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Impact the Knowledge Gap in the Relationship Between the Repercussions of Armed Conflict and Between of Technical and Vocational Education and Training (TVET) An Applied Study in the Yemeni Community Faculties

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Abstract

This study aims to determine the extent of the impact of the relationship when the knowledge gap mediates between the ramifications of conflict and outputs quality Technical and Vocational Education and Training TVET, and to verify the implications of the armed conflict directly and indirectly of in TVET outputs quality in Yemen. This study was based on a mixed methodology quantitative and qualitative. The quantitative study sample was taken in a probabilistic way. The sample consists of (615) respondents, including (60) teachers, (66) employees, and (489) students. Exploratory Factor Analysis EFA was performed used SPSS. The was used Program AMOS to perform confirmatory factor analysis CFA, and by the structural equation modeling (SEM) was analyzed the path of relations between the study variables, checking all kinds of validity, and compound reliability. The qualitative study relied on interviews with (15) academics and employees who are affiliated with TVET and They act represent 3 them focus groups. The study concluded the following results: There is a direct negative relationship between the knowledge gap and TVET outputs quality. This relationship decreases when the knowledge gap mediates between the Ramifications of conflict and TVET outputs quality. and this means that the mediator here is a partial mediator. The results of the study also showed a direct positive relationship between the repercussions of armed conflicts and the knowledge gap.

Keywords: Knowledge Gap; Repercussions Armed Conflict; TVET outputs quality.

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1. Introduction

Conflict is an old phenomenon has existed since the existence of human societies on the surface of the globe, the rapprochement and interaction between human groups and the multiplicity of interlocking interests between countries have increased the dangers of these conflicts, and under the rapid changes in all domains, it has become important to work under two conflicting tracks. the first of them is to keep pace with the tremendous and accelerating development in Knowledge progress in order to achieve human development, which has is the backbone of population development in any country, this requires attention to TVET because it is one of the foundations used by countries to keep pace with this development، and The second lies in facing the risks to human life and the foundations of its development, among these: natural disasters, crises and various conflicts that are man-made, which has a great impact in weakening the level of human life in all its dimensions, especially its impact in increasing poverty its economic and cognitive forms, as a result of the lack of awareness among members of society of the importance of knowledge and the indifference to the development of the human element [1]. Globalization has imposed many challenges whose impacts have been reflected on the societies of developing countries, among which has the crises and interrelated conflicts that destroyed the constituents of some societies. While developing countries are trying to make efforts to bridge the knowledge gap between them and the developed world, but their inter-conflicts has contributed to negative influences on the domains of their security, administrative, political, economic, social, cultural، and ethical lives. This has weakened the scientific and cognitive level. While the competition for knowledge in this era created a great difference in the level of achieving excellence in the indicators of this field, and for this reason there was a gap called the knowledge gap, and many countries of the world and most Arab countries suffer from this [2]. Knowledge has emerged in the 21st century as one of the valuable resources that determines who has power and profit. Some studies see that the concept of the gap generally refers to a hierarchy between those who have more knowledge and those who have less knowledge, and that the crystallization of the size of the knowledge gap in countries is the result of the accumulation of several gaps. Civilizations flourish or retreat between their regional and international surroundings, through the amount of knowledge that their human resources possess [3]. Education is one of the most important issues in which has the emergence of the knowledge gap manifests itself, because education is the basis for building knowledge, developing human resources and improving productive efficiency, and knowledge in society is based on education, and knowledge in this era has become a gateway to development in any society, and the key to this portal lies in education and learning, and the weak education leads to a decrease in the return on the development of the educational process, which has increases the widening of the gap, and thus the relationship of the knowledge gap with education is a direct inverse relationship, the weaker the educational level the more the gap widens and vice versa [4]. There are those who indicated that the low level of education is one of the main reasons leading to the knowledge gap, and that the most important cultural barrier to any development project in society lies in the expansion of the illiteracy phenomenon with its wings: alphabetical and cognitive, and a result of the high rate of illiteracy is the widening of the knowledge gap [5]. In Yemen, human capital suffers from the repercussions of devastating armed conflicts, as the humanitarian situation and the suffering of civilians in the country worsen. In this regard, the Guardian newspaper described the suffering of the Yemenis as "not only a global humanitarian crisis; it is a crime" [6]. The French Foreign Ministry also described what is going on in Yemen as a "dirty war" [7]. Food

insecurity contributed to the spread of diseases sharply, which has helped spread cholera as the largest epidemic in the world, and increased the number of deaths in the country, which has prompted Yemenis to face the deteriorating health conditions, and the health situation in Yemen is heading towards collapse [8]. As a result of the armed conflict, the infrastructure was severely damaged, with many homes, buildings, roads, bridges, schools, hospitals, and factories destroyed - in addition to education, water, energy, and sanitation infrastructure, as well as infrastructure related to major economic sectors such as oil, agriculture, and manufacturing industries [9]. Armed conflicts have contributed to widening the knowledge gap in Yemeni society, where the global knowledge index recorded the lowest level of knowledge in Yemen, Education contributes to measuring the level of knowledge through three main indicators out of seven indicators adopted by the global knowledge index. by measure the level of knowledge in countries, and these indicators include: pre-university course, (TVET), and higher education, not to mention scientific research, development and innovation, and it is clear here that education has a fundamental impact in increasing or decreasing the level of knowledge, and led the conflict Armed to the deterioration of the cognitive level, which has led to the educational process in the country reaching its worst stages, and its weakest components until its introduction into a clinical death as a natural reflection of the escalating conflict in the country [10]. The (TVET) is one of the important pillars in the field of preparing, qualifying and developing the workforce to increase its productivity, which has is the driving force for the technological and economic growth of the nation, and it is a service with a return economy, as it provides the requirements of the labor market according to scientific and technical variables in it [11]. In Yemen, (TVET) currently attracts less than 2% of Outputs from general education, and spending on this type of education represents 1.02% of total government spending, which has represents only 0.2% of GDP, Not to mention that those enrolled in this type of education are not allowed to pursue higher education [12]. In addition to the previous repercussions of the conflict, more than (50%) of TVET facilities were completely or partially destroyed, and (1928) employees representing (58%) of the human cadres for this type of education stopped, in addition to that more than (9,500) students stopped studying in the year 2014/2015 academic year, not to mention the large number of students unable to continue studying as a result of displacement and migration [13]. The aforesaid has led to the weaken outputs quality of this type of education, as the quality here is attributed to various variables, the important of which has: Knowledge acquisition, adaptation to the business community, self-development, acquisition of competence, and skills of joint action, ability to take responsibility and solve complex problems. The problem of the study revolves around revealing the importance and impact of the knowledge gap in the relationship between the repercussions of armed conflicts and TVET outputs quality, by mixing basic data obtained from human cadres in community faculties for Yemeni, and the secondary data that resulted in the analysis of what Yemen obtained in the global knowledge index for 2017. This study is an attempt to fill the clear void in the literature of the above-mentioned field, and this study is characterized by two advantages their: the consideration of the knowledge gap is an intermediate variable between the repercussions of the conflict and TVET outputs quality has not been addressed sufficiently before, and well the combination of primary data and secondary data. These two features made this study a starting point for more in-depth studies in this field, not to mention what this study adds to the field of knowledge in general.

