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Using the Bologna Track Requires Training Students to Use the Computer Program Dedicated to this

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Abstract
The current research aims to study the impact of Bologna Path in training students to use the computer program dedicated to this, according to the openions of students of the Technical College at Imam Ja'far Alsadiq University (Ijsu) - Baghdad - Iraq, the research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of one equestion, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna path requires students training to use the computer program dedicated to this.

Keywords: Bologna path, Imam Ja`afar Alsadiq University, Technical Colledge, SPSS

1. Introduction

1.1 The nature of the Problem

What are the point views of the first-stage students of the Department of Communications Technology Engineering at the Technical College at Imam Ja'far Alsadiq University (pbuh) on using the Bologna Path requires students training to use the computer program dedicated to this ?

1.2 Previous work

There are more a lot of previous Works about the surdents views on Bologna Path, some of them are :

1) Abdaljalil M. Hamad & Rusol A. Mohammed[1], studied the impact of Bologna Path in the access of educational content to students despite the weakness of the internet infrastructure according to the opinions of students of the Technical College at Imam Ja'far Alsadiq University (Ijsu) - Baghdad - Iraq, the research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of one equation, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna path doesn`t prevent the access of educational content to students despite the weakness of the internet infrastructure.
2) Abdaljalil M. Hamad [1], Studied the Impact of Bologna Track on the following and Communication With Teachers at Imam Ja`afar Alsadiq university. The research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of one question, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna Track increases the following and comminications with teacher.
3) Abdaljalil M. Hamad [2], Studied the Impact of Bologna Process on the learning proficiency of students at Imam Ja`afar Alsadiq university. The research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of one question, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS

computer program, and the results indicated that the application of the Bologna process increases the students` learning proficiency.

4) Abdaljalil M. Hamad [3], studied if the Bologna process helps to complete teaching activities faster than the traditional method according to the openions of students of the Technical College at Imam Ja'far Alsadiq University (Ijsu) - Baghdad - Iraq, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna process helps students to complete teaching activities faster than the traditional method.
5) Abdaljalil M. Hamad [4], studied if the Bologna process is useful in education according to the openions of students of the Technical College at Imam Ja'far Alsadiq University (Ijsu) - Baghdad - Iraq, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna process is useful in education for students.
6) Canmei Xu *@ et al* [5], studied the cultural universality and specificity of teacher-student relationship in Belgian, Chinese, and Italian primary school teachers, the manifestations of TSR varied across countries, highlighting the influence of cultural factors such as cultural norms, collectivistic versus individualistic values, and the perceived legitimacy of teacher authority. These findings shed light on the complexities of TSR across countries and emphasize the significance of culturally sensitive approaches in fostering positive TSR in education.
7) Li, Jiahul [6], deduces the student-centered concepts, summarizes teachers' practical experiences in promoting students' competency development, and analyzes the role of activities, delivery, assessment, and institutional support, developing a holistic understanding. The findings provide nuanced theoretical insights into the global literature on "how to foster the students with competence during the student-centered course" and offer practical suggestions for realizing the effective student-centered approach in the institutional course.
8) Anna Di Norcia, *@ et al* [7], employ the scale of Value from Pictorial Assessment of Interpersonal Relationships (PAIR) to investigate the links between the importance attributed by primary students to their teachers and two independent measures of scholastic wellbeing, provided by teachers and parents. The recognition of the teacher's role as an authority figure does not hinder a warm student–teacher relationship and impacts positively on school adjustment. In situations of Distress, dependent pupils showed a diminished appreciation of the teacher's importance, possibly as a result of a defensive stance.
9) Abduljaleel M. Hamad [9], studied the impact of Bologna Path in the new student`s skills required, according to the openions of students of the Technical College at Imam Ja'far Alsadiq University (Ijsu) - Baghdad - Iraq, the research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of one equation, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna path requires students to learn new skills.
10) Abdaljalil M. Hamad & Rosul A. Mohammed [10], Studied the Impact of Bologna Track on using alongside traditional education without intersecting at Imam Ja`afar Alsadiq university. The research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of one question, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna Track can be used alongside traditional education without intersecting.
11) Abduljaleel M. Hamad [11], studied the impact of Bologna Track in strengthening the teacher-student relationship according to the openions of students of the Technical College at Imam Ja'far Alsadiq University (IJSU) - Baghdad - Iraq, the research sample consisted of (109) male and female students from the Department of Communications Technology Engineering, and a questionnaire was prepared for that consisted of on equestion, and the indicators of their validity and stability were verified, then the data were processed statistically using the statistical SPSS computer program, and the results indicated that the application of the Bologna process increases the strength of teacher-student relationship.

