STUDENTS' CONSIDERATION IN SELECTING THEIR FAVOURITE SPORTS

GROUP: CS2594A

PREPARED BY:

STUDENT'S NAME	STUDENT'S ID
MUHAMAD FAIDI AKIF BIN MD ALI	2021196337
MUHAMMAD AMIR FAHMY BIN	2021149601
MUHAMMAD SYAZWAN FIKRI BIN SAHRAN	2021100233
MUSTAMIN BIN MUHAMAD HATTA	2021118223
NUR FARISHA IZATI BINTI CIK MAZRI	2021118685
ZUBLI QUZAINI BIN ZUBLI	2021119947

PREPARED FOR:

MISS SITI NUR ZAHRAH AMIN BURHANUDDIN

DATE OF SUBMISSION:

28th JANUARY 2022

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ACKNOWLEDGEMENT

First and foremost, praises and thanks to Allah, the Almighty, for His showers of blessings throughout our project work to complete it successfully.

We would like to express our deep and sincere gratitude to our beloved lecturer, Miss Siti Nur Zahrah, for allowing us to do the study and providing invaluable guidance throughout the study. Her dynamism, vision and sincerity and motivation have deeply inspired us. It was a great privilege and honour to work and study under her guidance. We are incredibly grateful for what Miss Zahrah has offered to us.

In addition, we are thankful to our parents for their love, prayers, caring and sacrifices for educating and preparing us for our future. Finally, we extend our thanks to our classmates for their support and help during the project. In addition, we are also longing our gratitude to UiTM Shah Alam students for their time and dedication to participate in completing the survey.

Finally, our thanks go to all the people who have supported us to complete the project directly or indirectly.

1.0 INTRODUCTION

1.1 Background of Study

Sports is defined as an activity involving physical or non-physical exertion and skills. An individual or team competes against others for entertainment or maintaining good health and wellbeing. Students who participate in sports bring positive impact in the society, physical and mental health. In the era of modernisation, sports as a platform have expanded exponentially from physical endurance to electronic sports. There are many factors to be considered in selecting preferred sports that suites one needs. Thus, the study is conducted to understand students' reasoning for selecting sports for each multiple types with statistical analysis.

During the COVID-19 pandemic, it is clear that sports activities are limited and requires innovative tactics to stay active. In addition, students transitioning to Open and Distance Learning (ODL) allow them time and flexibility to manage their studies and involvement in sports. It is common knowledge that ODL is challenging for every student, from the lowest to the higher level. Apart from more tasks, movement is also limited, such as walking to class, participating in sport, walking to cafes, etc. With no such basic movement, the students become lethargic and lifeless. But this challenge can be overcome by the students by choosing suitable sports with their environment to prevent fatigue from controlling the body, thus increasing the focus on learning. The issue sparked our curiosity towards other students, such as ourselves, about their consideration in selecting multiple sport types during this pandemic and seeing which one they favour the most and why.

In our study, multiple sports categories were emphasised to determine which sport is preferred by students. These categories are in the context of sport type in general. For example, it is a ball game, target game, combat sport, and E-sport. The study will be conducted in each of these categories in terms of time, cost, environment, students' interests, etc. Some factors will be affecting different parts of our study's objective. For example, the demographic profile of respondents will majorly depend on factors such as their gender and household income. Other factors such as the accessibility of the sports, communications required, and personal preferences will affect the other parts of our study. These factors carry significant significance in investigating the difference in mean between different categories.

1.2 Objective of Study

The objectives of the study included in the research are as follows:

1. To describe the demographic profile of the respondents.

2. To investigate the difference in the mean of students' consideration in selecting their favourite sports based on gender

3. To compare the mean of students' consideration in selecting their favourite sports based on household income

2.0 METHODOLOGY

2.1 Description of Data

Research Element Unit : A study on student's consideration in selecting their favourite sport : Faculty of Computer & Mathematical Sciences students in UiTM

Population : All Faculty of Computer & Mathematical Sciences students in UiTM

Sample : 30 Faculty of Computer & Mathematical Sciences students in UiTM

Sampling Technique : Convenience sampling technique

- Reasons:
  - o The results will be obtained immediately
  - o Submitted directly to the interviewer
  - o Did not conduct a study that required a large number of respondents
- Advantage:
  - o Delivers results promptly
  - o Obtaining a sample is quite simple
  - o Inexpensive
- Disadvantage
  - o It does not provide a representative result
  - o The sampling procedure may be influenced by researcher bias
  - o Easier to get fake data

Data Collection Method : Questionnaire

- The data was collected from 12th December 2021 to 18th December 2021
- The questionnaire was prepared via Google Form and distributed through an online communication platform, Whatsapp. The data was collected at the end of the week.
- A simple write-up was prepared with the Google Form link to invite students to participate in the study.
- The data collection period spans a week.

