



## Measuring the relationship between the content of community colleges' programs at King Khalid University and the skills required for the labour market and their impact on the employment of graduates: An exploratory study on a sample of the faculty members of those colleges

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### Abstract

This study aims to measure the relationship between the content of community colleges' programs at King Khalid University and the skills required for the labour market and their impact on graduates' employment. A questionnaire has been designed and distributed to the faculty members of community colleges at King Khalid University in a random sample method. The chosen sample size has covered (123) individuals. Questionnaire forms have been distributed and retrieved from (117) participants. Therefore, the estimated response has reached 95 % of the total sample size. The results of the study have shown a significant relationship between the programs of community colleges and the skills required for the labour market, while no relationship between the programs of community colleges at King Khalid University and the employment of graduates of those colleges. Moreover, there has been no relationship between the skills the graduate acquires and the employment requirements, that is, the skills that graduates of community colleges acquire do not affect the employment requirements. In addition, the skills required for the labour market do not mediate the relationship between colleges' programs and the employment of graduates. So the study has recommended a review of the contents of those programs to develop the skills required for the labour market, and that the requirements and needs of implementing those programs should be reviewed including laboratories, materials, and other tools, in addition to that, to strengthen the partnership between community colleges and owners of the labour market in order to know the job requirements and the skills required for them.



### Introduction

Education in general, and academic education in particular are considered as a part of the rules, foundations, and reasons that contribute to build the individual and society and shaping their present and future. In light of global changes and major transformations in various fields, Saudi Arabia faces big

challenges such as the increasing number of job seekers in both public and private sectors.

According to the data released by the Ministry of Education, statistics for the second quarter of 2017, released on October 2018, reported that the total number of employees, which was based on the data of administrative records in Saudi Arabia, was

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13.841.158, compared to 13.889.137 in the first quarter of 2017, while the number of employees in the fourth quarter of 2019 was 13390975, out of which 1084737 males and 2543601 females. The rate of male Saudis out of the total employees reached 15.34 %, while female rate was 8.32 %. The whole female number out of the total number of employees reached 19 %, while the rate of male was 81 %. The Unemployment of the Saudi population (15 years +) reached 12.0 %. A big rate for these numbers have been caused by the universities which deploy a great number of graduates into the labour market. As for King Khalid university, dispatch number (21) graduated in 2018. It consisted of 13450 students, out of which 11358 graduated with bachelor and diploma degrees, while those who graduated with a master degree were 457 students and those who graduated with a Doctorate degree reached 47 graduates. (<https://www.kku.edu.sa/ar/news-tags>).

We also notice in 2020 graduates batch, that the total number of graduates reached 13.615 students out of which 10.512 with Bachelor degree, 923 Master graduates, 247 Doctorate graduates, 1242 Diploma graduates, 3 High Diploma graduates and 532 Applied Diploma

graduates. Source: General Commission of Statistics-KSA These numbers are all found in <https://www.kku.edu.sa/ar/news-tags/>

All these numbers are considered as an additional figure for what is there on the labour market. In fact, what we are interested in, in this study, is the number of (1242) graduates of community colleges which

include more than 17 programs, which is expected to meet the bridging part of the gap in the labour market of the same technical and professional jobs. In 2017, a study by (El, at, Bettinger, Baker) confirmed that it was an important objective for community colleges to prepare the student for the labour market. But do the students realize the returns of their business of the labour market in various major? How many students take into account the returns from the labour market When choosing a specialization?

Indeed, with the complexities and failures of the ongoing educational process, and due to developments and changes in real life and the reality of societies, community colleges must exert more efforts to respond to these requirements and the really challenging variables. (Nimrawi, 2009).

Employment of young people and scientific degrees' holders is one of the necessities imposed by the data of development first, and globalization second. The problem of employing young people interacts with the data of educational and training reality and the extent of its response to the requirements of the contemporary job market. In all its rapid change to informatics framed by the globalization of the economy (Rabah, 2014). Education and training to provide labour markets with professional technical workers, who meet the technical needs of the job, must be aligned with the economic and social aspirations of any society. Contemporary trends also see that economic and social growth depends on the essentially cognitive inventory that effectively contributes to the formation of the individual in different fields, (Aden

Conference, 2010). Many experts stressed that researchers should work for developing and inventing new skills in their workplaces so that they stay in their business, (Benes and Bell). A study issued by Noy, Cleary (2014) designed a model and framework that provided concrete guidance, language and key perspectives on how to effectively align the global market. Indeed, due to the importance of the youth in building their countries, this study seeks convenience of the contents of community colleges at King Khalid university with the labour market requirements. In fact, (universities are the true youth factories, and the youth are the seed for which all the brains of the states go to water it with very purified water. This seed should be brought up in the labs of reality). Obaidat and Saadah2010. Therefore, we are going to discuss the dimensions of this study step by step.

### **- First: Study Problem**

The problem of the study is that the observer of what is happening in the labour market and the programs of community colleges notices that these colleges take care of graduating large quantitative numbers for the labour market rather than the qualitative ones regarding skills and competencies needed by that market.

The reality, as reviewed in the introduction of the study, shows that unemployment rates between education outputs and community colleges are on the rise. The private sector and the public one have little faith in the output of these colleges and do not meet their actual needs. The relationship between these

colleges and community institutions is almost completely broken.

### **- Second :Study Objectives**

This study aims at achieving the following goals:

1. Recognizing the reality of the current curriculums taught at community colleges at KKKU.
2. Stating the skills acquired by community college students and their relevance to the skills required by the Labourmarket.
3. Stating the active curriculums that satisfy the needs of the Labour market.
4. Conducting the required results, suggestions and recommendations for putting them in the hands of men in charge at KKKU.

### **- Third: The importance of the study**

The role of community colleges in building the abilities of many academic graduates is very crucial. It participates greatly and clearly in both economic and human developments .Nay, those colleges help bridging the ( unlucky) diploma students by giving them a chance to study and get their bachelor's degree .In deed, many economic sectors depend mainly on community college students to satisfy their manpower force needs, In fact, Saudi Arabia, with its educational institutions ,including King Khalid university, is a part of the global society, therefore, community colleges should have a great interest when the university plans and programs are set.

**- Fourth: Study hypothesis**

This study seeks testing the following hypothesis.

- 1- There is no statistical relation between community college programs and the skills needed for the Labourmarket.
- 2- There is no relationship between KKU community college programs and recruiting the involved graduates.
- 3- There is no relation between skills acquired by the graduates and the requirements of employment.
- 4- Required skills needed for the Labourmarket do not connect the relation between college programs and recruiting the graduates.
- 5- There is no relation between those variables and the demographic ones of the study sample.

**- Fifth: Study Methodology:**

1. Study method and tools:

The analytical and descriptive approach is used to measure the relationship between the required programs and skills and their impact on the employment of graduates through collecting primary and secondary data from

previous researches and studies, in addition to preparing a tool for the study through a questionnaire specially designed for this purpose in a shape of an electronic link addressed to a random sample of the members of the teaching staff. The link was distributed to several experimental samples of faculty members and several specialized experts to benefit from their views and suggestions to check the consistency and validity of the questionnaire through well-known scales like (Cronbach scale).

2- Study Population and Sample:

The sample consists of 123 staff members from the community colleges of King Khalid University, which is based in Abha, South Western of Saudi Arabia, established in 1419.

1. The study sample:

The sample of the study covered (123), i.e. all members of the community colleges where the questionnaire was distributed to all faculty members as a sample of study. Those who responded to the questionnaire reached 117 individuals, representing 95 % of the total study population, i.e. (123 individuals).

1 - Community Colleges programmes at King Khalid University

Serial No	College name	Year	Programs offered	Number of Faculty members
1	Abha Female Community College	1426H	Business Administration Program - Office management program - Accounting program - Programming and Computer operating program	43

			Information Systems Program - General Preparation Section	
2	Mahayel Community College	1428 H	Business Administration Program - Accounting program	16
3	Mahala Community College (Females)	1425 H	Business Administration Program - Accounting program Information Systems	20
4	Mahala Community College in Khamis Mushait (Male section )	1426 H	Business Administration Program - Accounting program - Computer Science - General Courses Section	35
5	Rejal Alma Community College (Females)	1428 H	Information Systems Program - Accounting program	15
<b>Total number of Teaching staff</b>				<b>123</b>

Source (prepared by researchers)

### **The terminology of study**

Community Colleges: An idiomatic definition which means institutions of higher education that offer a wide package of programs related to community needs. The duration of study in these programs may last for two years, or short courses, (Absi, Volume X. Issue 28, 2017).

#### **- Academic Programs**

Courses and metrics addressed to community college students in different

Departments (Zagawa, 2017).

### **- Requirements needed for labour market**

It is the field of supply and demand of work, which forms the various bodies and institutions from general sectors and private ones, willing to employ the outputs of community colleges. (Zagawa, 2017)

#### **- Skills of graduates**

They are: Communication, technological skills, initiatives kills, creativity, languages etc.. (Obeidat, Saadeh, 2010).

#### **- Employment of graduates**

The recruitment process can be defined as a set of activities used by the Organization to

attract candidates who have competence, excellence and ability to contribute to the realization of the objectives of the Organization (Arab Forum, 2012)

Previous studies

Serial No	1
Title of study	The reality of Community colleges in Yemen by the point of view of academic leaders, community colleges staff members, employers and community colleges graduates
Country of study	Yemen
Researcher name.	Absi 2017
Year	
Aim of study	Identifying successful global models of community colleges in advanced countries to put a suggestion for accommodating community college outcomes with the labour market in Yemen
Statistical methods used in study	The study used the descriptive approach, and the study was conducted with a validity of five community colleges
The most important outcomes	There is a weakness in the partnership between community colleges and labour market institutions in terms of students and faculty members training, curriculum setting and community college programs are not flexible to adapt with the needs of the labour market.
Serial No	2
Title of study	Academic programs and their response to the needs of labour market
Country of study	Algeria
Researcher name.	Zagawa Ahmed 2017
Year	
Aim of study	Investigating the extent of the response of the higher education curriculum and programs to the needs of the labour market from the university students point of view, in light of the gender variable (male and female)..
Statistical methods used in study	Descriptive and analytical approaches
The most important outcomes	It has indicated that the response of educational programs to the needs of the labour market was poor.
Serial No	3
Title of study	The acquisition of skills in life in Jordan universities .
Country of study	Jordan

Researcher name.	Obaidat ,Taiseer
Year	( 2010 )
Aim of study	This study aimed to measure the degree of acquiring life skills among students of Jordanian private and public universities
Statistical methods used in study	Analytical approach
The most important outcomes	There are some differences in the level of skill acquisition in terms of gender and type of college (literary and scientific). This was because Higher Education policymakers tended to improve its quality and make it more related to local economy.
Serial No	4
Title of study	The quality standards and the labour market requirements in the colleges curriculum of the University of Aden by the points of view of staff members and students
Country of study	Yemen
Researcher name.	Salem, Hazza (2010).
Year	
Aim of study	Maintaining quality standards and the requirements of the labour market in the colleges curriculum of Aden University, from the points of view of faculty members and students.
Statistical methods used in study	Descriptive and analytical approach
The most important outcomes	The results show that the quality standards of the curriculums of the university of Aden received a low overall rating of 1.60% The research also continues its prediction through the research sample in Aden University that the graduates' chances to find jobs are very weak with a rate reaching 54.4%
Serial No	5
Title of study	A Framework for Higher Education Labour Market Alignment: Lessons and Future Directions in the Development of Jobs
Country of study	New Jersey
Researcher name.	Cleary, Nov. 2014
Year	
Aim of study	To examine the impact of the Great Recession and several other factors which have increased concerns among economic policymakers and the general public about the role of higher education and its role of employment in the labour market
Statistical methods used in study	Descriptive and analytical approach

The most important outcomes This paper has designed a model and a framework that provide concrete guidance, a common language and a key vision for the policymakers on how to effectively direct the labour market and the higher education.  
Policymakers and researchers develop better policies and practices. Moreover, this paper estimates the current practices and prioritizes future research.

Serial No	6
Title of study	Labour market conditions, skill requirements, and education mismatch
Country of study	Canada
Researcher name.	Fraser Summerfield 2013
Year	
Aim of study	To prove that there is a positive relationship between the local unemployment rates and the requirements for manual skill jobs
Statistical methods used in study	The analytical approach
The most important outcomes	The study presented evidence that the change in the requirements to increase education and Job skills is the mechanism that determines the effect of labour market demands on the increase or decrease of accommodating graduates in different professions and jobs. The study clarified through its measurement that the decision to choose among jobs is influenced by the construction of those jobs resulting from the requirements of the labour market which also contributes to an increase in education (graduate surplus)

Serial No	7
Title of study	The Labour-Market Returns to Community College Degrees, Diplomas, and Certificates.
Country of study	America
Researcher name.	Jepsen ,Troske,Coomes 2012
Year	
Aim of study	To evaluates the comparison between the benefits and the profits earned by the labour market from the employees who graduated from community colleges using administrative data from the state of Kentucky
Statistical methods used in study	The analytical approach



The most important outcomes	The study clarifies the reasons that govern the difference in the graduates' ambitions and the wages that students expected to see ahead. It also concludes that there are differences in the profits of the market for the graduate students of the different studies, and women are the most employed in the labour market.
Serial No	8
Title of study	Improving the labour market success of poorly integrated new entrants (PINEs) in Canada.
Country of study	Canada
Researcher name.	Bell and Benes 2012
Year	
Aim of study	To confirm that the labour market is supposed to be able today to accommodate several sales jobs, especially for those who have acquired post-secondary education diploma
Statistical methods used in study	The descriptive approach
The most important outcomes	The study confirms that the impact of the 2008 recession can be compared to 1933 stagnation, accordingly suggested remedial strategies to help young people with limited potentials to be employed in jobs matching their abilities and skills to avoid increasing unemployment.
Serial No	9
Title of study	The Effect of Labour Market Information on Community College Students' Major Choice
Country of study	America
Researcher name.	Baker, Bettinger, Jacob, Marinescu 2017
Year	
Aim of study	To prove that one of the important objectives of community colleges is to prepare students for the labour market
Statistical methods used in study	Analytical and descriptive approach
The most important outcomes	Expected Labour market salaries have a great influence on the estimations of the study which shows that a 1% increase in salaries is enough to increase the rate of students' choice from 1.4% up to 1.8% when choosing their own specializations.
Serial No	10
Title of study	The relationship between the higher education outcomes and the labour market requirements to face the reasons of unemployment of graduates in Saudi Arabia

Country of study	Kingdom of Saudi Arabia
Researcher name.	Mana, Ezzat (2008)
Year	
Aim of study	To evaluate the relationship between the outputs of higher education institutions and the needs of the labour market to estimate the causes of unemployment in Saudi Arabia graduates
Statistical methods used in study	The descriptive approach
The most important outcomes	The research has included the causes of unemployment and the educational vision to improve the efficiency of the education outputs in order to meet the needs of the labour market and ways of linking higher education to the needs of the labour market

### Statistical analysis of study data

#### - Study sample description

The results of the analysis indicate that the participation rate in the sample for both sexes is about 34% for males and 66% for females, which means that the female participation rate is about twice that of males.

As for the age groups, the age group from 40 to less than 50 years is the most participating in the sample by about 48%, while the participation of other groups is about 33%, 13%, 7% for groups from 30 to less than 40 years, from 50 years or more, from 20 to less than 30 years old, respectively

The results also indicate that the percentage of participation of the academic degree groups in the sample is as follows: the participation rate of the assistant professors

reached 50% of the total participants, followed by lecturers at 30%, teacher assistants of about 11% and associate professors 7%, while the lowest participation rate was for the teachers approximately 2%.

The percentages of participants in the sample from the years of experience categories were as follows: From 10 years or more 43%, from 7 to 10 years, approximately 28%, from 4 to 6 years, approximately 21%, and from 3 years and less 8%.

The results indicate that the percentage of participants from the nationality categories of the non-Saudis category reached about 77%, more than three times of the Saudi nationality category. Because the number of non-Saudi professors in community colleges is more than the number of Saudi ones.

Table (1) standard averages and deviations of the study sample

standard deviations	averages	Statement	Qs	Ser
1.002	3.55	Academic programs in community colleges meet the	Q1	1

real needs of the labour market.

.917	3.50	Academic programs at community colleges meet the interests of male and female students.	Q2	2
1.060	3.51	Academic programs in community colleges keep pace with contemporary scientific developments.	Q3	3
1.060	3.52	University academic programs in community colleges respond to the requirements of labour market.	Q4	4
.965	3.34	Community colleges have agreements and working partnerships with public and private institutions.	Q5	5
.814	3.74	Community college academic programs contribute to economic development	Q6	6
.943	3.65	The academic majors in the community colleges correspond to the professions in the labour market.	Q7	7
.981	3.76	The goals of academic programs in community colleges are clear and precise.	Q8	8
1.126	3.36	The contents of the academic programs of the community colleges are characterized with modernity and development.	Q9	9
.980	3.80	Academic programs in community colleges allow students to effectively participate in educational activities.	Q10	10
.904	3.53	Community colleges' academic programs focus on educational skills rather than life skills.	Q11	11
	3.56			
1.051	2.95	Male and female students can write reports and official and personal messages.	Q12	12

.928	3.56	Male and female students of community colleges are good at controlling cooperation and teamwork skills.	Q13	13
1.068	3.03	Community college students have the skill of time management and organization.	Q14	14
1.000	3.58	After graduation ,students of community colleges realize the professional and ethical importance of their work	Q15	15
.991	3.48	Students of community colleges are fluent in communication skills.	Q16	16
1.004	3.84	Students of community colleges can use computers and modern technologies.	Q17	17
.979	3.51	Community college graduates possess the knowledge and skills needed to do their jobs.	Q18	18
1.102	3.28	Community college academic programs offer opportunities to learn job search techniques.	Q19	19
	3.4			
.900	2.88	Employers are reluctant to employ community college graduates because of some of the wrong practices by their former graduates.	Q20	20
.870	3.83	Community college graduates face intense competition from other college graduates upon employment.	Q21	21
.859	3.59	The lack of classification of some programs by the Civil Service prevents graduates from being employed.	Q22	22
1.059	3.23	Employers are reluctant to employ community college graduates because of their negative mental image about them.	Q23	23
.940	3.85	Weak skills of community college graduates in speaking foreign languages reduce their	Q24	24

employment opportunities.

3.48

Table (1) indicates the mean averages and standard deviations for the responses of the study items. The average value of the phrases, except two phrases, ranged between 3.85 as the highest average and 3.03 as the lowest average, with a general average of 3.56 for the axis of community college programs, 3.4 for the axis of skills required for the labour market, and 3.48 for the axis of employment requirements, which indicates to the tendency of vocabulary opinions to agreement. We also note that the standard deviations are relatively small, which indicate the homogeneity of the respondents' opinions.

**- The Results of the Analysis of the Community College Programs Model**

The SPSS version (21) and the AMOS Structural Placement Analysis program

(version 23) were used to analyze the research data. The descriptive indicators were analyzed by using SPSS and confirmatory factor analysis using the AMOS program to measure model consistency and find effects and test the effect of the intermediate variable, a model was built for a relationship of community colleges programs and the skills required for the labor market, and employment requirements as non-observable variables, each of which has several paragraphs as observational variables, and patterns have been identified in which programs are an independent variable while employment requirements are dependent variable, and skills are intermediate variable. After modifying the model, the model was reached in Figure 1 below.

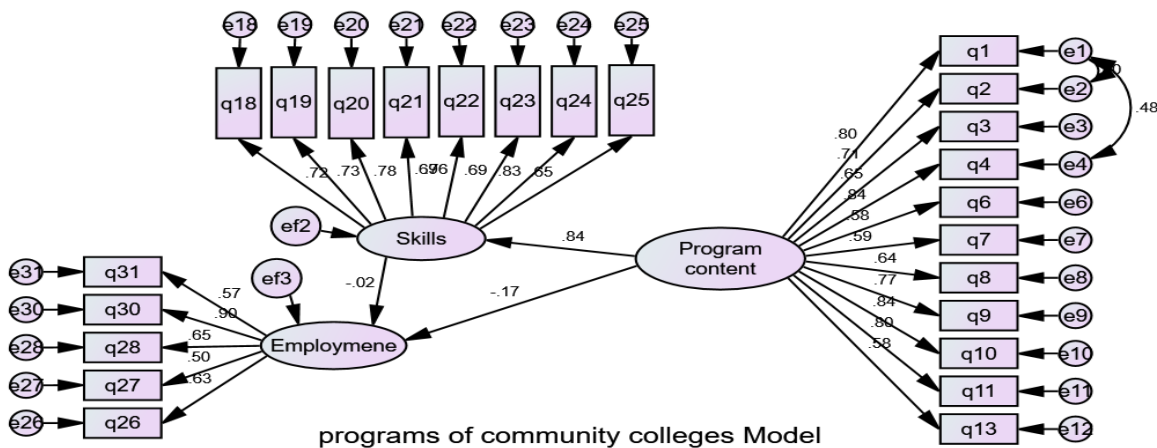


Figure 1: Modified study model using confirmatory factor analysis.

RMR, RMSEA, TCR-Louis TLI, CFI and CMIN / DF index indicators were calculated as quality match indicators for the model, and results were found as in Table (2):

Table (2) Indicators of Quality Application

RMR	RMSEA	TLI	CFI	CMIN/DF	The indicator
0.058	0.039	0.903	0.912	1.263	The value

Source 1: Prepared by researchers based on the results of statistical analysis using the Amos program.

The model indicators have used AMOS as in Table (2), and since the test of Chi square significant (P = 0.003) was at the level of 0.05, the standard Chi square value was referred to as 1.263 which is less than 5, while other matching indicators came as follows, Comparative Match Index (CFI) = 0.912, and Tucker-Lewis Index (TLI) = 0.903, both greater than 0.9 and the Root Square Error Mean Root (RMSEA) = 0.039 less than 0.05 and the Remaining Squares Average Index (RMR) = 0.058 less 0.1 This indicates that the data matches the model032, that is, the model is good and good results can be obtained.

Table (3) regression weights model between factors

The Relationship	Regression coefficient	Standard error	The critical value	Significant value
F2 <--- F1	0.86	0.145	5.475	***
F3 <--- F2	0.174	0.255	0.545	0.586
F3 <--- F1	-0.317	0.235	-0.994	0.32

Source: Results of statistical analysis using the Amos program

Table (3) represents the results of regression analysis using the AMOS program, after fulfilling the requirements of linear regression analysis, where the results indicate a significant relationship of statistical significance at a level of significance of 0.05 between community college programs and the skills required for the labour market. The value of significance has reached 0,000, and the absence of a significant relationship Statistics between the programs of community colleges at King Khalid University and the requirements for employing a graduate of those colleges, with a moral value of 0.32, and there is no relationship between the skills that graduates gain in employment requirements, where the value of significance reached 0.586.

Table No. (4) The different normative effects of independent variables on dependent variables

	Total effects			Direct effects			Indirect effects		
	F1	F2	F3	F1	F2	F3	F1	F2	F3
F2	.860	.000	.000	.860	.000	.000	.000	.000	.000
F3	-.167	.174	.000	-.317	.174	.000	.150	.000	.000

Source: Results prepared by researchers depending on statistical analysis using the Amos program

According to the study model that indicates an indirect relationship between college programs and graduate employment requirements through the skills required for the labour market as an intermediate variable, direct and indirect effects between the variables were calculated as in Table

No. (4), which shows the indirect relationship between community college programs and the requirements for employing graduates through the skills required for the labour market where the value reached 0.15. This means that the skills required for the labour market do not mediate the relationship between community college programs and graduate employment.

**- The Results of Analysing Test Relationship with Personal Variables**

To study the relationship between study variables and demographic variables, gender, age, educational qualification, experience and nationality, a Chi square test was used with a significance level of 0.05, and the results were as follows:

There was no correlation between the study variables, community college programs, skills, employment requirements, and the gender variable, where all the significant values of the Chi square test was greater than 0.05.

Table (5) Chi -square test for the relationship between variables and age

Significance	Degree of freedom	Chi square Statistics	The Statement	Q	Ser
.022	12	23.780	Academic programs in community colleges meet the real needs of the labour market.	Q1	1
.014	12	25.209	Academic programs in community colleges keep pace with contemporary scientific developments.	Q2	2
.000	12	38.925	University academic programs at community colleges respond to labour market requirements.	Q3	3
.039	12	21.911	Academic programs in community colleges allow students to participate in educational activities effectively.	Q4	4
.008	12	26.825	Male and female students of community colleges are good at controlling cooperation and teamwork skills.	Q5	5
.001	12	32.316	Students of community colleges can use computers and modern technologies.	Q6	6

Source: Prepared by researchers based on SPSS results

The results of the Chi square test in table (5) indicate that there is a significant relationship at the significance level of 0.05 among only four statements of the axis of academic programs and

the age variable, that is, +9 the academic programs meet the real needs of the labour market, keep pace with academic programs of contemporary scientific developments, and

respond to the requirements of the labour market and the participation of students in educational activities effectively. Likewise, there is a relationship between only two statements of the skills axis, which are cooperation skills, teamwork, computer use, and modern technologies. As for the employment axis, there is no significant value for the relationship between it and the age variable.

Table (6) Chi square for the relationship between the variables due to the educational qualification:

Significance	Degree of freedom	Chi square Statistics	Statement/ qualification	Q	Ser
.039	16	27.201	University academic programs at community colleges respond to labour market requirements.	Q1	1
.035	16	27.605	The majors in the community colleges correspond to the professions in the labour market.	Q2	2
.006	16	33.606a	Students of community colleges can use computers and modern technologies.	Q3	3

Source: Prepared by researchers based on SPSS results

The results of the Chi square test for the relationship of the variables of the programs axis with the variable of the qualification, table (6), indicate that there is a significant relationship at the level of 0.05 except for two variables only. Only in the skills axis, while the educational qualification is not related to any employment variable.

Table (7) Chi square statistics for the relationship between the variables ascribed to experience

Significance	Degree of freedom	Chi square Statistics	Statement/ Experience	Q	ser
.016	12	24.817	Academic programs in community colleges meet the real needs of the labour market.	Q1	1
.000	12	34.880	Academic programs in community colleges keep pace with contemporary scientific developments.	Q2	2
.003	12	30.295	University academic programs at community colleges respond to labour market requirements.	Q3	3
.021	12	23.883	Academic programs in community colleges allow students to effectively participate in educational activities.	Q4	4
.024	12	23.509a	Male and female students of community colleges are good at controlling cooperation and	Q5	5



teamwork skills.

.001	12	32.678a	Students of community colleges can use computers and modern technologies.	Q6	6
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Source: Prepared by researchers based on SPSS results

The results of the Chi square test in Table (7) indicate that there is a significant relationship at the significance level of 0.05 between the variable of experience, the terms of academic programs meeting the real needs of the labour market, keeping pace with academic programs of contemporary scientific developments, responding to labour market requirements, and students participating effectively in educational

activities from an axis academic programs. Likewise, there is a relationship between the variable of experience and only two expressions of the skills axis, which are: cooperation skills, team work, computer use, and modern technologies. As for the employment axis, there is no significant relationship between them and the variable of experience.

Table (8), Chi square statistics for the relationship between the variables due to nationality

Significance	Degree of Freedom	Chi square Statistics	Statement/ Nationality		ser
.027	4	10.987	Academic programs at community colleges meet the requirements of labour market	Q1	1
.007	4	13.973	Community colleges have agreements and working partnerships with public and private institutions.	Q2	2
.027	3	9.208	Community colleges' academic programs focus on educational skills rather than life skills.	Q3	3
.047	4	9.636	Students of community colleges are fluent in communication skills.	Q4	4
.027	4	10.948	Students of community colleges can use computers and modern technologies.	Q5	5
.017	4	12.115	Community college graduates face intense competition from other college graduates upon employment.	Q6	6
.044	4	9.803	The lack of classification of some	Q7	7

programs in the civil Service prevents graduates from being hired.

Source: Prepared by researchers based on SPSS results

Table (8) shows the test of the relationship between the study variables and the nationality variable using the Chi box, where we note a statistically significant relationship at the level of 0.05 between the nationality variable and the academic programs meeting the interests of male and female students and work partnerships with public and private institutions and the focus of academic programs on educational skills more than life skills of the centre of academic programs. The male and female students are proficient in communication skills and use of computers and modern technologies from the skills and non-employment axis because some programs in the Civil Service are not classified from the employment list.

### **Discussing the results of statistical analysis and hypothesis testing**

Through what was reviewed in the introduction to the study and what was stated in its objectives and importance and through what was reviewed in the theoretical framework and previous studies, the research data was analysed using the Statistical Package for Social Sciences (SPSS) version (21) and the structural placement analysis program (AMOS) version (23) What has been reached on the results of the statistical analysis will discuss these results and test the hypothesis of the research as follows:

#### **- The first hypothesis**

**This hypothesis states that there is no statistically significant relationship between the programs of community colleges and the skills required for the labour market.**

Referring to table (1) standard averages and deviations, we notice that most averages of program statements are closer to approval with an

average of 3.56, i.e. a positive description of community college programs, while the results of the averages indicate that the skills required for the labour market are modest in the neutral range with an average of 3.4 and the results of linear regression analysis indicate in table (3) that the value of the regression coefficient of the axis of community colleges programs on the skills required for the labour market has reached 0.86, which is significant at the level of significance of 5%, where the value reached 0,000, and therefore it can be said that there is a justification for rejecting the null hypothesis, and accordingly we accept the alternative hypothesis that there is a significant statistical relationship between community colleges programs and skills required for the labour market .

#### **- The second hypothesis**

**The second hypothesis states that there is no relationship between the programs of community colleges at King Khalid University and the employment of graduates of those colleges**

Referring to the averages and standard deviations in table (1), the average responses for the program axis is 3.56 in an acceptable range. Thus, we find that the average respondents' responses to the axis of employment of community college graduates are about 3.48 greater than neutral, but within the range i.e. employing graduates of community colleges is not to a large degree. The regression weights among the factors in table (3) indicate that the regression coefficient of the axis of community college programs on the axis of graduate employment requirements has reached -0.317, which is not significant at the level of significance of 5%, where the value of

significance was 0.32. And we accept the nihilistic assumption stipulated, there is no relationship between the programs of community colleges at King Khalid University and the employment of graduates of those colleges.

**- The third hypothesis**

**There is no relationship between the skills the graduate acquires and the employment requirements**

The results of the statistical analysis of the mean of the axes in table (1) and the analysis of linear regression in table (3) indicate that the general average of the axis of skills acquired by the graduate is 3.4 and the axis of employment is 2.48 less than the corresponding range, and the test of the relationship between the two axes, that was done using the regression analysis, showed that the coefficient of the slope of the graduate skills axis on employment requirements is 0.174, which is not significant at the level of statistical significance of 5%, as the value of significance reached 0.586. This is an evidence that enables us to accept the nihilistic assumption that there is no relationship between the skills the graduate acquires and the employment requirements, that is, the skills that graduates of community colleges have do not affect the employment requirements.

**- The fourth hypothesis**

**The skills required for the labour market do not mediate the relationship between college programs and the employment of graduates**

To test the effect of the variable, the axis of skills required for the labour market, as an intermediate variable between the axis of community college programs and employment requirements, direct and indirect effects of the variables that have been calculated, as in table (4), where we note that the direct impact of the variable of the programs axis on skills is equal to 0.86, which is a significant effect and the direct effect of the variable of the skills axis on the

employment requirements equal to 0.174 which is not significant, the direct effect of the program axis on the employment requirements equals - 0.317 and the indirect effect of the axis of community college programs on the employment requirements via the variable of the skills required for the labour market is equal to 0.15 which is an insignificant effect. This does not enable us to find a justification for rejecting the nihilistic hypothesis, by accepting the nihilistic hypothesis which says the skills required for the labour market do not mediate the relationship between college programs and the employment of graduates.

**- The fifth hypothesis**

**There is no relationship between these variables and the demographic variables of the study sample**

To test this hypothesis, the Chi square test was used to test whether the respondents' responses in the three axes of community college programs, graduate skills, and employment requirements are dependent on gender, age, educational qualification, experience, and nationality. Concerning the age variable, as in table (5), there is no relationship at all with the employment requirements axis, and there is no general relationship with the skills axis, and there is a weak relationship with the programming axis in four of eleven statements.

And table (6) shows the test of the relationship of the three study axes with the variable of the academic qualification as there are only two statements in the programs axis and only one statement in the skills axis which is significant at 5%. Therefore, it can be said that there is no relationship between the variables of the study and the educational qualification.

From table (7), we note that there are only six significant statements of the entire scale with twenty-five statements, for the relationship between the axes and the variable of experience,

four from the programs axis and two from the skills axis and there is no significant statement from the axis of employment requirements at the level of 5%. Therefore, we conclude that there is no relationship between experience and study variables.

The relationship between the study variable and the nationality one is shown in table (8), where we note the presence of seven significant statements at the level of significance of 5% of twenty-five statements, three from the programs axis, two from the skills axis and two from the employment requirements axis. Therefore, it can be said in general that there is no relationship between the line of study and the variable of nationality.

In general, it can be said that there is no relationship between the variables of the study and the demographic variables, so we accept the nihilistic hypothesis that there is no relationship between those variables and the demographic variables of the study sample.

## Conclusions and Recommendations

### Conclusions

After reviewing the research theoretical framework, analysing and discussing the results of the analysis and testing the study hypotheses, the following was reached:

1. There is a statistically significant relationship between the community college programs and the skills required for the labour market.
2. There is no relationship between the programs of community colleges at King Khalid University and the employment of graduates of those colleges
3. There is no relationship between the skills acquired by the graduate and the employment requirements, that is, the skills acquired by graduates of community colleges do not affect the employment requirements.

4. The skills required for the labour market do not mediate the relationship between college programs and the employment of graduates.

### Recommendations

Through reviewing the results and what was concluded, researchers can provide some recommendations that may contribute to the process of improvement of the educational process, which is one of the most important functions of the university, as follows:

1. It is noted that the programs offered by community colleges are commensurate with the requirements of the labour market, but researchers recommend reviewing the contents of those programs to develop the skills required for the labour market.
2. From previous studies, it is clear that community colleges contribute significantly to the development of societies. Therefore, researchers recommend that the requirements and needs of implementing these programs should be reviewed including laboratories, materials and other tools.
3. It is noted that there is a gap between the requirements of the labour market and the contents of the current programs. Therefore, the researchers recommend that the partnership between community colleges and labour market owners be strengthened to know their requirements.
4. It is noted that previous studies have paid much attention to the process of training graduates of community colleges before joining the theoretical labour market, so researchers recommend the need to pay attention to the practical training aspect of graduates before graduation.

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