1.3 Purpose and the contribution

The researcher in the current research aims to identify the consideration of students of the first stage in the Department of Communication Technology Engineering about the training students requirement to use the computer program dedicated to this, when using Bologna Path in university education, as the first experience in Iraq, and this research will contribute to promoting the use of this process or not in the future.

2. Theoritical Part

2.1 Bologna Path

Imam Ja`far Alsadiq University (IJSU) is a public university in Iraq that has started implementing the Bologna Track in 2023. On June 19, 1999, educational ministers from 29 different European nations signed an agreement in the Italian city of Bologna that would become known as the Bologna track [8]. The process seeks to promote a higher education system in Europe that is both internationally competitive and globally appealing.

2.2 Methodology

In this study, a questionnaire was used. It had only one question, it was "Does using the Bologna track require training students to use the computer program dedicated to this!?". This question was taking from some quastionnaires ordinary used to test the activities of any university education process.

2.3 Participants of the Study

109 students of both genders (male and female) in communications technical engineering department of technical colledge at Imam Ja`afar Alsadiq university involved in the study during the academic year 2023- 2024. All the participants were engaged in Bologna path; and consented to respond the question in the study.

2.4 Data collection and data analysis

A survey was used to gather the necessary information. Data

were examined using a 5-point Likert scale (I don`t agree at all, I don`t agree, unaligned, I agree, I completely agree) that was derived from the researcher-created scale.

2.5 SPSS computer program

The IBM® SPSS® software platform offers advanced statistical analysis, a vast library of machine learning algorithms, text analysis, open-source extensibility, integration with big data and seamless deployment into applications. Its ease of use, flexibility and scalability make SPSS accessible to users of all skill levels. What's more, it's suitable for projects of all sizes and levels of complexity, and can help in finding new opportunities, improve efficiency and minimize risk [12]

3. Practical Part

A questionnaire was prepared in the previously mentioned way, and it was distributed to the students of the first stage in the Department of Communications Technology Engineering, and after filling it out by them, it was entered into the SPSS program for statistical analysis, according to the following steps:

1) The SPSS computer program is excited.
2) Clicks File, then New, then Data, then Save, and the results file is named result.pdf
3) Select Variable view and the required information is filled in the name field. Let the name is "Q".
4) In the label list, the question is written.
5) From the value menu, click on value labels and write the 1st option (1. I do not agree at all). Then click add.
6) Then click on Repeat the process for the rest of the choices (2. I do not agree), (3. Unaligned), (4. I agree) and (5. I completely agree). Then click OK.
7) Click Variable view, and write the selection number of all participants (109).
8) Click on the question, select the question, click on the arrow to transfer the question to the other side, click statistics.
9) Point the options, then continue
10) Click charts, then point the histograms, then show normal curve on histograms, then continue
11) Choose analyze, then descriptive statistics, then explore
12) Choose number, then click on the arrow to transfer the number to the dependent list, then choose the question, then click the 2nd arrow to transfer the question to the factor list, then click statistics, the explore interface will occur.
13) Point all options, then continue
14) Return to explore list, choose plots, another interface will occur, select some options, then continue, then OK.
15) All results will occur.