3

Sources of : Primary Data.
Data
- Advantage
    - Accurate
    - Reliable
    - Up-to-date information
- Disadvantage
    - Time-consuming
    - Requires a lot of manpower

Table 1 *Description of Variables*

Section	Name of the Questionnaire	Description of the section	Item	Types of Variable	Measurement Scale
A	Demographic	Gender	Question 1	Qualitative	Nominal
		Household income	Question 2	Qualitative	Ordinal
		Do you like sports, both physical and/or non-physical	Question 3	Qualitative	Nominal
B	Students' consideration in selecting their favourite sports	I would/am play(ing) because I like teamwork	Question 4	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because it's cheap	Question 5	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because I followed friend / is always a trend	Question 6	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because i like to focus on one thing	Question 7	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because it is purely skill by myself.	Question 8	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because like open and uncrowded space	Question 9	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because I like to fight	Question 10	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) so I can protect myself	Question 11	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because I live a disciplined lifestyle	Question 12	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because it is easy to access.	Question 13	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because i can do whatever I want in game	Question 14	Quantitative Discrete	Scale (Interval)
		I would/am play(ing) because i like to stay inside a house	Question 15	Quantitative Discrete	Scale (Interval)

2.2 Method of Analysis

Table 2 *Method of Analysis*

	OBJECTIVE	VARIABLES	METHOD OF ANALYSIS
Objective 1	To describe the demographic profile of the respondents.	Gender	Pie Chart
		Household income	Bar Chart
		Do you line sports both physical and non-physical	Bar Chart
Objective 2	To investigate the difference in the mean of students' consideration in selecting their favourite sports based on gender	Mean of students' consideration in selecting their favourite sports	Independent Sample Test
		Gender	
Objective 3	To compare the mean of students' consideration in selecting their favourite sports based on household income	Mean of students' consideration in selecting their favourite sports	ANOVA
		Household income	

3.0 FINDINGS

3.1 Descriptive Analysis

Gender

Table 3 *Frequency Table of Variable Gender*

GENDER	FREQUENCY	PERCENT (%)
Male	17	56.7
Female	13	43.3
TOTAL	30	100

Table 4 *Measures of Central Tendency for Variable Gender*

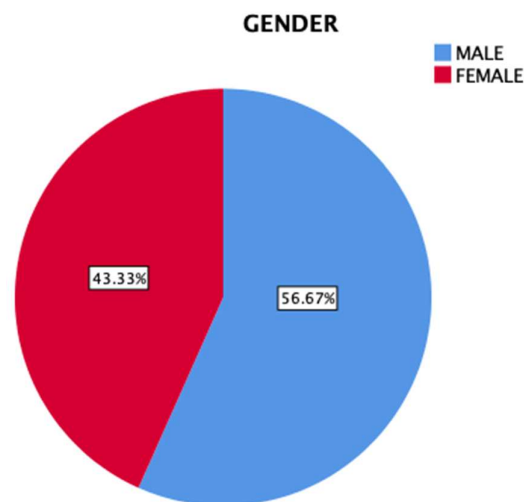| Mode	1
Median	1
Mean	1.43

Figure 1 *Pie Chart for Variable Gender*

Interpretation: **Table 3** and **Figure 1** shows the frequency and percentage of variable gender among the respondents. There are 30 respondents involved in this study. Based on **Table 3**, supported by **Table 4**, it was found that most of our respondents are male, which is 17 students that represents 56.7% of the whole respondents. Besides that, the female respondents are 13 students with 43.3%. Most of the respondents are female.

Household Income

Table 5 *Frequency Table for House Income*

HOUSEHOLD INCOME (RM)	FREQUENCY	PERCENT (%)
BELOW 2500	15	50
2500 - 3999	5	16.7
4000 - 6999	4	13.3
7000 - 10000	1	3.3
ABOVE 10000	5	16.7