2. Method

This study used the descriptive analytical approach (Quantitative and Qualitative). Then it was based on the

triangulation of data collection and analysis, as it relied on primary data, secondary data, and interviews. This way criticisms directed at quantitative studies were avoided, this triangulation enabled the results of the study hypothesis to be strengthened. and is based on what some studies have indicated that the mixed classification method is more impactive in enhancing the validity of the results [14]. The current study differs from previous studies in terms of the environment in which has it was applied, and the critical conflict situation the study community environment is currently undergoing. This study was also based on two theories: The first theory of comprehensive quality in education, which has laying the foundations of this theory Edward Deming and its four pillars (planning - implementation - examination direct), and linking the concept of quality impactive management, achieving a balance between the requirements of each of: The student; society; production institutions; staff and faculty members to achieve satisfaction with the services of the educational entity [15]. Total quality in education focuses on adhering to the specific specifications in which has defects are zero, because the application of a zero-defect approach has a positive impact on ensuring excellence in meeting society's needs in the field of production and service [16]. The most prominent justification that requires the application of comprehensive quality in the educational system is the link between quality and production so that the quality system includes all domains, because the link is closely between comprehensive quality system and the comprehensive evaluation of education in various educational institutions [17]. The second theory: is the theory of the knowledge gap, where the knowledge gap appears in countries as a result of the accumulation of many gaps, and the resulting gaps collectively lead to the so-called knowledge gap, which has a negative impact on humans and its well-being in any society, the amount of practical knowledge is what is characteristic of countries, as it increases its efficiency and its creativity in its regional and international surroundings. and the prosperity and development of civilizations or their decline lies in the qualitative knowledge to their human resources [18]. The knowledge gap theory is based on what Tichinor, Donohue, and Olain assume, because they believe that increased knowledge is disproportionately acquired among members of society, individuals with high social and economic conditions are more able to obtain information, while other groups that do not have these advantages, Their ability to obtain information is less, and this leads to the division of society into two groups: one group that has knowledge of most things and is highly educated, and a group with limited knowledge, and they are less educated, and these are far from current events and new discoveries, because they do not have access to more knowledge [3]. The above theory refers to the causes of the knowledge gap due to exposure to the media, and that the media and the social level are two reasons for the knowledge gap [5]. where the media differs in the transmission of information which has leads to the division of knowledge between those who are less educated and those who are more educated, and this leads to a diversity of influence between the two categories, and it can be said that the role of most of these means is to maintain the knowledge gap, which has includes all aspects of life, because the gap includes "everything we do and we do not know" [4]. This theory has been criticized in some studies because the media have limited impacts, and the impact of the media varies among the population, in addition to the emergence of new media technology that this theory has not addressed. For this reason, this theory has been criticized because its focus is actually on social structure and not on individuals, not to mention the difference in the influence of the media on cognitive variables rather than emotional changes [19].

3. Statistical methods used in analyzing study data

Primary and secondary data were used and included in to program statistical packages for social sciences SPSS to obtain the results of EFA. and use By Analysis of moment covariance structures program (AMOS), for CFA and SEM to analyze the course of the relationship between the study hypotheses, and these methods are more suitable for measuring causal relationships, in addition to conducting and studying Multiple variables at the same time. The next section explains the details of secondary and primary data processing, then the rest of the analysis stages.

3.1. Secondary data processing

The United Nations has relied on measure knowledge through a composite index to measure the level of knowledge in countries, and it consists of (7) indicators, and each indicator consists of (3-5) levels, and the lowest level is based on a set of variables that may reach more than (130) variables covering various vital sectors in a country. According to the World Knowledge Measurement Index 2017, the amount of the knowledge gap in Yemen was analyzed, the average size of the gap was calculated in the seven indicators on which has the measurement was based, and the values were distributed to the sample representing the study population. the following table shows the main and minor variables for each indicator.

Table 1: axes and parameters of knowledge index measurement

Sequence	Variable	Main hubs	Sub-axes	Variables
I	Pre-university course (PUC)	2	6	17
2	Technical and Vocational Education and Training (TVET)	2	4	12
3	high education (HE)	2	7	16
4	Research, development and innovation (RDI)	3	6	28
5	Information and Communication Technology (ICT)	2	6	20
6	Economics	3	6	22
7	Enabling environments	3	6	18
Total		17	41	133

Secondary data was analyzed to reach the amount of knowledge gap in Yemen, as a result of subtracting the value of the standard degree from the value obtained in the index. As shown in the following table.

Table 2: values that Yemen got in the global knowledge index 2017, and the gap

Statement	PUC	TVET	HE	RDI	ICT	Economics	Enabling environments	Total general index
Amount knowledge	39	29.7	16.2	13.7	22.1	26.1	32	25.54
knowledge gap	61	70.3	83.3	86.3	77.9	73.9	68	74.46

From the above table, it is clear the level of knowledge achieved in Yemen, as the last country to achieve the lowest values for the index. The level of knowledge given to Yemen was analyzed, and from it the estimated gap values for each of the seven measurement elements were reached. The estimated mean for the gap in each measurement element was reached by applying this equation. Estimated mean = gap value x highest measurement coefficient ÷ standard value.

Table 3: The amount of the knowledge gap in Yemen according to the Likert pentatonic scale

Sequence	Variable	1	2	3	4	5	Amount the mean	Element coding
I	PUC Gap	-	-	-	61	-	3.05	Q85
2	TVET Gap	-	-	-	70.3	-	3.15	Q86
3	HE Gap	-	-	-	-	88.5	4.425	Q87
4	RDI Gap	-	-	-	-	86.3	4.315	Q88
5	Economic Gap	-	-	-	77.9	-	3.895	Q89
6	ICT Gap	-	-	-	73.9	-	3.695	Q90
7	Enabling environment Gap	-	-	-	68	-	3.4	Q91
8	Overall indicator	-	-	-	75.13	-	3.74	Knowledge

(1) Very narrow (2) Narrow (3) Medium (4) Wide (5) Very wide

After obtaining the arithmetic mean of the values of the knowledge gap, the results of this mean were added to the primary data collected from the sample that was searched after coding the elements of the statistical analysis. Secondary data has been processed in the previous tables in order to obtain data for the knowledge gap that corresponds to the basic data, until it is included in the SPSS, to analyze the study hypotheses. Then EFA used to obtain the magnitude of the variance, error variance, common variance, and basic component analysis PCA, and the latent variables reduced to a few [20]. Then used program AMOS to implement CFA and used SEM to analyze the relationships between direct and indirect study hypotheses and analyze reliability and all types of validity. The next part outlines that.

3.2. Primary Data Analysis

The purpose of the preliminary data analysis is to ensure the suitability of the study data for the statistical methods used in testing the study hypotheses. There are methods that must be followed before performing the study data analysis process, whereby researchers stipulated some assumptions that must be made before performing the analysis to help obtain logical results that can be accepted to generalize on similar phenomena and these assumptions should be made according to the standard test for each species [21]. Among these assumptions are, for example, the treatment of lost data, and the outliers. this study data was evaluated used a distance test (Mahala Nobis), for each variable through by the SPSS program, and who's a variable exceeds the standard value were deleted. In this study as (75) variables removed which has extreme values in study variables, because they achieved acceptance values in this indicator less than (0.005) [22]. The data fulfilling the validity conditions for the analysis became (615) respondents. Multiple linear regression and correlation were

examined, then the normal distribution of data, and the linearity of the data.

3.3. The Metadata Analysis

The table below shows the arithmetic averages and standard deviations for analyzing the metadata for the variables of this study according to the results of the SPSS program.

Table 4: arithmetic averages and the standard deviation of the study variables

Sequence	Variable	Mean	T-Main	Std. Deviation	T-Std. Deviation
I	Security repercussions	3.18	3,34	1.62	1.24
2	Administrative repercussions	3.42		1.36	
3	Economic repercussions	3.48		1.21	
4	Health repercussions	3.32		0.998	
5	repercussions are social	3.43		1.1	
6	Repercussions are political	3.23		1.16	
7	Knowledge gap	3.74	3.74	1.56	1.56
8	Performance skills and take responsibility	3.37	2.72	1.01	1.04
9	Qualitative knowledge level	1.93		1.16	
10	Training and self-development	2.043		0.92	
11	Independence and creativity	3.55		1.1	

It is clear from the analysis of the data of the above table that all the arithmetic mean for the repercussions of armed conflict: security - administrative - economic - health - social - political these repercussions were high as they were respectively (3.18, 3.42, 3.48, 3.32, 3.43 and 3.23). The economic repercussions factor got the highest average of (3.48), with a standard deviation of (1.21), while the security repercussions got the lowest average of (3.18), and a standard deviation of (1.62). These results confirm the existence of consensus and agreement among the individuals appointed in the study that there are important repercussions for armed conflicts of all kinds, and that they represent a major factor impacting TVET outputs quality in Yemen. The knowledge gap average as an intermediate variable was also found to be (3.47) which has is the average obtained from the result of the analysis of secondary data for the global knowledge index, and with a standard deviation of (1.56). There is a consensus among the study sample members on the importance of the factors of the dependent variable according to the results presented in the previous table, where the independence and creativity variable got the highest arithmetic mean of (3.55), with a standard deviation of (1.1), and the qualitative knowledge level factor got the lowest arithmetic average of (1.93) With a standard deviation of (1.16). As we see in the table the results of the arithmetic averages of the three main variables, it has becomes clear that the knowledge gap got the highest arithmetic mean of (3.74), and a standard deviation of (1.56), then repercussions of armed conflict By (3.34), and a standard deviation of (1.24) Then, TVET outputs quality mean was (2.72), and standard deviation is (1.04).

3.4. Exploratory Factor Analysis (EFA)

these analysis is a statistical method that leads to the division of variables into groups called each factor group, and these factors are usually latent (invisible), and each factor must contain more than at least one paragraph, that is, this analysis summarizes the questionnaire paragraphs in Few factors, and these factors are used in studying the proposed hypotheses. And to determine the factors depends on the latent root whose value is one and more in order to consider it credible and purposeful, and the paragraph in the factors is accepted when you get (0.50) in the amount of saturation and more, and less than that is delete [23]. The results of the analysis of the study variables resulted in saturation of a group of factors, the details of which has shown in the following:

3.4.1. The EFA that represent the knowledge gap

The following table shows descriptive statistics (mean -Std. Deviation) in addition to the amount of saturation to represent the paragraphs of the median variable as its seven paragraphs were saturated in one factor, and the mean was located between (3.79) and (3.45), and the researcher was keen to make the total average of the factors Equals the average obtained from the analysis of the global knowledge index. The seven axes were loaded in one factor, as shown in the following table.

Table 5: Results of the EFA for the knowledge gap as an intermediate variable

Variable	Variable	mean	Std. Deviation	Component Loadings
PUC Gap	Q85	3.45	1.601	0,922
TVET Gap	Q86	3.76	1.374	0,921
HE Gap	Q87	3.71	1.414	0,917
RDI Gap	Q88	3.79	1.378	0,917
Economic Gap	Q89	3.78	1.398	0,906
ICT Gap	Q90	3.64	1.373	0,879
Enabling environment Gap	Q91	3.71	1.390	0,875
the average knowledge gap		3.73		

3.4.2. The EFA Results for the variables that represent the repercussions of armed conflict

The results of the analysis of this variable showed that the vocabulary of the questions was loaded according to expectations, and that the paragraphs of this variable were distributed in six factors: the first factor measures the security repercussions, the second measures the administrative repercussions, the third measures the economic repercussions, the fourth measures the health repercussions, the fifth measures the social repercussions, and the factor Six measures the political repercussions, and the latent root values of the independent variable factors obtained were high values, and it is noted that the first factors obtained the root larger than one of the factors that followed. The table below shows that the answer to the questionnaire paragraphs was divided into six factors, and these factors are those whose square root values were greater than one.

Table 6: Latent root values of the repercussions of armed conflict

Variable	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	variance %	cumulative %	Total	variance %	cumulative %	Total	variance %	cumulative %
I	19.25	40.104	40.104	19.3	40.104	40.104	9.86	20.536	20.536
2	6.079	12.665	52.769	6.08	12.665	52.769	6.58	13.715	34.251
3	4.146	8.639	61.407	4.15	8.639	61.407	6.05	12.613	46.864
4	3.734	7.779	69.186	3.73	7.779	69.186	5.92	12.339	59.203
5	2.590	5.395	74.582	2.59	5.395	74.582	4.63	9.651	68.854
6	1.603	3.340	77.922	1.60	3.340	77.922	4.35	9.067	77.922

We see in the previous table that the six factors were explained (77.922%) and this percentage is high. The intrinsic values are a criterion for each component, the higher the intrinsic value of the factor, the greater the variance explained by this factor. The suitability of data for factor analysis was also measure by the KMO scale, which has indicates the suitability of data for analysis, and the acceptable value must be greater than (0.50), in order to ensure that the sample size is sufficient for the analysis, and Bartlett's test showed that the relationship between The vocabulary is a statistical function because it is less than (0.05) [24]. The following table shows the quality of the data.

Table 7: KMO and Bartlett's Test of the repercussions of armed conflict

Test scale		The amount of data quality
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.966
Bartlett's Test of Sphericity	Approx. Chi-Square	34787.233
	DF	1128
	Sig.	0.000

We notice in the above table that the value of (Kaiser-Meyer-Olkin-KMO) is equal to (0.966). It is an acceptable value because it is greater than the standard value. This means that the sample is suitable and that the measurement is excellent and statistically significant at a level of significance less than (0.05).

3.4.3. Results of the EFA Results for the of TVET outputs quality

The latent root values revealed in results of the EFA that measure TVET outputs quality showed that the items of this variable were distributed in four factors, the first factor measures performance and responsibility skills, the second factor measures the level of specific knowledge, and the third factor measures self-learning and continuous development, while the fourth factor it measures independence and creativity, and the overall quality of the data was high. The tables (8) and (9) clear up that.

Table 8: Latent root values of the repercussions of the TVET outputs quality

Variable	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	variance %	cumulative %	Total	variance %	cumulative %	Total	variance %	cumulative %
I	10.4	36.99	36.999	10.4	36.99	36.999	7.02	25.08	25.081
2	4.65	16.61	53.604	4.65	16.61	53.604	4.78	17.13	42.213
3	1.84	6.586	60.190	1.84	6.586	60.190	4.16	14.86	57.076
4	1.35	4.821	65.012	1.35	4.821	65.012	2.22	7.935	65.012

Table 9: KMO and Bartlett's Test of the TVET outputs quality

Test scale		The amount of data quality
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.94
Bartlett's Test of Sphericity	Approx. Chi-Square	11197.019
	DF	378
	Sig.	0.000

3.5. Confirmatory Factor Analysis CFA

CFA results are presented using AMOS to check the consistency of the paragraphs in each factor as well as to validate, reliability and model validity. By use SEM, the relationships between direct and indirect hypotheses were analyzed. In addition to modifying the model by checking and restricting the waste provided by the AMOS program. Then has quality of conformity indicators was checked, based on two indicators for each matching category to evaluate the model of this study, where some researchers indicated that when using more than one indicator in each matching category, the results are strong [26]. Some researchers Indicator that only one index suffices in each of the three matching categories[25]. The next section detail that.

3.5.1. The CFA of the knowledge gap

The results of analysing this variable are clear according to the outputs of the AMOS program he dealt with, and he highlighted the details of the results of its paragraphs, which has shown by the standard estimates and non-standard estimates of the regression weights shown in the following table.

Table 10: Results of the CFA for the cognitive gap scale

Variable	Standard regression weights					Non-standard regression weights			Significance
	Loading	(R2)	Estimate	S.E.	C.R	Estimate	S.E.	C.R	
Q88	0.943	0.888	2.607	0.068	38.323	1.000			0,00
Q91	0.939	0.882	2.558	0.066	38.487	0,973	0,020	47.704	0,00
Q86	0.942	0.888	2.636	0.067	39.348	0,985	0,020	48.657	0,00
Q85	0.93	0.866	2.524	0.065	38.776	0,945	0,021	46.016	0,00
Q87	0.931	0.866	2.634	0.067	39.205	0,975	0,021	46.214	0,00
Q89	0.924	0.853	2.624	0.068	38.793	0,975	0,022	44.723	0,00
Q90	0.913	0.833	2.528	0.066	38.052	0,946	0,022	42.684	0,00

In the above table, the results of the CFA to measure the knowledge gap showed that the saturation between this variable and the seven axes that represent it is high, as it was between the ratio (0.913) as the lowest saturation and the ratio (0.943) as the highest saturation. The multi-factor correlation ranged between (0.833) and (0.888). All elements are statistically significant, and the standard T-value ranged between (38.052) and (39.348). As a result, the model enjoyed the validity of the variable, and all indicators obtained acceptance level. We find in Table No (14), which has separates the matrix of validity of differentiation between the variables shown later; we find that the compound reliability index got a percentage of (0.978), and the extracted variance got a ratio of (0.866), and after restricting the remaining error according to the amendment indicators for paragraphs (90 with 91); (90 with 86); (90 with 80), No. (91 with 87). These results confirmed that the knowledge gap measurement model is acceptable because it has a one-dimensional dimension. To achieve a one-dimensional condition, the saturation values for each paragraph must be acceptable, delete any paragraph with low saturation, and saturation is considered low when it is less than 0.5 in the developed scales, and for measurements derived from previous similar studies it is necessary to exceed the saturation of the paragraphs in each factor 0.6 [25]. Previous results confirmed that the knowledge gap measurement model is acceptable, in addition to its one-dimensional enjoyment, it is enjoying Convergence validity, differentiation validity, and reliability.

3.5.2. The CFA of the repercussions of armed conflict

The results of analyzing this variable show that the saturation values of the paragraph in the factor that measures it are acceptable, and high, as they are between (0.926). And 0.802). We also find in Table No. (14), which has separates the matrix of validity of differentiation between the variables shown later; we find that the compound reliability index for the factors of this variable falls between (0.986) as the highest percentage obtained from the security repercussions of the conflict, and (0.924) as the lowest percentage obtained the social repercussions of conflict. The values of the extracted variance AVE were between (0.896) and (0.672) achieved by the two mentioned variables. After restricting the residual error according to the amendment indicators in a number of paragraphs, the results became strong and acceptable because the model measurement of this variable was acceptable because it enjoyed the validity of the variable, as well as convergent and differential honesty, and reliability.

Table 11: The standard estimate of the factors underlying in repercussions armed conflict

Variable	Variable	Estimate	Standard error	Compound reliability	Significance, p-value	correlation
Security	Social	0.623	0.079	7.939	0.00	0.378
	Healthy	0.752	0.082	9.141	0.00	0.421
	Economic	1.133	0.101	11.268	0.00	0.55
	Political	0.055	0.049	1.128	0.075	0.048
	Administrative	0.402	0.053	7.555	0.00	0.368
Administrative	Political	0.819	0.076	10.739	0.00	0.648
	Healthy	0.016	0.057	0.287	0.034	0.012
	Economic	0.148	0.055	2.708	0.007	0.115
	Social	0.301	0.052	5.775	0.00	0.259
Economic	Political	0.267	0.047	5.651	0.00	0.259
	Healthy	0.307	0.08	3.857	0.00	0.165
	Social	0.22	0.046	4.755	0.00	0.218
Political	Healthy	1.263	0.108	11.702	0.00	0.722
	Social	0.339	0.055	6.123	0.00	0.285
Healthy	Social	0.067	0.047	1.43	0.03	0.063

In the above table, we find that the correlation ratios between factors within the model ranged between (0.722) as the highest correlation rate, which has is between the political and health repercussions factor, while the lowest correlation between administrative and health repercussions was achieved through (0.012), and these values indicate that a differentiation has been achieved The factors, and all the factors moved away from the complete merging between them, where they were at a level less than (0.85), and most of these factors are statistically significant, less than (0.05) except for the security and political repercussions, the relationship between these two factors it is not statistically significant, because it was (0.75). It is clear from the above table that the compound reliability index or the internal consistency of the variables obtained high values, ranging from (0.986) as the highest value achieved in security repercussions, and the lowest value (0.91) was achieved in social repercussions, and the values of variance extracted obtained by security repercussions were (0.897) The social repercussions got (0.628) as the lowest percentage. These values achieved by the six factors were higher than the standard values for these two previously explained indicators. Note that the radial values with a dark line are the square root of the average variance extracted for each variable, and the other values indicate the amount of relationship between the variables or what is known as common variance [25]. The values in the above table indicate that all six variables of the repercussions of armed conflict are acceptable because they meet the conditions of validity and reliability.

3.5.3. The CFA of the TVET outputs quality

The results of the analysis of the scale of this variable showed that there is a congruence in model building expectations, where the saturation was limited between (0.926) and (0.611) and these values are high, and the results also showed that the paragraphs of this variable in their original units are one-dimensional because the values of paragraph saturation in the measurement factor are acceptable, All results are satisfactory, the hypothetical measurement model is well suited to the study data, the values of its indicators are high in standard indicators and in non-standard indicators, and indicators of model matching with data were consistent with specific criteria that indicate good compatibility. This is shown by the following table.

Table 12: Normative Estimates and Correlation Factors for TVET outputs quality

Variable	Variable	Estimate	Standard error	Compound reliability	Significance, p-value	correlation
Creativity and responsibility	Qualitative knowledge	-0.362	0.047	-7.774	0,00	-0.384
	Training and self-development	-0.272	0.044	-6.233	0,00	-0.291
	Performance independence	0.642	0.057	11.282	0,00	0.642
Qualitative knowledge	Training and self-development	0.634	0.056	11.281	0,00	0.64
	Performance independence	-0.326	0.051	-6.401	0,00	-0.299
Training and self-development	Performance independence	-0.295	0.05	-5.939	0,00	-0.28

In the previous table, we see that the correlation ratios between factors within the model ranged between (0.642) as the highest correlation ratio, which has is between the creativity factor and the responsibility and independence of performance, while the lowest correlation between creativity and responsibility and the qualitative level of knowledge, where a ratio of (-0.384) was obtained, and These values indicate that the factors of this variable are differentiated, because they have avoided their full association. Also, all factors are statistically significant less than (0.05). Whereas, the statistical T-value ranged between (11.282) and (-5.939). It is clear from the above table that the compound reliability index or the internal consistency of the variables obtained high values ranging from (0.937) where the highest value in creativity and responsibility was achieved, and the lowest value (0.865) was achieved in training and self-development, and the values of the contrast varied were located between (0.704 The highest value obtained by the performance independence factor, and between (0.518) the lowest value achieved by the training and self-development factor. The Compound reliability and the contrast values extracted were higher than the standard value for these two previously mentioned indicators, and all four variables met the conditions for differentiation. The following section summarizes the results of analysing SEM for direct and indirect study hypotheses .

4.5. The results of the Structural Equation Modeling SEM

The use of SEM is one of the modern methods that some researchers rely on, especially in studies with intertwined and multiple variables, due to its ability to predict the relationships of each group of variables and factors and to where they belong and define the causal variables in the model. it this way highlights the relationship between the variables Latent and observable at the same time, where he was able to obtain the external measurement model, the internal structural model and the amount of its validity and reliability [26]. The external measurement model contributes to assessing the relationships between observed variables and unobserved latent variables, the internal construction model assesses the relationships between unobserved variables to determine the pattern in which observed variables affect latent variables, as well as the influence of latent variables in other latent variables in the model directly or indirectly [27]. After checking the conditions of the results of the preliminary data analysis, in addition to analyzing the factors in both the exploratory and confirmatory aspects of each measurement model in the study that was presented previously, this enabled the

use of SEM, to model all the variables of this study in one structural model, by drawing External variables and then intermediate and internal variables. The single-headed arrow has been used to indicate causal influences, connect variables and test assumptions of direct and indirect study. In the above figure, we see that the indicators for matching the model of measure study variables were high, where Chi-square got a value (4463,747), and the approximate error average root index RMSEA got a ratio of (0.034), and the comparative matching index got a percentage CFI (0.959), While Tucker and Lewis NFI index got (0.908), The index CMIN / DF got on (1.72). The values of the mentioned indicators indicate the strength of the relationship between the factors of this scale because they exceeded the standard values of the model, which has confirmed that the measurement model matches well with the theoretical model, and therefore the model is acceptable for measurement. The following figure shows the results of a SEM analysis for all study variables after modifying the model.

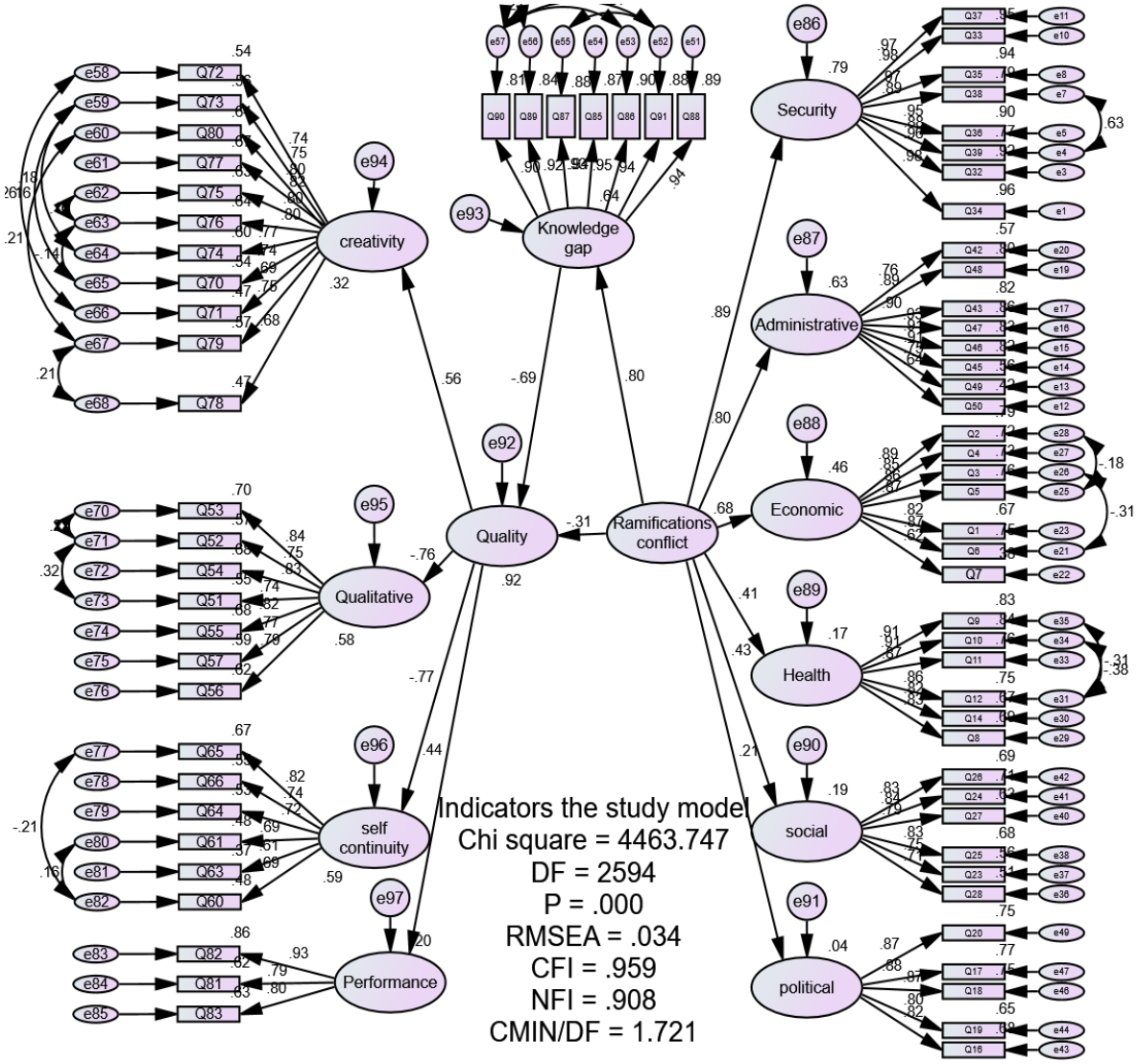

Figure 1: A schematic pathway for the results of a SEM analysis of the study hypothesis

And Looking at the path of direct study hypotheses in the Below graph, we find that the impact of the knowledge gap in the TVET outputs quality is (69%). While the impacts of the Ramifications of armed conflict

in the TVET outputs quality were (31%), which has confirmed that the impact of the knowledge gap is more than twice the impact of the Ramifications of armed conflict. and There a direct positive impact between the repercussions of armed conflict and the knowledge gap is (80%). While the coefficient of determination (R2), which has is the most important indicator to measure the quality of reconciliation of the regression model, obtained (92%), and its indicates the strength of the contribution of external variables in the interpretation of the total variations that occur in the values of internal variables, and that the deviation in the interpretation of internal variables is only (08%), This deviation is due to other factors such as random error and measurement error. Table (13) details these results.

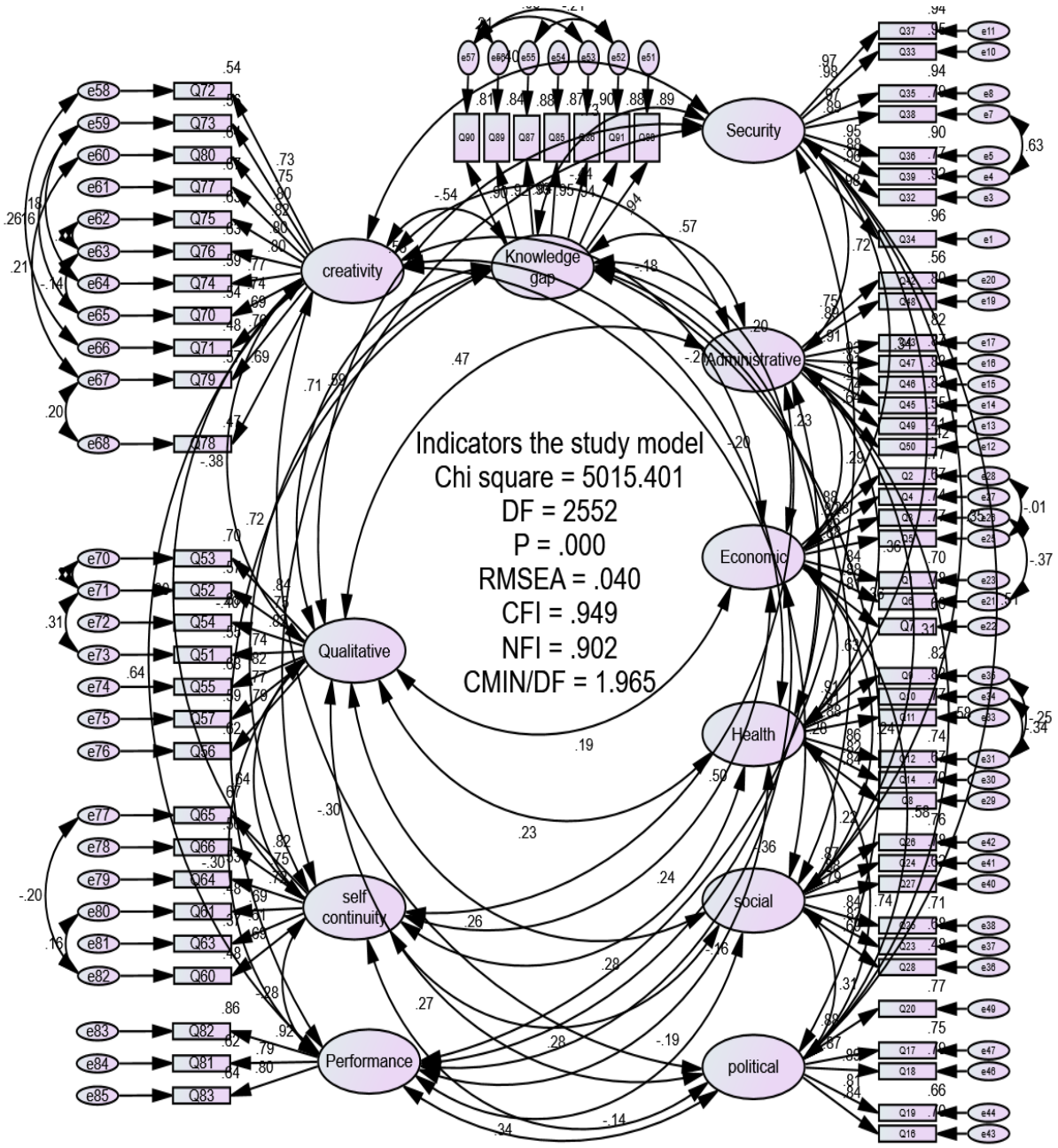

Figure 2: The results path for Compound reliability and the extracted and shared variance of a study model.

Table 13: Matrix of differentiation, compound reliability and variance in the model

No	Latent factor	CR	AVE	1	2	3	4	5	6	7	8	9	10	11
1	Security	0.986	0.896	**0.947**										
2	Administrative	0.950	0.709	0.723	**0.842**									
3	Economic	0.950	0.729	0.335	0.286	**0.854**								
4	Healthy	0.949	0.756	0.422	0.363	0.627	**0.869**							
5	Social	0.924	0.672	0.348	0.306	0.240	0.218	**0.820**						
6	Political	0.933	0.735	0.508	0.584	0.578	0.737	0.312	**0.857**					
7	Creativity	0.937	0.576	-0.40	-0.44	-0.18	-0.21	-0.20	-0.30	**0.759**				
8	Qualitative	0.921	0.627	0.556	0.467	0.191	0.232	0.264	0.265	-0.39	**0.792**			
9	self- continuity	0.863	0.513	0.592	0.496	0.236	0.280	0.283	0.341	-0.30	0.639	**0.717**		
10	Performance	0.877	0.704	-0.28	-0.36	-0.16	-0.19	-0.14	-0.22	0.643	-0.30	-0.28	**0.839**	
11	Knowledge gap	0.978	0.866	0.726	0.566	0.204	0.232	0.279	0.357	-0.54	0.714	0.723	-0.4	**0.931**

We see in the above table that the values of complex reliability were higher than the values of the standard criterion, as they Where is limited between (0.986) as the highest percentage achieved by the security repercussions factor, and between (0.863) as the lowest value got it the training and self-development factor, and Extracted contrast values is limited between (0.896) as the highest value In the security repercussions factor, and between (0.513) as the lowest value obtained in factor the training and self-development, and was Differentiation the values of common variation between factors within the model as detailed in the table varied, as it was found that the diagonal values that are in bold, which has the square root of the average variance extracted for each variable were higher than Other common contrast values In its row and column, and thus the requirement of differentiation is achieved, Because all links stay away from Fusion full between it.

5. Results

In **Figure 1**; we see the results of the direct hypotheses of the study, and in the following table an analysis of the path of direct and indirect hypotheses.

Table 14: Results of the analysis of the SEM for the course of study hypotheses

Nu Hypothesis	Impact pathway			Direct beta impacts	Beta impacts with gap	Significance	Judgment on the hypothesis
1	Knowledge gap	--->	Outputs quality	-0.692	-	0,00	Acceptable its impact is negative
2	Repercussions of the conflict	--->	Outputs quality	-	-0.31	0.008	Acceptable its impact is negative
3	Repercussions of the conflict	--->	Outputs quality	-0.863	-0.554	0,00	Acceptable its impact is negative
4	Repercussions of the conflict	--->	Knowledge gap	0.80	-	0,00	Acceptable its impact is positive

The results shown in the above table that the four study hypotheses are acceptable and statistically significant

less than (0.05), and that there are direct impacts of the knowledge gap in the outputs quality and that when the knowledge gap increases by one unit, TVET outputs quality it goes down by (69%). This is due to the inverse relationship that the knowledge gap contributed to and Impacted in quality education and of its outputs quality, and thus achieving the first goal of the study objectives. It goes down the impact of the relationship of the independent variable with the dependent variable of (86%) to (31%), its means that mediating the knowledge gap reduced the impact of conflict ramifications in TVET outputs quality by (55%). All hypotheses are statistically significant. Thus, it can be said that there is mediation in this study called "partial mediation", while if there is an effect, but the statistical significance has changed, that is, that P-sign was not statistically significant, it is called full mediation [28]. Thus, the second goal of this study be achieved. We also see that there is a direct expulsion relationship, statistically significant between the repercussions of armed conflicts and the knowledge gap, in the study community, meaning that when the repercussions of armed conflicts rise by one unit, the knowledge gap increases by (80%). and Thus, the third objective for this study is achieved. We see that the Impact that the repercussions of armed conflicts contribute to are strong. when it these Impact increase by one unit, was the amount of their direct impact in TVET outputs quality without the mediator is (86%), and this result is due to the inverse relationship between the repercussions of conflicts and the quality of education and its outputs. The sample interviewed confirms that the conflict has clear implications for the quality of education and its outputs, and that the quality of students as a whole has decreased from what it was before, and that their busyness of living conditions, and the consequences following of the fighting in the country, greatly affected their scientific background, as well as to in weakness Outputs. and thus, the fourth goal be achieved from the objectives of this study.

6. Conclusion

In view of the previous results of this study, it can be said that there is a lack of interest in raising the level of knowledge among members of society in all domains of knowledge, and that armed conflicts taking place in the country impose on the knowledge a darker reality in the short and long term, because its increased and increases the widening of the knowledge breach, and the Teaching and learning are the main tributaries of knowledge because they contribute to acquiring the knowledge and skill with which the individual and society can do any task assign to him. The complex and successive conflicts currently taking place in the country may be due to the weak level of knowledge in society. This is confirmed by the answers of the interview sample in its assessment of the level of knowledge under the current armed conflicts. They agreed that knowledge influences and is affected by the armed conflicts that exist in the country, and that education is affected by the knowledge side of individuals. and the lack of knowledge and lack of education led to the participation of a number of people with low educational levels with the parties to the various conflicts. That is why can be said that the lack of knowledge in society was a major reason for pushing children and weak education to the Holocaust losing conflict between the parties. Armed conflict resulted in many repercussions on the level of education in general, and in the TVET outputs quality in particular, because political imbalances, the economic and living situation, and centralization of management contributed to disrupting the functions of education management authorities, and the impacts of these repercussions are clear, because they led to The inability of the educational system in Yemen to develop a distinguished and prudent educational institution. The student, teacher, and administration were affected under circumstances that all lack stability, which has further deteriorated the quality of education.

In summary, we can say that Yemeni education in terms of quality is still in a coma, and the repercussions of armed conflicts have increased from that coma: as insecurity, deteriorating living conditions, disruption of the administrative work system and disruption of government spending, deterioration of infrastructure, displacement and everything that is directly related to the conflict It contributes to weakening the quality of the educational process and cripples its elements, in addition to the negative impacts that the knowledge gap contributed to.

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References

[1]. M. Y. K. a. I. Y. A. J. Ismail Ahmed Al Mwshki ،"The Impact of Armed Conflict in the Shadow of the Knowledge Gap on the Educational Dimension of Human Development in Yemen،" International Journal of Humanities and Social Sciences ،pp. 1-36 ،February 2019.

[2]. H. K. Al-hdrawi ،"The Knowledge Gap between Arab and Foreign Countries According to the Knowledge Assessment Methodology،" Journal of the Kufa Studies Center ،2013.

[3]. M. P. Center ،Knowledge Gap ،Jeddah: University, King Abdelaziz، 2012.

[4]. F. L. &. H. G. Boomgaarden ،"What we do and don't know: a meta-analysis of the knowledge gap hypothesis،" International communication Association٢٩ ، April 2019.

[5]. B. Ancori ،"Scientific popularization, increasing knowledge gap, and epistemology of communication،" Nouvelles perspectives in sciences socials ،p. 181–232 ،May 2016.

[6]. V. Diwakar, "The Impact of Armed Conflict on Education: Evidence from Iraq," The Journal of Development Studies, pp. 1702-1718, 24 Aug 2015.

[7]. J.- Y. Darian, "The Dirty War of Yemen" 28 /05 /2019. Date of arrival 2019. from : https://arabic.euronews.com/2019/05/28/french

[8]. F. Haqq ،"A sharp increase in cholera-related injuries and deaths in Yemen،" UNICEF ،Sana'a، 2019.

[9]. Q. Al-Awadi ،Building and Reconstruction Priorities for the Yemeni Economy ،Cairo: Institute of Arab Research and Studies، 2019.

[10]. H. Development ،"Impacts of War and Violent Conflict on Young People،" UNDP ،Beirut، 2016.

[11]. C. &. C. Shirley, "Towards Quality Technical Vocational Education and Training Programmes in Nigeria," Journal of Education and Learning, 2015.

[12]. T. N. C. f. E. f. All ،"The Educational Status of Different Education Categories -National Review in the Republic of Yemen،" International Education Forum ،Incheon، 2014.

[13]. G. A. o. Statistics ،"Statistics of the Governmental Community College،" Yemeni Ministry of Technical Vocational and Education Training ،Sanaa، 2016.

[14]. K. S. Rawat ،"A Hybrid Classification Method Based on Machine Learning Classifiers to Predict Performance in Educational Data Mining ،"Proceedings of 2nd International Conference on

Communication, Computing and Networking، 2018.

[15]. S. S. d. Valle ،The concept of quality in education: its structure, dimensions and evaluation ،Mexico City: Institute National for the Evaluation of Education (Spanish)، 2018.

[16]. Al-Awlaki ،"he Nature of the Relationship between the Quality of Educational Service and the Level of Student Satisfaction at Ibb University،" The Arab Journal of Quality Assurance in University Education ،pp. 125- 148 ،Volume 11 No. 37 2018.

[17]. B. A.-D. H. &. S. M. Salma Humaidan ،"The Quality of Higher Education Outcomes in the Shadow of the Knowledge Society Challenges،" Journal of Human Resources Development for Studies and Research ،pp. 177-197 ،No. 2 October 2018.

[18]. U. N. W. G. a. t. D. Government ،"Results of the World Knowledge Index،" Al Ghurair Printing and Publishing ،Dubai، 2017.

[19]. V. &. J. R. F. JR ،"The Knowledge Gap Hypothesis: Twenty-Five Years Later K،" Annals of the International Communication Association ،pp. 187-227، 18 May 2016.

[20]. J. F. A. R. E. B. W. B. B. B. &. T. R. L. Hair ،Multivariate Data Analysis. Auflage, Upper saddle river ، Seven, Ed، 2006.

[21]. J. F. R. E. B. W. B. &. T. R. L. Hair ،Multivariate Data Analysis: Prentice Hall، 2010.

[22]. B. G. &. F. L. S. Tabachnick ،"Using multivariate statistics،" MA: Allyn and Bacon ،Boston، 2013.

[23]. K. Bollen ،Structural Equations with latent variables ،New York: Wiley، 1989.

[24]. A. Z. S. F. G. P. &. R. N. Afthanorhan ،"The impact of product quality, medical price and staff skills on patient loyalty via cultural impact in medical tourism،" Management Science Letters ،pp.1421-1424, 12 -2018.

[25]. A. Z. R. N. F. H. &. G. P. Afthanorhan ،"Assessing the impacts of service quality on customer satisfaction. Management Science Letters،" Management Science Letters ،pp. 13-24، 09- 2019.

[26]. B. Tigaza ،Exploratory and Empirical Factor Analysis and Their Concepts and Methods، Oman: Al-Maysarah Publishing and Distribution House, 2012.

[27]. M. B. Aomr ،The Impact of Human Resources Management Practices on the Behavior of Organizational Citizenship through Organizational Behavior in Private Sector Institutions in the Sultanate of Oman ،Nilai: Malaysian Islamic Science University، 2019.

[28]. Z. Awang ،Modeling the Structural Equation Using Amos Program A Simplified Guide to Learning Amos Software ،Terengganu: Sultan Zain Al Abidin University، 2019.

[29]. H. M. J. S. F. M. N. a. Z. M. Y. Hazura Mohamed ،"Bridging Digital Divide: A Study on ICT Literacy among Students in Malaysian Rural Areas،" Australian Journal of Basic and Applied Sciences ،pp. 39-45, 2012.

[30]. H. M. J. S. F. M. N. a. Z. M. Y. Hazura Mohamed ،"Bridging Digital Divide: A Study on ICT Literacy among Students in Malaysian Rural Areas،" Australian Journal of Basic and Applied Sciences ،pp. 39-45, 2012.