4. Results

Table 1: Case processing Summary

	Using the Bologna track requires training students to use the computer program dedicated to this	Cases Total Percent
number	I do n`t agree at all	100.0%
	I do n`t agree	100.0%
	unaligned	100.0%
	I agree	100.0%
	I completely agree	100.0%

Table 2: Descriptives

Table(4-1)

Case Processing Summary

	Using the Bologna track requires training students to use the computer program dedicated to this	Cases Total Percent
number	I do n't agree at all	100.0%
	I do n't agree	100.0%
	unaligned	100.0%
	I agree	100.0%
	I completely agree	100.0%

Table(4-2)

Descriptives

Using the Bologna track requires training students to use the computer program dedicated to this				Statistic	Std. Error
number	I do n't agree at all	Mean		57.0000	11.49741
		95% Confidence Interval for Mean	Lower Bound	28.8668	
			Upper Bound	85.1332	
		5% Trimmed Mean		57.3889	
		Median		60.0000	
		Variance		925.333	
		Std. Deviation		30.41929	
		Minimum		13.00	
		Maximum		94.00	
		Range		81.00	
		Interquartile Range		65.00	
		Skewness		-.305	.794
		Kurtosis		-1.112	1.587
	I do n't agree	Mean		48.8889	10.62027
		95% Confidence Interval for Mean	Lower Bound	24.3985	
			Upper Bound	73.3793	
		5% Trimmed Mean		47.9321	
		Median		33.0000	
		Variance		1015.111	
		Std. Deviation		31.86081	
		Minimum		12.00	
		Maximum		103.00	
		Range		91.00	
		Interquartile Range		55.00	

Table(4-4)

Descriptives

Using the Bologna track requires training students to use the computer program dedicated to this		Statistic
	Minimum	1.00
	Maximum	109.00
	Range	108.00
	Interquartile Range	65.00
	Skewness	.107
	Kurtosis	-1.445

Descriptives

Using the Bologna track requires training students to use the computer program dedicated to this		Std. Error
	Minimum	
	Maximum	
	Range	
	Interquartile Range	
	Skewness	.314
	Kurtosis	.618

Table(4-5)

M-Estimators

	Using the Bologna track requires training students to use the computer program dedicated to this	Huber's M-Estimator[a]	Tukey's Biweight[b]	Hampel's M-Estimator[c]	Andrews' Wave[d]
number	I do n't agree at all	57.8940	57.7067	57.0000	57.7110
	I do n't agree	37.5116	29.1792	34.9611	29.1731
	unaligned	65.8855	63.1737	65.7748	62.9484
	I agree	58.9784	59.0372	59.1615	59.0303
	I completely agree	50.8309	51.1842	51.6338	51.1826

a. The weighting constant is 1.339.

b. The weighting constant is 4.685.

c. The weighting constants are 1.700, 3.400, and 8.500

d. The weighting constant is 1.340*pi.

Table(4-6)

Percentiles

		Using the Bologna track requires training students to use the computer program dedicated to this	Percentiles 5	10	25
Weighted Average (Definition 1)	number	I do n't agree at all	13.0000	13.0000	24.0000
		I do n't agree	12.0000	12.0000	27.0000
		unaligned	32.0000	33.4000	53.0000
		I agree	6.7500	21.5000	41.7500
		I completely agree	3.9000	6.9000	18.5000
Tukey's Hinges	number	I do n't agree at all			38.0000
		I do n't agree			28.0000
		unaligned			54.5000
		I agree			42.5000
		I completely agree			19.0000

Percentiles

		Using the Bologna track requires training students to use the computer program dedicated to this	Percentiles 50	75	90	Percentiles 95
Weighted Average (Definition 1)	number	I do n't agree at all	60.0000	89.0000	.	.
		I do n't agree	33.0000	82.0000	.	.
		unaligned	66.0000	77.0000	105.6000	.
		I agree	58.0000	83.0000	96.5000	105.2500
		I completely agree	47.5000	83.5000	100.1000	104.1500
Tukey's Hinges	number	I do n't agree at all	60.0000	78.0000		
		I do n't agree	33.0000	76.0000		
		unaligned	66.0000	76.0000		
		I agree	58.0000	82.0000		
		I completely agree	47.5000	83.0000		

Table(4-7)

Extreme Values[a]