Table 6 *Measures of Central Tendency for Variable Household Income*

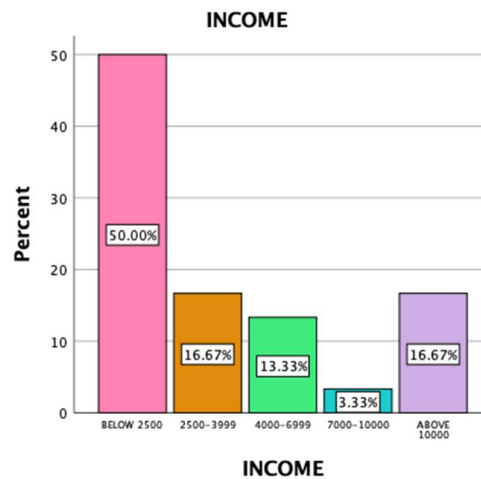| Mode	1
Median	1.50
Mean	2.20

Figure 2 *Bar chart for Variable Household Income*

Interpretation: **Table 5** and **Figure 2** show the frequency and percentage of household income among the respondents. There are 30 respondents involved in this study. Based on **Table 5**, supported by **Table 6**, it was found that most of our respondents are grouped in household income below RM2500, which is fifteen students that represents 50% of the whole respondents. Then, the lowest household income group is RM7000 to RM10,000 with a percentage of 3.33% that covers only one respondent. In addition, there are four respondents having household income between RM4000 to RM6999 and five respondents with household income above RM10,000.

The likeness of Both Physical and Non-Physical Sports

Table 7 *Frequency Table of Likeness of Both Physical and Non-Physical Sports*

LIKENESS	FREQUENCY	PERCENT (%)
Yes	26	86.7
No	4	13.3
TOTAL	30	100

Table 8 *Measures of Central Tendency for Variable Likeness of Both Physical and Non-Physical Sports*

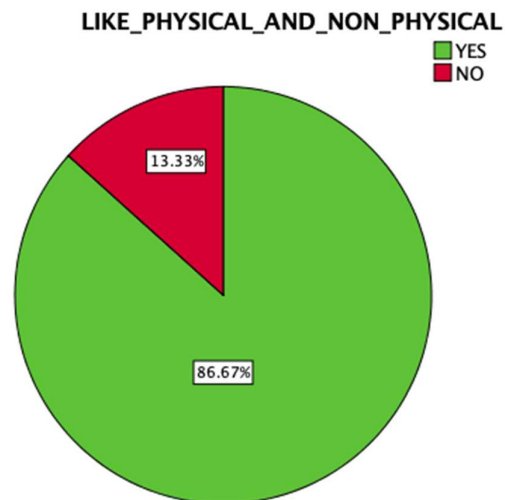| Mode	1
Median	1
Mean	1.13

Figure 3 *Pie Chart for Variable Likeness of Both Physical and Non-Physical Sports*

Interpretation: **Table 7** and **Figure 3** shows the frequency and percentage of likeness of Both Physical and Non-Physical Sports among respondents. There are 30 respondents in this study. Based on **Table 7**, supported by **Table 8**, it was found that most of our respondents preferred both physical and non-physical sports, which is 26 students that represents 86.7% of the whole respondents. Then, students that not like both physical and non-physical sports are four students, which cover a percentage of 13.3%.

3.2 Inferential Analysis

3.2.1 Independent Sample Test

Independent Sample Test is an analysis tool to compare the means of two independent groups to determine whether there is statistical evidence that the associated population means are significantly different. For this project, the independent sample test investigates the difference in the mean of students' consideration in selecting their favourite sports based on gender.

Table 9 *Group Statistics*

	Gender	n	Mean	Std. Deviation	Std. Error Mean
Students' Consideration	MALE	17	4.1078	.48926	.11866
	FEMALE	13	4.0128	.44598	.12369

Table 10 *Independent Sample Test*

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of Difference	
									Lower	Upper
Students' Consideration	Equal Variances Assumed	0.055	0.817	0.547	28	0.588	0.09502	0.17361	-0.26060	0.45064

Justification :

- ✓ We choose the significance level of a = 0.05 because it indicates a 5% risk of concluding that a difference exists when there is no actual difference. Lower significance levels indicate that we require more substantial evidence before you will reject the null hypothesis.

- ✓ We are 95% confidence that the difference in the mean of students' consideration in selecting their favourite sports for males and females is between -0.26060 and 0.45064.

Levene's Test

STEP 1: $\quad$ $H0: \sigma_1^2 = \sigma_2^2$

$\quad\quad\quad\quad\quad$ $H1: \sigma_1^2 \neq \sigma_2^2$

STEP 2: $\quad$ Test Statistics, p-value = 0.817

STEP 3: $\quad$ Decision Rule : Reject H_0 if p-value $\leq \alpha = 0.05$

$\quad\quad\quad\quad\quad$ Decision : Since p-value = 0.817 > a = 0.05 , thus we fail to reject H_0.

