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CONTEXTUAL INTELLIGENCE AMONG UNIVERSITY STUDENTS

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Abstract

The current research aims at identifying: -

1- The average degree of contextual intelligence among university students.

2- The contextual intelligence of university students according to the variables of gender (male and female), specialization (scientific-human), stage (third, fourth).

By the random stratified method of proportional distribution, the current research sample was selected, as it reached (400) male and female students from Wasit University.

In order to achieve the objectives of the research, the researchers adopted the Sternberg test for contextual intelligence translated into the Arabic language and adapted to the Iraqi environment by (Al-Azzawi 2008). By the statistical analysis, the clauses discriminatory power was extracted, and the difficulty of the clauses were done too, as well as the effectiveness of the alternatives to the clauses, in addition to the relationship of the score of the paragraph to the total degree of the

test was extracted. The psychometric properties from perspective of validity and stability were extracted, where they weredone by the Keoder Richardson equation 20. The descriptive statistical indicators of the scale were extracted, and the two researchers concluded the following:

1- University students have a medium degree of contextual intelligence.

2- There are statistically significant differences in contextual intelligence according to the variables of academic specialization (scientific, human), and the school stage (third, fourth), and there are no statistically significant differences according to the gender variable (males, females).

Problem of the Research

Intelligence is one of the vital topics that scientists are interested in, because it is related to different fields of life, academic, professional, artistic, social, and so on. The human brain represents the basic part of the central nervous system and it is very complex in terms of structure, and its work is extremely accurate and efficient, and so on. The progress that humanity has achieved through the ages, except thanks to that high mental capacity that the brain has, and the most important aspect of that ability is intelligence (Al-Zoghoul and Al-Hindawi, 2009: 313).

Therefore, the successful individual needs expertise to achieve adaptation and control over his individual resources, and other resources within his life and environmental context, whether in the form of information, data, experiences or tools. Hence, the need for contextual intelligence has arisen in our present time, due to the abundance of resources rich in information, and the huge amount of knowledge that human mind cannot carry it (Sternberg, 1998a, p. 71).

The university student is the basic building block of the university, as it forms its raw material, interacting with its scientific and educational orientation to become the creative energy of society and the most important tools for its development, by virtue of his age at this stage of life because he has the abilities to jump towards the most prestigious sites in various fields, thus he represents the community (Al-Dulaimi, 1997: 40)

In the current research, the researchers try to shed light on contextual intelligence in a broad and influential sample within the community, especially since the "university stage" is the stage in which the various mental abilities emerge, which may lead him towards giving and success. So that he is creative, effective and positive in his natural social environment, or lead towards frustration, feeling of depression, losing the meaning of life, and thinking of addiction or suicide.

Accordingly, the current research problem is determined according to the previous perception in the following question:

1 - Does contextual intelligence differ according to gender, specialization, and school stage?

Significance of the Research

The importance of studying human intelligence lies in the fact that it is linked to several areas such as knowledge, creativity, education, and success at the academic, personal and professional levels. This link extends to other fields such as economics, politics and development in its various aspects (Saadeh, 2003: 132).

In this way, it is considered an integrated system of capabilities necessary for success in life, as the individual knows it within his / her cultural-social context. The individual who has successful intelligence is able to distinguish his strengths and benefit from them as much as possible, as well as at the same time distinguish his weaknesses and find ways to correct them or perhaps compensate for them. Successful intelligent individuals also have the distinction of adapting, shaping, and choosing suitable environments for them by balancing their use of analytical, creative, and practical abilities. (Sternberg &Grigorenko 2007, p. 33).

Compared to other living creatures, man is distinguished by his intelligence and thinking in line with the fulfillment of his needs, which has prompted specialists and scientists to thoroughly research human intelligence and benefit from it to achieve success in life. Despite its ambiguity as a concept in terms of its nature, it includes many trends, such as the direction of compatibility with the environment, and intelligence according to this trend is an expression of an individual's ability to adapt or conform to the surrounding environment. This trend makes intelligence synonymous with the ability to adapt or conform to the environment (Dawn, &Pattil, 2005, p. 106).

The importance of contextual intelligence is evident in the fact that the individual who possesses a successful intelligence, in so far as he encounters new and unfamiliar circumstances, to the extent that his abilities develop and be able to successfully adapt to the changing circumstances around him, because successful intelligence is "the ability to learn and think using models and previously discovered relationships to solve new problems in unfamiliar contexts. (Borich, 1996, p. 65).

Aims of the Research

Any scientific research has a goal or group of goals it seeks to achieve, and the objectives that this research seeks to achieve is to dentify:

1- The average degree of contextual intelligence among university students.

2- The contextual intelligence of university students according to the variables of gender (male-female), specialization (scientific-human), stage.

Limits of the research

Spatial boundaries: Wasit University.

Temporal boundaries: the academic year 2018-2019.

Human Frontiers: Students of the morning study.

Objective boundaries: A stratified random sample of students from the third and fourth stage of Wasit University.

Search Terms Definition of the Terms

First: Contextual Intelligence

Sternberg defines it as "the ability to formal and informal work and adapt to the environment through street intelligences. He means "the ability of an individual to adapt to his environment or culture." It is also called the intelligence of a street smart (Nofal, 2007: 73).

Procedural definition

It is the total score obtained by the university student by answering the items of the contextual intelligence test used in the study.

Third: University Students:

University student: is the person who continues to study after the preparatory stage for a period ranging between (4-6) years, as is known in Iraqi universities, and who possesses knowledge, science and ability to analyze social situations that distinguish him from other members of society) Al-Jubouri, 2010: 1).

Theoretical framework

Theories about intelligence

First: Factor analysis theories (Spearman)

Spearman's Factor Theory (1924)

Its pioneers agree that the general factor is a basic unit in the analysis of intelligence, and it is obtained by the global analysis of a matrix of correlations between grades, which the individual obtains with a number of intelligence tests. Spearman believes that intelligence is nothing but the ability of the individual to perceive relationships, especially those difficult or hidden relationships (Al-Sheikh, 2008: 135).

Spearman aims with this theory to reveal the amount of overlap between all mental tests, and the extent of the separation of these tests from each other, that is, the common space that exists between all mental tests, and the common spaces.

According to Spearman, intelligence is not only a specific mental process, such as remembering, learning, or inference ... etc., but rather "a general ability that affects all cognitive processes or activities". Its effect varies according to the type of cognitive activity, and intelligence is the essence of mental activity within the individual and is manifested with all kinds of his behavior and activities, with varying degrees (Nashawati, 2003: 106).

Second: Cognitive theories (Sternberg)

This theory has three sub theories:

1- The first is the sub-theory of components (formative intelligence): - it defines the components of information processing in human intelligence, such as identifying problems, defining them and representing them.

2- The second is the contextual theory (context intelligence): it determines the intelligence functions related to the context in the real world, the adaptation to the existing environments and the formation of the existing environments in new, hopefully better, environments, and the selection of new ones (when Failure of adaptation and formation) (Sternberg, 1985, p: 62).

3- The third is the theory of experience (experiential intelligence): - It defines the areas of expertise in which these components are important for showing and evaluating intelligence, namely: novelty, and automatization.

Novelty refers to solving problems that differ in gender somewhat from what one is used to, albeit not completely different, or a completely new problem

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(such as a differential problem for a five-year-old child (Sternberg, 1985, p: 61).



Making	Obs	Direc
decision	erva	ting
S	tion	

Figure (1) A diagram illustrating Sternberg's Trarchic Theory

(Al-Faouri, 2012: 20).

The second sub-theory

Contextual Sub-Theory

The second aspect of the tripartite theory of intelligence relates to the practical applications of the theory of components (beyond components, performance components, components of knowledge acquisition) within the real context of life or the external aspect of the individual (Davidson & Downing, 2000, p. 49).

The theory focuses on the importance of linking an individual's intelligence with his external world and the need to adapt it to his surroundings or to reconfigure it if the situation calls for it (Al-Bailey et al, 1997: 140).

According to this theory, intelligence depends on two important methods, namely, first: the ability of the individual during his daily work to perform his tasks distinctly without prior education, and secondly: comparing the behavior of the individual with an intelligent person's ideal behavior (Al-Haroub, 1999: 87) (Sternberg &Detterman, 1986, p. 14).

Contextual theory includes three types of intelligence:

First: Analytical Intelligence

It means "the ability to think analytically and critically, and it is distinguished by those who excel in the academic field." The analytical thinking processes are concerned with knowing several incomplete and incomplete aspects, as well as ambiguities, with the statement of contradictions in the data or data presented regarding a problem, and the situation requires continuous analytical practice that falls within the limits of incomplete information (Abu Jadu, 2006: 61).

Second: Creative Intelligence

It means the ability of the individual to think creatively and think about solving problems in a distinctive way, which is what distinguishes inventors and creators such as Einstein and Newton, as they have that ability to relate information that could not find a common relationship between them. This type of intelligence is used when employing components and processing information in new forms of unfamiliar problems in which the individual innovates and creates some solutions. Sternberg's vision of creativity is embodied as the ability of the individual to come up with something that is distinguished by novelty, modernity and originality, or the work may have been previously produced.

Third: Practical Intelligence

It refers to the ability to deal with social problems and to respond to the requirements of daily life (Zaghoul, 2001: 247) Stermberg, 1988, P. 85)).

So, practical intelligence is completely related to the individual's personal daily dealings with problems, and it is possible to mix with him new (unconventional) solutions in daily life (Hussein, 2003: 45).

Research methodology and procedures

First: Research methodology:

Since the current research aims to identify (contextual intelligence among university students), the researchers adopted the descriptive research, which seeks to determine the current situation of the phenomenon studied, and then describe it, as it relies on a study as it is, and is concerned with its accurate description (Melhem, 2000, 324).

The aim of adopting this type of descriptive studies is to reach a deep understanding of the studied phenomenon. The studies confirm the knowledge of the type and size of relationships between the data, that is, it shows to what extent the variables of the studied phenomenon are related to each other (Daoud and Abdel Rahman 1990: 159 -178).

Second: Determining the research community and its sample:

1- Research community

The research population is the total group of elements that the researcher seeks to generalize to them the results related to the problem.

The current research community includes students of Wasit University in Wasit Governorate, for morning study, for the academic year (20 19-2020), they are (13977) male and female students, by (6569) males, or (47%) and (7408) females by (53%), while the variable of specialization (scientific, human) is distributed by (7788) male and female students for scientific specializations by (56%), and (6189) male and female students for humanitarian specializations by (44)

B- The Research Sample

Sample means, "a part of the society in which the study is conducted, and the researcher chooses it to conduct his study on it, according to special rules, according to which it is properly representative of society" (Melhem, 2000: 37).

The research sample consisted of (400) male and female students, and it is the same sample of statistical analysis that was previously used above in Table (4), after consulting a group of professors and specialists to use the same sample in the final application.

Third: the search tool

Contextual Intelligence Test

To measure the contextual intelligence of university students, the researchers adopted the Sternberg's triple test of capabilities. This test consists of a group of sub-tests that measure the analytical, practical and creative abilities through ten sub-tests of the multiple choice type of the test. The test was Arabized and adapted to the Iraqi environment, by (Al-Azzawi, 2008) except for the tenth part. To achieve the objectives of the current research, the researchers resorted to adopting this test, as the (Sternberg) test consists of the modified and applied to the Iraqi environment by (Al-Azzawi) (2008) of (36) questions, of the multiple choice type, distributed into (9) parts, each (3) of which measures one of the three types of capabilities, as parts (1, 2 and 3) measure the analytical ability, and parts (4, 5 and 6) measure the ability Process, and parts (7, 8 and 9) measure the creative capacity, with (4) questions for each part, and each question consists of a sentence or drawings followed by (4) possible answers, one of which is correct, and the respondent must choose one answer. Illustrative examples are shown before reviewing the questions and drawings in each part, and for each question Four options, and the time allotted for answering each part is shown in the table below. As for the time specified for answering the test as a whole, it takes (45) minutes, which is the same time specified by Sternberg and confirmed by (Al-Azzawi, 2008).

Then the two researchers created Iraqi standards for it (Al-Azzawi, 2008: 52).

After completing the statistical analysis of the test items, it becomes clear that all the items were significant and fall within the preferred range of correlation coefficients, and have a positive relationship with the total score, with the exception of items (1, 7, 36). Thus, the non-indicative clauses were deleted only in its final form, which consisted of (33) clauses.

Answer sheet for the Sternberg Triple Aptitude Test:

The two researchers approved the answer sheet that they prepared (Al-Azzawi, 2008) for the test, and it included on its first page general information about the respondent, such as specialization, gender, and stage, while the subsequent pages included all parts of the test, and in front of each part there are numbers of questions that represent him, in front of each question. Four squares inside each letter square, representing an alternative to the answer, the respondent must read the question on the test form and put a circle around the letter that represents his answer on the answer sheet.

Descriptive characteristics of the test

Some descriptive statistical estimates of the scores of the individuals of the basic sample were obtained after applying it to the sample of the statistical analysis of the current research, and the table below and the graph illustrate some of these characteristics:

 Table (3): Some statistical descriptive characteristics of the individuals of the statistical analysis sample Sternberg's test

Standard error	Values	Properties
0.178	9.37	arithmetic mean
	9.36	Trimmed arithmetic mean
	10.00	Medium
	12.680	variance
	3.561	standard deviation
	1	Lowest score
	19	Highest score

	18	Term
0.122	-0.093	skewness
0.243	-0.220	Flatulence



Figure (2): The distribution of the individuals of the statistical analysis sample in the Sternberg IQ test according to the normal distribution curve Statistical analysis of paragraphs

The two researchers applied the test on the sample of statistical analysis that was chosen by the random stratified method, consisting of (400) male and female students distributed among colleges with scientific specializations and colleges with human specializations after obtaining important facilitation letters from the College of Education for Human Sciences, for the purpose of applying the research.

The value of the measures of central tendency (the mean and the medium) of (9.37 and 10.00), respectively, indicates that they are close to each other, and that the value for the torsion factor is (-0.093), indicating that the scores are close to a large extent to the normal distribution. (Ferguson) that if the torsion coefficient is zero or close to it, the frequency distribution curve becomes close to the equinox and not twisted (Ferguson, 1971, p. 76), and that the difference between the kurtosis coefficient of (-0.220) and the kurtosis coefficient of the distribution the equinox (0.243) (Charity, 1970, p. 195).

Among the indicators of the measures of central tendency, the convergence between them, the degree of standard deviation, their proportionality with the number of clauses, and the proximity of the values of torsion and kurtosis to the standard values of the distribution indicate that the distribution of the tests statistical analysis sample scores is close to the equilibrium distribution, which enables us to generalize the results to the research community.

The researchers will offer to extract these characteristics as follows:

A- Discriminatory Power:

Extracting the distinction of the clauses is an important aspect of the process of statistical analysis of the test items or the psychological scale, through which the efficiency of the test items to measure the trait or ability of individuals is verified, especially those that are determined by standardized tests, (Abd al-Rahman, 1983, p. 376). The discriminatory strength of a paragraph is an indicator of the difference between individuals with high scores and others with low scores for the trait measured by all clauses (scale) (Ebel, 1972, P. 376).

The researcher followed the method of the two extreme groups by degree to extract the coefficient of discrimination and determined the two extremes by the total score of 27% for each group, where specialists in psychological and educational measurement believe that this ratio makes the two groups with the best size and good contrast between them (Stanley & Hopkins, 1972, P 268).

The number of individuals for each of the two extreme groups reached (108) individuals, and the discrimination factor was calculated for each of the test items by subtracting the number of individuals who answered correctly within the lower group, from the number of individuals who answered correct answers within the upper group, then divided the results are based on the number of members of one of the two groups, and the resulting value is the paragraph distinction coefficient, and the analysis showed that there are 33 items in which the differences between the two groups were significant, while

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3 clauses were omitted because the difference between the two groups is not significant, using the Chi square

B - Paragraph validity factor

The paragraph truth factor is "an indicator to reveal the paragraph measure of the same concept that the total score measures", meaning that clauses are homogeneous by measuring what they were prepared to measure (Kroll, 1966, P.426).

Each of the clauses follows the same path as the scale as a whole, as it is one of the most accurate known methods of calculating the internal consistency of the clauses by measuring the concept (Issawi, 1999: 51).

Therefore, the two researchers relied on calculating the validity factor of the clauses on the Point-Biserial correlation coefficient to calculate the correlation between the scores of each clause and the total score of the respondent for the sample of statistical analysis. The researcher tested the significance of the correlation coefficient by comparing the probability value P with the level of significance (0.05), and the clause (1, 7, 36) were not statistically significant, as the probability value for it was greater than the level of significance (0.05). So all test items were preserved except for the non-significant items, and after completing the statistical analysis of the test items, it becomes clear that all the clauses were significant and fall within the preferred range of the correlation coefficients, and have a positive-significant relationship with the total score, with the exception of clauses (1, 7, 36) clauses.

Psychometric properties of the test

Among the most important of these properties are

1- Validity

Validity is one of the basic and important characteristics of psychological and educational tests and measures to ascertain whether the scale has achieved the purpose for which it was set well (Al-Zobaie, 1981, p. 39).

It is one of the most important psychometric properties of the test or scale, as it must be true to the extent that it measures the characteristic, or characteristic that it was prepared to measure, and not be influenced by other variables (Al-Qamish and et al, 2000: 109).

There are types of validity

A- Face Validity

It is the validity that is based on observing the scale clauses to see if they are related to the characteristic to be measured or if they contain some that can be omitted from the clauses because they are far from related to the characteristic to be measured (Al-Zahir and et al, 1999: 134) 9.

B- Validity of construction

It is considered one of the most important types of validity used with hypothetical features such as intelligence, thinking and reasoning, as it constitutes the theoretical framework for its tests (Odeh, 1985: 164).

The clause relationship to the total score

Anastasi and Urbina (1997) indicate that one of the indicators of construct validity is the correlation between the scores of each clause and the overall test scores in statistical terms (Anastasi, 1997, p. 129). This is because the concept of validity here approaches the concept of homogeneity between the clauses to measure the characteristic (Abu Hatab and et al, 1976: 206). This indicator was achieved for the validity of the structure by extracting the correlation coefficients for the scores of each paragraph with the total score of the test (clauses validity factor).

2- Test consistency

Consistency is an important standard characteristic of a good scale, and it indicates the consistency of the scale scores by measuring what should be measured regularly (Al-Khatib et al., 1985: 50).

To calculate the consistency of the current test, the test reliability was found in two ways:

First: The test coefficient of the Coder Richardson 20 for internal consistency: The result of the stability of internal consistency by the method of the Kyoder Richardson 20 is (0.70), as this method confirms the arrival of the estimated value of the test laboratories whose vocabulary scores are binary i.e. (one or zero). It was shown to the researcher that the veracity coefficients of the clause had statistical significance at the level of significance (0.05) with the exception of clause (1, 7, 36), and it was not statistically significant, as in Table (8) p. (108). The researcher chose the sample consisting of (60) (Male and female university students were chosen by the random stratified method.)

Second: The consistency factor by retesting method: It was calculated through the following procedures:

A- The researchers chose two humanitarian colleges (College of Education, College of Arts), and two scientific colleges (College of Engineering, College of Science).

B- The researchers randomly selected from each college of Wasit University that was selected in (A) by two departments from each college (scientific and humanitarian) two stages from each department (third and fourth).

C- The researchers chose randomly from each of the mentioned stages 3 to 4 male or female students, as shown in Table (9).

The researchers found indicators of test reliability by using a retest method using Pearson correlation coefficient and reached (0.95).

Test correction

After completing the application of the test on the statistical analysis sample, the answers were corrected based on the correction key found in the original test (Appendix / 6), as each correct answer was given one score, and the wrong or abandoned answer was given a zero according to Sternberg's correction and then the scores of the correct answers were collected to represent the total score of the student and because the test consists of (33) items. The highest score that the student can obtain is (33), and the lowest score is (zero).

Final application of the tool:

After the validity and consistency of the test was obtained and the final image was formed, and in order to obtain data related to the research and its objectives, the test was applied to the research sample of (400) students from Wasit University

Statistical means:

The researchers adopted many statistical methods in the research tool procedures, and analyzed the data obtained from the research sample and the results obtained, by using the Statistical Package for Social Science, known as (SPSS).

The statistical methods are:

1- The standard error equation is used to measure the standard error of the test.

2- Skewness equation used to find the skewness and the shape of the frequency distribution of the test sample.

3- The kurtosis equation is used to determine the kurtosis of the shape of the frequency distribution of the test sample.

4 Qai-square test to find out the significance of the difference between the upper and lower groups in the Sternberg test for the sample of statistical analysis.

5- The Kuoder (Richardson) equation K-R 20 to extract the stability factor for the Sternberg test.

6- Bicerial correlation coefficient to find the correlation between the clause and the total scores for the test.

7- Arithmetic means, standard deviations, skewness, variance, range, minimum and highest score, when performing statistical analyzes of data.

Chapter Four Presentation, interpretation and discussion of results

This chapter includes a presentation of the findings of the current research according to its set objectives and an explanation of the results, then coming up with a set of conclusions, recommendations and proposals.

First: Presenting the results

1- The first goal: To identify the contextual intelligence of university students.

To achieve this goal, the Sternberg test was applied in its final form to the research sample of (400) male and female students, and after processing the data statistically, the arithmetic mean of the sample was (9.37) and a standard deviation (3.561). When comparing the arithmetic mean (9.37) with a hypothetical average of (16.5) for the contextual intelligence test, it becomes clear that the degree of contextual intelligence for the sample is much less than the average. To know the significance of the difference in contextual intelligence between the two averages, the researcher used the t-test for one sample. The results showed that the calculated T value (48.456) is a function, where the value of P (0.000) is less than the level of significance adopted in the current research of (0.05), and this means that the difference is statistically significant, as shown in Table (7)

ac.	P-Value		Standard	G. 1 1	A *.1 .*		
Signific	possibilit	T-Value	ossibilit T-Value med	medium	Standard	Arithmetic	Hypothetical
ance	r			deviation	mean	medium	
	У		error				
Indicati	0.000	19 156	0 179	2 5 6 1	0.27	16 5	
ve	0.000	40.430	0.178	5.501	9.57	10.5	

T-Test results for the mere sample to identify the average of contextual intelligence among university students

Observing the above table, the researchers believe that the students of Wasit University possess contextual intelligence to a degree less than the average.

This result can be explained by the fact that contextual intelligence is an integrated system of capabilities necessary for the success of the individual'slife within his cultural and social context. The successful individual distinguishes his strengths and benefits from them as much as possible, identifies his weaknesses and finds ways to correct or compensate them, and adapts, shapes and chooses his environment through balancing the analytical, creative and practical capabilities (Stermberg&Grigorenko, 2002p. 265).

The researchers believe that this result is logical, and its results are consistent with what Sternberg proposed in that there are many obstacles that limit the development of intelligence. The most important of which is the individual's personal feeling of inadequacy and the source of it is the individual himself, which deprives him of work, achievement and reaching his maximum potential. Contextual intelligence is characterized by personal efficacy and has a positive trend towards the ability to do things (Abu Jadu, 2006: 39-41).

The current result has not been found with studies that agree or disagree with it because contextual intelligence was not previously covered up to its date (as far as the researchers know). 2- The second goal: - Contextual intelligence among university students according to variables:

A. Gender (male, female) b. Specialization (humanitarian, scientific) c. Stage (third, fourth)

To find out the significance of differences in contextual intelligence according to the variables (gender, specialization, and stage), the two researchers used the analysis of single variance, and the researcher will present the statistical indicators for the contextual intelligence test as shown in Table (8).

Table (8): Some statistical descriptive characteristics of the research sample in contextual intelligence

Sample	Standard	Arithmetic	Gender	Specializ	Stage	
Sumple	deviation	mean	Gender	ation		
42	3.83	10.71	Males			
74	2.96	9.77	Females	Scientific	Third	
116	3.32	10.11	Total			
64	2.73	8.77	Males	Humanita		
74	4.06	7.58	Females	rian		
138	3.54	8.13	Total			
106	3.34	9.54	Males			
148	3.71	8.68	Females	Total		
254	3.58	9.04	Total			
58	4.32	10.71	Males	Scientific	Fourth	
26	2.12	10.42	Females			

		Total	10.62	3.76	84
	Uumonito	Males	9.69	2.46	36
	rian	Females	8.19	3.07	26
	Total	Total	9.06	2.81	62
		Males	10.32	3.73	94
		Females	9.31	2.85	52
		Total	9.96	3.47	146
	Scientific	Males	10.71	4.10	100
		Females	9.94	2.77	100
		Total	10.33	3.51	200
	II	Males	9.10	2.66	100
Total	rian	Females	7.74	3.82	100
		Total	8.42	3.36	200
		Males	9.91	3.54	200
	Total	Females	8.84	3.51	200
		Total	9.37	3.56	400

It is clear from the table above that:

- Gender variable: the mean for males was (9.91) with a standard deviation (3.54), while the average for females was (8.84) and with a standard deviation (3.51).

The variable of the academic specialization: the average of the sample from the scientific specialization is (10.33) with a standard deviation (3.51), while the average for students from the humanitarian specialization is (8.42) and a standard deviation (3.36).

The variable of the academic stage: the arithmetic mean of the third stage was (9.04) with a standard deviation (3.58), and the arithmetic mean of the fourth stage was (9.96) and with a standard deviation (3.47).

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To find out the significance of the differences between the research variables in contextual intelligence, the researchers used the one-way analysis of variance by interaction, and the results were as shown in Table (9).

Table (9)

An interactive unitary variance analysis table to identify the significance of the difference in contextual intelligence according to the variables of the stage, academic specialization and gender of university students

	p-		Average	Freed		
Signific	possibil	F-	Average	om	Total of	T 7 '
ance	ity	Value	IO	degre	squares	variance
	value		squares	e		
Indicati	0.000	24.07	280 167	1	280 167	Stage
ve	0.000	24.97	209.107	1	209.107	Stage
Indicati	0.008	7.02	81.333	1	81.333	Specialization
ve	0.000		011000	-	011000	~P*******
New						
Non-						
indicati	0.545	0.37	4.248	1	4.248	Gender
ve						

specialization * stage	.623	1	.623	0.05	0.817	Non- indicati ve
gender * Stage	11.296	1	11.296	0.98	0.324	Non- indicati ve
gender * Specialization	5.075	1	5.075	0.44	0.508	Non- indicati ve
gender*specialization*stage	289.167	1	289.167	24.97	0.000	indicati ve

Observing the table, the results indicate the following:

1_Gender variable:

The results showed that there is no statistically significant difference in contextual intelligence according to the gender variable, as the value of P probability (0.545) is not statistically significant, because it is greater than the level of significance (0.05)

The researchers interpret this result as logical, as the students' awareness and aspirations have a major role in their acquisition of experience and the development of their intelligence as well as their abilities and this does not depend on their gender, and the environmental conditions for both sexes and the difficulties facing each of them are similar conditions. The environment has a role and special strategies and precedent trends preparing for each sex, and this may be due to the nature of life and socialization of each society. There are social pressures and educational practices that push both sexes to certain directions, and that students possess mental capabilities that make them more in control of their lives to achieve a certain level of intelligence regardless of their gender.

_ Specialization variable:

The results showed that there is a statistically significant difference in contextual intelligence according to the variable of specialization, as the calculated F value reached (7.02), which is a statistically significant function, because the value of (p) (0.008) is smaller than (0.05) in favor of the scientific specialization as the arithmetic mean of the science (10.33) is greater than the arithmetic mean for the human specialization of (3.51).

The researchers believe that this result was consistent with Sternberg's opinion (1986) in the necessity of linking social and physiological characteristics that develop with age between the individual's cognitive experiences and his physiological characteristics.

The researchers explain this result that the academic specialization has a great role in enriching the students' environment and developing their mental abilities. Through the specialization, students can learn a variety of information that enriches them cognitively, so that their experiences increase, their horizons expand, and their intelligence develops in light of this, and this happens through the difference in the academic specialization.

_ Academic stage variable:

The results showed that there is a statistically significant difference in contextual intelligence according to the stage variable (third, fourth), as the calculated F value reached (24.97), which is a statistically significant function, as the value of (p) probability (0.000) is less than (0.05) in favor of the fourth stage, as its arithmetic mean (9.96), which is slightly larger than the arithmetic mean of the third stage of (9,04).

The researchers believe that this result is logical and is evident with the progression of the age stage. This is due to the fact that intelligence is related

to the ability of the individual to acquire information from the social and environmental context.By the availability of different cognitive environments and various activities their cognitive mental abilities are formed through what the curriculum proposes or through acquisition knowledge in the school stages, which makes them smarter than others.

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As for the interactions between (stage * specialization, stage * gender, specialization * gender, stage * specialization * gender)

a. There is no interaction between the two variables (stage * specialization) as the F value reached (0.05), which is not significant because the value of (p) (0.817) is greater than (0.05).

B. There is no interaction between the two variables (stage * gender) as the F value reached (0.98), which is not significant because the value of () (p 0.324) is greater than (0.05).

c. There is no interaction between the two variables (specialization * gender), as the F value reached (0.44), which is not significant because the value of ((p (0.508)) is greater than (0.05).

d. There is an interaction between the variables (stage * specialization * gender), as the F value reached (24.97), which is a function because the p-value () (0.000) is less than (0.05).

Conclusions

In light of the results of the current study, the following can be concluded:

1- University students in the fourth stage have a medium degree of contextual intelligence that is higher than that of the third stage students.

2- Contextual intelligence is affected by the two variables of specialization and the school stage and is not affected by the gender variable. 3- Students of scientific majors have a higher contextual intelligence rate than that of humanities students.

Recommendations

After obtaining and interpreting the results, the researchers made several recommendations:

1- Establishing cultural programs based on the literature of contextual intelligence, with the material and moral experiences and capabilities it represents, at a high level of positivity and rich returns for acquisition and development on all cognitive levels.

2- Requesting to the Ministry of Higher Education and Scientific Research to set up programs to develop contextual intelligence for university students.

3- Requesting to the Ministry of Higher Education and Scientific Research to subject university students to a contextual intelligence test through activities that contain cultural and educational programs.

Proposals

In light of the current research results, the researcher suggests the following: -

1- Conducting a study on contextual intelligence among university teachers.

2. Conducting a study on contextual intelligence among educational leaders

3. Conducting a global analysis study of contextual intelligence among university students.

4 Conducting a study to reveal the factors affecting contextual intelligence.

5- Conducting a study to know the effect of other variables on contextual intelligence among university students, such as economic level, socialization, cultural level, etc.

6. Conducting a study to find out the effect of a training program on improving contextual intelligence among different samples of society.

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