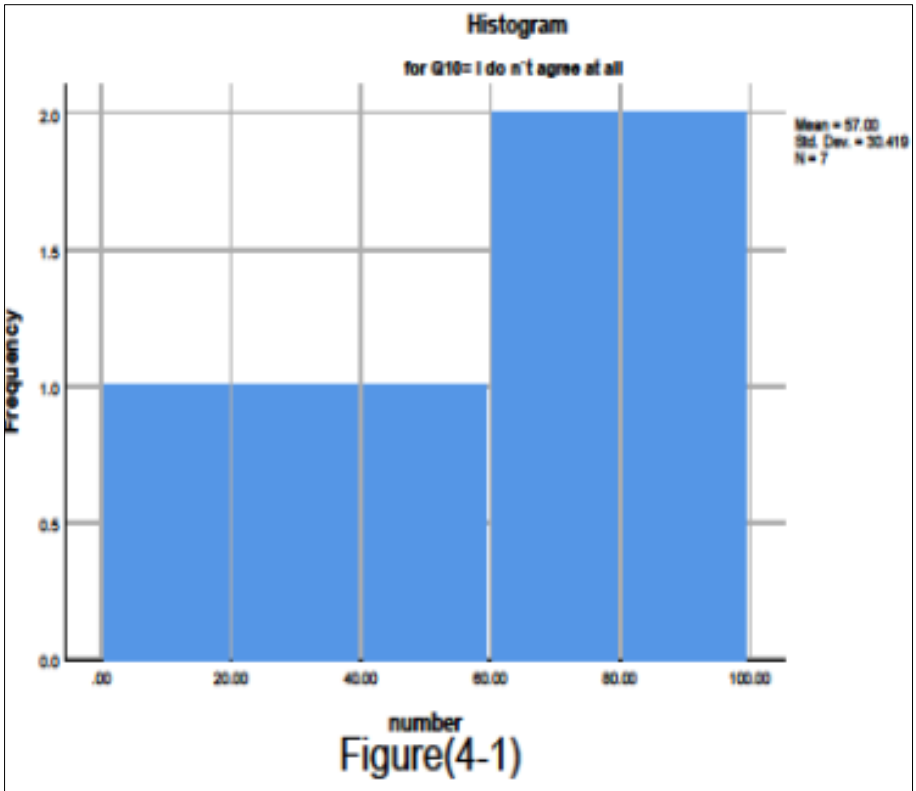
	Using the Bologna track requires training students to use the computer program dedicated to this			Case Number	Value
number	I do n't agree at all	Highest	1	94	94.00
			2	89	89.00
			3	67	67.00
		Lowest	1	13	13.00
			2	24	24.00
			3	52	52.00
	I do n't agree	Highest	1	103	103.00
			2	88	88.00
			3	76	76.00
			4	43	43.00
		Lowest	1	12	12.00
			2	26	26.00
			3	29	28.00
			4	31	31.00
	unaligned	Highest	1	106	106.00
			2	104	104.00
			3	77	77.00
			4	75	75.00
			5	69	69.00

Table(4-8)

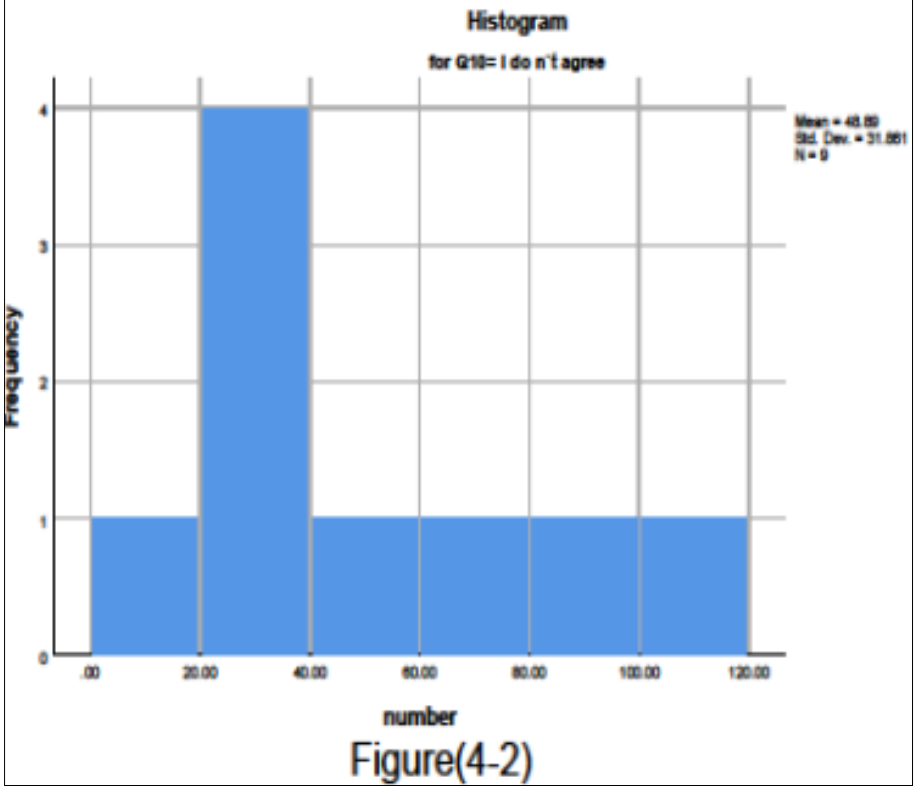
Extreme Values[a]

Using the Bologna track requires training students to use the computer program dedicated to this			Case Number	Value
	Lowest	1	32	32.00
		2	39	39.00
		3	53	53.00
		4	56	56.00
		5	65	65.00
I agree	Highest	1	108	108.00
		2	97	97.00
		3	96	96.00
		4	92	92.00
		5	86	86.00
	Lowest	1	3	3.00
		2	18	18.00
		3	25	25.00
		4	28	28.00
		5	34	34.00
I completely agree	Highest	1	109	109.00
		2	107	107.00
		3	105	104.00
		4	102	102.00
		5	101	101.00
	Lowest	1	1	1.00
		2	2	2.00
		3	4	4.00
		4	5	5.00
		5	6	6.00

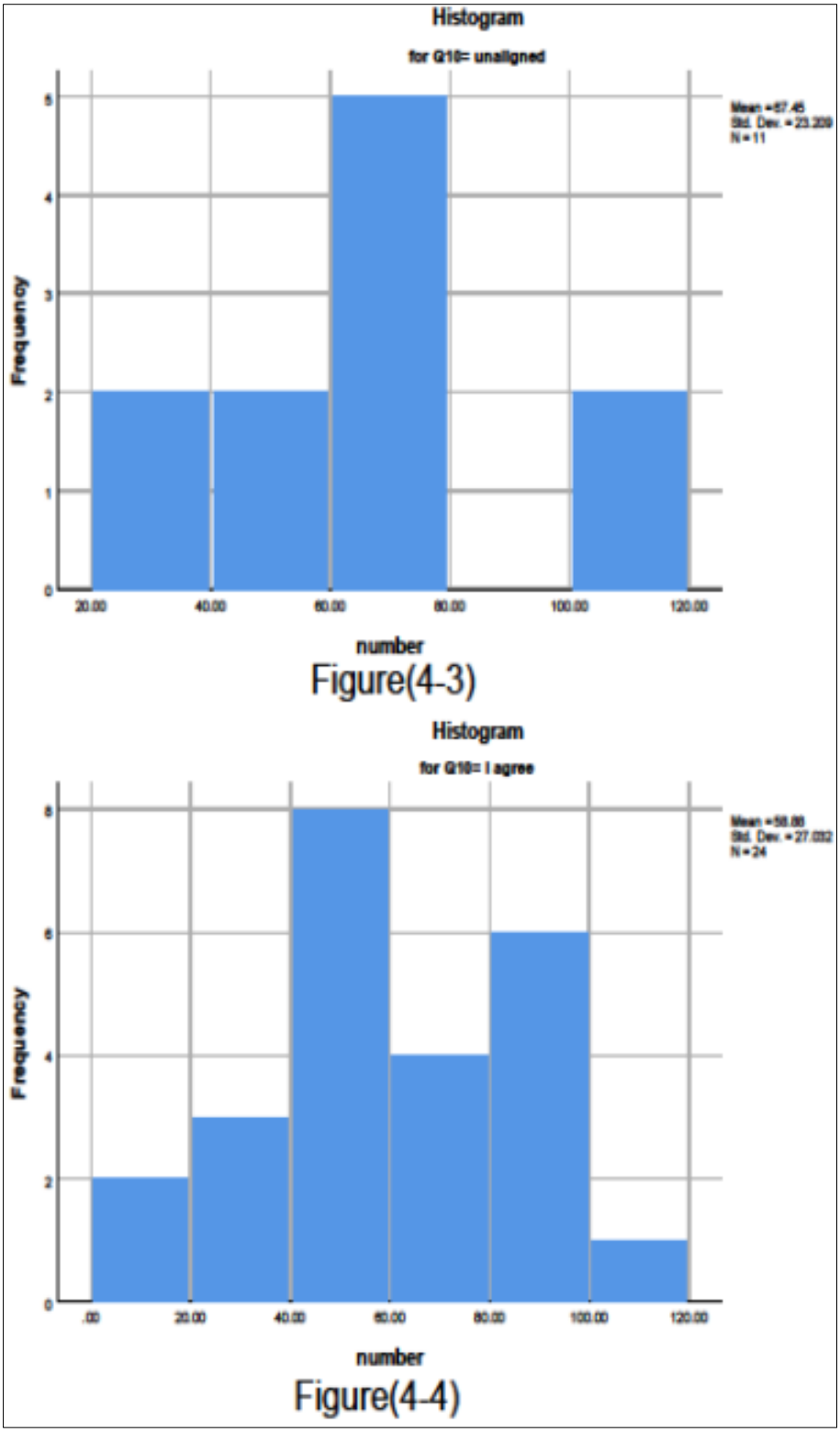
a. The requested number of extreme values exceeds the number of data points. A smaller number of extremes is displayed.



Figure(4-1)

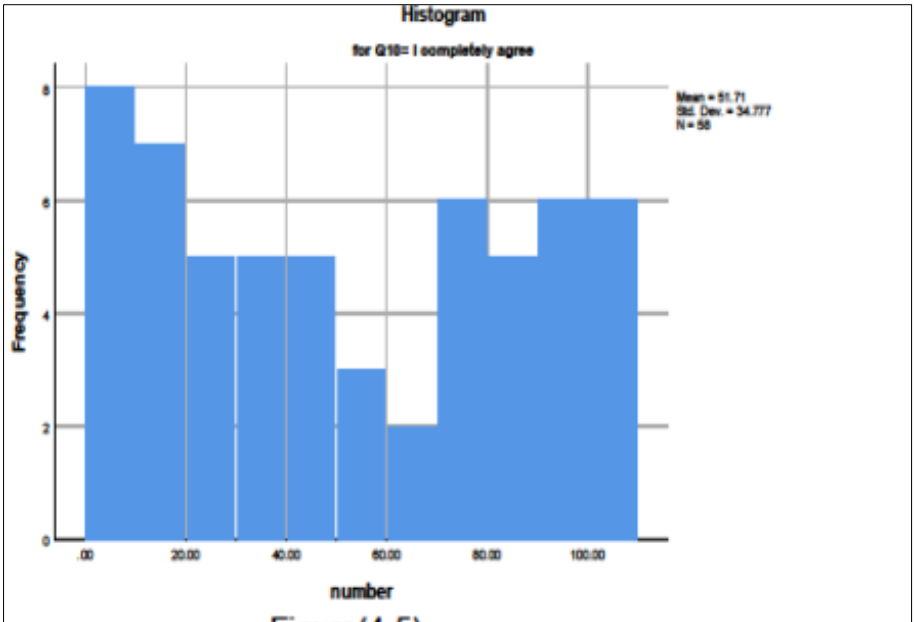


Figure(4-2)