STEP 4: $\quad$ Conclusion : We conclude that $\sigma_1^2 = \sigma_2^2$, thus equal variance.

Hypothesis Testing

Let; μ_1 = Male $\quad$ and $\quad$ μ_2 = Female

STEP 1: $\quad$ $H_0: \mu_1 = \mu_2$

$\quad\quad\quad\quad\quad$ $H_1: \mu_1 \neq \mu_2$

STEP 2: $\quad$ Test Statistics, p-value = 0.588

STEP 3: $\quad$ Decision Rule: Reject H_0 if p-value $\leq \alpha = 0.05$

$\quad\quad\quad\quad\quad$ Decision : Since p-value = 0.588 > a = 0.05 , failed to reject H_0.

STEP 4: $\quad$ Conclusion: Therefore, there is not enough evidence to conclude that there is a difference in the mean of students' consideration in selecting their favourite sports based on gender, male and female.

3.2.2 Analysis of Variance (ANOVA)

Analysis of Variance (ANOVA) is an analysis technique in statistical analysis to test for the equality of three or more populations means. This technique is used to assess potential differences between one dependent variable, a quantitative variable, and an independent variable or factor, a nominal variable having more than two categories. For this project, ANOVA compares the mean of students' consideration in selecting favourite sports based on five different household incomes. The mean of students' consideration in selecting favourite sports is a dependent variable, while household income is an independent variable with five categories.

Table 11 *ANOVA*

	Sum of Squares	df	Mean Square	F	Sig
Household income	1.343	4	.336	1.699	.182
Error	4.940	25	.198		
Total	6.283	29			

Let; μ_1 = "Mean of students' selecting sports for income below RM 2500"

μ_2 = "Mean of students' selecting sports for income between RM 2500 and RM 3999"

μ_3 = "Mean of students' selecting sports for income between RM 4000 and RM 6999"

μ_4 = "Mean of students' selecting sports for income between RM 7000 and RM 10000"

μ_5 = "Mean of students' selecting sports for income above RM 10000"

STEP 1: $H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$

$H_1: At\ least\ one\ pair\ of\ treatment\ means\ is\ not\ equal$

STEP 2:   Test Statistics, p-value = 0.182, α = 0.05

STEP 3:   Decision Rule: Reject H_0 if p-value ≤ α = 0.05

Decision : Since p-value = 0.182 > α = 0.05, thus, we failed to Reject H_0

STEP 4:   Conclusion: Therefore, there is not enough evidence to reject the null hypothesis that all students selecting their favourite sports based on five different household incomes is the same.

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FAVOURABLE SPORTS AMONG STUDENTS

👁️‍🗨️ faidiakif123@gmail.com (not shared) Switch account   ☁️

* Required

PART A: RESPONDENT BACKGROUND

Gender *

- ◯ Male
- ◯ Female

Household income *

- ◯ < 2500
- ◯ 2500 - 3999
- ◯ 4000 - 6999
- ◯ 7000 - 10,000
- ◯ > 10,000

Do you like sports both physical and/or non-physical *

- ◯ Yes
- ◯ No

Back   Next   Clear form

PART B

Please answer as if you have the intention to play the sport IF you have never played the sport before.

1. WHY DO YOU / WHY WOULD YOU PLAY BALL GAME?
Examples: Football, Badminton, Hockey, Sepak Takraw, Volleyball, Tennis, etc.

I would/am play(ing) because I like teamwork *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because it's cheap *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because I followed friend / is always a trend *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. WHY DO YOU / WHY WOULD YOU PLAY TARGET GAME
Examples: Archery, Bowling, Golf, etc.

I would/am play(ing) because I like to focus on one thing *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because it is purely skill by myself. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because i like open and uncrowded space *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. WHY DO YOU / WHY WOULD YOU PLAY COMBAT SPORTS
Examples: Fencing, Judo, Taekwondo, Boxing, Jujitsu, etc.

I would/am play(ing) because I like to fight *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) so I can protect myself *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because I live a disciplined lifestyle *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

4. WHY DO YOU / WHY WOULD YOU PLAY E-SPORTS (video game)
Examples: Mobile Legend, Genshin Impact, CSGO, DOTA 2, PUBG, Tekken, A Hat in Time , etc.

