise to the demand for Automation economy, new roles in engineering, and product development [10]. The future of work shows demand for a wide variety of knowledge, skills, and attitudes that match these professional opportunities.

c) Saudi High education and the new system

Kingdom of Saudi Arabia Higher education is the educational step that follows the three years of secondary School. SHEIs are either governmental or private. However, Saudi Arabia has around 30 public universities and 15 private universities. There are also many junior colleges or community colleges, most of them managed by the government. Several of these colleges are attached to public universities, but usually have lower admissions standards [4]. These colleges provide two- or three-year diploma that associate degree programs and usually offer articulation pathways to bachelor's degree programs at universities. In addition, there are approximately 45 specialized private colleges that mainly concentrate on health fields, although some offer programs in other disciplines, such as business or engineering. In addition, Saudi Arabia governmental universities offer free of charge bachelor's degree for Saudis students and a monthly payment during their studying period[4].

In 2020, kingdom of Saudi Arabia started implement, the new higher education system aims to promote greater universities' independence administratively, financially and academically. In other words, the SHEIs will be able to approve their programs, budget and organization according to job opportunities and development needs in the regions. In addition, they can also charge for postgraduate programs they offer depend on certain criteria approved by Saudi education ministry[11].The biggest advantages removing away from government bureaucracy, administrative work and they can set their academic standards.

METHODOLOGY

The study had reviewed the role of SHEIs to close the gap between Higher Education outcome and the labor market needs in Saudi Arabia. The paper is based on the conceptual study and the data has been gathered from the secondary sources of information such as different published papers. In additional to present the results of a forecasting study on expected knowledge, skills, and attitude needed by SPSLs of Energy, services, Health Care, telecommunication, education and the other, to meet the requirements of new labor market. The study aims to identify the future knowledge, skills, and attitudes need based on the analysis of the Saudi Vision 2030 goals and COVID-19 pandemic consequences as well as current survey and interviews. The significance of the study lies in the fact that the obtained results would support Saudi decision-makers to identify key strategies and investments in human capital development through SHEIs. This study will be added considerable value of the Saudi Government, companies, and academics in their efforts to bridge the gap between the knowledge, skills, and attitudes demand and supply, which arises out of labor market change.

a) Survey of Saudi Private sector leaders

The online survey questionnaire was designed with the primary objectives to identify future knowledge, skills, and attitudes needed by SPSLs to align with the Saudi Vision 2030 objectives and COVID 19 pandemic consequence. The design of the survey has gone through different stages and pre-tests, which have resulted in reclassifying, eliminating, and rephrasing its elements. The resulting questionnaire is organized into four sections as follow:

- Section I: Respondents' Characteristics: aimed to identify respondents' characteristics such as Job title, qualification, age, experience, organization size, private Sector type.
- Section II: Future Knowledge Needs: aimed to recognize respondents' feedback towards future knowledge needs in Saudi labour market with full consideration of Saudi Arabia vision 2030 requirement and COVID-19 consequences
- Section III: Future Skill Needs: aimed to recognize respondents' feedback towards future Skill needs for Saudi labour market with full consideration of Saudi Arabia vision 2030 requirement and COVID-19 consequences
- Section IV: Future attitudes Needs: aimed to recognize respondents' feedback towards future attitudes, needs of Saudi labour market with full consideration of Saudi Arabia vision 2030 requirement and COVID-19 consequences.

The questionnaire was sent out to 600 SPSLs of Energy, services, Health Care, telecommunication, education and other, working in different organizations across the Kingdom of Saudi Arabia. Survey respondents were asked to assess each statement, according to a five ranking-Likert rating scale- which enables eventual comparative deductions since the same scale is used in similar studies. After answering the questionnaire. The data were analyzed using descriptive tests (mean, percentage, standard deviation, T test and P value). The internal consistency of the questionnaire same group elements was measured by Cronbach’s alpha and its content validity was examined based on expert reviews from academic institutions.

b) Interviews with Saudi Private sector leaders

The interview questions were designed with the primary objective to identify future knowledge, skills, and attitudes needed to align with the Saudi Vision 2030 and COVID 19 pandemic consequences new requirement. The interviews had been conducted with twenty SPSLs from Energy, services, Health Care, telecommunication, education and other. The questions as follow: (1)At which extend Saudi higher education institutions outcome are matching labor market needs in the private sector, (2)At which extend Saudi higher education institutions Graduates are equal with their peers in the labor market, (3) from your perspective: what is the possibility of localizing engineering and administrative jobs in the private sector, (4) from your perspective: the knowledge, skills and attitudes of SHEIs Graduates are matching with the requirements of the labor market in the private sector, (5) At which extend SHEIs Graduates have the ability to face the challenges related to society’s rejection of some Vocational jobs.

DATA ANALYSIS AND RESULTS

Out of the 600 questionnaires sent, 338 replies were received from SPSLs of Energy, services, Health Care, telecommunication, education and other. The questions consisted of four sections aiming to identify the necessary knowledge, skills, and attitudes that SHEI should be provided to deal with the changing Saudi business environments. The respondents were of different ages, organization, experiences, private Sector, education level, and job titles.

a) Survey Validity

In order to validly survey, internal consistency has been measured by calculating Cronbach’s alpha statistical factor. It measures the internal consistency among a group of items combined to form a single scale, and reflects the homogeneity of the scale. A value of Cronbach’s alpha if it is more than 0.7 indicates homogeneity and consistency of the survey element. Table 1 shows the Cronbach’s alpha coefficients. As can be seen, the values of the Cronbach’s alpha range, from 0.834 to 0.901, indicating the reliability.

TABLE 1. Overall Cronbach's Alpha, Means, and Std. Dev.

Questionnaire components	No.	Cronbach's alpha	Mean	Std. Dev	P-value
Knowledge	12	0.867	3.58	0.082	0.039
skills	12	0.834	3.20	0.154	
Attitudes	12	0.901	3.22	0.169	

The survey’s internal consistency also assessed through Pearson correlation coefficients between the terms of each knowledge, skills and attitudes and sector type. The results are shown in Table 9 indicate clearly that there is no significant correlation between items, even for negative ones.

b) Data Analysis and Interpretation

The data gathered were analyzed using the Statistical Package for Social Science (SPSS) program. A descriptive statistical analysis using (mean, percentage, standard deviation, T test and P value) were used to describe the variables and to answer the research question: “Which knowledge, skills and attitudes should the SHEIs develop towards 2030 and covid19 pandemic consequences?” The participants answered the survey using scale ranging from 1 for Strongly Disagree, till 5 for Strongly Agree. The range between the max and min mean values was classified into five levels reflecting the respondents’ attitudes towards the questionnaire components Table 2. The mean scores and standard deviation values for the questionnaire components are presented in Table 3. As illustrated, all components ranked mean values between 3.22 and 3.58. Such result shows strong attitude of the participants towards the needs for new knowledge, skills and attitudes.

TABLE 2. Mean Ranges and Participant Attitudes

Mean range	Respondent attitudes
Below 3.19	weak
3.20 to 3.49	Strong
Above 3.50	Very strong

TABLE 3. Overall means, variance, std. deviations and respondent’s attitude

Questionnaire components	Mean	Std. Dev	Variance	P-value	Respondent’s attitude
Knowledge	3.58	0.082	0.036	0.039	very strong
skills	3.20	0.154	0.087		strong
Attitudes	3.22	0.169	0.117		strong

Analysis of variance (ANOVA) and mean were used to determine if there are significant differences between the means of the groups. An important question was raised in this study: “Do the attitudes of participants vary based on the participant’s background, such as Job title, education level, Sector type or size of organization?”. A null hypothesis (H0) was set for the study as follows: “There are statistically no significant differences in the way participants view the future of knowledge, skills and attitudes needs in align with the Vision 2030 and covid19 pandemic consequences.” The level of statistical significance of the data is expressed in terms of the mean and/or p-value as shown in Table 5, 6, 7, &8.

c) Respondent Profiles

The respondent profiles are summarized in Table 4. The participants from different ages, education level, job titles, Organization size, private Sector type and experiences. A careful examination shows that 76.5% of the respondents are from middle and executive leadership categories, and the majority of them (91.4%) hold BSc degree and above. Its worth to mention that (65.1%) of respondent work in big organization which exceed 100 employees and (90.5%) age more than 36 years.

TABLE 4: Respondent Profiles

No.	Profile of Respondents		No.	P %
1	Job title	President / CEO	20	6.10
		Chairman / GM	47	13.91
		Sr. Manager / Manager	191	56.51
		Section head/ Dean	24	7.10
		Supervisor / Forman	46	13.61
2	Education level	Ph.D	38	11.24
		MSc	115	34.02
		BSc	156	46.15
		Diploma	20	5.92
		High School or less	9	2.66
3	Age (years)	less than 25	2	0.59
		26 to 35	30	8.88
		36 to 45	202	59.76
		46 to 55	65	19.23
		more than 55	39	11.54
4	Organization size	less than 50	66	19.53
		51 to 100	52	15.38
		101 to 500	70	20.71
		501 to 1000	94	27.81
		more than 1000	56	16.57
5	Experience	less than 1	4	1.18
		1 to 5	55	16.57
		6 to 10	214	63.61
		11 to 20	47	14.20
		More than 20	15	4.44
6	Privet Sector type	Energy	71	21.01
		Health Care	45	13.31
		Telecommunication	81	23.96
		Services	59	17.46
		Education	45	13.31
		Other	37	10.95

TABLE 5: ANOVA for participant’s attitudes with job title

Randomized blocks ANOVA				
Job title	Std. Dev	Mean	p-value	t-tests
President / CEO	0.171	3.490	0.00016	0.00018
Chairman /GM	0.243	3.372		
Sr. Manager / Manager	0.325	3.216		
Section head/ Dean	0.138	3.388		
Supervisor / Forman	0.256	3.200		

TABLE 6: ANOVA for participants’ attitudes with sector type

Sector type	Knowledge	skills	Attitudes	Std. Dev
Energy sector	3.485	3.076	2.945	0.282
Health Care	3.042	2.972	2.573	0.253
Telecommunication	3.609	2.920	3.105	0.357
Services	3.803	3.718	3.485	0.165
Education	3.452	3.244	3.449	0.119
Other	3.680	3.036	3.236	0.330

TABLE 7: ANOVA for participant’s attitudes with education level

Randomized blocks ANOVA				
Education level	Std. Dev	Mean	p-value	t-tests
Ph.D	0.3115	3.334	0.0039	0.0029
MSc	0.295	3.227		
BSc	0.2763	3.273		
Diploma	0.1378	3.293		
High School or less	0.4201	3.160		

TABLE 8: ANOVA for participants’ attitudes with organization size

Organization size	Knowledge	skills	Attitudes	Std. Dev
less than 50	3.591	3.167	3.223	0.230
51 to 100	3.699	3.144	3.256	0.293
101 to 500	3.527	3.155	3.242	0.194
501 to 1000	3.595	3.010	2.985	0.345
more than 1000	3.538	3.068	2.762	0.391

d) Attitudes of participants based on the Job title

The p-value approach is regularly used as a substitute for rejection points to provide the smallest level of significance at which the null hypothesis would be rejected. A p-value more than 0.05 is not considered statistically significant and indicates strong evidence for the null hypothesis. As can be seen in Table 5, the data analysis gave p-values 0.00016 (<0.05), which indicates statistically significant differences in how participants based on the Job title view the future workforce and the null hypothesis should be rejected.

e) Attitudes of participants based on sector type

The mean is the average or the most common value in a collection of numbers. In statistics, it is a measure of central tendency of a probability distribution along median and mode. However, the Table 6 shows the correlation between Knowledge, silks and attitudes needs and Private sector's type. Although mean of skills needs in services, private sector slightly higher, and the mean for knowledge, silks and attitudes required sectors wise almost, quail, which indicates no statistically significant differences in how participants based on the sector type, view the future workforce. Nevertheless, the standard deviation of Energy, Services, Health Care, Telecommunication, Education and other are located were between (0.119 to 0.330), which showed low standard deviation and data are clustered around the mean.

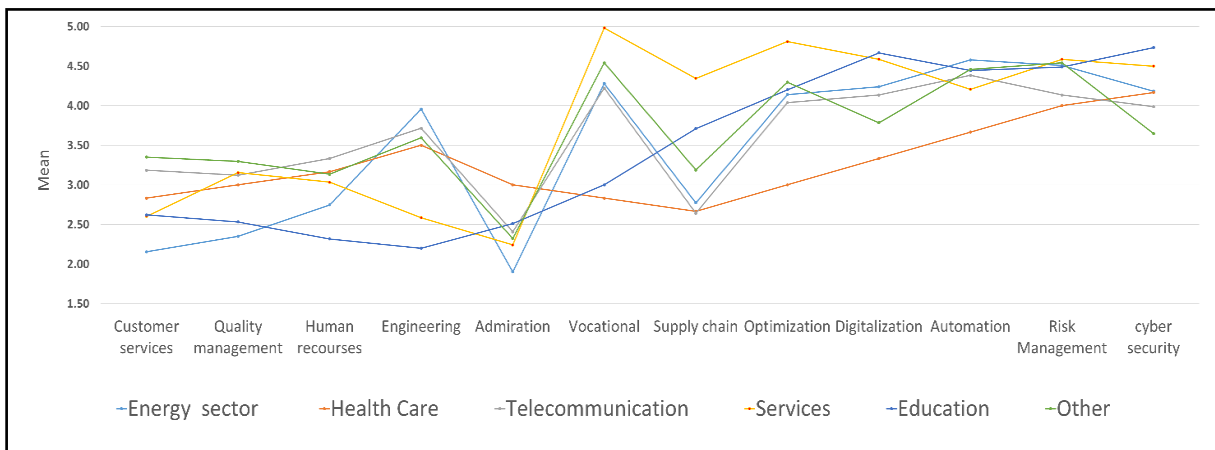
f) Attitudes of participants based on Education

The t-test approach is usually used as a substitute for rejection points to provide the smallest level of significance at which the null hypothesis would be rejected. A t-test above 0.05 is not considered statistically significant and indicates strong evidence for the null hypothesis. As can be seen in Table 7, the data analysis gave p-values 0.0029 (<0.05), which indicates statistically significant differences in how participants based on Education level view the future workforce and the null hypothesis should be rejected.

g) Attitudes of participants based on organization

The similar concept applied to approve there is no statistically significant differences in how participants view the future workforce based on organization size. The table 8 shows the correlation between Knowledge, silks and attitudes needs and organization size. The mean for Knowledge, silks and attitudes with sectors wise almost quail. In additional, the standard deviation for different size of organization are located between (0.194 to 0.391), which showed low standard deviation and data are clustered around the mean.

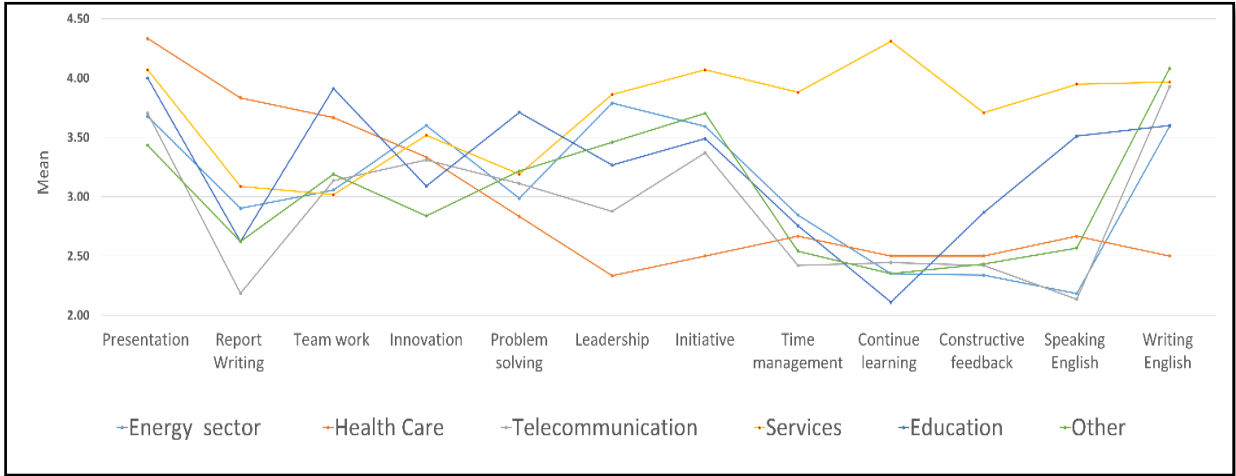
h) Knowledge needs based on private sector type



Finger 1: Participants' feedback with respect to the knowledge needs

The finger 1 shows the means of knowledge needs based on private sector type. The -Customer services, Automation, Risk Management, Optimization, Digitalization, Cyber security, Vocational, Supply chain, Engineering, Human recourses, Quality management, Administration - were examined carefully. Yet, there is clear consensus among of SPSLs that, there is a huge gap in Risk Management, Automation , Optimization, Digitalization, Cyber security, while the majority of SPSLs emphasize important to closing the gap in vocational. Furthermore, the review also shows that, Administration and Customer services consider as highest availability knowledge.

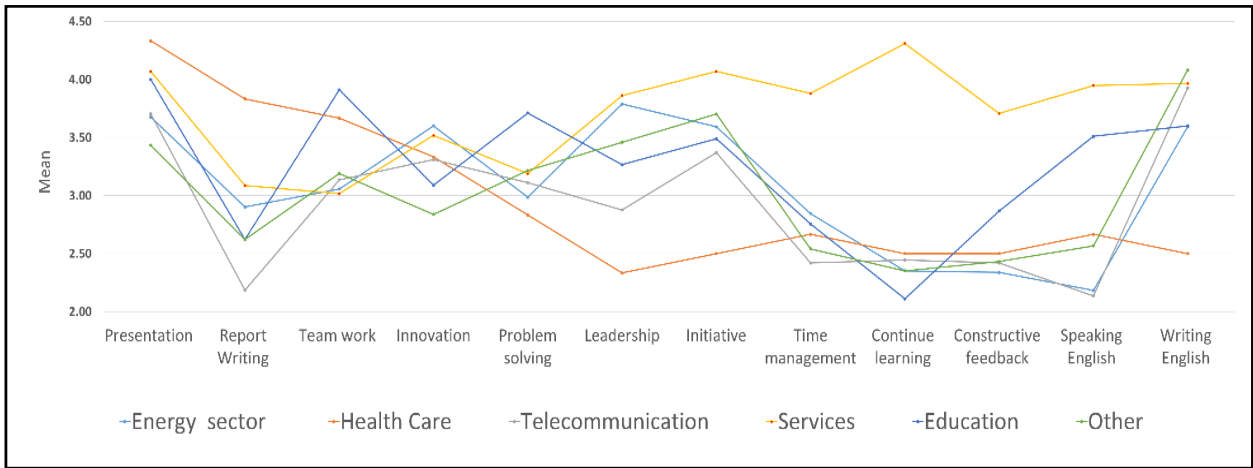
i) Skills needs based on private sector type



finger 2: Participants’ feedback with respect to the skills needs

While finger 2 shows the means of skills needs based on private sector type. The -Presentation, Report Writing, Teamwork, Innovation, Problem solving, leadership, Initiative, Time management, Continue learning, Constructive feedback, Speaking English, and writing English skills - are carefully examined. However, there is clear consensus among of participant that, there is a bag gap in Presentation skills, while the majority of private sectors emphasize important closing the gap in writing English skills. Moreover, the Services private sector leaders are only suffering from Continue learning and time management skills weaknesses. The survey also shows that, leadership and problem solving, consider as one of the major gaps as well as high Initiative approach.

j) Attitudes needs based on private sector type



The finger 2: Participants’ feedback with respect to the skills needs

Finally, finger 3 shows the means of attitudes, needs based on private sector type. The - Emotional, Passion, Commitment, Consistency, Transparency, Discipline, Respect, Punctuality, Integrity, Diligence, Honesty and Serious- are carefully examined. However, the majority of SPSLs concluded the Emotional, Passion attitudes are the large gap. While the minority had issue with respect attitudes. In additional there is fluctuation in punctuality ranking. The survey also shows that, diligence considers as one of the minor gaps as well as honesty attitudes.

TABLE 9: Ranking of required knowledge, skills and attitudes by mean and the stander deviation, Pearson correlation based on private sector type.

#	Knowledge needs	Mean	Std. Dev	Pearson Corr.	Skills needs	Std. Dev	Mean	Pearson Corr.	Attitudes Needs	Mean	Std. Dev	Pearson Corr.
1	Automation	4.401	0.889	0.271	Presentation	1.136	3.646	0.0436	Emotional	3.833	0.643	0.160
2	Risk Management	4.381	0.772	0.115	Initiative	1.017	3.616	0.0268	Passion	3.737	0.857	-0.039
3	Optimization	4.293	0.679	0.023	Writing English	0.963	3.512	0.19	Commitment	3.688	0.949	0.249
4	Digitalization	4.266	0.73	-0.288	Leadership	1.111	3.28	-0.165	Consistency	3.20	1.185	0.519
5	Cyber security	4.199	0.769	0.120	Problem solving	0.946	3.276	0.098	Transparency	3.10	2.949	0.025
6	Vocational	4.093	1.997	-0.003	Innovation	1.085	3.269	0.034	Discipline	2.981	0.886	0.130
7	Supply chain	3.254	0.984	0.172	Team work	0.972	3.24	0.057	Respect	2.921	0.778	0.310
8	Engineering	3.089	0.764	0.112	Time management	1.189	2.833	0.063	Punctuality	2.885	0.859	0.057
9	Human recourses	2.887	1.004	0.022	Speaking English	0.957	2.739	0.105	Integrity	2.828	1.081	0.492
10	Quality management	2.873	0.73	-0.061	Constructive feedback	0.722	2.678	0.214	Serious	2.822	1.048	0.156
11	Customer services	2.805	1.779	0.093	Continue learning	0.888	2.668	0.420	Honesty	2.814	0.932	0.205
12	Administration	2.364	0.874	0.021	Report Writing	2.415	2.588	0.252	Diligence	2.753	0.997	0.038

RECOMENDATIONN AND CONCLUSION

Although Saudi Arabia Vision 2030 reformed economic requirements, the COVID-19 pandemic has created both challenges and opportunities in the labor market. Due to the economic slowdown, a huge number of migrant workers are returning to their home countries, thus creating a massive vacancies that can be conveniently filled by qualified Saudi workers, as the country is already implementing the localization jobs program of Saudi Vision 2030, in which expatriate employees have to be gradually replaced with a local workers. However, there are needs to be a quick elevation in the knowledge, skill and attitudes levels of local workers and High education students to comply with requirements of the new labor market. Finally, Table 9 incorporates the most required domains of knowledge, skills and attitudes as per these study outcomes.

Yet, the role of SHEIs is essential to fulfil the required of Saudi labour markets. According to the current study, the main knowledge gaps are Automation, Risk management, and optimization, digitalization, cyber security and vocational. Thus, the future workplace will require, most probably, a generalized technological knowledge. More robots, devices, Artificial Intelligence which require competent workforce, if high education leader's investment in them is not to backfire. Therefore, the role of SHEIs are essential to close the knowledge gap. Thus, following recommendations have been concluded by research team to narrow the knowledge gap:

- Establish and/or increase the number of programs related to Automation, Risk Management, Optimization, Digitalization, Cyber security and Vocational in SHEIs
- Launch training and/or workshops programs associated with the latest update of Automation, Risk Management, Optimization, Digitalization, Cyber security and Vocational in SHEIs.
- Launch a new training program for existing workers to enhance their knowledge related to Automation, Risk Management, Optimization, Digitalization, Cyber security.
- Develop strong feedback system between Higher Education Institution and privet sector leaders aims to narrow knowledge gaps.

While the essential skills gaps are Presentation, Initiative, Leadership, Writing English, Problem solving and Innovation as per present study. Usually, recruitment departments looking for persons have high skills such as Leadership, Presentation, Initiative which extremely important for every business. Thus, the following recommendations have been concluded to narrow the skills gap:

- a) Establish a training workshop center to enhance crucial skills such as Presentation, Writing English and Problem solving. Moreover, Training workshop can happen informally through involvement with campus organizations.
- b) Establish Innovation center partners to connecting students to resources, education, infrastructure, and support for the development of technologies that will have an impact on communities living in poverty.
- c) Create leadership short program to train and mentor students aims to develop students Leadership competencies and build the Initiative skills. Such program targets the gap between leadership development and career preparation.
- d) Include Presentation, Initiative, Leadership, Writing English, Problem solving and Innovation ads elective courses in SHEIs programs and/or as hidden parts of the curriculums.
- e) Cultivate the culture of innovation through campus life, faculties, curricula, facilities, and technology

Similarly, attitudes gaps are Emotional, Passion, Commitment, Consistency, Transparency and Discipline as per existing research. A positive attitude in the businesses helps workers to achieve tasks faster with a better manner. The performance of workers to a great extent depends on the Transparency, Commitment and relationship they share with their colleagues. Therefore, the following recommendations have been decided to narrow the skills gap:

- a) Include the Passion, Commitment, Consistency, Transparency and Discipline as a core value in SHEIs strategic plan.
- b) Deliver training and/or workshop programs for Emotional intelligent, Transparency and Discipline courses.
- c) Provide practical assignments for students to enhance Emotional, Passion, Commitment, Consistency, Transparency and Discipline attitudes.
- d) Develop students attitudes enhancement program that assess students current attitudes, identify the gap and provide recommendations to reach the desired attitudes.

In additional, Saudi Universities Affairs Council shall be interfere to narrow the gap. Saudi Universities Affairs Council is the authority members, established in 2020 as part of new Saudi high education system implementation stage. The authority members led by education minister and aims to organize the affairs of universities, formulate their policies, and set the regulations, which comply with government system. Yet, the following extra recommendations to Saudi Universities Affairs Council:

- a) Tie SHEIs basic requirement knowledge, skill and attitudes with high school curriculum.
- b) Develop ongoing feedback system between SHEIs and SPSLs to updating the mismatches knowledge, skill and attitudes between labour market supply and demand. The system should be characterized with welcome ideas.
- c) Working with the education and human resource ministries to identify the future opportunities for alignment and collaboration with SHEIs
- d) Developing a Workforce Planning and Development Office aims to narrow the mismatching gap SHEIs outcome and the Labour Market needs.
- e) Incorporates with SHEIs to launch a new training program for existing workers to enhance the current employee's knowledge, skills and attitudes.
- f) Establish pilot projects that have demonstrated the international best practices, and measuring the success of these pilots.
- g) Engaging SHEIs graduates to addressing the barriers and challenges faced with hiring.
- h) Identify the difficulties of hiring SHEIs graduates with disabilities and provide especial program to enhance their knowledge, skills and attitudes.
- i) Encourage SPSLs to conduct National Campaign to Raise Awareness of and Promote Multiple Pathways to Well-Paying Jobs for All Saudi.
- j) Cultivate the culture of innovation in Higher Education Institutions.
- k) Establish one common center office for all SHEIs led Saudi Universities Affairs Council aims to share high education institutes successful stories, achievements, failures and lessons learned within the High education institutes team and leaders.
- l) Develop competition program which appreciate SHEIs have the highest number of their graduates recruited in labour market.

In conclusion, Although Kingdom of Saudi Vision 2030 is committed to close the gap between SHEIs outputs and the requirements of the labour market [3]. SHEIs leaders shall engage in continuous planning to determine what the student's knowledge, skills, and attitudes are required to meet Saudi private sector needs and reform their curricula, programs and direction to comply with new business environments.

Yet, this research herein reflects the great potential to raise the quality of SHEIs outcomes by identifying the main important knowledge, skills, and attitudes, needs as per SPSLs feedback with full respect of Saudi 2030 vision and COVID-19 pandemic new work style and workforce requirement.

Finally, evidence seems to support the statement that, there is a gap between SHEIs and Labour market needs. SPSLs who participate in survey are illustrate by the fact that, the low score of knowledge, skills and attitudes needs to be enhanced by SHEIs. Indeed, the results are hopeful. However, we need to further replicate this research to approve or reject that statement. In any case, confirming that statement and covering the preceding research questions presents the clear implication that SHEIs leaders have to put more effort to Bridge the Gap between Higher Education and the Labour Market needs in Saudi Arabia.

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