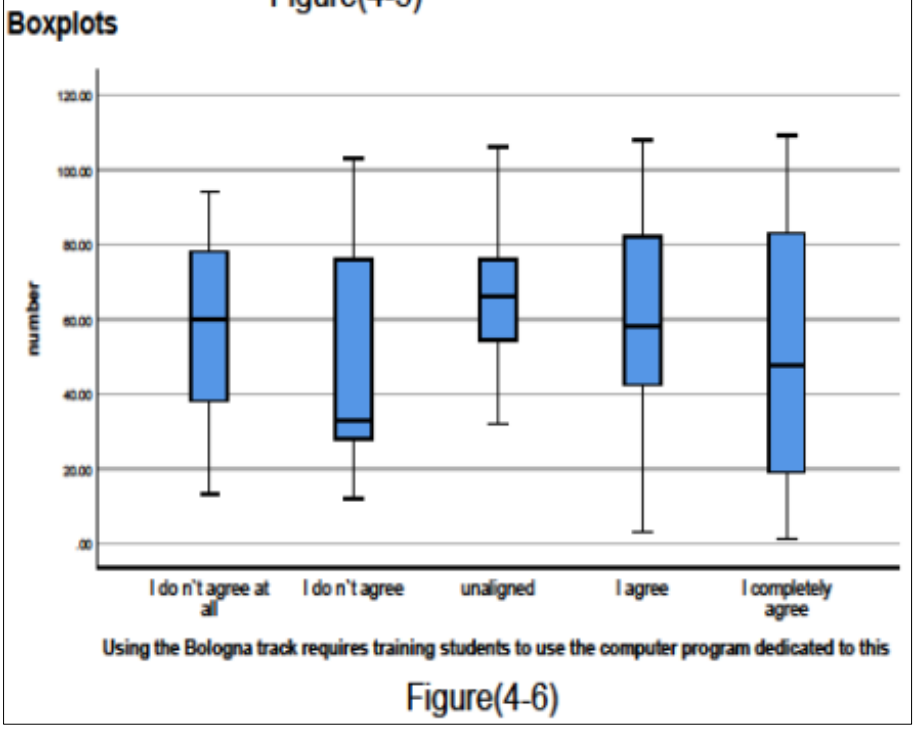


Figure(4-3)

Figure(4-4)



Figure(4-5)



Figure(4-6)

5. CONCLUSION

1) Case processing summary

- Participants' responses were evaluated regarding the necessity of training students to use the dedicated program for the Bologna track.
- The main response categories include: "I do not agree at all," "I do not agree," "Neutral," "I agree," and "I completely agree."

2) Descriptive Statistics

- **Means:** "I do not agree at all": 57.00, "I do not agree": 48.89, "Neutral": 67.45, "I agree": 58.88, "I completely agree": 51.71
- The range of values varies between 13 and 109, with significant variation among responses.
- **Dispersion:**The standard deviation is relatively high for all categories, indicating a significant diversity in responses. The highest dispersion was observed in the "I completely agree" category (34.77), while the lowest was in the "Neutral" category (**23.20**).

3) Distribution Analysis (Skewness & Kurtosis)

Some categories showed moderate skewness, indicating a tendency of distribution toward certain values. Kurtosis values reflect the flatness of the distribution, showing how data clusters around the mean.

4) Extreme Values

High and low extreme values were observed in each category, impacting the stability of statistical analysis.
For example, extreme values in the "I do not agree at all" category ranged between 13 and 94.

5) Graphical Analysis (Histograms & Boxplots)

- The histograms show a diverse distribution of data across different categories.

- The boxplot indicates significant variation in responses, with some extreme values present.

6) Robust Estimators (M-Estimators)

- Various estimations, such as Huber, Tukey, Hampel, and Andrews, were used to analyze data behavior without the influence of extreme values.
- The extracted values for these estimators are close to the general mean, indicating relative stability in the analysis.

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