I would/am play(ing) because it is easy to access. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because i can do whatever I want in game *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would/am play(ing) because i like to stay inside a house *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Back   **Submit**   Clear form

SPSS OUTPUT

Descriptive Statistics

Gender

Statistics

GENERAL

GENDER		
N	Valid	30
	Missing	0
Mean		1.43
Median		1.00
Mode		1

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	17	56.7	56.7	56.7
	FEMALE	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

Household Income

Statistics

INCOME

N	Valid	30
	Missing	0
Mean		2.20
Median		1.50
Mode		1

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BELOW 2500	15	50.0	50.0	50.0
	2500–3999	5	16.7	16.7	66.7
	4000–6999	4	13.3	13.3	80.0
	7000–10000	1	3.3	3.3	83.3
	ABOVE 10000	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

The likeness of Both Physical and Non-Physical Sports

Statistics

LIKE_PHYSICAL_AND_NON_PHYSICAL

N	Valid	30
	Missing	0
Mean		1.13
Median		1.00
Mode		1

LIKE_PHYSICAL_AND_NON_PHYSICAL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	26	86.7	86.7	86.7
	NO	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

Inferential Statistics: Independent Sample Test

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
MEAN_AGREEMENT	MALE	17	4.1078	.48926	.11866
	FEMALE	13	4.0128	.44598	.12369

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MEAN_AGREEMENT	Equal variances assumed	.055	.817	.547	28	.588	.09502	.17361	-.26060	.45064
	Equal variances not assumed			.554	27.061	.584	.09502	.17141	-.25664	.44669

Inferential Statistics: ANOVA

ANOVA for Mean of Student Selecting Favourite Sports and Household Income

Descriptives

MEAN_AGREEMENT

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
BELOW 2500	15	4.2333	.41928	.10826	4.0011	4.4655	3.33	5.00
2500-3999	5	3.9833	.57252	.25604	3.2725	4.6942	3.42	4.67
4000-6999	4	3.7917	.50231	.25115	2.9924	4.5910	3.25	4.33
7000-10000	1	4.5000	.	.	.	.	4.50	4.50
ABOVE 10000	5	3.7833	.32059	.14337	3.3853	4.1814	3.42	4.17
Total	30	4.0667	.46547	.08498	3.8929	4.2405	3.25	5.00

ANOVA

MEAN_AGREEMENT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.343	4	.336	1.699	.182
Within Groups	4.940	25	.198		
Total	6.283	29			

WRITTEN REPORT EVALUATION FORM

Instruction: Lecturers are encouraged to give all comments and recommendations for corrections in the students report.

Title of Project	STUDENTS' CONSIDERATION IN SELECTING THEIR FAVOURITE SPORTS

	Student 1	Student 2	Student 3
Name	Muhamad Faidi Akif Bind Md Ali	Muhammad Syazwan Fikri Bin Sahran	Muhammad Amir Fahmy Bin Muhalith@Muhalis
Student ID	2021196337	2021100233	2021149601
Signature			

	Student 4	Student 5	Student 6
Name	Mustamin Bin Muhamad Hatta	Nur Farisha Izati binti Cik Mazri	Zubli Quzaini Bin Zubli
Student ID	2021118223	2021118685	2021119947
Signature			

*** Suggested Score Indicator:

Excellent	(8-10) A+/A
Good	(6-7) A-/B+
Satisfactory	(5) B/B-
Poor	(1-4) C/C+

Assessment criteria for written report		Weight (W)	Score (S) (Refer to ***)	W x S
Title	Suitability of the project title.	**0.25**		
Introduction	Background of study.	**0.25**		
	Clarity of the objectives.	**0.25**		
Methodology	Description of data.	**0.25**		
	Descriptive analysis were appropriate for the study.	**0.25**		
	Inferential analysis aligning with the **first** objective of the study (statistical method 1).	**0.25**		
	Inferential analysis aligning with the **second** objective of the study (statistical method 2).	**0.25**		
Findings	Presentation of results – **descriptive analysis**	**0.25**		
	Clear explanation of results/findings – **descriptive analysis**	**0.25**		
	Presentation of results – **first** objective of the study (statistical method 1).	**0.5**		
	Presentation of results – **second** objective of the study (statistical method 2).	**0.5**		
	Clear explanation of results/findings – **first** objective of the study (statistical method 1).	**0.5**		
	Clear explanation of results/findings – **second** objective of the study (statistical method 2).	**0.5**		
Conclusions	Conclusions.	**0.25**		
Report Presentation	Sections, figures, and tables were numbered properly.	**0.25**		
	In overall, the report was organized properly.	**0.25**		
TOTAL: □ (W x S)				
Percentage from written report: (TOTAL/50 x 10%)				

Other Comments: