# AN INVESTIGATION OF ENGLISH EDUCATION DEPARTMENT STUDENTS' INTELLIGENCE AREA AT FACULTY OF TARBIYAH AND TEACHER TRAINING AT ISLAMIC STATE UNIVERSITY OF SJECH M. DJAMIL DJAMBEK BUKITTINGGI

**THESIS**

*Submitted as partial fulfillment of the requirement to get strata one of English Education Study Program*


**Written By:**

**IMELDA RIZKI**
**2319.013**

***Advisor:***
**SYAHRUL, S.S., M.Pd.**
**NIP. 197003252003121008**


**ENGLISH EDUCATION DEPARMENT**

**FACULTY OF TARBIYAH AND TEACHER TRAINING**

**ISLAMIC STATE UNIVERSITY OF SJECH M. DJAMIL DJAMBEK BUKITTINGGI**

**2024 M/ 1445 H**

## LETTER OF ADVISOR APPROVAL

Thesis entitled **"An Investigation of English Education Department Students' Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi"**, written by Imelda Rizki (2319.013) has fulfilled the requirements to be tested and has been considered and approved to be presented and retained in thesis examination.

Bukittinggi, Oktober 2024

Advisor,

**SYAHRUL, S.S., M.Pd.**
**NIP. 197003252003121008**

## ABSTRACT

**Imelda Rizki 2319013, English Education Department, Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Buktinggi, 2024 M / 1445 H, "An Investigation of English Education Department Students' Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi".**

Intelligence goes beyond academic achievements; it involves solving real-life problems, generating new challenges, and providing valuable contributions within a cultural context. Every individual has unique potential, supported by their environment, which helps them navigate life's challenges. Howard Gardner's theory of multiple intelligences underscores that intelligence is diverse and includes abilities like creativity and problem-solving, illustrating that intelligence should be seen as multifaceted rather than narrowly defined. This study at Islamic State University of Sjech M. Djamil Djambek Bukittinggi, found that varying English proficiency among students due to different educational backgrounds, creating knowledge gaps that affect academic performance and extend graduation times. This study aims to find out the dominant intelligence area, to find whether there are differences in intelligence in each semester, and what are the types of intelligence possessed by English language students'.

This research design was quantitative and conducted at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Buktinggi. The population in this study consisted of students of the English Education Department in the 2020-2023 academic year. This research used a questionnaire to obtain data on multiple intelligence areas. There were eight kinds of multiple intelligences on the questionnaire that consist of 80 items, and each of intelligence will consist of ten questions. The questionnaire is written in English because the respondents are from the English department, and it is expected that the students will understand and answer the questions. The questionnaire was created through a Google form, which participants answered in online.

The results showed that the level of multiple intelligences of English Education Department students was in general condition, and the three most dominant intelligences were linguistic 36.66, physical/kinesthetic 34.84%, and naturalist 34.80%, and the lowest percentage of intelligence was musical intelligence 33.85%. From the explanation above shows that students who have high linguistic ability or other intelligence should have good English language skills among students'. This happens if English students have a good educational background, environment, or family background. This will not lead to the long graduation of English students, an average of 5 years and 9 months, mainly due to poor language skills that require repeating the course. So that's why this research was conducted to help English students discover their own intelligence.



**Key words: Investigation, Intelligence Area**

# ABSTRAK

**Imelda Rizki 2319013, Program Studi Pendidikan bahasa Inggris, Fakultas Tarbiyah dan Keguruan, Universitas Agama Islam Negeri Sjech M. Djamil Djambek Buktinggi 2024 M / 1445 H, "An Investigation of English Education Department Students' Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi".**

Kecerdasan lebih dari sekadar pencapaian akademis; kecerdasan juga mencakup kemampuan untuk memecahkan masalah dalam kehidupan nyata, menciptakan tantangan baru, dan memberikan kontribusi yang berharga dalam konteks budaya. Setiap individu memiliki potensi unik, yang didukung oleh lingkungannya, yang membantu mereka menghadapi tantangan hidup. Teori kecerdasan majemuk Howard Gardner menggarisbawahi bahwa kecerdasan itu beragam dan mencakup kemampuan seperti kreativitas dan pemecahan masalah, yang mengilustrasikan bahwa kecerdasan harus dilihat dari berbagai sisi dan tidak hanya didefinisikan secara sempit. Penelitian di Universitas Islam Negeri Sjech M. Djamil Djambek, Bukittinggi, menemukan adanya perbedaan kemampuan bahasa Inggris di antara para mahasiswa karena latar belakang pendidikan yang berbeda, sehingga menimbulkan kesenjangan pengetahuan yang mempengaruhi kinerja akademik dan memperpanjang waktu kelulusan. Penelitian ini bertujuan untuk mengetahui area kecerdasan yang dominan, untuk mengetahui apakah ada perbedaan kecerdasan di setiap semester, dan apa saja jenis kecerdasan yang dimiliki oleh mahasiswa Bahasa Inggris.

Desain penelitian ini adalah kuantitatif dan dilakukan di Fakultas Tarbiyah dan Keguruan Universitas Islam Negeri Sjech M. Djamil Djambek Buktinggi. Populasi dalam penelitian ini terdiri dari mahasiswa Jurusan Pendidikan Bahasa Inggris pada tahun akademik 2020-2023. Penelitian ini menggunakan kuesioner untuk mendapatkan data tentang area kecerdasan majemuk. Terdapat delapan jenis kecerdasan majemuk dalam kuesioner yang terdiri dari 80 butir pertanyaan, dan masing-masing kecerdasan terdiri dari sepuluh pertanyaan. Kuesioner ditulis dalam bahasa Inggris karena responden berasal dari jurusan bahasa Inggris, dan diharapkan para mahasiswa dapat memahami dan menjawab pertanyaan-pertanyaan tersebut. Kuesioner dibuat melalui formulir Google, yang kemudian dijawab oleh para peserta secara online.

Hasil penelitian menunjukkan bahwa tingkat kecerdasan majemuk mahasiswa Jurusan Pendidikan Bahasa Inggris dalam kondisi umum, dan tiga kecerdasan yang paling dominan adalah linguistik 36,66, fisik/kinestetik 34,84%, dan naturalis 34,80%, dan persentase kecerdasan yang paling rendah adalah kecerdasan musikal 33,85%. Dari penjelasan di atas menunjukkan bahwa siswa yang memiliki kemampuan linguistik yang tinggi atau kecerdasan lainnya seharusnya memiliki kemampuan bahasa Inggris yang baik di kalangan siswa. Hal ini terjadi jika mahasiswa bahasa Inggris memiliki latar belakang pendidikan, lingkungan, atau latar belakang keluarga yang baik. Hal ini tidak akan menyebabkan kelulusan mahasiswa bahasa Inggris yang lama, rata-rata 5 tahun 9 bulan, terutama disebabkan oleh kemampuan bahasa yang kurang baik sehingga

harus mengulang mata kuliah. Oleh karena itu, penelitian ini dilakukan untuk membantu mahasiswa Bahasa Inggris menemukan kecerdasan mereka sendiri.

**Kata kunci: Investigasi, Area Kecerdasan**

## ACKNOWLEDEMENT



In the name of Allah SWT, the most gracious and most merciful who always provide health, strength and convenience for researcher to complete this thesis under the title "An Investigation of English Education Department Students Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi". Shalawat and Salam to Prophet Muhammad SWT who has teach us and guide us, on how to follow and love our lord Allah SWT.

The researcher would like to express her deepest gratitude to the people who contributed and assisted the researcher in carrying out this research. They are:

1. Prof. Dr. Silfia Harani, S.Ag., M.Si. as the rector of UIN Sjech Djamil Djambek Bukittinggi. Dr. Afrinaldi, S.Sos.I, MA as Vice Rector I for Academic and Institutional Fields. Dr. Iiz Izmuddin, MA as Vice Rector II for Finance and Planning. Dr. H. Edi Rosman, S.Ag, M.Hum as Vice Rector III for Alumni and Cooperation.
2. Dr. Junaidi, S.Ag., M.Pd as Dean of the Faculty of Tarbiyah and Teaching Training.
3. Widya Syafitri M.Pd as Head of English Education Department.
4. Merry Prima Dewi, M.Pd as my 1st advisor who has patiently provided ideas, guidance, inspiration, advice, input, and extraordinary time to researchers while completing this thesis.

5. Syahrul, S.S., M.Pd as my 2nd advisor who has provided extraordinary input, time of knowledge during the completion of this thesis. Thank you so much.
6. Muthia Rahman, M.Pd, Syahrul, S.S., M.Pd., and Lena Sastri, M. Pd as validators of this thesis instrument, thanks for the correction and suggestion.
7. All of the lecturers, especially English lecturers who have given their knowledge, ideas, and contributions during this research and helped to complete the thesis.
8. The Librarians of State Islamic University Sjech M.DJamil Djambek Bukittinggi who have assisted researcher in finding references and knowledge in preparing this thesis.
9. Thank you to my beloved parents, Armen Isa (Ayah), Fitriani (Umak), who always support me in difficult times, pray for me, give me advice, praise the little achievements in my life, and who are always patient with me, let me tell the world how lucky I am to be your only daughter. And also All of my beloved brothers, Rifa Pribadi (Adang), Rinaldi (Udo) and Al Putra (Acik) who always give their love, prayers and support. Thank you for making every effort for your little sister. I'm very grateful to be your sister. I'll try my best to prove that my name really brings sustenance.
10. And also my special thanks to my beloved cousin, Annisa, S.Sos. Thank you for always being there in my life journey. Thank you for being my support system every step of the way, even when I was at my

lowest point. There are not many words I can say; just thank you, and let's be friends forever.

11. The researcher would like to thank my close friends from the beginning of study until now that makes my life more colorful, Fadila Amalia Berinal and Gina Chintya Zazalmi, who have provided support, enthusiasm, and generosity in completing this thesis.
12. The author would also like to thank all of my beloved friends, Meidi Arman, Meli Puspa, S.Pd, Nuzula Ramadhani, S.Pd, Intan Zahara, Andriansyah, M Abdillah, M. Ryan Firdaus, S.Pd., Agung Shafikri, S.Pd, Windi Wulandari, S.Sos., and Nur Azizah Yunelfi, S,Pd for their support, motivation, and suggestions in completing this thesis.
13. All students of the English Education Department class of 2020-2023 who have helped to fill out the questionnaire in this research.
14. All of the friends at English Education Department especially PBI-A 2019 who has shared and helped the writer to finish my study
15. All of the researcher’s best friends and all of friends for the sweet memories, helps, supports, and wonderful friendship.
16. And the researcher wishes to express gratitude and dedicate this thesis to all of my family, supportive friends, and those who often asked, "Kapan Tamat?" Thank you for your attention, encouragement, and motivation. Those questions, though simple, served as a reminder that this journey is meaningful and must be completed.

The researcher hopes Allah SWT always blesses all of them, who have been mentioned or not. The researcher believes that this thesis might still have

some weaknesses. Therefore, the researcher hopes that there will be some criticism and suggestions for improving this thesis.

Bukittinggi, 31 Oktober 2024

Writer,

**Imelda Rizki**

**NIM. 2319013**

## LIST OF PICTURE

Picture 2.1 The intelligence modalities ..... 14

## LIST OF GRAPH

Graphs 2.1 Conceptual Framework ..... 40

## LIST OF TABLES

Table 3-1 Distribution of Population of the Students 2020–2023 Academic Years of English Education Department Students at Islamic State University of Sjech M. Djamil Djambek Bukittinggi ..... 44

Table 3-2 Determination of the number of student samples for each class (ni) on 2020–2023 Academic Years of English Education Department at Islamic State University of Sjech M. Djamil Djambek Bukittinggi ..... 47

Table 3-3 Reliability Index Category of Cronbach's Alpha ..... 52

Table 3-4 Results of the realibility analysis of the questionnaire. ..... 52

Table 3-5 Likert Scale ..... 54

Table 4-1 The Total Percentage and Mean for the English Education Department students' Linguistics Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 76

Table 4-2 The Total Percentage and Mean for the English Education Department students' Logical/ Mathematical Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi ..... 78

Table 4-3 The Total Percentage and Mean for the English Education Department students' Spatial/Visual Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 80

Table 4-4 The Total Percentage and Mean for the English Education Department students' Musical Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 81

Table 4-5 The Total Percentage and Mean for the English Education Department students' Bodily/Kinesthetic Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 83

Table 4-6 The Total Percentage and Mean for the English Education Department students' Interpersonal Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 85

Table 4-7 The Total Percentage and Mean for the English Education Department students' Intrapersonal Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 86

Table 4-8 The Total Percentage and Mean for the English Education Department students' Naturalistic Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 88

## LIST OF FIGURE

Figure 4-1 The total of students' answered the questionnaire. ..... 57
Figure 4-2 General Percentage of Background of School of English Education Department Students' at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 58
Figure 4-3 General Percentage of Students' Answer of the Questionnaire about Multiple Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 59
Figure 4-4 the Difference in Percentage of Intelligence Area on Female Students' of English Education Department ..... 61
Figure 4-5 the Difference in Percentage of Intelligence Area on Male Students' of English Education Department ..... 61
Figure 4-6 The differences percentage of Linguistic Intelligence in each semester. ..... 62
Figure 4-7 The differences percentage of Logical/Mathematical Intelligence in each semester. ..... 63
Figure 4- 8 The differences percentage of Spatial/Visual intelligence in each semester.. 64
Figure 4-9 The differences percentage of Bodily/Kinesthetic Intelligence in each semester. ..... 64
Figure 4-10 The differences percentage of Musical Intelligence in each semester. ..... 65
Figure 4-11 The differences percentage of Interpersonal Intelligence in each semester. . 66
Figure 4-12 The differences percentage of Interpersonal Intelligence in each semester. . 66
Figure 4-13 The differences in the percentage of Naturalistic Intelligence in each semester. ..... 67
Figure 4-14 The Difference percentages in intelligence on Vocational High School ..... 68
Figure 4-15 The Difference percentages in intelligence on Senior High School..... 68
Figure 4-16 The Difference percentages in intelligence on Islamic Boarding School ..... 69
Figure 4-17 The Difference percentages in intelligence on State Islamic Senior High School ..... 69
Figure 4-18 Types of intelligence area that possessed by 2nd semester English Education Department students' on 2023 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 70
Figure 4- 19 The percentage of linguistics Intelligence..... 71
Figure 4-20 Types of intelligence area that possessed by 4th semester English Education Department students' on 2022 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 72
Figure 4-21 The percentage of linguistics Intelligence..... 72
Figure 4-22 Types of intelligence area that possessed by 6th semester English Education Department students' on 2020 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 73
Figure 4-23 The percentage of linguistics Intelligence..... 74
Figure 4-24 Types of intelligence area that possessed by 6th semester English Education Department students' on 2020 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. ..... 75
Figure 4-25 The percentage of linguistics Intelligence..... 75
Figure 4-26 The percentage of logical/Mathematical Intelligence ..... 79

## LIST OF APPENDICES

Appendix 1 Research Guidelines ..... 101
Appendix 2 Questionnaire of Multiple Intelligence ..... 104
Appendix 3 Determination of the number of student samples for each class (ni) on 2020–2023 Academic Years of English Education Department Students. ..... 112
Appendix 4 Validation Sheet ..... 114
Appendix 5 Validation of the questionnaire Instrument ..... 127
Appendix 6 SK Supervisor ..... 130
Appendix 7 Letter of Research Permission ..... 131
Appendix 8 Frequencies table for each item of questioner ..... 132
Appendix 9 Total percentage per each Intelligences ..... 151
Appendix 10 Studi, Kelulusan Tepat Waktu dan Keberhasilan Studi dan IPK Lulusan 159

## TABLE OF CONTENTS

LETTER OF ADVISOR APPROVAL ..... I

ABSTRACT ..... II

ABSTRAK ..... III

ACKNOWLEDEMENT ..... V

LIST OF PICTURE ..... IX

LIST OF GRAPH ..... IX

LIST OF TABLES ..... IX

LIST OF FIGURE ..... XI

LIST OF APPENDICES ..... XII

TABLE OF CONTENTS ..... XIII

CHAPTER I ..... 1

INTRODUCTION ..... 1

A. Background of the Problem ..... 1

B. Identification of the Problem ..... 7

C. Limitation of the Research ..... 7

D. Formulation of the Problem ..... 7

E. Purpose of the Research ..... 8

F. Significance of the Research ..... 9

G. Definition of Key Terms ..... 9

CHAPTER II ..... 10

REVIEW OF LITERATURE ..... 10

A. Review Related Theory ..... 10

1. Intelligence ..... 10

2. Multiple Intelligence ..... 13
3. Factors that can affect Multiple Intelligences ..... 18
4. Types of Multiple Intelligence ..... 24
B. Review of Related Studies ..... 37
C. Conceptual Framework ..... 40
CHAPTER III ..... 42
RESEARCH METHOD ..... 42
A. Research Design ..... 42
B. Population and Sample ..... 43
1. Population ..... 43
2. Sample ..... 44
C. Instrument ..... 48
D. Technique of Data Collection ..... 53
E. The Technique of Data Analysis ..... 53
CHAPTER IV ..... 56
FINDINGS AND DISCUSSION ..... 56
A. Findings ..... 56
B. Discussion ..... 90
CHAPTER V ..... 95
CONCLUSION AND SUGGESTION ..... 95
A. Conclusion ..... 95
B. Suggestion ..... 96
REFERENCES ..... 98
APPENDICES ..... 101

# CHAPTER I
# INTRODUCTION

## A. Background of the Problem

Every child born into this world carries potentials inherited from heredity; one of the potentials brought is intelligence. Intelligence is one of the human abilities. The ability of intelligence has potential and is a general skill. With the support of the environment, this skill may be achieved in real life. It is impossible for children born into this world not to have abilities and talents. So far, society and the world of education (including parents and teachers) have assumed that intelligent students are students who get the highest grades (100, 90, and others), students who are ranked first, second, and third in class, and students who are smart in exact science subjects such as math, chemistry, physics, and the like. However, the concept of intelligence is broad and not limited to grades and numbers alone. So, intelligence cannot be assessed or measured through scores or numbers.

Good assessment is relevant, continuous, and authentic; students learn from their performance on meaningful tasks. Students need to be able to read, write, and calculate well, so there is a place for students to use linguistic and logical-mathematical skills to demonstrate what is known.[1] For this reason, it is important for students, teachers, and parents to recognize and nurture all the diverse intelligences and all combinations

[1] Thomas R. Hoerr, *Becoming a Multiple Intelligences School*, *Association for Supervision and Curriculum Development*, 2000, VI. p-24

of intelligence. All intelligences are very different because all humans have different combinations of intelligences.[2]

According to Howard Gardner in Retno Sulistyaningsih, the concept of intelligence assessment through multiple intelligences by looking at humans not only based on value standards, but with a measure of the ability to solve problems that occur in human life, the ability to produce new problems to be solved, the ability to create something or give appreciation in one's culture.[3] One's intelligence can be developed through education, and there are many ways. This is different from the old concept, which states that a person's intelligence is fixed from birth to adulthood and cannot be changed significantly. Gardner stated that ability is called intelligence when it shows a person's skills to solve problems and difficulties found in life. Therefore, someone with high intelligence can solve problems in real life, not just in theory. The more a person is skilled and able to solve life's problems in varied and complex situations, the higher the person's intelligence.

Traditionally, intelligence has not adequately covered all human capabilities. Essentially, everyone has two or more dominant intelligences that humans will use to carry out daily tasks and solve problems in life. In addition, almost everyone has the ability to develop skills in each intelligence and learn through them. Gardner defined eight intelligences to fulfill the criteria of intelligence, namely linguistic, logical/mathematical,

[2] Thomas Armstrong, *Multiple Intelligence in the Classroom 4th Edition*, Fourth Edi (Alexandria, Virginia, USA: Association for Supervision and Curriculum Development, 2018).
[3] Retno Sulistiyaningsih and others, 'Mengembangkan Kecerdasan Majemuk Pada Generasi Milenial Siswa Sekolah Dasar Islam Terpadu (SDIT) Insantama Malang', *GUYUB: Journal of Community Engagement*, 1.3 (2020), 157–66 <https://doi.org/10.33650/guyub.v1i3.1563>.

spatial/visual, musical, physical/kinesthetic, interpersonal, intrapersonal, and naturalist.[4] The eight intelligences that exist in each individual can be optimized to the level people have, although there is no guarantee that the eight intelligences will stand out evenly in each individual. For this reason, it is necessary for every teacher to re-understand the potential or multiple intelligences possessed by their students, how to optimize each intelligence, and the types of intelligence that stand out and can be developed or optimized in each student.[5]

Linguistic intelligence is one of the basic types of intelligence in language teaching and learning, which means the ability of students' language skills or linguistic capacity.[6] As Gardener stated that, linguistic intelligence is sensitivity to spoken and written language, the ability to learn languages and the capacity to use language to accomplish goals. It also includes being able to use language to convince others and understanding patterns of a language (in terms of grammar use or appropriateness of language). This intelligence is involved in using language to remember information, tell stories, jokes, write letters, or write poetry.

At the cognitive level, the multiple intelligences theory develops a framework that assists in explaining individual variations in children's second language learning proficiency. Interpersonal and intrapersonal

[4] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*.
[5] Arifmiboy, 'Multiple Intelligences: Mengoptimalkan Kecerdasan Anak Sebagai Upaya Dalam Mempersiapkan Generasi Emas Masa Depan', International Seminar on Education 2016, 69–84.
[6] Dibekulu Alem Dawit, 'Theory of Multiple Intelligences and Its' Underlying Philosophy', *International Journal of English Literature and Culture*, 7.7 (2019), 205–13 <https://doi.org/10.14662/IJELC2019.120>.

intelligence provide a cognitive explanation of the affective factors that impact a student's language learning achievement. Musical, spatial and bodily kinesthetic intelligence is also important influences in the language learning process. Based on above explanation it is clearly seen that multiple intelligences is very appropriate for students in learning and developing English.

Based on preliminary research conducted through interview with lecturer of the English Education Department at Faculty of Tarbiyah and Teacher Training at State Islamic University Sjech M. Djamil Djambek Bukittinggi on September 29th, 2023, Mrs Lena Sastri, it was found that the students' level of proficiency in English varies. There are three paths offered to enter Bukittinggi State Islamic University, namely the SPAN-PTKIN, UM-PTKIN, and UM-Mandiri paths. Based on interviews conducted by researcher, in this independent pathway, specifically for English Education Department, there is no English interview test for prospective new students. So the level of ability of English students on this pathway certainly varies. However, it cannot be denied that students who enter the SPAN/UM-PTKIN pathway also have diverse English language abilities because these students come from various different educational backgrounds. Basically, every child is intelligent, which cannot be denied. Intelligence is a gift from God Almighty to humans. Thus, there are no unintelligent children and no children who do not have intelligence specifications. Therefore, students' level of English proficiency also varies.

Secondly, different and diverse educational backgrounds make some students background knowledge of English still low. Based on an interview with one of English Education Department lecturer, Mrs Lena Sastri, the different educational backgrounds are certainly one of the factors that make it difficult for students to learn English more deeply in college. Students who graduated from senior high school / Madrasah Aliyah and or Islamic boarding school are different from students who graduated from vocational high school. This is because the curriculum and syllabus of this High School and Vocational High School differ. State Islamic Senior high school/ Madrasah Aliyah and Islamic boarding school students learn more English both in terms of time and material, while vocational high schools do not study English in depth; vocational high schools focus more on learning English in general and related to the majors that students pursue.

But basically, students who graduate from vocational high school are prepared to work in the world of work. In contrast, graduates of senior high school and Madrasah Aliyah are prepared to enter college. Therefore, with different background knowledge, it is difficult for lecturers because they have to re-explain some basic things during the teaching and learning process because some students have little background knowledge of English. So, educational background is an important factor affecting students' background knowledge of English.

Thirdly, based on interview that researcher conducted with lecturer in the English Education Department, Mrs Lena sastri, it is estimated that

there are only a few students who have higher English comprehension skills, and the rest are below average. Due to the lack of understanding and the lack of active students in learning, some students only accept what is given or told by the lecturer. This is one of the causes of students' GPA (Grade Point Average) not being maximized because the lecturer will give grades according to what students have done when learning takes place, of course by considering several things. Based on interview that researcher conducted with lecturer in the English Education Department, Mrs Merry Prima Dewi, most English students graduate in 5 years and 9 months. Students who have poor English skills are one of the factors that make it difficult for English students to graduate on time. Another factor is retaking the courses, and if traced further, if students are retaking the courses, of course the language ability factor is also dragged into it.

Furthermore, based on interviews conducted by researcher with several English students, Azzahwa, Habib, and Fabiola, some of the intelligences possessed by students in the English Education Department show that students feel that their intelligence areas are in linguistic, interpersonal, musical, and naturalist intelligence, but it is not certain whether the intelligence possessed by these students has met the criteria or not.

Based on the background of the research above, this research would describe about English Education Department students intelligence area. So, the researcher wants to do the research under the title “An Investigation of English Education Department Students’ Intelligence Area

at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi"

## B. Identification of the Problem

Based on the background of the problem above, several problems can be identified as follows:

1. Students' level of proficiency in English varies.
2. Different and diverse educational backgrounds such as senior high school, vocational high school, state Islamic senior high school and Islamic boarding school and others can make some students' background knowledge of English still low.
3. It is estimated that there are only a few students who have higher English comprehension skills, and the rest are below average.

## C. Limitation of the Research

Based on the identification of the problems above, the researcher limited the scope of the problem to investigate English Education Department Students' intelligence area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

## D. Formulation of the Problem

Based on the limitations of the problem above, the problems in this research are formulated in the following questions:

1. What is the most dominant multiple intelligence types of students from 2020-2023 Academic Years of English Education Department

at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi?

2. Is there any difference between students from 2020-2023 Academic Years of English Education Department in terms of their dominant multiple intelligence types?
3. What are the types of multiple intelligences possessed by English Education Department Students at the Faculty of Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi?

## E. Purpose of the Research

Based on the formulations above there is a purpose in this research is:

1. To find out the dominant multiple intelligence types in English Education Department Students at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.
2. To find out there is any difference between students from 2020-2023 Academic Years of English Education Department in terms of their dominant multiple intelligence types.
3. To find out the types of multiple intelligences possessed by English Education Department Students at the Faculty of Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

## F. Significance of the Research

The researcher hopes this research finding will give the contribution to:

1. For the students, it is expected to help the students in identifying dominant intelligence and intelligence weaknesses. So it might subsequently boost the students' abilities.
2. For lectures, multiple intelligences are designed to provide information about the starting condition in which students' potential intelligence has dominated or developed, so that teachers may use the appropriate teaching technique or model to increase the quality of learning results.
3. For the researcher, it can expand knowledge and provide experience in identifying students' multiple intelligences.
4. For the other researcher, it is expected to help other researchers in conducting research.
5. For institutions, this research is expected to help the institutions to find out the dominant intelligence area of students.

## G. Definition of Key Terms

1. Investigation is the action of investigating something or someone; formal or systematic examination or research.
2. Intelligence is the ability to solve problems or create products that have value within one or more cultural settings.

# CHAPTER II

# REVIEW OF LITERATURE

## A. Review Related Theory

### 1. Intelligence

Intelligence comes from Latin, *intelligere*, which derives from *inter-legere*, which means smart or sharp. Another form is *intellectus*, which means more technical, that is, understanding, and is a translation of the Greek term nous. Many of the defenses that experts put forward about intelligence are sometimes concepts that they build on the results of research or approaches.[7]

One of the most popular defenses is from Howard Gardner, who has given the following definition of intelligence: the ability to solved problems that one encounters in real life; the ability to generate new problems to solve; the ability to make something or offer a service that is valued within one's culture. Or intelligence is "bio psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture."[8] Gardner's study demonstrated that intelligence is more than just a notion; it is also a practice description for how to developed and encouraged human potential. Furthermore, each individual has developed other intelligences more strongly, resulting in diverse types of cleverness.

[7] Asep Kurniawan, 'Pembelajaran Dengan Kecerdasan Jamak Di Sekolah', Al Ibtida: Jurnal Pendidikan Guru MI, 2.2 (2015), 1–18

[8] Howard Gardner, Frames of Mind, Experiments With People, 2011 paper (United States of America: Published by Basic Books, A Member of the Perseus Books Group, 2011)

The definition of intelligence that is supported by these criteria the ability to solve a problem or create a product that is valued in a society is very different from the definition of intelligence implicit in standardized I.Q. and aptitude tests (one based on verbal fluency, wide vocabulary, and computational skills). While the traditional definition of intelligence focuses on inert knowledge and skills that are especially valuable in school, Gardner's definition is far wider, "Creating a product" could encompass transforming a blank canvas into a picture that evokes emotion, or it might mean forming and leading a productive team from a group that couldn't agree on anything. The definition of "solving a problem or creating a product" is a pragmatic one, focusing on using the ability in a real-life situation. In applying criteria resulted, Gardner asserting that there are more intelligences than those relied upon in I.Q. tests and typically valued in school.[9]

Intelligence, which is regarded as an essential factor in learning and academic performance, was formerly thought to be a singular thing that is born with and cannot be modified. This viewpoint on intelligence may be found, for example, in the intelligence quotient hypothesis, which states that intelligence influences "people's ability to learn, to achieve academically, and thus to take on leadership roles in society."[10] Intelligence is a fairly wide

[9] Hoerr, VI.
[10] Zahra Dolati and Abdorreza Tahriri, 'EFL Teachers' Multiple Intelligences and Their Classroom Practice', SAGE Open, 7.3 (2017), 1–12

term that may take on several meanings and has been defined in a variety of ways.

According to Sreenidhi, et al, in a survey asking individuals to describe intelligence, for example, respondents claimed that intelligence included problem-solving skills, linguistic talents, and social competence. Others place greater emphasis on abstract reasoning, learning capacity, and environmental adaptation. Psychologists, on the other hand, define intelligence as "the capacity to understand the world, think rationally, and use resources effectively when faced with challenges".[11]

The same thing was also expressed by Sadoon that defined intelligence as a general process of gathering and analyzing the information in the minds of humans. Defines intelligence as the capacity to acquire knowledge, the ability to think and reason in the abstract, and the capability to solve problems. Maintain that intelligence is the main factor in predicting success or failure in school.[12]

In addition, Dawit explained that intelligence is the ability, capacity, or skill to learn, understand, or deal with new information or

[11] S K Sreenidhi, M S Tay, and Chinyi Helena, 'Multiple Intelligence Assessment', International Journal of Scientific and Research Publications, 7.4 (2017), 203–13

[12] Sadoon Salih Muttar, 'An Investigation Into Types of Multiple Intelligence Used by Students of English Department at College of Basic Education.', *Science International Journal*, 3.1 (2019), 19–21.

ideas. Intelligence is the ability to solve problems or to make a product, which is rewarded with one or more cultural objects.[13]

Based on the definition above, the researcher concludes Intelligence is an ability that humans are born with; it is not singular and fixed but diverse and evolving. It is also a way to apply knowledge to solve problems, create products, and adapt to situations with different cultural backgrounds. Intelligence has a great impact on individual development. This can be seen in the different abilities involved in daily activities and the way humans solve problems.

## 2. Multiple Intelligence

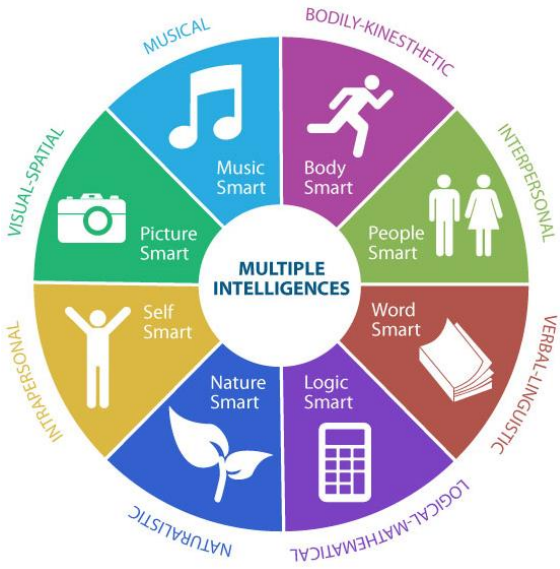
The theory of Multiple Intelligences was firstly proposed by American scholar Howard Gardner in 1983, which has broken through the traditional view of unitary intelligence. That was described in Gardner's book "Frames of Mind". In this book, Gardner explained the definition and composition of the Multiple Theory of Intelligence. Gardner also encouraged changing the traditional way of understanding intelligence into a more holistic view that can thoroughly consider all aspects that might influence human behavior or an event.

Almost 80 years after the first intelligence tests were developed. Gardner proposed in the book Frames of Mind that there are at least seven basic intelligences. More recently, Gardner added eight and discussed the possibility of a ninth intelligence. In the theory

[13] Dibekulu Alem Dawit, 'Theory of Multiple Intelligences and Its' Underlying Philosophy', International Journal of English Literature and Culture, 7.7 (2019), 205–13.

of multiple intelligences (MI theory), Gardner sought to broaden the scope of human potential beyond the confines of the IQ score. Gardner seriously questioned the validity of determining intelligence through the practice of taking individuals out of natural learning environment and asking people to do isolated tasks people would never done before and probably would never choose to do again. Instead, Gardner suggested that intelligence has more to do with the capacity for solving problems and fashioning products in culturally supported, context-rich, and naturalistic settings.[14]

**Picture 2.1 The intelligence modalities**




Howard Gardner explained that, multiple intelligences (MI) refers to a learner-based philosophy that characterizes human intelligence as having multiple dimensions that must be acknowledged and developed in education. In the book frames of mind, Gardner has given the definition of intelligence: the ability to solved problems that

[14] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.2

one encounters in real life; the ability to generate new problems to solve; the ability to make something or offer a service that is valued within one's culture. According to the definition, it can be obviously seen that intelligence is the capacity to solve problems and create something under the certain social culture and value standard, which shows that the dimensions of intelligence are diverse rather than one aspect.[15]

For educators and its implications for education, the theory of multiple intelligences sees children as unique individuals. Educators will see that there is a wide range of variation in learning, with each variation having consequences for the way it is viewed and evaluated. Intelligence, according to the multiple intelligences paradigm stated by Howard Gardner in Tadkiroatun Musfiroh, can be defined as an ability that has three main components, namely:

a. The ability to solve problems that occur in real daily life;
b. The ability to generate new problems to be solved;
c. The ability to create something or offer a service that will generate respect in one's culture will cause appreciation in one's culture.

All of these abilities are possessed by all humans, although people have different ways of demonstrating them. Children's intelligence is also based on the following main views of the multiple intelligences theory as stated by Armstrong, as follows:

[15] Yulan Lin and Qingsheng Lu, 'An Investigation on the Multiple Intelligences of English Major Undergraduates in a University in Jiangxi Province', Studies in Linguistics and Literature. 4.4 (2020), 131–48

a. Every child has the capacity to possess nine intelligences. These intelligences can be highly developed, moderately developed or underdeveloped.
b. All children, in general, can develop each of intelligence to a sufficient level of mastery if they receive sufficient support, enrichment, and instruction.
c. The intelligences work together in everyday activities. A child who sings needs both musical and kinesthetic intelligence.
d. Children have different ways of demonstrating their intelligence in each category. A child may not be very good at jumping but can do a good job of raffling (kinesthetic intelligence) or may not like telling stories but understand quickly when spoken to (linguistic intelligence).[16]

Maryam also stated, the theory of multiple intelligences emphasizes the processes of learning rather than teaching, where teachers are challenged to notice and take into account the diverse skills, abilities, and preferences that learners can exhibit in the classroom. Then, teachers can present the material in ways that recognize and consider the multiple intelligences of each individual learner.[17]

According to Gardner, using students' various inner capacities, abilities, or intelligence, multiple intelligences classroom activities

[16] Tadkiroatun Musfiroh, Pengembangan Kecerdasan Majemuk. In: Hakikat Kecerdasan Majemuk (Multiple Intelligences), Paud4404/Modul 1 (Universitas Terbuka: Bandung, 2014)
[17] Maryam Zarei, 'An Investigation into Iranian English Major Students' Learning Styles Preferences and Their Multiple Intelligences', International Journal on Studies in English Language and Literature, 4.8 (2016), 46–52

can be used to teach any subject matter. Generally, Gardner stated that multiple intelligence has its own feature as: Gardner claimed that human beings have multiple intelligences, each individual has eight intelligences in varying amount, these intelligences are located in different areas of the brain, these intelligences can work independently or together; these MI can be nurtured and strengthened or ignored and weakened; and education can improve by addressing these multiple intelligences of students.

The explanation above as a whole indicates that general intelligence and multiple intelligences have a complementary relationship. General intelligence sees intelligence as an ability measured by tests such as IQ, and general intelligence highlights general cognitive aspects, while multiple intelligences detail a person's specialized abilities in various domains, such as the 8 intelligences described by Howard Gardner. Therefore, these two theories provide a more holistic understanding of how people think, learn, and perform in various contexts.

There are many other theories of intelligence and even other concept of multiple intelligences. We can find value in all of them. However, different ways of seeing have different results. For example, if you choose to see intelligence in only the IQ score, then intelligence will be bestowed only on a certain few. If you choose to see

intelligence sweeping over the whole range of human talents, then everyone is clever.[18]

### 3. Factors that can affect Multiple Intelligences

To provide a strong theoretical foundation, Gardner developed a set of criteria to determine the set of skills that make up intelligence. These criteria are focused on problem solving and product creation; they are based on the biological underpinnings and psychological aspects of intelligence. Gardner suggests that the ability can be considered a full-fledged intelligence and not simply a talent, skill, or aptitude if it can meet some (but not necessarily all) of these criteria:

a. Potential Isolation by Brain Damage.

For example, the location of brain damage; in some cases, brain lesions appear to selectively affect one intellect while leaving the others intact. For example, someone with a lesion in Broca's area (in the left frontal lobe) may have damage to Word Smart intelligence and thus have great difficulty speaking, reading, or writing, but can still sing, do math, dance, reflect on feelings, and relate to others. A person with lesions to the temporal lobe in the right hemisphere may have a selectively impaired music-smart capacity, while frontal lobe lesions may primarily affect interpersonal intelligence (self-smart) or intrapersonal intelligence (people-smart).[19] And other instances, such as those

[18] E R Shofiana, 'Multiple Intelligences in EFL Learning', 2019, 1–135. p. 15

[19] Thomas Armstrong, Multiple Intelligence in the Classroom 4th Edition, Fourth Edition (Alexandria, Virginia, USA: Association for Supervision and Curriculum Development, 2018)

that may result from a stroke, may result in a person losing certain linguistic abilities.[20] According to Gardner's book, the consequences of such brain injuries are perhaps the single most instructive piece of evidence regarding the distinctive abilities or calculations that are at the core of human intelligence.[21]

b. The Existence of Idiots Savants, Prodigies, and Other Exceptional Individuals.

It is demonstrated by the existence of idiot savants, prodigies, and other exceptional individuals who demonstrate a high level of skill in one area. For example, by observing people who demonstrate extraordinary ability in a single intelligence, people can watch intelligences in relative isolation.[22] For instance, in the movie Rain Man, which is based on the true story of Kim Peek, Dustin Hoffman plays the role of Raymond Babbitt, a Number/Logic Smart savant. Raymond can mentally calculate multidigit numbers and perform astounding math feats, but Raymond has poor peer interaction, poor language function, and a lack of insight into personal life (low People Smart and Self Smart). There are also savants who draw exceptionally well (e.g., Stephen Wiltshire), savants who have amazing Music Smart memories (who can play a composition after hearing it only once) (e.g., Leslie Lemke or Gloria Lenhoff), savants who read complex material but do not understand what has been read (hyperlexia),

[20] Hoerr, VI. p.3
[21] Gardner. p.67
[22] Hoerr, VI. p. 3

and savants who have an extraordinary sensitivity to nature or animals.[23]

c. An Identifiable Core Operation or Set of Operations

In the real world, specific intelligences operate in rich environments, typically in conjunction with several other intelligences. For analytic purposes, however, it is important to tease out capacities that seem central or "core" to an intelligence. These capacities are likely to be mediated by specific neural mechanisms and triggered by relevant internal or external types of information. Analysis suggests that linguistic intelligence, for instance, includes core operations of phonemic discriminations, command of syntax, sensitivity to the pragmatic uses of language, and acquisition of word meanings. Other intelligences also have their component operations or processes, such as the sensitivity to large-scale, local, three-dimensional and two-dimensional spaces (spatial intelligence), or the aspects of musical processing that encompass pitch, rhythm, timbre, and harmony (musical intelligence).[24]

According to Gardner, much as a computer program requires a set of operations to function, so too does each of intelligence maintain a set of core operations to drive its various activities. Core operations of Music Smart, for example, may

[23] Hoerr, VI. p. 8

[24] Howard Gardner, *Intelligence Reframed: Multiple Intelligences for the 21st Century*, *Gifted and Talented International* (Basic Books, A Member of the Perseus Books Group, 2001), XVI <https://doi.org/10.1080/15332276.2001.11672976>.

include sensitivity to pitch or the ability to discriminate among various rhythmic structures. In Body Smart, core operations may include the ability to imitate the physical movements of others or to master established fine-motor routines for building a structure. Gardner speculates that these core operations may someday be identified with such precision as to be simulated on a computer.[25]

d. It has a distinctive developmental history, along with a definable set of expert "end-state" performances.

Intelligence should have an identifiable developmental history through which normal as well as gifted individuals pass in the course of ontogeny. To be sure, intelligence will not develop in isolation, except in an unusual person, and so it becomes necessary to focus on those roles or situations where intelligence occupies a central place. In addition, it should prove possible to identify disparate levels of expertise in the development of intelligence, ranging from the universal beginnings through which every novice passes to exceedingly high levels of competence, which may be visible only in individuals with unusual talent and/or special forms of training. There may well be distinct critical periods in the developmental history as well as identifiable milestones linked either to training or to physical maturation. Identification of the developmental history of intelligence and analysis of its

[25] Gardner; Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.68

susceptibility to modification and training are of the utmost importance for educational practitioners.[26]

Gardner pointed out that people can best see the intelligences working zenith by studying the "end-states" of the intelligences in the lives of truly exceptional individuals. For example, Music Smart at work by studying Beethoven's Eroica Symphony, Nature Smart through Darwin's theory of evolution, or Picture Smart via Michelangelo's Sistine Chapel paintings.[27]

e. It has an evolutionary history or evolutionary plausibility.

All species display areas of intelligence (and ignorance), and human beings are no exception. The roots of our current intelligence reach back millions of years in the history of the species. A specific intelligence becomes more plausible to the extent that one can locate its evolutionary antecedents, including capacities (like bird song or primate social organization) that are shared with other organisms; one must also be on the lookout for specific computational abilities that appear to operate in isolation in other species but have become yoked with one another in human beings. For example, animals exhibit forms of spatial intelligence; birds have musical intelligence.

f. It has support from experimental psychological tasks.

Gardner suggested that examining psychological studies can help to see intelligences working in isolation from one

[26] Gardner. p.68
[27] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.8

another. For example, in studies where subjects master a specific skill, such as reading, but fail to transfer that ability to another area, such as mathematics, the failure of Word Smart to transfer to Number/Logic Smart. Similarly, in studies of cognitive abilities such as memory, perception, or attention, it can see evidence that individuals possess selective abilities. Certain individuals, for instance, may have a superior memory for words but not for faces; others may have an acute perception of musical sounds but not of verbal sounds. Each of these cognitive faculties, then, is intelligence-specific; that is, people can demonstrate different levels of proficiency across the eight intelligences in each cognitive area.

g. It has support from psychometric findings. For example, batteries of tests can reveal which intelligences reflect the same underlying factors.

h. It has susceptibility to encoding in a symbol system.

Gardner notes that one of the best indicators of intelligent behavior is the ability to use symbols. The Codes such as language, maps, numbers, and facial expressions capture components of the various intelligences.[28] The word cat as it appears in this sentence is simply a collection of marks printed in a specific way, yet it more than likely conjures up a range of associations, images, and memories. What has occurred is the

[28] Hoerr, VI. p. 3

bringing to the present (the "re-present-ation") of something that is not actually here. Gardner suggests that the ability to symbolize is one of the most important factors separating humans from most other species. Gardner notes that each of eight intelligences in theory meets the criterion of being able to be symbolized.

In fact, each intelligence has its own unique symbol or notational system. For Word Smart, there is the great diversity of written languages such as English, Hebrew, and Russian; for Picture Smart, there are a number of graphic languages used by architects, engineers, and designers, as well as some of the ideographs used in Chinese and Japanese communication.[29]

## 4. Types of Multiple Intelligence

Gardner is not the first to propose the existence of multiple intelligences. Decades ago, J. P. Guilford created the Structure of Intelligence, a model that identifies over 90 different intellectual capacities, and Robert Sternberg developed the Triarchical Theory of Intelligence, which contains three forms of intelligence. More recently, Daniel Goleman's Emotional Intelligence and Robert Coles' Moral Intelligence have received national attention. All of these theories share the belief that intelligence is a diverse and complex capacity. Gardner's model is distinguished from other theories by its breadth, its scientific basis, and its educational implications.

[29] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p. 13

Gardner says that intelligence has more to do with the capacity to (1) solve problems and (2) create products in culturally supported, context-rich, and naturalistic environments. Therefore, Gardner provides a way to map the various abilities that humans possess by categorizing their abilities into the following eight comprehensive intelligences:

a. Linguistic Intelligence

The basic type of intelligence in language teaching and learning is linguistic intelligence, which means the ability of students' language skills or linguistic capacity. As Gardener stated, linguistic intelligence is sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish goals. With abilities in the complex acquisition, formation, and processing of language. Armstrong said that thinking symbolically and reasoning abstractly fall under this category, as does the ability to create conceptual verbal patterns. Reading, writing, and the development of symbolic writing and language skills—anagrams, palindromes, metaphors, similes, puns, and analogies—come under this heading. Children who talk early, those who enjoy making sounds and rhyming patterns, and children who are prolific readers and have good memories for poetry, lyrics, tongue twisters, and verse may have a propensity in this area.

These individuals love words, both spoken and written, and often think in words. These individuals learn by verbalization, by seeing and hearing words, and usually enjoy word games.[30] Armstrong stated this intelligence includes the ability to manipulate the syntax or structure of language, the phonology or sounds of language, the semantics or meanings of language, and the pragmatic dimensions or practical uses of language. Some of these uses include rhetoric (using language to convince others to take a specific course of action), mnemonics (using language to remember information), explanation (using language to inform), and meta-language (using language to discuss language).[31]

Hani Morgan stated linguistic intelligence is people with strong linguistic skills can use native language, and sometimes other languages, to understand and express people thoughts. Examples of professionals with above average intelligence levels in this area include writers and orators.[32]

In line to linguistic intelligence, Mohammad also defined verbal linguistic intelligence is the ability to understand and the use language, both written and spoken, with sensitivity to the meaning of words and the different functions of language. Verbal linguistic intelligence is most commonly used in daily communication, whether formal or informal, written or spoken.

[30] Dawit.

[31] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.2

[32] Hani Morgan, 'Howard Gardner's Multiple Intelligences Theory and His Ideas of Promoting Creativity', *Celebrating Giants and Trailblazers: A-Z of Who's Who in Creativity Research and Related Fields*, 2021, 124–41.

Students are called upon to use verbal linguistic intelligence when they write essays or poetry. Reading, vocabulary, writing and making speeches, journal or diary keeping, creative and poetry writing, debates, impromptu speaking, or story telling are some of the activities that facilitate the development of this intelligence.[33]

Thus, it can be concluded that linguistic intelligence is a language ability that includes reading, writing, and speaking skills. People with high linguistic intelligence include lawyers, speakers, writers, and poets.

b. Logical-Mathematical Intelligence

This is an intelligence to solve mathematical equations and logical things. Similarly, Gardner defined it is the capacity to analyze problems logically, carry out mathematical operations, and investigate issues scientifically. Qin also stated logical or mathematical intelligence is the ability for rational thinking and logical deduction, being able to reason about the relationships between things, and being interested in new scientific discoveries.[34]

Another opinion related to the definition of logical-mathematical by Yalmanci, stated that the logical mathematical intelligence is a capability type for making mathematical calculations, deductive and inductive reasoning, building logical

[33] Siti Nurul Mahfuzah Mohamad and Mohd Azran Mohd Salleh, 'Multiple Intelligences in the Classroom', Diges Penyelidikan Dan Penulisan Ilmiah, 2014

[34] Yulan Lin and Qingsheng Lu, 'An Investigation on the Multiple Intelligences of English Major Undergraduates in a University in Jiangxi Province', Studies in Linguistics and Literature, 4.4 (2020), p131

relationships, generating hypotheses, solving problems, making critical thinking decisions, and understanding numbers, geometric shapes, and abstract symbols.[35]

Armstrong also explained that logical-mathematical intelligence is the capacity to use numbers effectively (e.g., as a mathematician, tax accountant, or statistician) and to reason well (e.g., as a scientist, computer programmer, or logician). This intelligence includes sensitivity to logical patterns and relationships, statements and propositions (if-then, cause-effect), functions, and other related abstractions. The kinds of processes used in the service of logical-mathematical intelligence include categorization, classification, inference, generalization, calculation, and hypothesis testing.[36]

Mathematicians, logicians, and scientists exploit logical mathematical intelligence. For example, logical-mathematical intelligence is number Smart, which: asks a lot of questions about how things work, computes arithmetic questions in head quickly, enjoys the challenges of math class, finds math games and math computer games interesting, enjoys playing chess, checkers, or other strategy games, and working with logic puzzles and brainteasers, likes to experiment in a way that shows higher-order-

[35] Sibel Gurbozoglu Yalmanci and Ali İbrahim Can Gozum, 'The Effects of Multiple Intelligence Theory Based Teaching on Students' Achievement and Retention of Knowledge (Example of the Enzymes Subject).', International Journal on New Trends in Education & Their Implications (IJONTE), 4.3 (2013), 27–36

[36] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.2

thinking processes, thinks on a more abstract level than peers, and has a good sense of cause and effect relationships for age.[37]

According the definition above, this intelligence refers to the ability to make effective use of numbers, draw conclusions, make logical deductions, and infer cause-and-effect relationships. Learners in this category recognize patterns easily and can arrive at the principles of a system, such as solving the meaning of a text. These learners appreciate grammar rules.

c. Spatial/Visual Intelligence

According to Gardner, the central components of spatial intelligence are the capacities to perceive the visual world accurately, to perform transformations and modifications upon one's initial perceptions, and to be able to recreate aspects of one's visual experience even in the absence of relevant physical stimuli. One can be asked to produce forms or simply manipulate those that have been provided. These abilities are clearly not identical; an individual may be acute, say, in visual perception while having little ability to draw, imagine, or transform an absent world. Even as musical intelligence consists of rhythmic and pitch abilities that are sometimes dissociated from one another and as linguistic intelligence consists of syntactic and pragmatic capacities that may also come uncoupled, so, too, spatial intelligence emerges as an amalgam of abilities. All the same, an individual with skills in

[37] Dawit.p.208

several of the aforementioned areas is most likely to achieve success in the spatial domain. The fact that practice in one of these areas stimulates the development of skills in related ones is another reason that spatial skills can reasonably be considered "of a piece".[38]

According to Sabriye, said that spatial/visual intelligence is the type of intelligence is described as the ability of perceiving, modifying and creating images. Artists, designers, architects, sculptors have highly this type of intelligence.[39]

In another opinion regarding spatial/visual intelligence, Armstrong said that Spatial intelligence is the ability to perceive the visual-spatial world accurately (e.g., as a surveyor or cartographer) and to perform transformations upon those perceptions (e.g., as an interior decorator, architect, artist, or inventor). This intelligence involves sensitivity to color, line, shape, form, space, and the relationships that exist between these elements. It includes the capacity to visualize, to graphically represent visual or spatial ideas, and to orient oneself appropriately in a spatial matrix.[40] Students with spatial intelligence can use the imagination to get an idea of how things are created and are very good at contextualizing themselves in a limited space. Students are

[38] Gardner. p. 182-183
[39] Sabriye Şener and Ayten Çokçalışkan, 'An Investigation between Multiple Intelligences and Learning Styles', Journal of Education and Training Studies, 6.2 (2018), 125
[40] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*.

also very aware of the space around them and are very good at recognizing images.

From the definition above, the researcher concluded spatial/visual intelligence is a person who has sensitivity with form, color, shape, space and line. The ability to solve the problems related to the notion of space such as using a map to locate a place in a city or drawing a floor plan are example of spatial intelligence.

d. Musical Intelligence

Armstrong defined that musical intelligence is the capacity to perceive (e.g., as a music aficionado), transform (e.g., as a composer), express (e.g., as a performer), and discriminate among (e.g., as a music critic) musical forms. This intelligence includes sensitivity to the rhythm, pitch or melody, and timbre or tone color of a musical piece. One can have a figural or "top-down" understanding of music (global, intuitive), a formal or "bottom-up" understanding (analytic, technical), or both.[41]

Another opinion is from Lunenburg, said that musical intelligence refers to the ability to produce and appreciate rhythm, tone, and color forms of music, as well as forms of musical expression. Students can learn better with a musical background because teachers can integrate activities into lessons that encourage students' musical intelligence by turning lessons into

[41] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.3

lyrics, rhythmic speaking, and tapping time. Tools that can be used include musical instruments, music, radio, stereo, CD-ROM, and multimedia. Some examples of people who are gifted with musical intelligence are Wolfgang Amadeus Mozart, Louis Armstrong, and Lauryn Hill.[42] According to Ibnian, musical intelligence is an intelligence that includes the ability to recognize and compose musical tones, pitches and rhythms. (Auditory function is necessary for a person to develop this intelligence in relation to pitch and tone, but not necessary for knowledge of rhythm).[43]

Thus, it can be concluded that musical intelligence is the capacity to recognize and compose music, understand tones, and rhythms. People with enhanced musical intelligence have a heightened ability to hear, recognize, and remember patterns. They think in music and cannot get it out of their minds. In Frames of Mind, Gardner indicated that musical intelligence emerges earlier than other intelligences.

e. Bodily-Kinesthetic Intelligence

This intelligence entails the potential of using one's whole body or parts of the body (like the hand or the mouth) to solve problems or fashion products. Those who are good at this intelligence can use all their body skills to express ideas and feelings (for example, as actors, mimes, athletes, or dancers) and

[42] Fred C Lunenburg and Melody R Lunenburg, 'Applying Multiple Intelligences in the Classroom: A Fresh Look at Teaching Writing', INTERNATIONAL JOURNAL OF SCHOLARLY ACADEMIC INTELLECTUAL DIVERSITY, 16.1 (2014), 1–15

[43] Salem Saleh Khalaf Ibnian and Ala' Daifallah Hadban, 'Implications of Multiple Intelligences Theory in ELT Field', *Journal of Humanities and Social Science*, 3.4 (2013), 292–97.

have the ability to use their hands to produce or change things (for example, as craftsmen, sculptors, mechanics, or surgeons). This intelligence includes specific physical skills such as coordination, balance, agility, strength, flexibility, and speed, as well as proprioceptive, tactile, and haptic abilities. Some examples of people who are gifted with this intelligence are LeBron James (basket player), Serena Williams (tennis player), and Mia Hamm (soccer player).

f. Interpersonal Intelligence

According to Howard, interpersonal intelligence entails the capacity of a young child to discriminate among individuals and to detect various moods. In an advanced form, interpersonal knowledge permits a skilled adult to read the intentions and desires—even when these have been hidden—of many other individuals and, potentially, to act upon this knowledge—for example, by influencing a group of disparate individuals to behave along desired lines. Political and religious leaders (such as Mahatma Gandhi or Lyndon Johnson), skillful parents and teachers, and those working in the helping professions (such as therapists, counselors, or shamans) all have highly developed kinds of interpersonal intelligence.[44]

Armstrong also had the opinion that interpersonal intelligence is the ability to perceive and distinguish among the

[44] Gardner. p. 253

mood, intentions, motivations, and feelings of other people. This can include sensitivity to facial expressions, voice, and gestures; the capacity for discriminating among many different kinds of interpersonal cues; and the ability to respond effectively to those cues in some pragmatic way (e.g., by influencing a group of people to follow a certain line of action).[45]

Another opinion defined that interpersonal (social) intelligence is the capacity of understanding, distinguishing and welcoming the emotions, aspirations and needs of surrounding people.[46]

g. Intrapersonal Intelligence

According to Howard, the intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such discrimination, to become more involved in or to withdraw from a situation. At its most advanced level, intrapersonal knowledge allows one to detect and to symbolize complex and highly differentiated sets of feelings. One finds this form of intelligence developed in the novelist (like Proust) who can write introspectively about feelings, in the patient (or the therapist) who comes to attain a deep knowledge of his own feeling life, and in the wise elder who

[45] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p.3
[46] Yalmanci and Gozum.

draws upon his own wealth of inner experiences in order to advise members of his community.[47]

Armstrong says that intrapersonal intelligence is knowledge about oneself and the ability to act adaptively based on that knowledge. This intelligence includes having an accurate picture of oneself (one's strengths and limitations); awareness of one's inner moods, intentions, motivations, temperaments, and desires; and the capacity for self-discipline, self-understanding, and self-esteem.[48]

Another opinion defined that intrapersonal intelligence, according to Gardner cited in Yalmanci, et al, is the most important intelligence type of daily life, which enables oneself to have knowledge and take responsibility of his own life.[49]

h. Naturalist Intelligence

Naturalist intelligence deals with the ability to sense patterns in nature and make connections to elements in nature. Using this intelligence, children possessing enhanced levels of "nature smarts" may be very interested in human behaviors, the behaviors and habits of other species, or their immediate environment.[50]

Another opinion according to Lunenburg, et al, that the naturalist intelligence is the ability to understand, relate to,

[47] Gardner. p. 253
[48] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*.
[49] Yalmanci and Gozum.
[50] Dawit.

> categorize, classify, comprehend, and explain the things encountered in the world of nature. Teachers can enhance this intelligence by having students differentiate among living things (plants, animals) and demonstrate sensitivity to the natural world (clouds, rock configurations) through the study of relationships such as pattern recognition, comparison and contrast, and connections to real-life and science issues. Examples of people gifted with naturalist intelligence are Charles Darwin, John Muir, and Jane Goodall.[51]
>
> Armstrong also said that, this expertise could recognition and classification of the numerous species- the flora and fauna-of an individual's environment. This also includes sensitivity to other natural phenomena (e.g., cloud formations and mountains) and, in the case of those growing up in an urban environment, the capacity to discriminate among inanimate objects such as cars, sneakers, and smartphones.[52]

In this research, the researcher used the theory presented by Howard Gardner. Gardner's model is distinguished from other theories by its breadth, its scientific basis, and its educational implications. Gardner says that intelligence has more to do with the capacity to (1) solve problems and (2) create products in culturally supported, context-rich, and naturalistic environments. Therefore, Gardner provides a way to map the various abilities that humans possess by categorizing the abilities into

[51] Lunenburg and Lunenburg.
[52] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*. p. 3

eight comprehensive intelligences, namely linguistics, logic/mathematics, spatial/visual, musical, bodily/kinesthetic, interpersonal, intrapersonal, and naturalist.[53]

## B. Review of Related Studies

There are several previous studies related to this research. The first, the research was conducted by Yulan Lin and Qingsheng Lu (2020) with title of the research is "An Investigation on the Multiple Intelligences of English Major Undergraduates in a University in Jiangxi Province". The study aims to survey multiple intelligences in college students majoring in English at a university in Jiangxi Province. The methodology of this research is quantitative research method. The instrument used by the researcher is intelligences questionnaire. The result of this study showed that the level of multiple intelligences of English majors in the university is in a general state, and their weaknesses intelligence and superior intelligence are music intelligence and naturalist intelligence respectively. What's more, the results provide three aspects of enlightenments for a better use of multiple intelligences for further college teaching: based on students' current multiple intelligences; make use of students' learning styles and learning strategies; enable students to get overall development.[54]

The second study, a research entitled "An Investigation into Types of Multiple Intelligence Used by Students of English Department at College of Basic Education". The research was conducted by Sadoon Salih

[53] Thomas Armstrong, *Multiple Intelligences in the Classroom 3rd Edition* (Association for Supervision and Curriculum Development, 2009).
[54] Lin and Lu, 'An Investigation on the Multiple Intelligences of English Major Undergraduates in a University in Jiangxi Province'. Studies in Linguistics and Literature. Vol 4, no 4. (2020)

Muttar in 2019. This study aims to understand which multiple intelligence types are dominant among the students as well as to explore the relationship between multiple intelligences and the variable of gender and grade of students. This methodology of this research is quantitative. The study is restricted to the 3rd and 4th year Basic Education College students during the academic year 2017-2018. The total number of the whole population is 80, which was distributed into two types: the pilot sample and the main sample. This research was conducted in the English department of the Basic Education College. Multiple intelligence questionnaires were applied to the students. The data obtained from the study were analyzed statistically using the Statistical Package Program through the use of descriptive statistics and an independent sample T-Test. The results of the study showed that the students in the English department showed a variety of multiple intelligences according to gender and grade type. Finally, the students perceived activities related to bodily or kinesthetic intelligence to be the least useful activities.[55]

The third study was conducted by Tha'er Issa Tawalbeh in 2016 with the title "Investigation of EFL Learners' Multiple Intelligences in Preparatory Year at Taif University ". This research aims to investigate the English as a foreign language (EFL) learners' multiple intelligences (MIs) in the preparatory year at Taif University in Saudi Arabia and to provide suggestions for EFL instructors to integrate MIs in their lesson plans for instructional use in the classroom. This research instrument used a

[55] Muttar.

questionnaire, and the sample of this study comprised two thousand and five hundred students learning English in the first semester of the academic year 2015–2016. Four hundred and eighty two students responded to the questionnaire. The results of this research revealed that students do not tend to have interest in musical and naturalistic intelligences. In addition, there were statistically significant differences among the streams in the perceptions of their MIs in favor of the health stream students. The researcher also synthesized literature and suggested a number of techniques and activities to help instructors integrate MIs in their plans.[56]

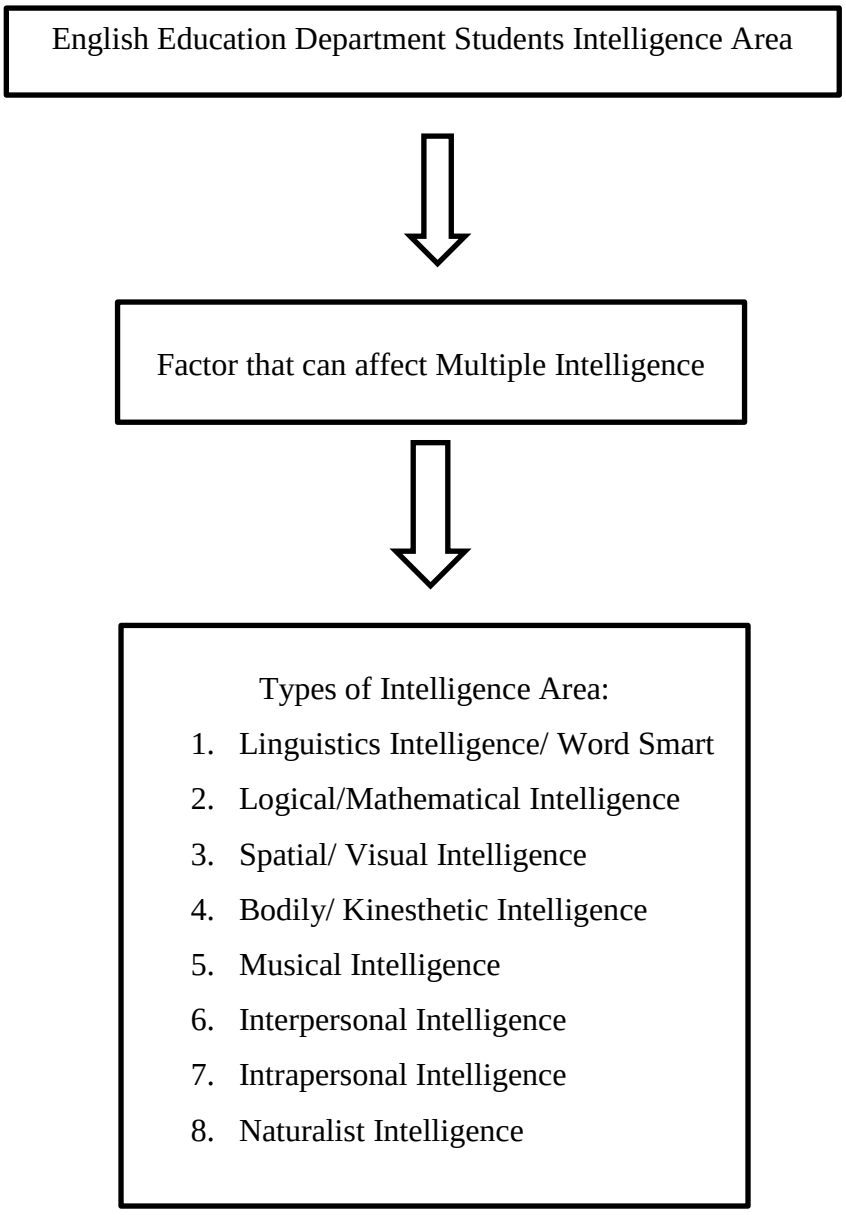
Based on previous studies that have been explained by researcher, it shows the level of multiple intelligences of students, their weaknesses, and their superior intelligence. A variety of multiple intelligences is also shown by gender and grade type. The similarities in the previous study showed that at least the students had one or more intelligences that they did not tend to interest in.

So, the researcher concluded that there are many differences between the researcher research and other. This research will uses 80 questions that will be distributed to English education students. The population of this study is even semester students in the 2023–2024 academic years, namely semesters $2^{nd}$, $4^{th}$, $6^{th}$, and $8^{th}$, with a total population of 348 students.

[56] Tha'er Issa Tawalbeh, 'Investigating EFL Learners' Multiple Intelligences in the Preparatory Year at Taif University', Theory and Practice in Language Studies, 6.7 (2016), 1347

## C. Conceptual Framework

Conceptual framework of this research can be created as follow:




**Graphs 2.1 Conceptual Framework**

The conceptual framework above explains how this research was conducted. This research investigated English Education Department students' intelligence area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. It explains there are eight types that are important in the intelligence area; those are linguistic intelligence/word smart, logical/mathematical intelligence, spatial/visual intelligence, bodily/kinesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalist intelligence.

# CHAPTER III

# RESEARCH METHOD

## A. Research Design

This research used quantitative approach with a descriptive design. Quantitative research methods were one of the types of research whose specifications were systematic, planned and clearly structured from the beginning to the made of the research designed. Quantitative research is the collected and analysis of numerical data to described, explained, predicted, or control phenomena of interested.[57] The purposed of this research was to investigate the English Education department students' intelligence area of in Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

According to Sugiyono, quantitative research methods could be interpreted as research methods based on the philosophy of positivism, uses to research a particular population or sample; sampling technique generally involves random data collection using research instruments; data analysis is quantitative or statistical with the aim of testing the established hypothesis.[58] This research used an approach descriptive with the aims of describe the object of the research or results study.

The descriptive understanding as Sugiyono stated is the method that served to describe or provided an overview of the object under study through data or samples that collected as without conducting an analysis

[57] L. R. Gay, Geoffrey E Mills, and Peter W Airasian, *Educational Research Competencies for Analysis and Application*, tenth edit (new york: PEARSON, 2011).
[58] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, Dan R & D* (Bandung: Alfabeta, 2013).

and drawing generally accepted conclusions.[59] After analyzed the data, the researcher described the results of the data made the reader easy to understand the results of the analysis, and this research concerned to investigate the English Education department students' intelligence area of in Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

## B. Population and Sample

Population and sample are two necessary elements to get the data for the research. The population and sample of this research were:

### 1. Population

The population is a general subject or object which is research by researcher to get a conclusion. According to Creswell, population refers to a group of individuals who have the same characteristics. The population of this research was students from 2020-2023 academic years of English department students at Islamic State University of Sjech M. Djamil Djambek Bukittinggi and this research was conducted during the even semester. The population is described in the following table:

[59] Sugiyono.

**Table 3-1 Distribution of Population of the Students 2020–2023 Academic Years of English Education Department Students at Islamic State University of Sjech M. Djamil Djambek Bukittinggi**

| No | Semester | Class | Total Number of Students | | |
|---|---|---|---|---|---|
| | | | Male | Female | Total |
| 1 | 2nd | A | 7 | 16 | 23 |
| | | B | 2 | 20 | 22 |
| | | C | 5 | 20 | 25 |
| 2 | 4th | A | 8 | 24 | 32 |
| | | B | 6 | 28 | 34 |
| | | C | 10 | 25 | 35 |
| 3 | 6th | A | 6 | 23 | 29 |
| | | B | 8 | 18 | 26 |
| | | C | 9 | 16 | 25 |
| 4 | 8th | A | 4 | 20 | 24 |
| | | B | 3 | 17 | 20 |
| | | C | 6 | 22 | 28 |
| | | D | 3 | 22 | 25 |
| Total | | | | | **348** |

*Source: Islamic State University of Sjech M. Djamil Djambek Bukittinggi*

**2. Sample**

Sample is a part of population and its amount. According to Gay et al, in quantitative research, a good sample is one that is representative of the population from which it was selected, and

selecting a representative sample is not a haphazard process. Several techniques for selecting a sample are appropriate, and selection depends on the situation because the techniques do not all provide the same level of assurance concerning representativeness. However, as with populations, someone must occasionally sacrifice the ideal for what is achievable.[60]

In this research the researcher used proportionate stratified random sampling, which involves drawing random samples from stratified groups in proportion to the population.[61] According to Sugiyono, Proportionate stratified random sampling is a sample withdrawal where the population has members or elements that are not homogeneous and stratified proportionally. Thus, the size of this research sample was determined based on the Slovin formula, so that the number of samples for each stratum can be known as follows:

$$\boldsymbol{n = \frac{N}{1 + N.d^2}}$$

Description:

n : Sample size

N : Population size

d :Precision value / error tolerance limit (assuming an error rate of 5%)[62]

[60] Gay, Mills, and Airasian. p.131

[61] Suwartono, *Dasar-Dasar Metodologi Penelitian*, ed. by Erang Risanto (Yogyakarta: CV.ANDI OFFSET, 2014).

[62] Imam Machali, *Metode Penelitian Kuantitatif, Laboratorium Penelitian Dan Pengembangan.* FARMAKA TROPIS Fakultas Farmasi Universitas Mualawarman, Samarinda, Kalimantan Timur, 2021. p. 33

The population in this study focuses on even semester English education department namely semesters 2nd, 4th, 6th, and 8th semesters in the 2020–2023 academic years. There were 13 classes that became respondents. So to perfect the use of a more representative sample, researchers use proportionate stratified random sampling techniques.

Based on the Slovin Formula, the amount of withdrawal of the number of research samples was:

N = 348 students

d = 0.05%

$$n = \frac{\text{N}}{1 + (N.d^{2})}$$

$$n = \frac{348}{1 + (348\ x\ 0.05^{2})}$$

$$n = \frac{348}{1 + (348\ x\ 0.0025)}$$

$$n = \frac{348}{1 + 0.87}$$

$$n = \frac{348}{1.87}$$

$$n = 186{,}096$$

$$n = 186$$

So, the total samples in this research were 186 students from the English Education Department who became respondents.

The sampling technique used in this research was probability sampling using proportionate stratified random sampling. In this study,

the researcher used simple random sampling to determine the sample. To determine the size of the sample in each class, the distribution was carried out so that the sample taken is more proportional, in the following way:

$$ni = \frac{\mathbf{Ni} \cdot \mathbf{n}}{\mathbf{N}}$$

Description:

ni = Number of student samples for each class

Ni = Total student population for each class

n = Total sample size

N = Total population[63]

**Table 3-2 Determination of the number of student samples for each class (ni) on 2020–2023 Academic Years of English Education Department at Islamic State University of Sjech M. Djamil Djambek Bukittinggi**

| No | Semester | Class | Total Number of Students | | |
|---|---|---|---|---|---|
| | | | Male | Female | Ni |
| 1 | 2nd | A | 7 | 16 | 12 |
| | | B | 2 | 20 | 12 |
| | | C | 5 | 20 | 13 |
| | | Total | | | 37 |
| 2 | 4th | A | 8 | 24 | 17 |
| | | B | 6 | 28 | 18 |
| | | C | 10 | 25 | 19 |
| | | Total | | | 54 |
| 3 | 6th | A | 6 | 23 | 16 |
| | | B | 8 | 18 | 14 |
| | | C | 9 | 16 | 13 |

[63] Machali, p. 83.

| | | | | | |
|---|---|---|---|---|---|
| | | Total | | | 43 |
| 4 | 8th | A | 4 | 20 | 13 |
| | | B | 3 | 17 | 11 |
| | | C | 6 | 22 | 15 |
| | | D | 3 | 22 | 13 |
| | | Total | | | 52 |
| Total of respondents | | | | | 186 |

For more details can be seen in **Appendix 3 on page 112.**

## C. Instrument

Instrumentation is known as the tool to get the data that is needed for data collection. This research gets the data from questionnaires.

1. **The questionnaire** is used to determine the variety of intelligence possessed by English Education Department students. The questions were adapted from the book "Multiple Intelligences in the Classroom, 3rd Edition (Association for Supervision and Curriculum Development, 2009), written by Thomas Armstrong on pages 22–26.[64] Then the researcher adjusted the questions based on the needs and situation under study.

   In this study, a closed-ended questionnaire was used. A closed-ended questionnaire is a question that expects a short answer or expects the respondent to choose one of the alternative answers from each available question. Any raised question that expects answers in the form of nominal, ordinal, interval, or ratio data is a closed form of question. Closed-ended questions help respondents to answer quickly and also make it easier for researchers to analyze data on all

[64] Armstrong, *Multiple Intelligences in the Classroom 3rd Edition*. p. 22

questionnaires that have been collected. Questions or statements in the questionnaire need to be made in positive and negative sentences so that respondents answer each question more seriously and not mechanistically.

The researcher conducted validity and reliability tests on this questionnaire to ensure its validity and reliability before distributing it to English students.

**1. Validity**

Validity refers to the degree to which a test measures what it is supposed to measure and, consequently, permits appropriate interpretation of scores. Validity is important in all forms of research and all types of tests and measures and is best thought of in terms of degree: highly valid, moderately valid, and generally invalid. Validation begins with an understanding of the interpretation(s) to be made from the selected tests or instruments. It then requires the collection of sources of evidence to support the desired interpretation. There are content validity, construct validity, concurrent validity and predictive validity. And in this research, the researcher used construct validity. According to Gay, construct validity is determined by expert judgment.[65] There were the following steps that researcher took to validate the instrument:

a. Constructing the questioner.

[65] Gay, Mills, and Airasian.

b. The items had been validated by a validator, and the researcher chose the English lectures at the Islamic State University of Sjeh M. Djamil Djambek of Bukittinggi. The researcher was sure the instrument was valid after asking for judgment from validator. The researcher gave the research guideline, the instruments and the theory to the validator to checking. The name of validators who had the researcher's questionnaire was Mrs. Muthia Rahman, Mr. Syahrul and Mrs. Lena Sastri, with the result stating that this instrument was valid for used.

c. After obtaining data and tabulating the data, the construction validity test is carried out with factor analysis, namely by correlating between instrument item scores in a factor and correlating factor scores with total scores.

**Table 3-3 Results of the validity analysis of the questionnaire.**

| BUTIR | Validator | | | s1 | s2 | s3 | ∑S | v | Ket |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | | | | | | |
| butir 1-80 | 320 | 240 | 229 | 320 | 240 | 229 | 789 | 0,822 | TINGGI |

The table above is the validation result of the Questionnaire instrument, where the average value obtained is 0.822, which shows a high result. For more details can be seen in **Appendix 3 on page 127.**

d. Analyzing test questions. Problem analysis is carried out to identify good, less good, and bad statements. With question

analysis, information can be obtained about the ugliness of a problem and instructions for making an improvement.[66]

**2. Reliability**

Reliability refers to the stability of research result from one day and another, and stability from one score to another. According to Gay, reliability is the extent to which a test consistently measures whatever it measures. If the results of the current questionnaire are the same as the previous questionnaires that have been conducted, it means that the questionnaire has high reliability.[67] To find the reliability of the test, the KR-20 formula can be used as follows:

$$r11 = \left[\frac{k}{k-1}\right]\left[1 - \frac{\sum \sigma_b^2}{\sigma_t^2}\right]$$

Description:

$r11$ = Reliability of instrument

K = Number of items or total of item

$\sum \sigma_b^2$ = Number of item variants

$\sigma_t^2$ = Varian total

Decision rules:

If $r_{11} > rtabel$ means reliable and If $r_{11} < rtabel$ means not reliable.

With criteria:

[66] Arikunto Suharsimi, *Dasar-Dasar Evaluasi Pendidikan* (Jakarta: PT Bumi Aksara, 2016).
[67] Gay, Mills, and Airasian.

**Table 3-3 Reliability Index Category of Cronbach's Alpha**

| Cronbach's Alpha Value | Category |
|---|---|
| More than or equal to 0.900 | *Excellent* |
| 0,800 – 0,899 | *Good* |
| 0,700 – 0,799 | *Acceptable* |
| 0,600 – 0,699 | *Questionable* |
| 0,500 – 0,599 | *Poor* |

Based on the table above, the general decision on the reliability of the instrument can be seen from the Cronbach's alpha value in the reliability statistics output compared to the criteria as follows:

*If Cronbach's alpha value is <0.7, it is declared less reliable.*

*If the Cronbach's alpha value is> 0.7, it is declared reliable.* [68]

This test is carried out to show the extent to which the measurement results are relatively consistent when measuring the same aspects. This test aims to test whether the measurements taken are reliable. If the ***Cronbach Alpha*** value is close to 1, then this means that the respondent's answer will tend to be the same even though it is given to different respondents.

**Table 3-4 Results of the reliability analysis of the questionnaire.**

| | |
|---|---|
| Number of item variants | 67,533 |
| Varian Total | 1184,711 |
| Cronbach Alpa Value | 0,956 |
| Standart | 0,7 |
| Description | **Reliable** |

[68] Machali. p-107

Based on the calculation results, $r_{11}$ = 0.966 was obtained, while $r_{table}$ = 0.7. So it can be concluded that the test questions in this study are reliable with excellent criteria because $r_{11}$ > 0.7.

## D. Technique of Data Collection

This research used a questionnaire to obtain data on multiple intelligence areas. There were eight kinds of multiple intelligences on the questionnaire that consist of 80 items, and each of intelligence will consist of ten questions. The questionnaire is written in English because the respondents are from the English department, and it is expected that the students will understand and answer the questions. The questionnaire was created through a Google form, which participants answered in online. Participants answered the questions according to the students preferred situations based on the questions in the questionnaire. In conclusion, this research collected the data from the questionnaire of multiple intelligence areas to know the location of the intelligence area of English Education Department students at the University of Sjech M. Djamil Djambek Bukittinggi.

## E. The Technique of Data Analysis

The data analysis is the process of gathering, modeling and transforming data with useful information, suggesting conclusions, supporting decisions making.[69] Multiple intelligence area questionnaires were used to know the location of English department students'

[69] Lexy J. Moleong, Metode Penelitian Kualitatif (Bandung: PT Remaja Rosdakarya, 2018).

intelligence area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. The questionnaire consisted of 80 questions, and the items had four options on a scale of 1 to 5. The data analysis in this research used a likert scale. A likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena.[70] A likert scale requires an individual to respond to a series of statements by indicating whether the respondent attains a score of strongly agree (SA), agree (A), is undecided (U), disagree (D), or strongly disagree (SD). According to Gay, there were four to five answers from highly positive to highly negative. Each response is assigned a point value, and an individual's score is determined by adding the point values of all the statements. For example, the following point values are typically assigned to positive statements: SA=5, A=4, U=3, D=2, SD=1.

**Table 3-5 Likert Scale**

| Category | Scale for Positive statements | Scale for Negative statements |
|---|---|---|
| a. Strongly Disagree | 1 | 5 |
| b. Disagree | 2 | 4 |
| c. Undecided | 3 | 3 |
| d. Agree | 4 | 2 |
| e. Strongly Agree | 5 | 1 |

*Source: Gay, Mills, Airasian*[71]

[70] Sugiyono.
[71] Gay, Mills, and Airasian.

After getting the data, the researcher described the data. In describing the data of the English Education Department students' intelligence area, the researcher followed the following steps:

1. Collecting of the data students questionnaire
2. The data obtained is entered into a table and tabulated.
3. Calculating the percentage of the data
4. The technique of analyzing the data in this research is percentage technique by using the formula suggested by Sudjana as follow on this page below: [72]

$$\mathbf{P = \frac{f}{n} \times 100\%}$$

Description:

P = Percentage

$f$ = Frequency

$\boldsymbol{n}$ = Number of respondents

100% = Constant Number

5. Arrange the percentage into a diagram of the ranting quality percentage.
6. Then, the researcher made the conclusion.

[72] nana Sudjana and Ibrahim, *Metode Penelitian Kualitattif* (Bandung: Sinar Baru Algesindo, 2001).

# CHAPTER IV

# FINDINGS AND DISCUSSION

## A. Findings

In this chapter, the researcher would like to explain and interpret the data collection to answer the research questions: what is the most dominant multiple intelligence, is there any difference between students from 2020–2023 academic years in terms of their multiple intelligence types, and what are the types of multiple intelligence possessed by English Education Department students at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

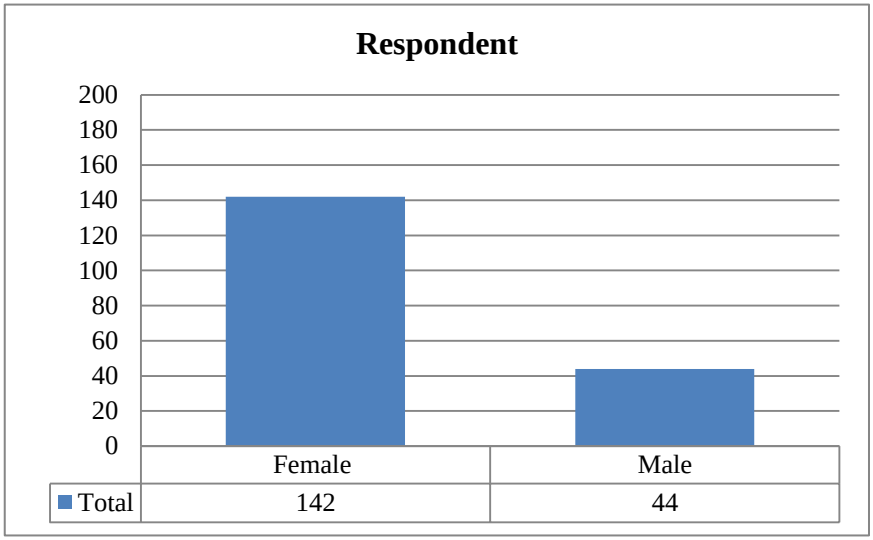
The data collection for this research was based on the percentage of students who answered the questionnaire given by the researcher. The questionnaires consisted of 80 items for the students. This was a kind of closed-ended questionnaire where the answers were provided to be chosen by the samples. The questionnaire has been distributed to 186 students from 2020-2023 academic years of English Education Department Students at Faculty Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

### 1. Description of the data

The data were collected from the students 2020-2023 academic years of English education department at Islamic State University of Sjech M. Djamil Djambek Bukittinggi and 186 samples from the population were taken for further analysis. The data is in the form of a closed-ended questionnaire. The questions were adapted from the book

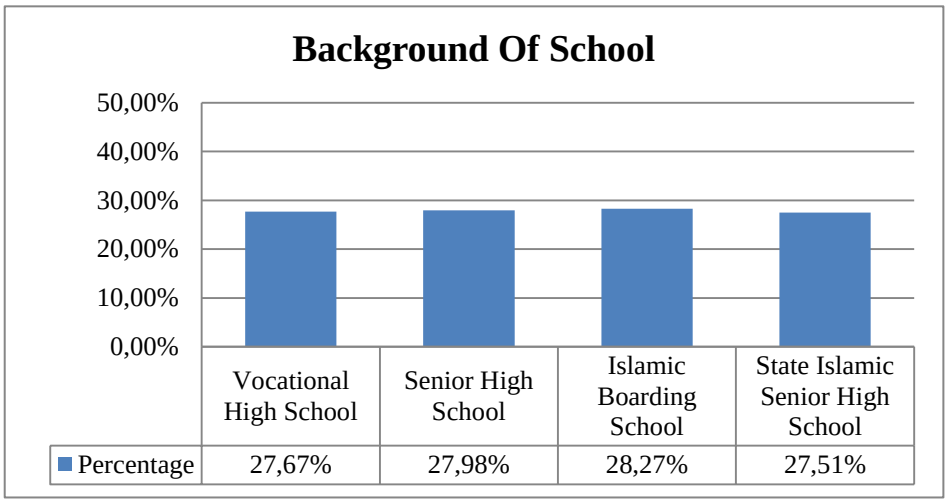
“Multiple Intelligences in the Classroom, 3rd Edition" written by Thomas Armstrong on pages 22-26. Then the researcher adjusts the questions to the needs and situation under study.

**Figure 4-1 The total of students’ answered the questionnaire**.



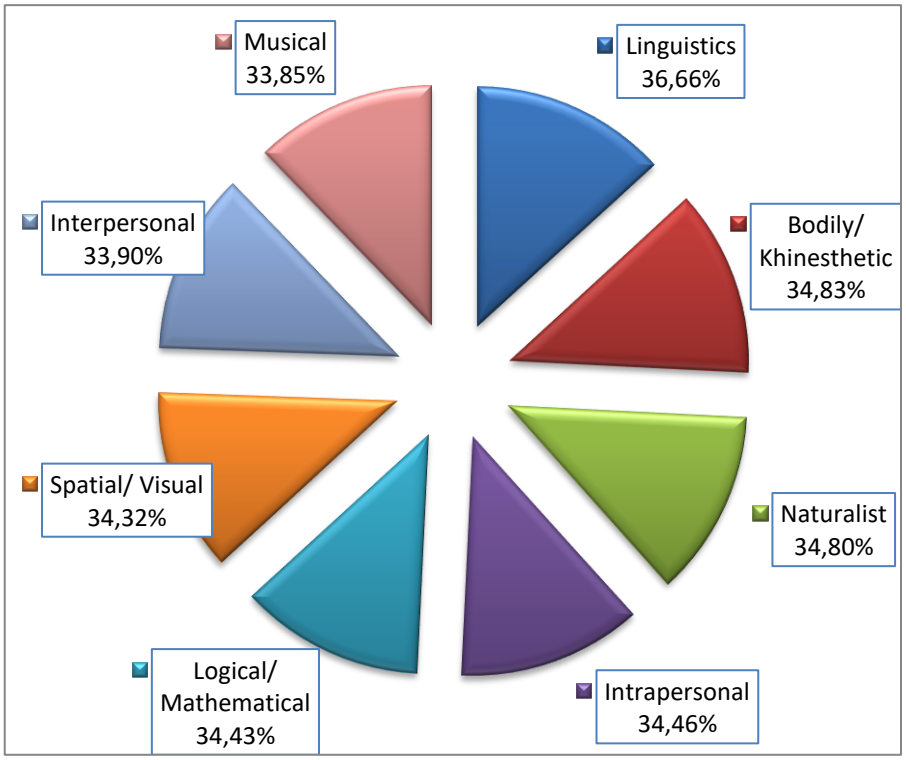

Based on the chart above, this used a questionnaire consisting of 80 items. From the table 3.4 above was the lowest score was 1 and the highest score was 5, all the data has been answered by 186 of English education department students’. The researcher found that 142 female with 76% and 44 male with 24% had responded to the questionnaires of multiple intelligence area at Faculty Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

**Figure 4-2 General Percentage of Background of School of English Education Department Students' at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**




The chart above explained the total of percentage of background of school of English education department students' at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. The percentages above are taken from English students who filled in the data of background school with the 2020-2023 academic years. First was the total number of English students coming from vocational high schools, it was 27,67%. Second, the English students coming from senior high school with 27,98%. The total percentage of English students coming from Islamic boarding school, it was 28,27% and state Islamic senior high school was same, it was 27,51%.

**Figure 4-3 General Percentage of Students' Answer of the Questionnaire about Multiple Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**



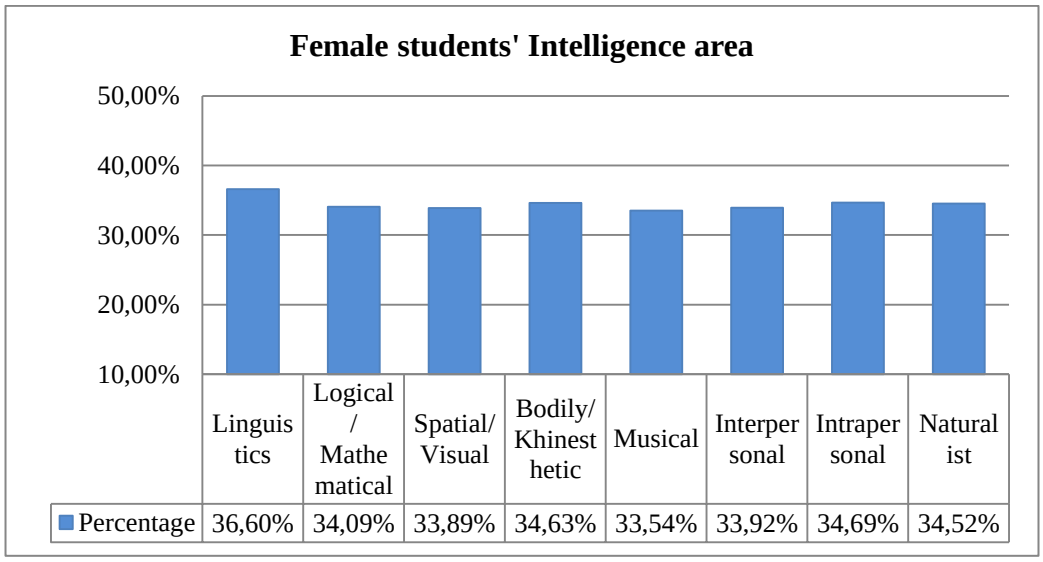

The chart above explained the total of percentage of students' answer from all of the statements that the researcher gave to the students about 8 Multiple Intelligences area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. Based on the chart above, it can be seen that students' multiple intelligence results showed that 3 main dominant results, namely linguistics, bodily/kinesthetic, and naturalistic. For more details can be seen in **Appendix 8 on page 151.**

The first was percentage about Linguistics Intelligence was 36,66%, this intelligence had a higher percentage from another intelligence. It means Linguistics intelligence was the dominant intelligence that English education department students' was chosen. The second was Bodily/ Kinesthetic Intelligence with 34,83%, the third was Naturalist with 34,80%, fourth was Intrapersonal Intelligence with 34,46%, fifth was Logical/Mathematical Intelligence with 34,43%, sixth was Spatial/Visual Intelligence with 34,32%, number seventh was Interpersonal Intelligence with 33,90% and the last, the lowest percentage was Musical with 33,85%.

In addition students do not study music or interpersonal-related to the courses that may enable them to realize the importance of these two domain in their life, and to encourage students to have interests in musical or interpersonal intelligence. Not being interested in music may negatively affect the students listening and speaking competencies in terms of recognizing and performing tone, pitch, rhyme and rhythm. All in all, the students in general have a relatively positive attitude towards all the domains of MIs except the first two. But it cannot be denied that the eight domains of MIs directly related to students and fostered in the courses they study at university.

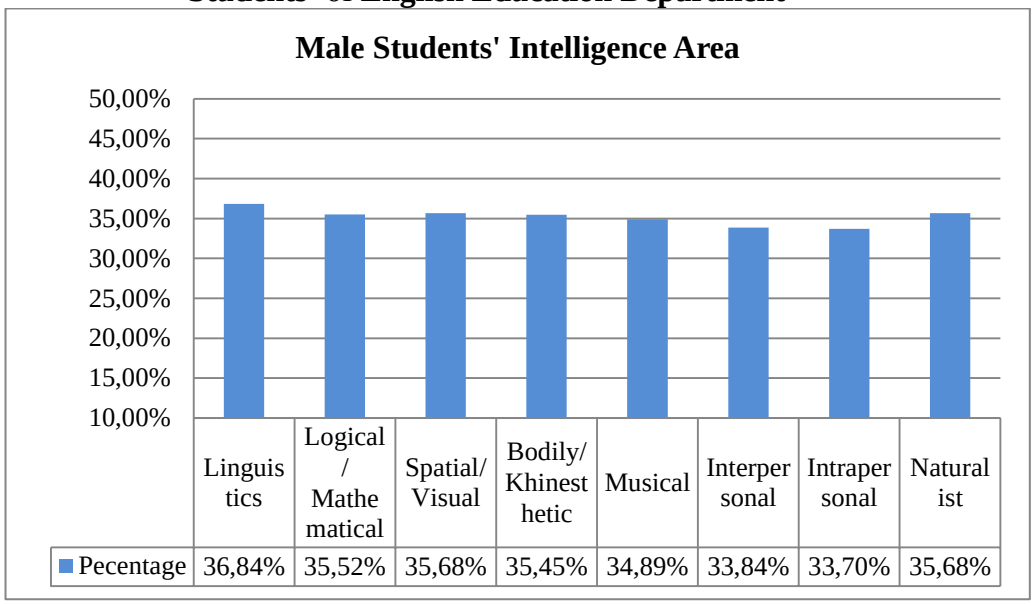
After knowing the percentage of each intelligence from the answers of all respondents, then the researcher will display the difference in the percentage of intelligence areas in female and male students of the English Education Department.

**Figure 4-4 the Difference in Percentage of Intelligence Area on Female Students' of English Education Department**




The chart above explained about the Difference in Percentage of Intelligence Area on Female Students' of the English Education Department. Female students' had the higher intelligence on linguistics, it was 36,60%. And the lowest percentage that they had on musical intelligence, it was 33,54%.

**Figure 4-5 the Difference in Percentage of Intelligence Area on Male Students' of English Education Department**



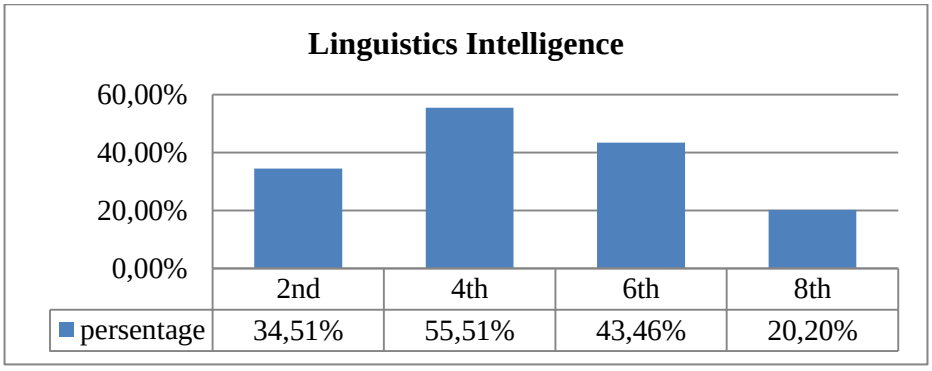
The chart above explained about the Difference in Percentage of Intelligence Area on Male Students' of the English Education Department. Male students' also had the same higher intelligence on linguistics, it was 36,84%. And the lowest percentage that they had on Intrapersonal intelligence, it was 33,70%.

**2. Analysis of the data**

The researcher would like to describe about English education department students' intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. In this part the researcher would describes all of the data about getting the total percentage from the data above.

First, these 8 multiple intelligences have different percentages in each semester, as follows:

**Figure 4-6 The differences percentage of Linguistic Intelligence in each semester.**

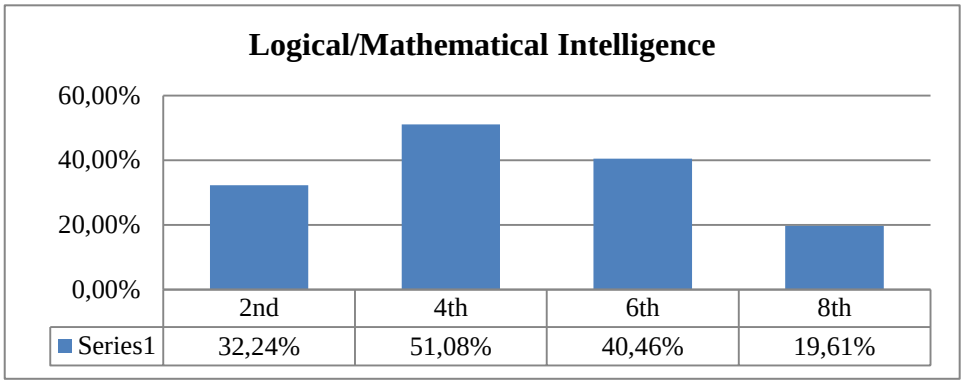



The chart above explained that students' English education department in the 4th semester had a higher percentage difference in linguistic intelligence than other semesters, namely 55,51%. The second was the 6$^{th}$ semester with a percentage of 43,46%, the third was

the 2th semester with a percentage of 34,51%, and the last with a lower percentage in linguistic intelligence was the 8th semester with 20,20%.

The second percentage is logical-mathematical intelligence at 34,43%, as shown in figure 4.3 above. This intelligence also has differences in each semester, as shown in figure 4.7.

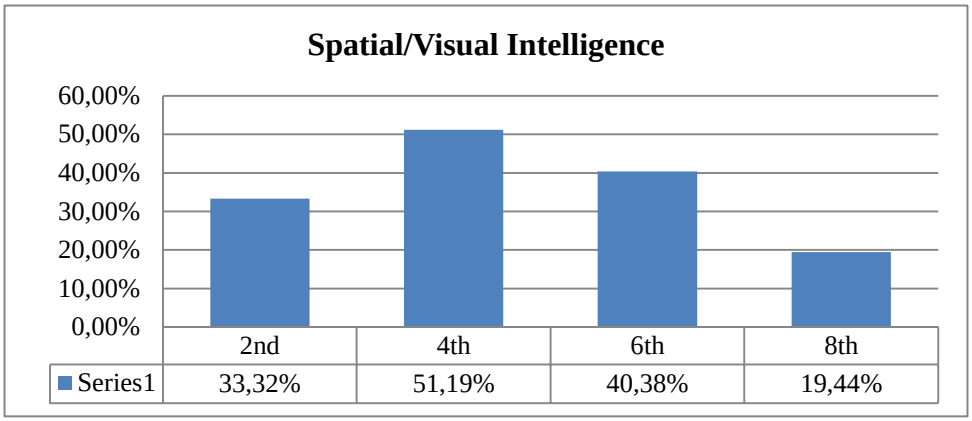
**Figure 4-7 The differences percentage of Logical/Mathematical Intelligence in each semester.**




The chart above shows the percentage of English education department students on logical/mathematical intelligence. The 4th semester had 51,08%, 6th semester had 40,46%, 2nd semester had 32,24% and the last was 8th semester had a lower percentage with 19,61% on logical/mathematical intelligence.

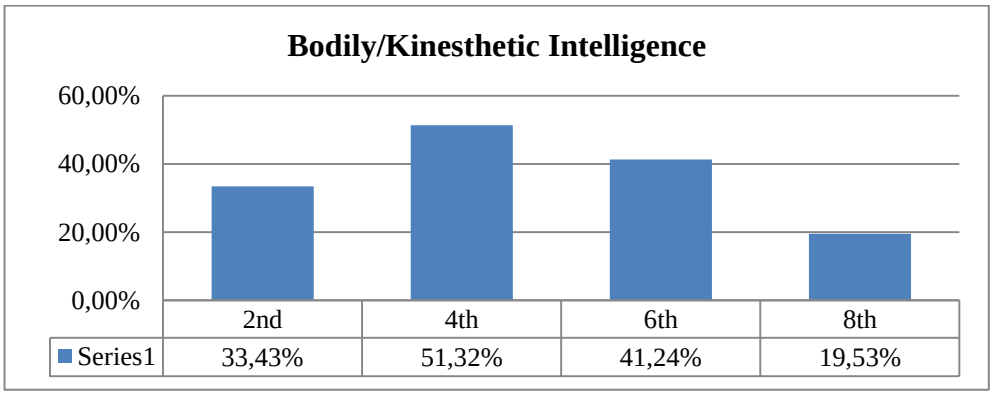
The third percentage was spatial/visual intelligence at 34,32%, as shown in figure 4.3 above. This intelligence also has differences in each semester, as shown in figure 4.8.

**Figure 4- 8 The differences percentage of Spatial/Visual intelligence in each semester**.




The chart above shows the percentage of English education department students on Spatial/visual Intelligence. The 2nd semester had 33,32%, the 4th semester had 51,19%, the 6th semester had 40,38%, and the last was the 8th semester with 19,44% on Spatial/visual intelligence.

**Figure 4-9 The differences percentage of Bodily/Kinesthetic Intelligence in each semester.**

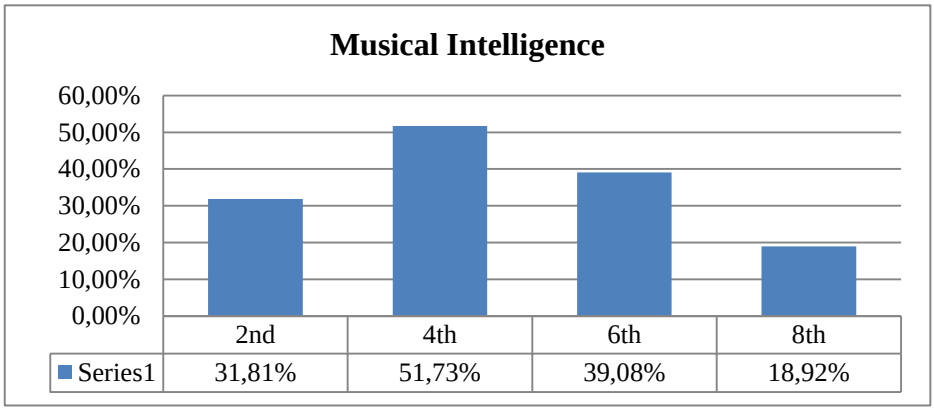



The chart above shows the percentage of English education department students on Bodily/ Kinesthetic Intelligence. The 2nd semester had 33,43%, the 4th semester had 51,32%, the 6th semester

had 41,24%, and the last was the 8th semester with 19,53% on Bodily/ Kinesthetic intelligence.

The fifth was Musical intelligence at 33,85%, as shown in figure 4.3 above. This intelligence also has differences in each semester, as shown in figure 4.10.

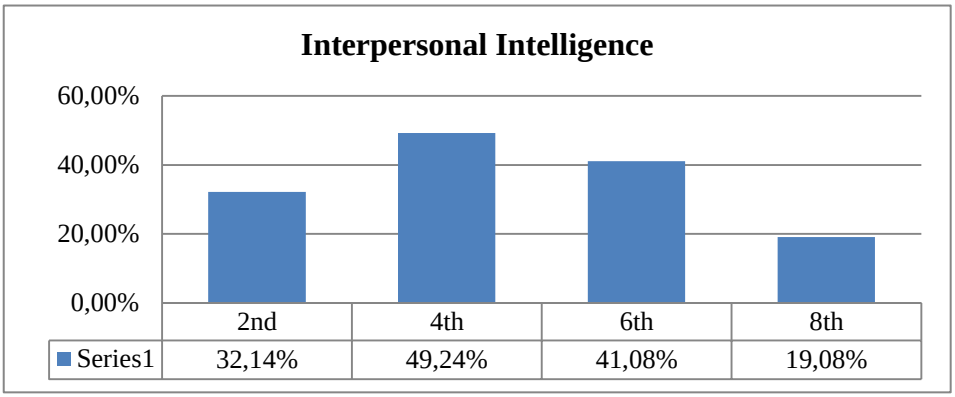
**Figure 4-10 The differences percentage of Musical Intelligence in each semester.**




The chart above shows the percentage of English education department students on Musical Intelligence. The 2nd semester had 31,81%, the 4th semester had 51,73%, the 6th semester had 39,08%, and the last was the 8th semester with 18,92% on Musical intelligence.

The sixth was Interpersonal intelligence at 33,90%, as shown in figure 4.3 above. This intelligence also has differences in each semester, as shown in figure 4.11.

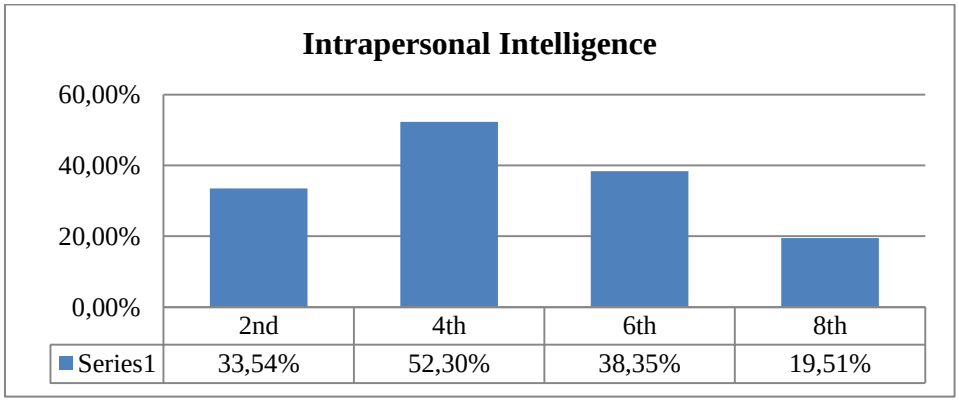
**Figure 4-11 The differences percentage of Interpersonal Intelligence in each semester.**




The chart above explained that the percentage of English education department students on Interpersonal Intelligence. The 2nd semester had 32,14%, the 4th semester had 49,24%, the 6th semester had 41,08%, and the last was the 8th semester with 19,08% on Interpersonal intelligence.

The seventh was Intrapersonal intelligence at 34,46%, as shown in figure 4.3 above. This intelligence also has differences in each semester, as shown in figure 4.12.

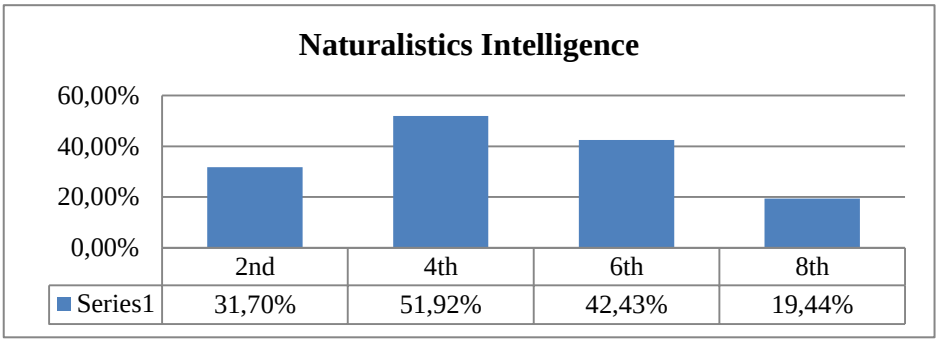
**Figure 4-12 The differences percentage of Interpersonal Intelligence in each semester.**



The chart above explained that the percentage of English education department students on Intrapersonal Intelligence. The 2nd semester had 33,54%, the 4th semester had 52,30%, the 6th semester had 38,35%, and the last was the 8th semester with 19,51% on Intrapersonal intelligence.

The last one was Naturalistic Intelligence at 34,40%, as shown in figure 4.3 above. This intelligence also has differences in each semester, as shown in figure 4.13.

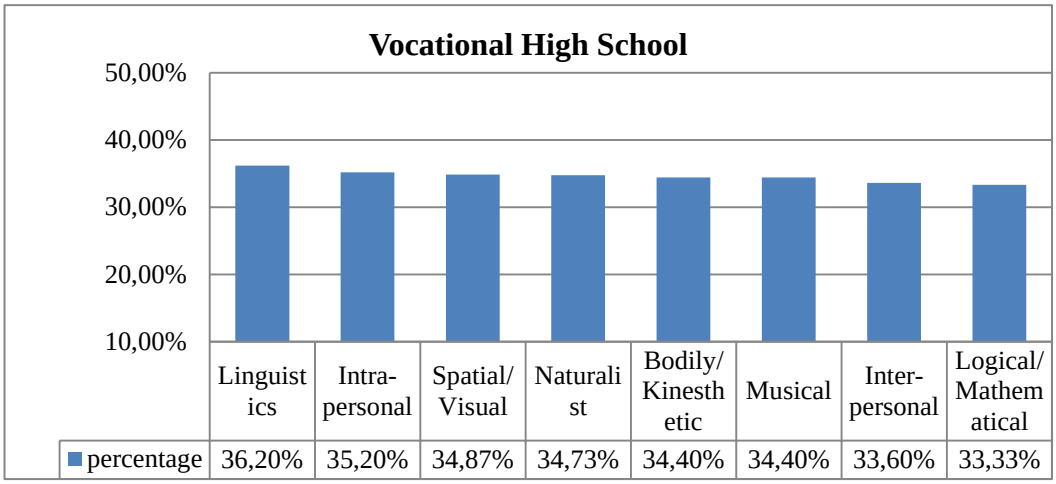
**Figure 4-13 The differences in the percentage of Naturalistic Intelligence in each semester.**




The chart above explained that the percentage of English education department students on Naturalistic Intelligence. The 2nd semester had 31,70%, the 4th semester had 51,92%, the 6th semester had 42,43%, and the last was the 8th semester with 19,44% on Naturalistic intelligence.

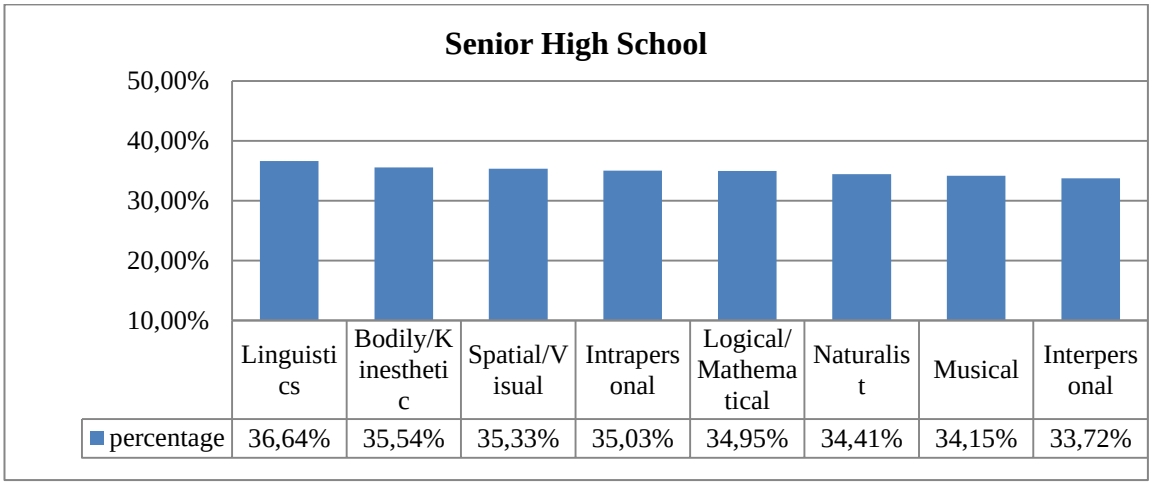
As explained above regarding the differences in the eight intelligences in each semester, next the researcher will show the differences in intelligence based on the school background of English students in the 2020-2023 academic year below:

**Figure 4-14 The Difference percentages in intelligence on Vocational High School**




The chart above explained that the percentage of English education department students on vocational high school. The intelligence that had higher percentage was Linguistics intelligence, it was 36,20%. The second was intrapersonal intelligence with 35,20% and third was spatial/visual intelligence, it was 34,87%.

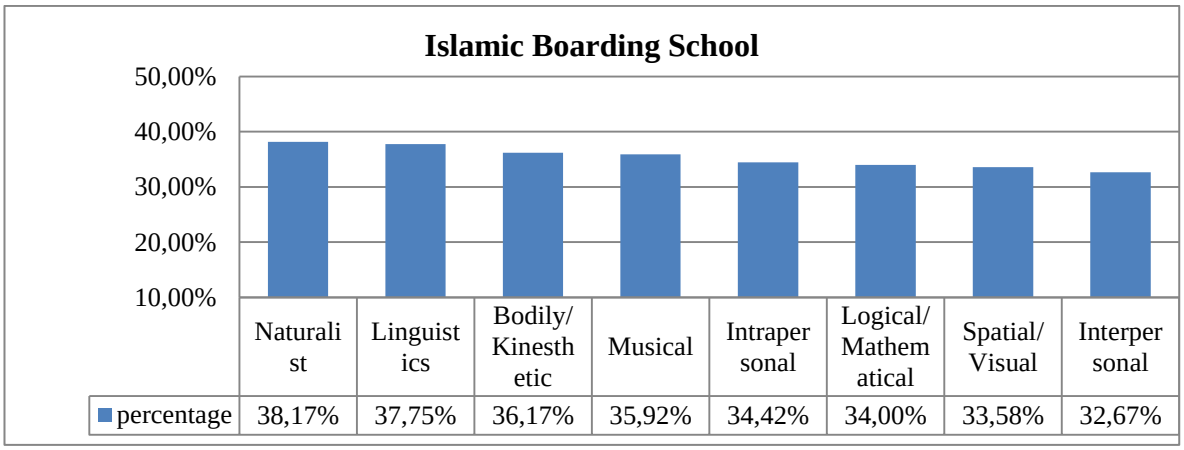
**Figure 4-15 The Difference percentages in intelligence on Senior High School**




On the chart of senior high school above explained that linguistics had the higher percentage, it was 36,64%. The second was

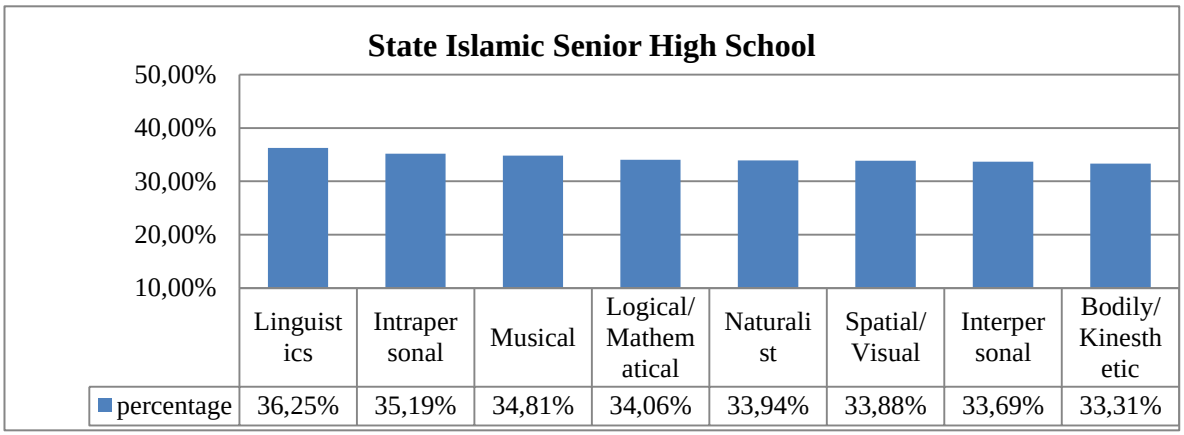
bodily/kinesthetic intelligence with 35,54% and third was intrapersonal intelligence, it was 33,05%.

**Figure 4-16 The Difference percentages in intelligence on Islamic Boarding School**




On the chart of Islamic boarding school, explained that Naturalists had the higher percentage, it was 38,17%. The second was linguistics intelligence with 37,75% and third was bodily/kinesthetic intelligence, it was 36,17%.

**Figure 4-17 The Difference percentages in intelligence on State Islamic Senior High School**

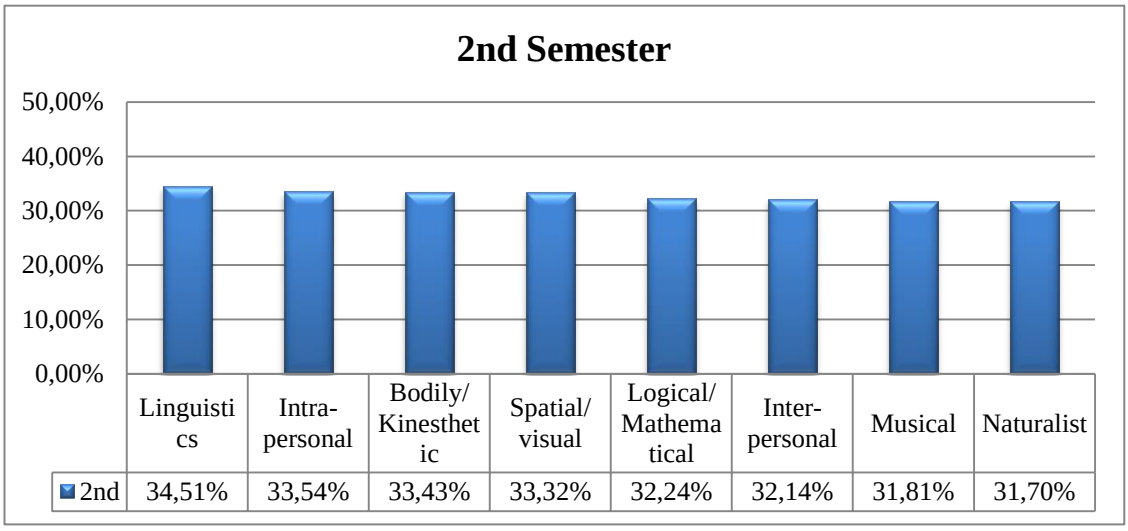



The chart above explained that the percentage of English education department students on sate Islamic senior high school. The

intelligence that had higher percentage was Linguistics intelligence, it was 36,25%. The second was intrapersonal intelligence with 35,19% and third was Musical intelligence, it was 34,81%.

As explained about the difference percentage in each semester and the different percentage based on background of school based on 8 intelligences above, each semester has the most dominant type of intelligence that is possessed to the intelligence that is less desirable. The following types of intelligence areas were possessed by English education department students' from 2020-2023 academic years at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.

**Figure 4-18 Types of intelligence area that possessed by 2nd semester English Education Department students' on 2023 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**




The chart above explained the types of intelligence area that possessed by English education department students' on 2023 academic year grade at Faculty Tarbiyah and Teacher Training at the

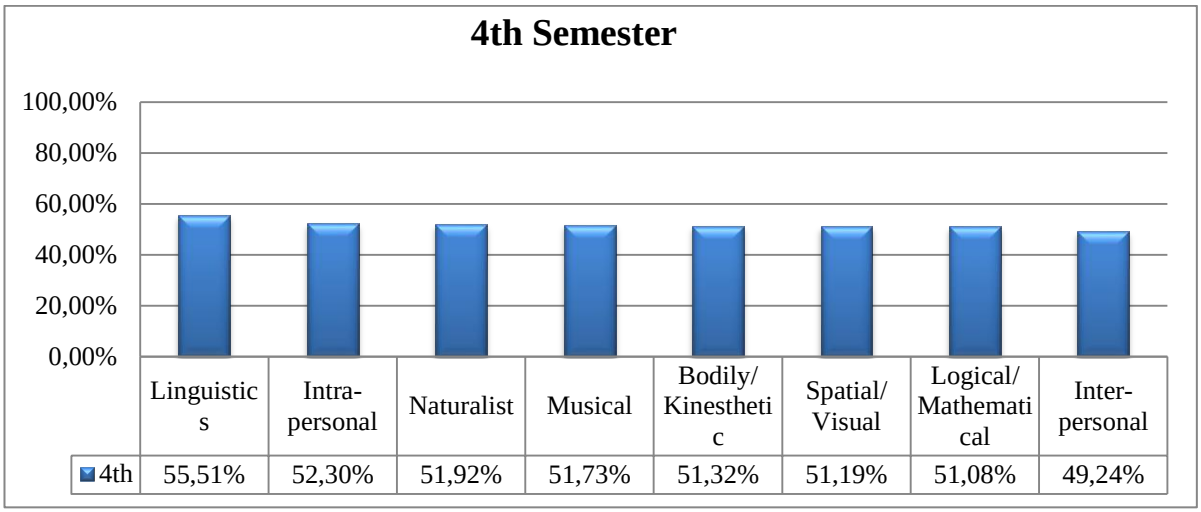
Islamic State University of Sjech M. Djamil Djambek Bukittinggi. First, the most intelligence that chosen by 2nd semester of English education department students' was linguistics intelligence, with the highest percentage 34,51%. It means most of the 2nd semester English education department students' agree with statement number 1, "Books are very important to me," where 13 students strongly agree and 8 others agree with the statement. See to figure 4.19.

**Figure 4- 19 The percentage of linguistics Intelligence**

| Books are very important for me. | | | | | |
|---|---|---|---|---|---|
| | Likert scale | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly Disagree | 1 | 2.7 | 2.7 | 2.7 |
| | Disagree | 1 | 2.7 | 2.7 | 5.4 |
| | Undecided | 14 | 37.8 | 37.8 | 43.2 |
| | Agrees | **8** | 21.6 | 21.6 | 64.9 |
| | Strongly Agrees | **13** | 35.1 | 35.1 | 100.0 |
| | Total | 37 | 100.0 | 100.0 | |

Second was intrapersonal intelligence with the percentage 13,34%. Third, bodily/kinesthetic intelligence has a difference of 4 points with intrapersonal intelligence that was 13.30%. The fourth was spatial/visual intelligence with the percentage 13,26%. Fifth was logical/mathematical intelligence, it was 12,83%. Sixth, 12,78% of interpersonal intelligence, seventh was musical with 12,66%, and the last, with the lower percentage was naturalist intelligence with 12,61%.

**Figure 4-20 Types of intelligence area that possessed by 4th semester English Education Department students' on 2022 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**




The chart above explained the types of intelligence area that possessed by English education department students' on 2022 academic year grade or 4th semester at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. First, the most intelligence that chosen by 4th semester its same with the 2nd semester of English education department students', it was linguistics intelligence, with the highest percentage 55,51%. It means most of the 4th semester English education department students' agree with statement number 1, "Books are very important to me," where 30 students strongly agree and 11 others agree with the statement. See to figure 4.21.

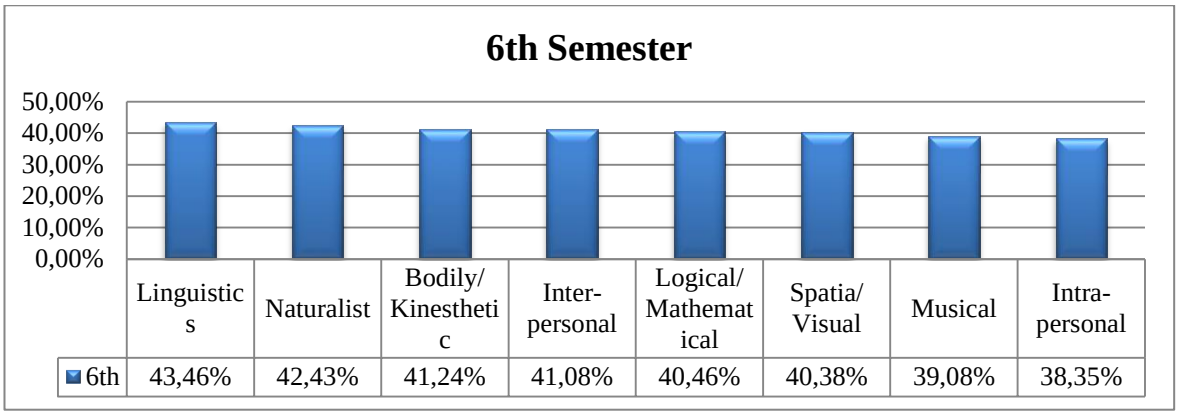
**Figure 4-21 The percentage of linguistics Intelligence**

| Books are very important for me. | | | | | |
|---|---|---|---|---|---|
| | Likert scale | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Undecided | 13 | 24,1 | 24,1 | 24,1 |
| | Agrees | 11 | 20,4 | 20,4 | 44,4 |

| | | | | | |
|---|---|---|---|---|---|
| | Strongly Agrees | 30 | 55,6 | 55,6 | 100,0 |
| | Total | 54 | 100,0 | 100,0 | |

Second was intrapersonal intelligence with the percentage 20,81%. Third, naturalistic intelligence was 20,66%. The fourth was musical intelligence with the percentage 20,58%. Fifth was bodily/kinesthetic intelligence, it was 20,42%. Sixth, 20,37% of spatial/visual intelligence, seventh was logical/ mathematical with 20,32%, and the last, with the lower percentage was interpersonal intelligence with 19,59%.

**Figure 4-22 Types of intelligence area that possessed by 6th semester English Education Department students' on 2020 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**




The chart above explained the types of intelligence area that possessed by English education department students' on 2021 academic year grade or 6th semester at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. First, the most intelligence that chosen by 6th semester its of English education department students', it was linguistics intelligence, with the highest percentage 43,46%. Based on the results

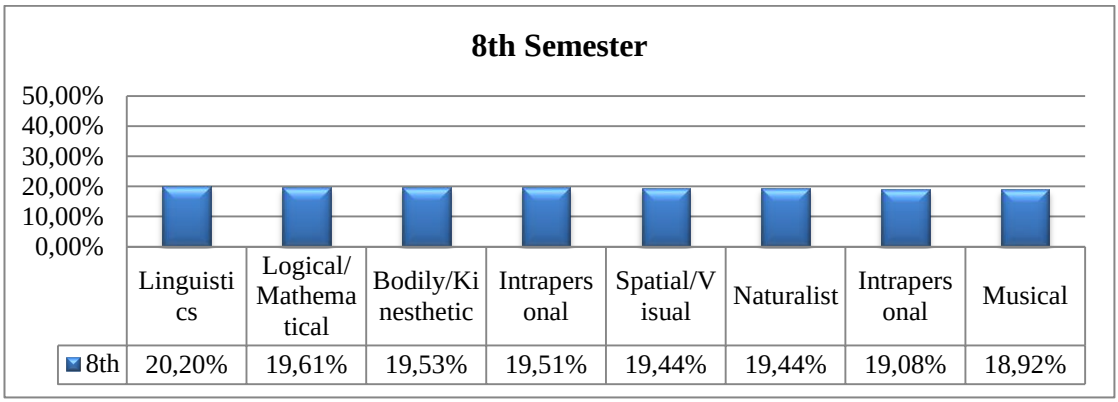
of this questionnaire, some of the students in the 6th semester strongly agreed with statement number 1, “Books are very important to me,” where 24 students strongly agreed and 11 others agreed with the statement. See to figure 4.23.

**Figure 4-23 The percentage of linguistics Intelligence**

| **Books are very important for me.** | | | | | |
|---|---|---|---|---|---|
| | Likert scale | Frequency | Percent | Valid Percent | Cumulative Percent |
| **Valid** | Disagree | 3 | 7,0 | 7,0 | 7,0 |
| | Undecided | 5 | 11,6 | 11,6 | 18,6 |
| | Agrees | 11 | 25,6 | 25,6 | 44,2 |
| | Strongly Agrees | 24 | 55,8 | 55,8 | 100,0 |
| | Total | 43 | 100,0 | 100,0 | |

Second was naturalistic intelligence with the percentage 16,88%. Third, bodily/kinesthetic intelligence was 16,41%. The fourth was interpersonal intelligence with the percentage 16,34%. Fifth was logical/ mathematical intelligence, it was 16,10%. Sixth, 20,37% of spatial/visual intelligence, seventh was musical intelligence with 15,55%, and the last, with the lower percentage was intrapersonal intelligence with 15,26%.

**Figure 4-24 Types of intelligence area that possessed by 6th semester English Education Department students' on 2020 academic year grade at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**




The chart above explained the types of intelligence area that possessed by English education department students' on 2020 academic year grade or 6th semester at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi. First, linguistics intelligence that was chosen by 8th semester of English education department students', with the highest percentage 20,20%. Based on the results of this questionnaire, some of the students in the 8th semester strongly agreed with statement number 1, "Books are very important to me," where 28 students strongly agreed and 16 others agreed with the statement. See to figure 4.25.

**Figure 4-25 The percentage of linguistics Intelligence**

| **Books are very important for me.** | | | | | |
|---|---|---|---|---|---|
| | Likert scale | Frequency | Percent | Valid Percent | Cumulative Percent |
| **Valid** | Disagree | 3 | 5,8 | 5,8 | 5,8 |
| | Undecided | 5 | 9,6 | 9,6 | 15,4 |
| | Agrees | 16 | 30,8 | 30,8 | 46,2 |
| | Strongly Agrees | 28 | 53,8 | 53,8 | 100,0 |
| | Total | 52 | 100,0 | 100,0 | |

Second was logical/ mathematical intelligence with the percentage 19,61%. Third, bodily/kinesthetic intelligence was 19,53%. The fourth was intrapersonal intelligence with the percentage 19,51%. Fifth was spatial/visual intelligence, it was 19,44%. Sixth, 20,37% of naturalistic intelligence, seventh was intrapersonal intelligence with 19,08%, and the last, with the lower percentage was musica intelligence with 18,92%.

As explained about the different types of intelligence that possessed by English education department above, in this section would described about the total percentage in each intelligence based on 8 intelligences.

**Table 4-1 The Total Percentage and Mean for the English Education Department students' Linguistics Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| **Questions** | **SD** | **D** | **U** | **A** | **SA** | **N** | **Total score** | **%** |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | **Linguistics Intelligence** | | | | | | | |
| 1 | 1,08 | 2,15 | 19,89 | 27,42 | 49,46 | 186 | 785 | 4,22 |
| 2 | - | 4,30 | 30,65 | 48,92 | 16,13 | 186 | 701 | 3,77 |
| 3 | 0,54 | 6,45 | 30,65 | 47,31 | 15,05 | 186 | 688 | 3,70 |
| 4 | 2,69 | 4,84 | 39,78 | 34,41 | 18,28 | 186 | 671 | 3,61 |
| 5 | - | 6,99 | **51,61** | 33,33 | 8,06 | 186 | 637 | 3,42 |
| 6 | 0,54 | 9,14 | 45,16 | 32,26 | 12,90 | 186 | 647 | 3,48 |
| 7 | - | 5,38 | 26,88 | 47,31 | 20,43 | 186 | 712 | 3,83 |
| 8 | 1,61 | 10,75 | 37,63 | 37,63 | 12,37 | 186 | 648 | 3,48 |
| 9 | - | 2,15 | 38,71 | 44,62 | 14,52 | 186 | 691 | 3,72 |
| 10 | 2,15 | 6,99 | 45,16 | 37,10 | 8,60 | 186 | 638 | 3,43 |
| **Total Score** | 8,6 | 59,1 | 366,1 | 390,3 | 175,8 | | 6818 | 36,66 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Percentage** | 4,62% | 31,79% | 196,84 % | 209,85 % | 94,52% | | | |
| **Mean** | 0,86% | 5,91% | 36,61% | 39,03% | 17,58% | | | |

Table 4-1 shows the average score of English education department students' in linguistic intelligence area. From statements numbers 1–10, there were 0.86% of respondents who answered strongly disagree, 5.91% of respondents who answered disagree, 36.61% of respondents who answered undecided, and more respondents who answered agree with a percentage of 39.03%, and 17.58% of respondents who answered strongly agree for all statements.

For the general information, there are two things for each answered that given by the students that can the researcher showed. First, the most statement that chosen by the students was undecided, with the highest score is 51,61%, it is the statement number 5, it was about "I enjoy entertaining myself or others with tongue twisters, nonsense rhymes or puns." with 96 students that was chose it. Second, the lowest statement with strongly disagree that was not chosen by anyone of the students, it was the statement number 2, 5, 7, and 9. It can be seen on figure 4-26 below:

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 4, next, for disagree the highest score is the statement number 8, it was 10,75%, then, for the part of undecided it was 51,61% for the highest score, also for the part of agree it was 48,92% and the last is strongly agree, it is 49,46% that was chosen by the students. Fourth, the lowest score from all of the part of statements.

The lowest score of strongly disagree is 0%, for disagree is 2,15%, undecided 19,89%, agree 27,42% and the last one strongly agree was 8,06%.

**Table 4-2 The Total Percentage and Mean for the English Education Department students' Logical/ Mathematical Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | Logical/Mathematical Intelligence | | | | | | | |
| 11 | 2,69 | 5,38 | 38,71 | 43,01 | 10,22 | 186 | 656 | 3,53 |
| 12 | 8,60 | 16,13 | 50,54 | 20,97 | 3,76 | 186 | 549 | 2,95 |
| 13 | 1,61 | 4,84 | 45,16 | 34,95 | 13,44 | 186 | 658 | 3,54 |
| 14 | 0,54 | 13,98 | **55,91** | 23,66 | 5,91 | 186 | 596 | 3,20 |
| 15 | 2,69 | 5,38 | 51,08 | 34,41 | 6,45 | 186 | 626 | 3,37 |
| 16 | 2,15 | 14,52 | 40,86 | 32,80 | 9,68 | 186 | 620 | 3,33 |
| 17 | 0,54 | 2,69 | 31,18 | 48,92 | 16,67 | 186 | 704 | 3,78 |
| 18 | 0,54 | 3,23 | 37,10 | 46,77 | 12,37 | 186 | 683 | 3,67 |
| 19 | 1,08 | 7,53 | 49,46 | 33,33 | 8,60 | 186 | 634 | 3,41 |
| 20 | 1,08 | 5,38 | 36,56 | 41,94 | 15,05 | 186 | 678 | 3,65 |
| **Total Score** | 21,5 | 79,0 | 436,6 | 360,8 | 102,2 | | 6404 | 34,43 |
| **Percentage** | 11,56% | 42,49% | 234,71 % | 193,95% | 54,92% | | | |
| **Mean** | 2,15% | 7,90% | 43,66% | 36,08% | 10,22% | | | |

Table 4-2 shows the average score of English education department students' in Logical/Mathematical Intelligence area. From statements numbers 11–20, there were 2,15% of respondents who answered strongly disagree, 7.90% of respondents who answered disagree, 43.66% of respondents who answered undecided, and more respondents who answered agree with a percentage of 36.08%, and also 10.22% of respondents who answered strongly agree for all statements.

For the general information, there are two things for each answered that given by the students that can the researcher showed. First, the most statement that chosen by the students was undecided, with the highest score is 55,91%, it is the statement number 14, it was about “I like to set up little “what if” experiments (for example, “what if I double the amount of water I give to my rosebush each week”)”, with 104 students that was chose it. Second, the lowest statement with strongly disagree with 0,54% that was not chosen by anyone of the students, it was the statement number 14, 17, and 18. It can be seen on figure 4-27 below:

**Figure 4-26 The percentage of logical/Mathematical Intelligence**

**I like to set up little “what if” experiments (for example, “what if I double the amount of water I give to my rosebush each week”)**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 26 | 14.0 | 14.0 | 14.5 |
| | Decided | 104 | 55.9 | 55.9 | 70.4 |
| | Agrees | 44 | 23.7 | 23.7 | 94.1 |
| | Strongly Agrees | 11 | 5.9 | 5.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 12, it was 8,60%, for disagree the highest score is the statement number 12, it was 16,13%, then, for the part of undecided it was 55,91% for the highest score, also for the part of agree it was 48,92% and the last is strongly agree, it is 16,67 % that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree is 0,54%, for disagree is

2,69%, undecided 31,18%, agree 20,97% and the last one strongly agree was 3,76%.

**Table 4-3 The Total Percentage and Mean for the English Education Department students' Spatial/Visual Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | Spatial/Visual Intelligence | | | | | | | |
| 21 | 1,61 | 9,14 | 46,24 | 27,96 | 15,05 | 186 | 643 | 3,46 |
| 22 | 4,30 | 10,22 | 36,02 | 34,41 | 15,05 | 186 | 643 | 3,46 |
| 23 | 3,23 | 6,99 | 31,18 | 31,72 | 26,88 | 186 | 692 | 3,72 |
| 24 | 0,54 | 12,90 | 41,40 | 30,11 | 15,05 | 186 | 644 | 3,46 |
| 25 | 1,08 | 9,14 | 34,95 | 42,47 | 12,37 | 186 | 662 | 3,56 |
| 26 | 2,15 | 15,05 | 50,00 | 25,27 | 7,53 | 186 | 597 | 3,21 |
| 27 | 4,30 | 15,59 | 40,86 | 26,34 | 12,90 | 186 | 610 | 3,28 |
| 28 | 7,53 | 21,51 | 44,09 | 17,74 | 9,14 | 186 | 557 | 2,99 |
| 29 | 0,00 | 10,22 | **51,61** | 23,66 | 14,52 | 186 | 637 | 3,42 |
| 30 | 1,08 | 3,76 | 34,41 | 40,32 | 20,43 | 186 | 698 | 3,75 |
| **Total Score** | 25,8 | 114,5 | 410,8 | 300,0 | 148,9 | | 6383 | 34,32 |
| **Percentage** | 13,87% | 61,57% | 220,83% | 161,29% | 80,07% | | | |
| **Mean** | 2,58% | 11,45% | 41,08% | 30,00% | 14,89% | | | |

Table 4-3 shows the average score of English education department students' in Spatial/Visual Intelligence area. From statements numbers 21–30, there were 2,58% of respondents who answered strongly disagree, 11,45% of respondents who answered disagree, 41,08% of respondents who answered undecided, and more respondents who answered agree with a percentage of 30%, and also 14,89% of respondents who answered strongly agree for all statements.

In spatial/visual intelligence, there are two things for each answered that given by the students that can the researcher showed. First, the most statement that chosen by the students was undecided, with the highest score is 51,61%, it is the statement number 29, it was about "I like to set up little "what if" experiments (for example, "I can comfortably imagine how something might appear if it were looked down on from directly above in bird's-eye view", with 96 students that was chose it. Second, the lowest statement with strongly disagree that was not chosen by anyone of the students, it was also the statement number 29 too. It can be seen on figure 4-28 below:

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 28, it was 7,53%, for disagree the highest score is the statement number 28, it was 21,51%, then, for the part of undecided it was 51,61% for the highest score, also for the part of agree it was 42,47%, that was number 25 and the last is strongly agree, it was number 23 with 26,88 % that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree is no one of students chose it, for disagree is 3,76%, undecided 31,18%, agree 17,74% and the last one strongly agree was 7,53%.

**Table 4-4 The Total Percentage and Mean for the English Education Department students' Musical Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |

| | Musical Intelligence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 31 | 2,15 | 9,68 | 41,40 | 35,48 | 11,29 | 186 | 640 | 3,44 |
| 32 | 1,61 | 15,59 | 40,86 | 30,11 | 11,83 | 186 | 623 | 3,35 |
| 33 | 3,23 | 13,98 | 43,55 | 27,96 | 11,29 | 186 | 614 | 3,30 |
| 34 | 1,61 | 5,91 | 32,80 | 43,01 | 16,67 | 186 | 683 | 3,67 |
| 35 | 4,84 | 11,29 | 31,72 | 32,80 | 19,35 | 186 | 652 | 3,51 |
| 36 | 3,23 | 5,91 | 39,25 | 42,47 | 9,14 | 186 | 648 | 3,48 |
| 37 | 0,54 | 6,45 | 42,47 | 38,17 | 12,37 | 186 | 661 | 3,55 |
| 38 | 3,23 | 9,14 | **47,85** | 31,18 | 8,60 | 186 | 619 | 3,33 |
| 39 | 1,08 | 5,91 | 46,77 | 36,56 | 9,68 | 186 | 647 | 3,48 |
| 40 | 1,08 | 3,23 | 36,56 | 41,40 | 17,74 | 186 | 691 | 3,72 |
| Total Score | 22,6 | 87,1 | 403,2 | 359,1 | 128,0 | | 6478 | 34,83 |
| Percentage | 12,14% | 46,83% | 216,79% | 193,09% | 68,79% | | | |
| Mean | 2,26% | 8,71% | 40,32% | 35,91% | 12,80% | | | |

Table 4-4 shows the average score of English education department students' in Musical Intelligence area. From statements numbers 31–40, there were 2,26% of respondents who answered strongly disagree, 8,71% of respondents who answered disagree, 40,32% of respondents who answered undecided, and more respondents who answered agree with a percentage of 35,01%, and also 19,35% of respondents who answered strongly agree for all statements.

In musical intelligence, there are two things for each answered that given by the students that can the researcher showed. First, the most statement that chosen by the students was undecided, with the highest score is 31,72%, it is the statement number 38, it was about "I know the tunes to many different songs or musical pieces", with 89 students that was chose it. Second, the lowest statement with strongly disagree that was

not chosen by anyone of the students, it was also the statement number 37. It can be seen on figure 4-26 below:

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 35, it was 4.84%, for disagree the highest score is the statement number 32, it was 15,59%, then, for the part of undecided it was 47,85% for the highest score, also for the part of agree it was 43,01%, that was number 34 and the last is strongly agree, it was number 35 with 19,35% that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree it was 0,54% of students chose it, for disagree is 3,23%, undecided 31,72%, agree 27,96% and the last one strongly agree was 8,60%.

**Table 4-5 The Total Percentage and Mean for the English Education Department students' Bodily/Kinesthetic Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | Bodily/Kinesthetic Intelligence | | | | | | | |
| 41 | 5,38 | 9,68 | 40,32 | 36,02 | 8,60 | 186 | 619 | 3,33 |
| 42 | 3,76 | 23,66 | 37,10 | 27,42 | 8,06 | 186 | 581 | 3,12 |
| 43 | 1,08 | 4,30 | 25,81 | 29,57 | 39,25 | 186 | 747 | 4,02 |
| 44 | 8,06 | 17,74 | 41,40 | 22,04 | 10,75 | 186 | 576 | 3,10 |
| 45 | 7,53 | 24,19 | 33,33 | 22,04 | 12,90 | 186 | 574 | 3,09 |
| 46 | 1,08 | 3,23 | 37,10 | 37,10 | 21,51 | 186 | 697 | 3,75 |
| 47 | 2,69 | 11,29 | **49,46** | 25,27 | 11,29 | 186 | 616 | 3,31 |
| 48 | 3,76 | 16,13 | 46,77 | 21,51 | 11,83 | 186 | 598 | 3,22 |
| 49 | 1,61 | 12,37 | 40,32 | 30,11 | 15,59 | 186 | 643 | 3,46 |
| 50 | 3,23 | 8,60 | 39,78 | 34,41 | 13,98 | 186 | 646 | 3,47 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Total Score** | 38,2 | 131,2 | 391,4 | 285,5 | 153,8 | | 6297 | 33,85 |
| **Percentage** | 20,52 % | 70,53% | 210,43 % | 153,49 % | 82,67% | | | |
| **Mean** | 3,82% | 13,12% | 39,14% | 28,55% | 15,38% | | | |

Table 4-5 shows the average score of English education department students' in Bodily/Kinesthetic Intelligence area. From statements numbers 41–50, there were 3,82% of respondents who answered strongly disagree, 13,12% of respondents who answered disagree, 39,14% of respondents who answered undecided, and more respondents who answered agree with a percentage of 28,55%, and also 15,38% of respondents who answered strongly agree for all statements.

In Bodily/Kinesthetic intelligence, there are two things for each answered that given by the students that can the researcher showed. First, the higher statement that chosen by the students was undecided, with the highest score is 49,46%, it is the statement number 47, it was about "I need to touch things in order to learn more about them", with 92 students that was chose it. Second, the lowest statement with 1,08% strongly disagree that was chosen by 7 of the students, it was also the statement number 42, and it was about " I find it difficult to sit still for long periods of time". It can be seen on figure 4-30 below:

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 44, it was 8,06%, for disagree the highest score is the statement number 45, it was 24,19%, then, for the part of undecided it was 49,46% for the highest score and it was number 47, also for the part of agree it was 37,10%, that was number 46

and the last is strongly agree, it was number 43 with 39,25% that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree it was 1,08% of students chose it, for disagree is 3,23%, undecided 25,81%, agree 21,51% and the last one strongly agree was 8,60%.

**Table 4-6 The Total Percentage and Mean for the English Education Department students' Interpersonal Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | Interpersonal Intelligence | | | | | | | |
| 51 | 1,61 | 12,90 | 45,16 | 32,80 | 7,53 | 186 | 617 | 3,32 |
| 52 | 3,23 | 10,22 | 36,56 | 34,41 | 15,59 | 186 | 649 | 3,49 |
| 53 | 6,45 | 9,14 | 45,70 | 33,33 | 5,38 | 186 | 599 | 3,22 |
| 54 | 3,23 | 8,06 | 25,81 | 32,80 | 30,11 | 186 | 704 | 3,78 |
| 55 | 2,69 | 6,45 | 40,86 | 35,48 | 14,52 | 186 | 656 | 3,53 |
| 56 | 1,08 | 7,53 | 33,33 | 46,77 | 11,29 | 186 | 669 | 3,60 |
| 57 | 3,76 | 10,22 | 45,16 | 30,11 | 10,75 | 186 | 621 | 3,34 |
| 58 | 6,45 | 15,05 | 37,63 | 30,11 | 10,75 | 186 | 602 | 3,24 |
| 59 | 4,30 | 5,38 | **51,08** | 32,26 | 6,99 | 186 | 618 | 3,32 |
| 60 | 8,60 | 17,74 | 39,25 | 27,42 | 6,99 | 186 | 570 | 3,06 |
| **Total Score** | 41,4 | 102,7 | 400,5 | 335,5 | 119,9 | | 6305 | 33,90 |
| **Percentage** | 22,26% | 55,21% | 215,34% | 180,37% | 64,46% | | | |
| **Mean** | 4,14% | 10,27% | 40,05% | 33,55% | 11,99% | | | |

Table 4-6 shows the average score of English education department students' in Interpersonal Intelligence area. From statements numbers 51–60, there were 4,14% of respondents who answered strongly disagree, 10,27% of respondents who answered disagree, 40,05% of respondents who answered undecided, and more respondents who answered agree with

a percentage of 33,55%, and also 11,99% of respondents who answered strongly agree for all statements.

In interpersonal intelligence, there are two things for each answered that given by the students that can the researcher showed. First, the higher statement that chosen by the students was undecided, with the highest score is 51,08%, it is the statement number 59, it was about "I like to get involved in social activities connected with my work, crunch, or community", with 95 students that was chose it. Second, the lowest statement with 1,08% strongly disagree that was chosen by 2 of the students, it was also the statement number 56, and it was about "I enjoy challenge of teaching another person, or groups of people, what I know how to do".

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 60, it was 8,06%, for disagree the highest score is the statement number 59, it was 5,38%, then, for the part of undecided it was 51,08% for the highest score and it was number 59, also for the part of agree it was 46,77%, that was number 56 and the last is strongly agree, it was number 54 with 30,11% that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree it was 1,08% of students chose it, for disagree is 5,38%, undecided 25,81%, agree 27,42% and the last one strongly agree was 5,38%.

**Table 4-7 The Total Percentage and Mean for the English Education Department students' Intrapersonal Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | Intrapersonal Intelligence | | | | | | | |
| 61 | 1,08 | 10,75 | 45,70 | 26,88 | 15,59 | 186 | 642 | 3,45 |
| 62 | 7,53 | 22,58 | 43,55 | 18,82 | 7,53 | 186 | 551 | 2,96 |
| 63 | 1,61 | 18,28 | 49,46 | 22,58 | 8,06 | 186 | 590 | 3,17 |
| 64 | 1,08 | 8,06 | 31,72 | 36,02 | 23,12 | 186 | 692 | 3,72 |
| 65 | 1,08 | 4,30 | 33,33 | 40,32 | 20,97 | 186 | 699 | 3,76 |
| 66 | 0,54 | 8,60 | 43,55 | 36,02 | 11,29 | 186 | 649 | 3,49 |
| 67 | 1,61 | 10,75 | 38,71 | 30,65 | 18,28 | 186 | 657 | 3,53 |
| 68 | 1,08 | 4,30 | 30,65 | 43,55 | 20,43 | 186 | 703 | 3,78 |
| 69 | 5,38 | 19,89 | 43,55 | 22,58 | 8,60 | 186 | 575 | 3,09 |
| 70 | 1,08 | 5,38 | **50,54** | 28,49 | 14,52 | 186 | 651 | 3,50 |
| **Total Score** | 22,0 | 112,9 | 410,8 | 305,9 | 148,4 | | 6409 | 34,46 |
| **Percentage** | 11,85% | 60,70% | 220,83% | 164,47% | 79,78% | | | |
| **Mean** | 2,20% | 11,29% | 41,08% | 30,59% | 14,84% | | | |

Table 4-7 shows the average score of English education department students' in Intrapersonal Intelligence area. From statements numbers 61–70, there were 2,20% of respondents who answered strongly disagree, 11,29% of respondents who answered disagree, 41,08% of respondents who answered undecided, and more respondents who answered agree with a percentage of 43,55%, and the last also 14,84% of respondents who answered strongly agree for all statements.

For the general information on intrapersonal intelligence, there are two things for each answered that given by the students that can the researcher showed. First, the higher statement that chosen by the students was undecided, with the highest score is 50,54%, it is the statement number 70, it was about "I am self-employed or have at least thought

seriously about starting my own business", with 94 students that was chose it. Second, the lowest statement with 0,54% strongly disagree that was chosen by 2 of the students, it was the statement number 66, and it was about "I have a realistic view of my strengths and weaknesses (borne out by feedback from other sources)".

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 62, it was 7,53%, for disagree the highest score is the statement number 62, it was 22,58%, then, for the part of undecided it was 50,54% for the highest score and it was number 70, also for the part of agree it was 43,55%, that was number 68 and the last is strongly agree, it was number 64 with 23,12% that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree it was 0,54% of students chose it, for disagree is 4,30%, undecided 30,65%, agree 18,82% and the last one strongly agree was 7,53%.

**Table 4-8 The Total Percentage and Mean for the English Education Department students' Naturalistic Intelligence area at Faculty Tarbiyah and Teacher Training at the Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

| Questions | SD | D | U | A | SA | N | Total score | % |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | | | |
| | Naturalistic Intelligence | | | | | | | |
| 71 | 3,23 | 8,06 | 28,49 | 40,32 | 19,89 | 186 | 680 | 3,66 |
| 72 | 3,76 | 15,05 | 44,62 | 20,97 | 15,59 | 186 | 613 | 3,30 |
| 73 | 3,76 | 8,60 | 38,71 | 36,56 | 12,37 | 186 | 642 | 3,45 |
| 74 | 3,76 | 9,68 | **45,16** | 27,42 | 13,98 | 186 | 629 | 3,38 |
| 75 | 11,29 | 21,51 | 36,56 | 19,35 | 11,29 | 186 | 554 | 2,98 |
| 76 | 2,15 | 16,13 | 41,40 | 27,42 | 12,90 | 186 | 619 | 3,33 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 77 | 2,15 | 10,22 | 35,48 | 38,17 | 13,98 | 186 | 654 | 3,52 |
| 78 | 0,54 | 6,99 | 35,48 | 30,65 | 26,34 | 186 | 698 | 3,75 |
| 79 | 2,69 | 6,99 | 25,27 | 29,03 | 36,02 | 186 | 723 | 3,89 |
| 80 | 2,15 | 12,37 | 29,57 | 40,32 | 15,59 | 186 | 660 | 3,55 |
| **Total Score** | 35,5 | 115,6 | 360,8 | 310,2 | 178,0 | | 6472 | 34,80 |
| **Percentage** | 19,08 % | 62,15% | 193,95 % | 166,78 % | 95,68% | | | |
| **Mean** | 3,55% | 11,56% | 36,08% | 31,02% | 17,80% | | | |

Table 4-8 shows the average score of English education department students' in Naturalistic Intelligence area. From statements numbers 70–80, there were 3,55% of respondents who answered strongly disagree, 11,56% of respondents who answered disagree, 36,08% of respondents who answered undecided, and more respondents who answered agree with a percentage of 31,02%, and the last also 17,80% of respondents who answered strongly agree for all statements.

For the general information on naturalistic intelligence, there are two things for each answered that given by the students that can the researcher showed. First, the higher statement that chosen by the students was undecided, with the highest score is 45,16%, it is the statement number 74, it was about "I have a hobby that involves nature in some way (e.g., bird watching, observing nature around the house)", with 84 students that was chose it. Second, the lowest statement with 0,54% strongly disagree that was chosen only one of the students, it was the statement number 78, and it was about "When on vacation, I prefer to go off to a natural setting (park, campground, hiking trail) rather than to a hotel/resort or city/cultural location".

Third, the highest score that the students chose in every statements, for the strongly disagree were statements number 75, it was 11,29%, for disagree the highest score is also the statement number 75, it was 21,51%, then, for the part of undecided it was 45,16% for the highest score and it was number 74, also for the part of agree it was 40,32%, that was number 80 and the last is strongly agree, it was number 79 with 36,02% that was chosen by the students. Fourth, the lowest score from all of the part of statements. The lowest score of strongly disagree it was 0,54% of students chose it, for disagree is 6,99%, undecided 25,27%, agree 19,35% and the last one strongly agree was 11,29%.

## B. Discussion

In this section is presented the discussion based on the research findings. In this research, there are several things that will be discussed regarding the findings that the researcher found to answer the research questions of this research. (1) What is the most dominant multiple intelligence types of students from 2020-2023 Academic Years of English Education Department at Faculty of Tarbiyah and Teacher Training in Islamic State University of Sjech M. Djamil Djambek Bukittinggi? (2) Is there any difference between students from from 2020-2023 Academic Years of English Education Department at Faculty of Tarbiyah and Teacher Training in Islamic State University of Sjech M. Djamil Djambek Bukittinggi in terms their dominant multiple intelligence area? and (3) What are types of multiple intelligence possessed by English Education

Department at Faculty of Tarbiyah and Teacher Training in Islamic State University of Sjech M. Djamil Djambek Bukittinggi?

Multiple intelligence is the ability to solved problems that one encounters in real life; the ability to generate new problems to solve; the ability to make something or offer a service that is valued within one‘s culture. Or intelligence is “bio psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture.”[73] Gardner's study demonstrated that intelligence is more than just a notion; it is also a practice description for how to developed and encouraged human potential. Furthermore, each individual has developed other intelligences more strongly, resulting in diverse types of cleverness.

Gardner defined eight intelligences to fulfill the criteria of intelligence, namely linguistic, logical/mathematical, spatial/visual, musical, physical/kinesthetic, interpersonal, intrapersonal, and naturalist. The eight intelligences that exist in each individual can be optimized to the level people have, although there is no guarantee that the eight intelligences will stand out evenly in each individual.[74]

Based on the explanation above, to answer the research question and find out what intelligence is most dominantly possessed by English education department students’ from 2020-2023 academic years was linguistic intelligence, by getting the highest percentage which is 36,66% among others intelligences. And the lowest percentage that was chosen by

[73] Gardner.
[74] Armstrong, *Multiple Intelligence in the Classroom 4th Edition*.

students, it was musical intelligence with 33,85%. It means English education department students' had an excellent ability can use native language or sometimes other language, to understand and express people thoughts. According to Armstrong, People with high linguistic intelligence usually love words, both spoken and written, and often think in words. This individual learns by verbalization, by seeing and hearing words, and usually enjoys word games. And the lowest percentage that was chosen by students, it was musical intelligence with 33,85%. For more details it can be seen on **Appendix 8 page 151.**

In addition, item 44 shows that most students agree with the statement that they can play music, and most students like to sing. Item number 50 is about students who like to make tapping sounds or sing little melodies while working, studying, or learning something new. However, most of them choose undecided in each item, for example in item number 48, where students choose undecided in knowing the tunes to many different songs or musical pieces. This phenomenon has a direct relationship with the current educational environment, as parents always pay attention to students' academic performance rather than fostering students' interest in musical instruments. Thus, most English students are at a low level of musical intelligence.

Second, the difference between students from 2020-2023 academic year of English education department in terms of their dominant multiple intelligence area types. For all semesters of the 2020-2023 grades, the most dominant type of intelligence was linguistic intelligence. For the

second semester in the class of 2023, the three intelligences that have the highest percentage are linguistic, intrapersonal, and bodily/kinesthetic intelligence, while the intelligence that has less interest is naturalistic intelligence. For the class of 2022, the three intelligences that have highest percentage are linguistics, intrapersonal and naturalistic intelligences, while the intelligence that has less interest was interpersonal intelligence. In the class of 2021 or semester 6, the intelligences that are most in demand by students are linguistic, naturalist, and bodily/kinesthetic intelligences, while the intelligence with lowest percentage is in intrapersonal intelligence. And the last is the class of 2020 or 8$^{th}$ semester, with intelligence that had a high percentages, it was linguistic, logical/mathematical, and bodily/kinesthetic intelligence.

Third, the percentage differences of English education department students based on their school background. There are four school backgrounds that researcher make reference to, namely vocational high school, high school, Islamic state high school, and Islamic boarding school. Then it is found from these four school backgrounds that English students who come from Islamic boarding school have the highest intelligence in Naturalistic intelligence. It is different from the other 3 school backgrounds, where they have the same first intelligence ranking, namely linguistic intelligence.

In the last section, the types of multiple intelligences possessed by students of the English Education Department, Faculty of Tarbiyah and Teacher Training, Islamic State University Sjech M. Djamil Djambek

Bukittinggi are the eight intelligences discussed in this study, but each student has different intelligences related to the eight intelligences. As stated by Armstong on Tadkiroatun Musfiroh, All of these abilities are possessed by all humans, although people have different ways of demonstrating them. Children's intelligence is also based on the following main views of the multiple intelligences theory as stated by Armstrong, as follows:

a. Every people have the capacity to possess nine intelligences. These intelligences can be highly developed, moderately developed or underdeveloped.
b. All people, in general, can develop each of intelligence to a sufficient level of mastery if they receive sufficient support, enrichment, and instruction.
c. The intelligences work together in everyday activities. A person who sings needs both musical and kinesthetic intelligence.
d. People have different ways of demonstrating their intelligence in each category. A person may not be very good at jumping but can do a good job of raffling (kinesthetic intelligence) or may not like telling stories but understand quickly when spoken to (linguistic intelligence).[75]

[75] Musfiroh.

# CHAPTER V

# CONCLUSION AND SUGGESTION

## A. Conclusion

Based on finding and discussion that have been presented in chapter four about an investigation of English education department students' intelligence area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi. The researcher concluded that there were 142 female students and 44 male students who had answered the questionnaire.

Based on the above findings, for the general results, it can be concluded that English Education Department students' show a strong dominant preference towards activities presented in linguistic intelligence. Where the percentage of linguistic intelligence was the highest among the others at 36.66%. It means that English Education Department students' who have high linguistic intelligence tend to excel in language skills, both orally and in writing. And the intelligence that had the lowest percentage was musical intelligence. And the lowest percentage that was chosen by students, it was musical intelligence with 33,85%.

The different and diverse educational backgrounds, such as those from general high schools, vocational schools, State Islamic Senior high schools and Islamic boarding schools, lead to varying levels of English proficiency among students, which is generally low, as described in the identification of the problem above. This can be seen from the different percentages of English Education Department based on their school

backgrounds. Research shows that students from general high schools exhibit the highest bodily/kinesthetic intelligence. Meanwhile, students from vocational schools, State Islamic high schools, and Islamic boarding schools tend to prioritize linguistic intelligence as their top-ranked intelligence.

Although the research indicates that students from Islamic Boarding schools show the highest level of naturalistic intelligence, this does not mean their linguistic intelligence is lower compared to students from other schools. They may also have good linguistic intelligence, but the data highlights that their naturalistic intelligence is the most dominant. Meanwhile, students from vocational schools, senior high schools, and state Islamic senior high schools tend to excel more in linguistic intelligence. So, the focus is on the most dominant type of intelligence, not that their abilities in other areas are weak.

From the explanation above shows that students who have high linguistic ability or other intelligence should have good English language skills. This happens if English students have a good educational background, environment, or family background. This will not lead to the long graduation of English students, an average of 5 years and 9 months, mainly due to poor language skills that require repeating the course. So that's why this research was conducted to help English students discover their own intelligence.

## B. Suggestion

Based on the researcher analysis, finding and discussion, there are some suggestion given based on this research:

1. Since the students of English Education Department students' demonstrated a higher preference of the activities which presented in linguistics intelligence, so it is necessary for the lectures inside Department of English to give those students great attention to the linguistic intelligence, because those students want to be efficient in learning English language.
2. Level differences also often affect the learning and teaching process. Therefore, it is important for lecturers to consider that different levels can have an effect because they have different difficulties at each semester level and also have different learning styles in the learning process, especially in higher education. In addition, lecturers should think about the general needs that match the needs and intelligence of the students in the class.
3. Most importantly, for the new English students who want to enter the English education, it is important for them to have the ability in terms of linguistics. The students should be aware of their weaknesses and strengths in terms of learning techniques. By doing so, students have the opportunity to identify and use appropriate approaches to compensate for their weaknesses and enhance their strengths.
4. For English Education Department, it is necessary to have an English interview test at the time of admission.

## REFERENCES


Arifmiboy, 'Multiple Intelligences: Mengoptimalkan Kecerdasan Anak Sebagai Upaya Dalam Mempersiapkan Generasi Emas Masa Depan', *International Seminar on Education 2016*, 2016, 69–84

Armstrong, Thomas, *Multiple Intelligence in the Classroom 4th Edition*, Fourth Edi (Alexandria, Virginia, USA: Association for Supervision and Curriculum Development, 2018)

Armstrong, Thomas, *Multiple Intelligences in the Classroom 3rd Edition* (Association for Supervision and Curriculum Development, 2009)

Dawit, Dibekulu Alem, 'Theory of Multiple Intelligences and Its' Underlying Philosophy', *International Journal of English Literature and Culture*, 7.7 (2019), 205–13 <https://doi.org/10.14662/IJELC2019.120>

Dolati, Zahra, and Abdorreza Tahriri, 'EFL Teachers' Multiple Intelligences and Their Classroom Practice', *SAGE Open*, 7.3 (2017), 1–12 <https://doi.org/10.1177/2158244017722582>

Gardner, Howard, *Frames of Mind, Experiments With People*, 2011 paper (United States of America: Published by Basic Books, A Member of the Perseus Books Group, 2011) <https://doi.org/10.4324/9781315101347-25>

Gardner, Howard, *Intelligence Reframed: Multiple Intelligences for the 21st Century, Gifted and Talented International* (Basic Books, A Member of the Perseus Books Group, 2001), XVI <https://doi.org/10.1080/15332276.2001.11672976>

Gay, L. R., Geoffrey E Mills, and Peter W Airasian, *Educational Research Competencies for Analysis and Application*, tenth edit (new york: PEARSON, 2011)

Hoerr, Thomas R., *Becoming a Multiple Intelligences School*, *Association for Supervision and Curriculum Development*, 2000, VI

Ibnian, Salem Saleh Khalaf, and Ala' Daifallah Hadban, 'Implications of Multiple Intelligences Theory in ELT Field', *Journal of Humanities and Social Science*, 3.4 (2013), 292–97

Kurniawan, Asep, 'Pembelajaran Dengan Kecerdasan Jamak Di Sekolah', *Al Ibtida: Jurnal Pendidikan Guru MI*, 2.2 (2015), 1–18 <https://doi.org/10.24235/al.ibtida.snj.v2i2.127>

Lin, Yulan, and Qingsheng Lu, 'An Investigation on the Multiple Intelligences of English Major Undergraduates in a University in Jiangxi Province', *Studies in Linguistics and Literature*, 4.4 (2020), 131–48 <https://doi.org/10.22158/sll.v4n4p131>

Lunenburg, Fred C, and Melody R Lunenburg, 'Applying Multiple Intelligences in the Classroom: A Fresh Look at Teaching Writing', *INTERNATIONAL JOURNAL OF SCHOLARLY ACADEMIC INTELLECTUAL DIVERSITY*, 16.1 (2014), 1–15

Machali, Imam, *Metode Penelitian Kuantitatif*, *Laboratorium Penelitian Dan Pengembangan FARMAKA TROPIS Fakultas Farmasi Universitas Mualawarman, Samarinda, Kalimantan Timur*, 2021

Mohamad, Siti Nurul Mahfuzah, and Mohd Azran Mohd Salleh, 'Multiple Intelligences in the Classroom', *Diges Penyelidikan Dan Penulisan Ilmiah*, 2014 <https://doi.org/10.4324/9781315175386>

Moleong, Lexy J., *Metode Penelitian Kualitatif* (Bandung: PT Remaja Rosdakarya, 2018)

Morgan, Hani, 'Howard Gardner's Multiple Intelligences Theory and His Ideas of Promoting Creativity', *Celebrating Giants and Trailblazers: A-Z of Who's Who in Creativity Research and Related Fields*, 2021, 124–41

Musfiroh, Tadkiroatun, 'Pengembangan Kecerdasan Majemuk. In : Hakikat Kecerdasan Majemuk (Multiple Intelligences)', in *Paud4404/Modul 1* (Universitas Terbuka: Bandung, 2014), pp. 1–60

Muttar, Sadoon Salih, 'An Investigation Into Types of Multiple Intelligence Used by Students of English Department at College of Basic Education.', *Science International Journal*, 3.1 (2019), 19–21

Şener, Sabriye, and Ayten Çokçalışkan, 'An Investigation between Multiple Intelligences and Learning Styles', *Journal of Education and Training Studies*, 6.2 (2018), 125 <https://doi.org/10.11114/jets.v6i2.2643>

Shofiana, E R, 'Multiple Intelligences in EFL Learning', 2019, 1–135

Sreenidhi, S K, M S Tay, and Chinyi Helena, 'Multiple Intelligence Assessment', *International Journal of Scientific and Research Publications*, 7.4 (2017), 203–13

Sudjana, nana, and Ibrahim, *Metode Penelitian Kualitattif* (Bandung: Sinar Baru Algesindo, 2001)

Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, Dan R & D* (Bandung: Alfabeta, 2013)

Suharsimi, Arikunto, *Dasar-Dasar Evaluasi Pendidikan* (Jakarta: PT Bumi Aksara, 2016)

Sulistiyaningsih, Retno, Nur Eva, Nur Rohmah Hidayatul Qoyyimah, Najway Azka Ar-Robbaniy, and Sri Andayani, 'Mengembangkan Kecerdasan Majemuk Pada Generasi Milenial Siswa Sekolah Dasar Islam Terpadu (SDIT) Insantama Malang', *GUYUB: Journal of Community Engagement*, 1.3 (2020), 157–66 <https://doi.org/10.33650/guyub.v1i3.1563>

Suwartono, *Dasar-Dasar Metodologi Penelitian*, ed. by Erang Risanto (Yogyakarta: CV.ANDI OFFSET, 2014)

Tawalbeh, Tha'er Issa, 'Investigating EFL Learners' Multiple Intelligences in the Preparatory Year at Taif University', *Theory and Practice in Language Studies*, 6.7 (2016), 1347 <https://doi.org/10.17507/tpls.0607.03>

Yalmanci, Sibel Gurbozoglu, and Ali İbrahim Can Gozum, 'The Effects of Multiple Intelligence Theory Based Teaching on Students' Achievement and Retention of Knowledge (Example of the Enzymes Subject).', *International Journal on New Trends in Education & Their Implications (IJONTE)*, 4.3 (2013), 27–36

Zarei, Maryam, 'An Investigation into Iranian English Major Students' Learning Styles Preferences and Their Multiple Intelligences', *International Journal on Studies in English Language and Literature*, 4.8 (2016), 46–52 <https://doi.org/10.20431/2347-3134.0408006>

# APPENDICES

## Appendix 1 Research Guidelines

| Variable | Sub Variable | Symbols | Description | Number of questions |
|---|---|---|---|---|
| Intelligence Area | Linguistic intelligence | Using Words/Language | Linguistic intelligence is Sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish goals. With abilities in the complex acquisition, formation, and processing of language. | 1-80 |
| | Logical-Mathematical | Number | Logical-Mathematical is the capacity to analyze problems logically, to carry out mathematical operations, and investigate issues scientifically. | |
| | Spatial intelligence | Seeing | Spatial intelligence area the capacities to perceive the visual world accurately, to perform transformations and modifications upon one's initial perceptions, and to be able to recreate aspects of one's visual experience even in the absence of relevant physical stimuli. | |

| | | | | |
|---|---|---|---|---|
| | Musical intelligence | Sounds/Songs | Musical intelligence refers to the ability to produce and appreciate rhythm, tone, and color forms of music, as well as forms of musical expression. | |
| | Bodily/Kinesthetic | Moving/ Touching | Bodily/Kinesthetic is the intelligence that entails the potential of using one's whole body or parts of the body (like the hand or the mouth) to solve problems or fashion products. This intelligence includes specific physical skills such as coordination, balance, agility, strength, flexibility, and speed, as well as proprioceptive, tactile, and haptic abilities. | |
| | Interpersonal Intelligence | With other People | Interpersonal intelligence entails the capacity of a young child to discriminate among individuals and to detect various moods. | |

| | | | | |
|---|---|---|---|---|
| | Intrapersonal intelligence | Working Alone | Intrapersonal intelligence amounts to little more than the capacity to distinguish a feeling of pleasure from one of pain and, on the basis of such discrimination, to become more involved in or to withdraw from a situation. | |
| | Naturalist Intelligence | Nature | Naturalist Intelligence is deals with the ability to sense patterns in nature, and making connections to elements in nature. | |

**Appendix 2 Questionnaire of Multiple Intelligence**

**Instruction of the Questionnaire**

*Slide 1*

**Research questionnaire on Multiple Intelligence Areas at English Education Department students.**

Dalam rangka penyelesaian skripsi yang berjudul **"An Investigation of English Education Department Students' Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State of Sjech M. Djamil Djambek Bukittinggi"**. Maka diharapkan kesediaan rekan-rekan untuk mengisi kuesioner ini. Atas perhatian dan bantuan rekan-rekan saya ucapkan terima kasih.

Mengisi identitas:

- Email
- Nama
- NIM
- Jenis kelamin
- Kelas

*Slide 2*

Pada penelitian ini terdapat 8 jenis Multiple Intelligence yang akan diisi, dimana masing-masing terdapat 10 pertanyaan. Dan pada setiap item pertanyaan memiliki 5 option scale sebagai berikut:

1- Strongly Disagree
2- Disagree
3- Undecided
4- Agrees
5- Strongly Agrees

| No | Linguistic intelligence Statement | Scale | | | | |
|---|---|---|---|---|---|---|
| | | 1 (SD) | 2 (D) | 3 (U) | 4 (A) | 5 (SA) |
| 1 | Books are very important for me. | | | | | |
| 2 | I can hear words in my head before I read, speak, or write them down. | | | | | |
| 3 | I get more out of listening to the radio or a spoken-word recording than I do from television or films. | | | | | |
| 4 | I enjoy word games such as scrabble, anagrams, or passwords. | | | | | |
| 5 | I enjoy entertaining myself or others with tongue twisters, nonsense rhymes or puns. | | | | | |
| 6 | Other people sometimes have to stop and ask me to explain the meaning of the words I use in my writing and speaking | | | | | |
| 7 | English were easier for me in school than math and science. | | | | | |
| 8 | Learning to speak or read another language (e.g., English, Arabic or Korea) has been relatively easy for me. | | | | | |
| 9 | My conversation includes frequent references to things that I've read or heard. | | | | | |
| 10 | I've written something recently that I was particularly proud of or that earned me recognition from others. | | | | | |

| No | Logical-Mathematical Intelligence Statement | Scale | | | | |
|---|---|---|---|---|---|---|
| | | 1 (SD) | 2 (D) | 3 (U) | 4 (A) | 5 (SA) |
| 1 | I can easily compute numbers in my head | | | | | |
| 2 | Math and or science were among my favorite | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | subjects in school | | | | | |
| 3 | I enjoy playing games or solving brainteasers that require logical thinking | | | | | |
| 4 | I like to set up little "what if" experiments (for example, "what if I double the amount of water I give to my rosebush each week?") | | | | | |
| 5 | My mind searches for patterns, regularities, or logical sequences in things | | | | | |
| 6 | I'm interested In new developments in science | | | | | |
| 7 | I believe that almost everything has a rational explanation | | | | | |
| 8 | I sometimes think in clear, abstract, wordless, imageless concept | | | | | |
| 9 | I like finding logical flaws in things that people say and do at home and work | | | | | |
| 10 | I feel more comfortable when something has been measured, categorized, analyzed, or qualified in some way. | | | | | |

| **No** | **Spatial/Visual Intelligence Statement** | **Scale** | | | | |
|---|---|---|---|---|---|---|
| | | **1 (SD)** | **2 (D)** | **3 (U)** | **4 (A)** | **5 (SA)** |
| 1 | I often see clear visual images when I close my eyes | | | | | |
| 2 | I'm sensitive to color, line, shape, space, and others. | | | | | |
| 3 | I frequently use a camera or camcorder to record what I see around me | | | | | |
| 4 | I enjoy doing jigsaw puzzles, mazes, and other visual puzzles. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | I have vivid dreams at night | | | | | |
| 6 | I can generally find my way around unfamiliar territory | | | | | |
| 7 | I like to draw such as, an abstract image, doodle, or a view. | | | | | |
| 8 | Geometry was easier for me than algebra in school | | | | | |
| 9 | I can comfortably imagine how something might appear if it were looked down on from directly above in bird's-eye view | | | | | |
| 10 | I prefer looking at reading material that is heavily illustrated | | | | | |

| **No** | **Musical Intelligence Statement** | **Scale** | | | | |
|---|---|---|---|---|---|---|
| | | **1 (SD)** | **2 (D)** | **3 (U)** | **4 (A)** | **5 (SA)** |
| 1 | I have a pleasant singing voice | | | | | |
| 2 | I can tell when a musical not is off-key | | | | | |
| 3 | I frequently listen to music on the radio, play music on my phone, through YouTube, Spotify, etc. | | | | | |
| 4 | I play a musical instrument | | | | | |
| 5 | My life would be poorer if there were no music in it | | | | | |
| 6 | I sometimes catch myself while doing an activity sing a song or other tune that is ringing in my head. | | | | | |
| 7 | I can easily keep time to a piece of music with a simple percussion instrument | | | | | |
| 8 | I know the tunes to many different songs or musical pieces | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately | | | | | |
| 10 | I often make tapping sounds or sing little melodies while working, studying, or learning something new. | | | | | |

| **No** | **Bodily-Kinesthetic Intelligence Statement** | **Scale** | | | | |
|---|---|---|---|---|---|---|
| | | **1 (SD)** | **2 (D)** | **3 (U)** | **4 (A)** | **5 (SA)** |
| 1 | I engage in at least one sport or physical activity on a regular basis | | | | | |
| 2 | I find it difficult to sit still for long periods of time | | | | | |
| 3 | I like to work with my hand at concrete activities such as sewing, weaving, carving, carpentry, or model building | | | | | |
| 4 | My best ideas often come to me when I'm out for a long walk or a jog or when I'm engaging in some other kind of physical activity | | | | | |
| 5 | I often like spend my free time outdoors | | | | | |
| 6 | I frequently use hand my gestures or other forms of body language when conversing with someone | | | | | |
| 7 | I need to touch things in order to learn more about them | | | | | |
| 8 | I enjoy daredevil amusement rides or similar thrilling physical experiences, such as roller coaster, etc. | | | | | |
| 9 | I would describe myself as well coordinated | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10 | I need to practice a new skill rather than simply reading about it or seeing a video that describe it. | | | | | |

| No | Interpersonal Intelligence Statement | Scale | | | | |
|---|---|---|---|---|---|---|
| | | 1 (SD) | 2 (D) | 3 (U) | 4 (A) | 5 (SA) |
| 1 | I'm the sort of person that people come to for advice and counsel at work or in my neighborhood | | | | | |
| 2 | I prefer team sports like badminton, volleyball, or softball over solo sports like swimming and jogging | | | | | |
| 3 | When I have a problem, I'm more likely to seek out another person for help than attempt to work it out on my own | | | | | |
| 4 | I have at least three close friends | | | | | |
| 5 | I favor social pastimes such as monopoly or Ludo games over individual recreations such as video games and solitaire. | | | | | |
| 6 | I enjoy challenge of teaching another person, or groups of people, what I know how to do. | | | | | |
| 7 | I consider myself a leader (or others have called me that) | | | | | |
| 8 | I feel comfortable in the midst of a crowd | | | | | |
| 9 | I like to get involved in social activities connected with my work, crunch, or community | | | | | |
| 10 | I would rather spend my evenings at a lively party than stay at home alone | | | | | |

| No | Intrapersonal Intelligence Statement | Scale | | | | |
|---|---|---|---|---|---|---|
| | | 1 (SD) | 2 (D) | 3 (U) | 4 (A) | 5 (SA) |
| 1 | I regularly spend time alone mediating, reflecting, or thinking about important life questions | | | | | |
| 2 | I have attended counseling sessions or personal growth seminars to learn more about myself | | | | | |
| 3 | I am able to respond to obstacles with resilience | | | | | |
| 4 | I have a special hobby or interest that I keep pretty much to myself | | | | | |
| 5 | I have some important goals for my life that I think about on a regular basis | | | | | |
| 6 | I have a realistic view of my strengths and weaknesses (borne out by feedback from other sources) | | | | | |
| 7 | I would prefer to spend weekends alone at home rather than tourist object with lots of people around | | | | | |
| 8 | I consider myself to be strong willed or independent minded | | | | | |
| 9 | I keep a personal diary or journal to record the events of my inner life | | | | | |
| 10 | I am self-employed or have at least thought seriously about starting my own business. | | | | | |

| No | Naturalist Intelligence Statement | Scale | | | | |
|---|---|---|---|---|---|---|
| | | 1 (SD) | 2 (D) | 3 (U) | 4 (A) | 5 (SA) |
| 1 | I love spending time in nature (hiking, gardening, farming or just walking, etc.). | | | | | |
| 2 | I belong to some kind of volunteer organization | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | related to nature and I'm concerned about helping to save nature from further destruction | | | | | |
| 3 | I thrive on having animals around the house | | | | | |
| 4 | I have a hobby that involves nature in some way (e.g., bird watching, observing nature around the house) | | | | | |
| 5 | I've enrolled community centers or colleges related to nature (Mapala, pramuka and etc.). | | | | | |
| 6 | I'm quite good at telling the difference between kinds of trees, dog, birds, or other types of flora or fauna | | | | | |
| 7 | I like to reads and magazines or watch television shows or movies that feature nature in some way | | | | | |
| 8 | When on vacation, I prefer to go off to a natural setting (park, campground, hiking trail) rather than to a hotel/resort or city/cultural location | | | | | |
| 9 | I love to visit zoos, aquariums, or other places where the natural world is studied. | | | | | |
| 10 | I have a garden and enjoy working regularly in it. | | | | | |

Source : Armstrong, Thomas, *Multiple Intelligences in the Classroom 3rd Edition* (Association for Supervision and Curriculum Development, 2009) (e-book)

**Appendix 3 Determination of the number of student samples for each class (ni) on 2020–2023 Academic Years of English Education Department Students.**

| No | Semester | Class | Total Number of Students | | | |
|---|---|---|---|---|---|---|
| | | | Man | Women | Total respondents / class | Ni |
| 1 | 2nd | A | 7 | 16 | $= \frac{186 . 23}{348} = 12$ | 12 |
| | | B | 2 | 20 | $= \frac{186 . 22}{348} = 11{,}75$ | 12 |
| | | C | 5 | 20 | $= \frac{186 . 25}{348} = 13{,}3$ | 13 |
| | | **Total** | | | | **37** |
| 2 | 4th | A | 8 | 24 | $= \frac{186 . \ 32}{348} = 17$ | 17 |
| | | B | 6 | 28 | $= \frac{186 . \ 34}{348} = 18$ | 18 |
| | | C | 10 | 25 | $= \frac{186 . \ 35}{348} = 18{,}70$ | 19 |
| | | **Total** | | | | **54** |
| 3 | 6th | A | 6 | 23 | $= \frac{186 . \ 29}{348} = 15{,}5$ | 16 |
| | | B | 8 | 18 | $= \frac{186 . \ 26}{348} = 13{,}89$ | 14 |
| | | C | 9 | 16 | $= \frac{186 . \ 25}{348} = 13$ | 13 |
| | | **Total** | | | | **43** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | $8^{th}$ | A | 4 | 20 | $= \frac{186 \,.\, 24}{348} = 12{,}82$ | 13 |
| | | B | 3 | 17 | $= \frac{186 \,.\, 20}{348} = 10{,}68$ | 11 |
| | | C | 6 | 22 | $= \frac{186 \,.\, 28}{348} = 14{,}96$ | 15 |
| | | D | 3 | 22 | $= \frac{186 \,.\, 32}{348} = 13$ | 13 |
| | | **Total** | | | | **52** |
| **Total of respondents** | | | | | | **186** |

# Appendix 4 Validation Sheet

**PERMOHONAN VALIDASI**

Kepada Yth
Bapak/Ibu
Di tempat

Assalamu'alaikum Wr. Wb
Saya yang bertandatangan dibawah ini:

Nama : Imelda Rizki
NIM : 2319013
Fakultas/Prodi : FTIK/PBI
Judul Proposal : An Investigation of English Education Department Students' Intelligence Area of Faculty Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi
Pembimbing : Merry Prima Dewi, M.Pd

Dengan ini bermaksud untuk mengajukan permohonan kepada Ibu, sekiranya berkenan melakukan validasi instrumen yang saya susun.

Demikianlah permohonan ini diajukan kepada Ibu, sekiranya Ibu dapat mengabulkannya. Atas pertimbangannya saya ucapkan terimakasih.

Bukittinggi, 17 Mei 2024

Mengetahui,
Ketua Prodi

Merry Prima Dewi, M.Pd
NIP. 198403152015032003

Pemohon,

Imelda Rizki
NIM. 2319013

**SURAT PERNYATAAN**

Saya yang bertandatangan di bawah ini:

Nama : LENA SASTRI

Jabatan : Dosen Bahasa Inggris

Dengan ini menyatakan bahwa mahasiswa yang bernama Imelda Rizki dengan NIM 2319013 dengan judul skripsi "**An Investigation of English Education Department Students Intelligence Area at Faculty of Tarbiyah and Teacher Training in Islamic State University of Sjech M. Djamil Djambek Bukittinggi"** benar telah melakukan validasi instrument yang akan digunakan untuk penelitian dan pengolahan data dalam penulisan skripsi.

Demikian surat keterangan ini saya buat dengan sesungguhnya agar dipergunakan sebagaimana mestinya.

Bukittinggi, 1 JULI 2024

Validator

LENA SASTRI

NIP. 198705052022032001

**LEMBAR VALIDASI INSTRUMEN PENELITIAN**

Judul Penelitian : **An Investigation of English Education Department Students Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi.**

Nama : Imelda Rizki

NIM : 2319013

Fakultas/ Prodi : Tarbiyah dan Ilmu Keguruan/ Pendidikan Bahasa Inggris

**Petunjuk:**

1. Bapak/Ibu cukup memberikan tanda *centang* (v) pada kolom yang disediakan.
2. Jika Bapak/Ibu merasa perlu memberikan catatan khusus demi perbaikan instrumen, mohon ditulis di dalam kolom yang telah disediakan pada lembaran penilaian.
3. Angka-angka yang terdapat pada kolom yang dimaksud berarti:
   0 : Tidak valid
   1 : Kurang valid
   2 : Cukup valid
   3 : Valid
   4 : Sangat valid
4. Huruf-huruf yang terdapat pada kolom yang dimaksud berarti:
   A : Dapat digunakan tanpa revisi
   B : Dapat digunakan dengan revisi sedikit
   C : Dapat digunakan dengan revisi sedang
   D : Dapat digunakan dengan banyak revisi
   E : Tidak dapat digunakan

PENILAIAN VALIDASI QUESTIONNAIRE OPTION

**APPENDIX 2: Questionnaire of Multiple Intelligence**

| No | Linguistic intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | Books are very important for me. | | | | √ | | |
| 2 | I can hear words in my head before I read, speak, or write them down. | | | | √ | | |
| 3 | I get more out of listening to the radio or a spoken-word recording than I do from television or films. | | | √ | | | |
| 4 | I enjoy word games such as scrabble, anagrams, or passwords. | | | √ | | | |
| 5 | I enjoy entertaining myself or others with tongue twisters, nonsense rhymes or puns. | | | | √ | | |
| 6 | Other people sometimes have to stop and ask me to explain the meaning of the words I use in my writing and speaking | | | | √ | | |
| 7 | English were easier for me in school than math and science. | | | | √ | | |
| 8 | Learning to speak or read another language (e.g., English, Arabic or Korea) has been relatively easy for me. | | | √ | | | |
| 9 | My conversation includes frequent references to things that I've read or heard. | | | | √ | | |
| 10 | I've written something recently that I was particularly proud of or that earned me recognition from others. | | | | √ | | |

| No | Mathematical / Logical Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I can easily compute numbers in my head | | | | ✓ | | |
| 2 | Math and or science were among my favorite subjects in school | | | ✓ | . | | |
| 3 | I enjoy playing games or solving brainteasers that require logical thinking | | | | ✓ | | |
| 4 | I like to set up little "what if" experiments (for example, "what if I double the amount of water I give to my rosebush each week") | | | | ✓ | | |
| 5 | My mind searches for patterns, regularities, or logical sequences in things | | | | ✓ | | |
| 6 | I'm interested In new developments in science | | | | ✓ | | |
| 7 | I believe that almost everything has a rational explanation | | | | ✓ | | |
| 8 | I sometimes think in clear, abstract, wordless, imageless concept | | | | ✓ | | |
| 9 | I like finding logical flaws in things that people say and do at home and work | | | | ✓ | | |
| 10 | I feel more comfortable when something has been measured, categorized, analyzed, or qualified in some way. | | | √ | | | |

| No | Spatial/Visual Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I often see clear visual images when I close my eyes | | | | ✓ | | |
| 2 | I'm sensitive to color, line, shape, space, and others. | | | | √ | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | I frequently use a camera or camcorder to record what I see around me | | | | √ | | |
| 4 | I enjoy doing jigsaw puzzles, mazes, and other visual puzzles. | | | | √ | | |
| 5 | I have vivid dreams at night | | | | √ | | |
| 6 | I can generally find my way around unfamiliar territory | | | | √ | | |
| 7 | I like to draw such as, an abstract image, doodle, or a view. | | | | √ | | |
| 8 | Geometry was easier for me than algebra in school | | | | √ | | |
| 9 | I can comfortably imagine how something might appear if it were looked down on from directly above in bird's-eye view | | | | √ | | |
| 10 | I prefer looking at reading material that is heavily illustrated | | | √ | | | |

| No | Musical Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I have a pleasant singing voice | | | | √ | | |
| 2 | I can tell when a musical not is off-key | | | | √ | | |
| 3 | I frequently listen to music on the radio, play music on my phone, through YouTube, Spotify, etc. | | | √ | | | |
| 4 | I play a musical instrument | | | | √ | | |
| 5 | My life would be poorer if there were no music in it | | | | √ | | |
| 6 | I sometimes catch myself while doing an activity sing a song or other tune that is ringing in my head. | | | √ | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7 | I can easily keep time to a piece of music with a simple percussion instrument | | | ✓ | | | |
| 8 | I know the tunes to many different songs or musical pieces | | | | ✓ | | |
| 9 | If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately | | | | ✓ | | |
| 10 | I often make tapping sounds or sing little melodies while working, studying, or learning something new. | | | | ✓ | | |

| No | Bodily-Kinesthetic Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I engage in at least one sport or physical activity on a regular basis | | | | ✓ | | |
| 2 | I find it difficult to sit still for long periods of time | | | | ✓ | | |
| 3 | I like to work with my hand at concrete activities such as sewing, weaving, carving, carpentry, or model building | | | | ✓ | | |
| 4 | My best ideas often come to me when I'm out for a long walk or a jog or when I'm engaging in some other kind of physical activity | | | | ✓ | | |
| 5 | I often like spend my free time outdoors | | | | ✓ | | |
| 6 | I frequently use hand my gestures or other forms of body language when conversing with someone | | | | ✓ | | |
| 7 | I need to touch things in order to learn more about them | | | | ✓ | | |
| 8 | I enjoy daredevil amusement rides or similar thrilling physical experiences, such as roller | | | | ✓ | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | coaster, etc. | | | | ✓ | | |
| 9 | I would describe myself as well coordinated | | | | ✓ | | |
| 10 | I need to practice a new skill rather than simply reading about it or seeing a video that describe it. | | | | V | | |

| No | Interpersonal Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I'm the sort of person that people come to for advice and counsel at work or in my neighborhood | | | | ✓ | | |
| 2 | I prefer team sports like badminton, volleyball, or softball over solo sports like swimming and jogging | | | | ✓ | | |
| 3 | When I have a problem, I'm more likely to seek out another person for help than attempt to work it out on my own | | | | ✓ | | |
| 4 | I have at least three close friends | | | | ✓ | | |
| 5 | I favor social pastimes such as monopoly or Ludo games over individual recreations such as video games and solitaire. | | | | ✓ | | |
| 6 | I enjoy challenge of teaching another person, or groups of people, what I know how to do. | | | | ✓ | | |
| 7 | I consider myself a leader (or others have called me that) | | | | ✓ | | |
| 8 | I feel comfortable in the midst of a crowd | | | | ✓ | | |
| 9 | I like to get involved in social activities connected with my work, crunch, or community | | | | ✓ | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 10 | I would rather spend my evenings at a lively party than stay at home alone | | | | ✓ | | |

| No | Intrapersonal Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I regularly spend time alone mediating, reflecting, or thinking about important life questions | | | | ✓ | | |
| 2 | I have attended counseling sessions or personal growth seminars to learn more about myself | | | | ✓ | | |
| 3 | I am able to respond to obstacles with resilience | | | | ✓ | | |
| 4 | I have a special hobby or interest that I keep pretty much to myself | | | | ✓ | | |
| 5 | I have some important goals for my life that I think about on a regular basis | | | | ✓ | | |
| 6 | I have a realistic view of my strengths and weaknesses (borne out by feedback from other sources) | | | | ✓ | | |
| 7 | I would prefer to spend weekends alone at home rather than tourist object with lots of people around | | | | ✓ | | |
| 8 | I consider myself to be strong willed or independent minded | | | | ✓ | | |
| 9 | I keep a personal diary or journal to record the events of my inner life | | | ✓ | | | |
| 10 | I am self-employed or have at least thought seriously about starting my own business. | | | | ✓ | | |

| No | Naturalist Intelligence Statement | Penilaian | | | | | Note |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | |
| 1 | I love spending time in nature (hiking, gardening, farming or just walking, etc.). | | | | ✓ | | |
| 2 | I belong to some kind of volunteer organization related to nature and I'm concerned about helping to save nature from further destruction | | | | ✓ | | |
| 3 | I thrive on having animals around the house | | | | ✓ | | |
| 4 | I have a hobby that involves nature in some way (e.g., bird watching, observing nature around the house) | | | | ✓ | | |
| 5 | I've enrolled community centers or colleges related to nature (Mapala, pramuka and etc.). | | | ✓ | | | |
| 6 | I'm quite good at telling the difference between kinds of trees, dog, birds, or other types of flora or fauna | | | | ✓ | | |
| 7 | I like to reads and magazines or watch television shows or movies that feature nature in some way | | | | ✓ | | |
| 8 | When on vacation, I prefer to go off to a natural setting (park, campground, hiking trail) rather than to a hotel/resort or city/cultural location | | | | ✓ | | |
| 9 | I love to visit zoos, aquariums, or other places where the natural world is studied. | | | | ✓ | | |
| 10 | I have a garden and enjoy working regularly in it. | | | | ✓ | | |

**PENILAIAN UMUM**

| Uraian | A | B | C | D | E |
|---|---|---|---|---|---|
| Penilaian secara umum terhadap instrument | | ✓ | | | |

Komentar/ Saran:

1. Sesuaikan konteks yang relate dg English Education Department Students.
2. Perbaiki tata bahasa penulisan.
3. Diganti sesuai dengan buku asli
4. Revisi kalimat yang ditandai

Bukittinggi, 4 September 2024

Validator

LENA SASTRI

**NIP. 198702052022032001**

**SURAT PERNYATAAN**

Saya yang bertandatangan di bawah ini:

Nama : Muthia Rahman, M.Pd

Jabatan : Dosen

Dengan ini menyatakan bahwa mahasiswa yang bernama Imelda Rizki dengan NIM 2319013 dengan judul skripsi "**An Investigation of English Education Department Students Intelligence Area at Faculty of Tarbiyah and Teacher Training in Islamic State University of Sjech M. Djamil Djambek Bukittinggi"** benar telah melakukan validasi instrument yang akan digunakan untuk penelitian dan pengolahan data dalam penulisan skripsi.

Demikian surat keterangan ini saya buat dengan sesungguhnya agar dipergunakan sebagaimana mestinya.

Bukittinggi, 22 Mei 2024

Validator

Muthia Rahman, M.Pd

NIPN. 2104058502

**PENILAIAN UMUM**

| Uraian | A | B | C | D | E |
|---|---|---|---|---|---|
| Penilaian secara umum terhadap instrument | ✓ | | | | |

Komentar/ Saran:

1. Revise ~~senten~~ some sentences' structures.
2. Create statements for your instrument which stated directly to the condition of English Language Department students.

Bukittinggi, 26/09 2024

Validator

MUTHIA RAHMAN, M. Pd

**NIDN. 2104058502**

## Appendix 5 Validation of the questionnaire Instrument

| Butir | Validator | | | S1 | S2 | S3 | ∑S | n(c-1) | V | Keterangan |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | | | | | | | |
| butir_01 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_02 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_03 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_04 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_05 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_06 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_07 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_08 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_09 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_10 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_11 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_12 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_13 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_14 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_15 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_16 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_17 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_18 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_19 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_20 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_21 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_22 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_23 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_24 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_25 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_26 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_27 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_28 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_29 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_30 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_31 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_32 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_33 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_34 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_35 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_36 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_37 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_38 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_39 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| butir_40 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_41 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_42 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_43 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_44 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_45 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_46 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_47 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_48 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_49 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_50 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_51 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_52 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_53 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_54 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_55 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_56 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_57 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_58 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_59 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_60 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_61 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_62 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_63 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_64 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_65 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_66 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_67 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_68 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_69 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_70 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_71 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_72 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_73 | 4 | 3 | 2 | 4 | 3 | 2 | 9 | 12 | 0,750 | SEDANG |
| butir_74 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_75 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_76 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_77 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_78 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_79 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir_80 | 4 | 3 | 3 | 4 | 3 | 3 | 10 | 12 | 0,833 | TINGGI |
| butir 1-80 | 320 | 240 | 229 | 320 | 240 | 229 | 789 | 960 | 0,822 | TINGGI |

| BUTIR | Validator | | | s1 | s2 | s3 | ∑S | v | Keterangan |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | | | | | | |
| butir 1-80 | 320 | 240 | 229 | 320 | 240 | 229 | 789 | 0,822 | TINGGI |

Keterangan:

*If Cronbach's alpha value is <0.7, it is declared less reliable.*

*If the Cronbach's alpha value is> 0.7, it is declared reliable*

## Appendix 6 SK Supervisor

**KEPUTUSAN DEKAN FAKULTAS TARBIYAH DAN ILMU KEGURUAN (FTIK) UIN BUKITTINGGI**
Nomor : B-1216/Un.26.1/HK.00.5/10/2024

TENTANG
**PENUNJUKAN DOSEN PEMBIMBING SKRIPSI MAHASISWA**
**PRODI PENDIDIKAN BAHASA INGGRIS FAKULTAS TARBIYAH DAN ILMU KEGURUAN**
**UIN SJECH M. DJAMIL DJAMBEK BUKITTINGGI**

**DENGAN RAHMAT TUHAN YANG MAHA ESA**
**DEKAN FAKULTAS TARBIYAH DAN ILMU KEGURUAN (FTIK) UIN BUKITTINGGI**

Membaca : Permohonan Mahasiswa Fakultas Tarbiyah dan Ilmu Keguruan (FTIK) Universitas Islam Negeri Syekh M. Djammil Djambek Bukittinggi an. **IMELDA RIZKI, NIM. 2319013** tanggal 28 Oktober 2024 perihal permohonan penerbitan SK Pembimbing Skripsi;

Menimbang : a. bahwa untuk lebih terarah dan terkoordinirnya penulisan skripsi mahasiswa Universitas Islam Negeri (UIN) Bukittinggi, perlu ditetapkan Dosen Pembimbing;

: b. bahwa yang namanya tersebut di bawah ini, dipandang cakap dan mampu untuk diangkat sebagai Dosen Pembimbing Skripsi;

Mengingat :
1. Undang-Undang Nomor 20 tahun 2003 tentang Sistem Pendidikan Nasional (Lembaran Negara Republik Indonesia Tahun 2003 Nomor 78. Tambahan Lembaran Negara Republik Indonesia Nomor 4301);
2. Peraturan Pemerintah Nomor 60 tahun 1999 tentang Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 1999 Nomor 115. Tambahan Lembaran Negara Republik Indonesia Nomor 3859);
3. Peraturan Presiden Nomor 85 Tahun 2022 tentang Universitas Islam Negeri (UIN) Sjech M. Djamil Djambek Bukittinggi;
4. Peraturan Menteri Agama Nomor 76 tahun 2022 Tentang Organisasi dan Tata Kerja Universitas Islam Negeri (UIN) Sjech M. Djamil Djambek Bukittinggi;

**MEMUTUSKAN:**

Menetapkan : KEPUTUSAN DEKAN FAKULTAS TARBIYAH DAN ILMU KEGURUAN UIN SJECH M. DJAMIL DJAMBEK BUKITTINGGI TENTANG PENUNJUKAN DOSEN PEMBIMBING SKRIPSI MAHASISWA PROGRAM STUDI PENDIDIKAN BAHASA INGGRIS

KESATU : Menyetujui judul skripsi mahasiswa yang bersangkutan: ***"An Investigation of English Education Department Students' Intelligence Area at Faculty of Tarbiyah and Teacher Training at Islamic State University of Sjech M. Djamil Djambek Bukittinggi"***

KEDUA : Menunjuk Saudara :

| | |
|---|---|
| Nama | : **Syahrul, SS, M.Pd** |
| NIP | : **197003252003121008** |
| Pangkat/Gol.Ruang | : Penata Tk. I/III/d |
| Jabatan | : Lektor |
| Bidang Keahlian Pokok | : Pendidikan Bahasa Inggris |
| Sebagai Dosen | : PEMBIMBING |

KETIGA : Apabila dikemudian hari ternyata terdapat kekeliruan dalam penetapan ini akan diubah dan diperbaiki kembali sebagaimana mestinya.

Ditetapkan di Bukittinggi,
Pada tanggal : 28 Oktober 2024

DEKAN FAKULTAS TARBIYAH DAN ILMU KEGURUAN

**Dr. JUNAIDI, S. Ag, M. Pd**
NIP.197706162003121003

## Appendix 7 Letter of Research Permission

KEMENTERIAN AGAMA REPUBLIK INDONESIA
UNIVERSITAS ISLAM NEGERI SJECH M. DJAMIL DJAMBEK BUKITTINGGI
FAKULTAS TARBIYAH DAN ILMU KEGURUAN
Kampus II: Jl. Gurun Aur Kubang Putih - Kabupaten Agam - Sumatera Barat – Telepon/ Fax: (0752) 22875
Website: http://ftik.uinbukittinggi.ac.id | email: ftik@uinbukittinggi.ac.id

Nomor : B-0943/Un.26.1/PP.07/10/2024 Bukittinggi, 29 Oktober 2024
Lamp : 1 (Satu) rangkap
Hal : Mohon Izin Penelitian

Kepada YTH :
**Bapak/Ibu .....**

***Assalamu'alaikum Wr. Wb***

Dalam rangka mengumpulkan data untuk penyusunan skripsi bagi mahasiswa Fakultas Tarbiyah dan Ilmu Keguruan (FTIK) Universitas Islam Negeri Sjech M. Djamil Djambek Bukittinggi, maka bersama ini kami mohon kepada Bapak/Ibu untuk dapat memberi izin penelitian bagi mahasiswa dibawah ini:

| | | |
|---|---|---|
| **Nama** | : | **IMELDA RIZKI** |
| **NIM** | : | **2319013** |
| Semester | : | 11 |
| Program Studi | : | Pendidikan Bahasa Inggris |
| Fakultas | : | Tarbiyah dan Ilmu Keguruan |
| Judul Skripsi | : | ***An Investigation of English Education Department Students' Intelligence Area at Faculty of Tarbiyah and Teacher Training in Islamic State University of Sjech M. Djamil Djambek Bukittinggi.*** |
| Lokasi Penelitian | : | Universitas Islam Negeri Sjech M. Djamil Djambek Bukittinggi |
| Waktu | : | Oktober 2024 s.d Selesai |

Demikian permohonan ini kami sampaikan atas perhatian dan kerjasamanya diucapkan terimakasih.

DEKAN,

Dr. JUNAIDI, M.Pd
NIP. 197706162003121003

## Appendix 8 Frequencies table for each item of questioner

Appendix 6: **Frequencies table for each item of questioner**

1. **Frequency Table of Linguistics Intelligence**

**Books are very important for me.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 4 | 2.2 | 2.2 | 3.2 |
| | Decided | 37 | 19.9 | 19.9 | 23.1 |
| | Agrees | 51 | 27.4 | 27.4 | 50.5 |
| | Strongly Agrees | 92 | 49.5 | 49.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I can hear words in my head before I read, speak, or write them down.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Disagree | 8 | 4.3 | 4.3 | 4.3 |
| | Decided | 57 | 30.6 | 30.6 | 34.9 |
| | Agrees | 91 | 48.9 | 48.9 | 83.9 |
| | Strongly Agrees | 30 | 16.1 | 16.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I get more out of listening to the radio or a spoken-word recording than I do from television or films.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 12 | 6.5 | 6.5 | 7.0 |
| | Decided | 57 | 30.6 | 30.6 | 37.6 |
| | Agrees | 88 | 47.3 | 47.3 | 84.9 |
| | Strongly Agrees | 28 | 15.1 | 15.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I enjoy word games such as scrabble, anagrams, or passwords.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 2.7 | 2.7 | 2.7 |
| | Disagree | 9 | 4.8 | 4.8 | 7.5 |
| | Decided | 74 | 39.8 | 39.8 | 47.3 |
| | Agrees | 64 | 34.4 | 34.4 | 81.7 |
| | Strongly Agrees | 34 | 18.3 | 18.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I enjoy entertaining myself or others with tongue twisters, nonsense rhymes or puns.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Disagree | 13 | 7.0 | 7.0 | 7.0 |
| | Decided | 96 | 51.6 | 51.6 | 58.6 |
| | Agrees | 62 | 33.3 | 33.3 | 91.9 |
| | Strongly Agrees | 15 | 8.1 | 8.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**Other people sometimes have to stop and ask me to explain the meaning of the words I use in my writing and speaking**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 17 | 9.1 | 9.1 | 9.7 |
| | Decided | 84 | 45.2 | 45.2 | 54.8 |
| | Agrees | 60 | 32.3 | 32.3 | 87.1 |
| | Strongly Agrees | 24 | 12.9 | 12.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**English were easier for me in school than math and science.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Disagree | 10 | 5.4 | 5.4 | 5.4 |
| | Decided | 50 | 26.9 | 26.9 | 32.3 |
| | Agrees | 88 | 47.3 | 47.3 | 79.6 |
| | Strongly Agrees | 38 | 20.4 | 20.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**Learning to speak or read another language (e.g., English, Arabic or Korea) has been relatively easy for me.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 20 | 10.8 | 10.8 | 12.4 |
| | Decided | 70 | 37.6 | 37.6 | 50.0 |
| | Agrees | 70 | 37.6 | 37.6 | 87.6 |
| | Strongly Agrees | 23 | 12.4 | 12.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**My conversation includes frequent references to things that I've read or heard.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Decided | 72 | 38.7 | 38.7 | 40.9 |
| | Agrees | 83 | 44.6 | 44.6 | 85.5 |
| | Strongly Agrees | 27 | 14.5 | 14.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I've written something recently that I was particularly proud of or that earned me recognition from others.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 13 | 7.0 | 7.0 | 9.1 |
| | Decided | 84 | 45.2 | 45.2 | 54.3 |
| | Agrees | 69 | 37.1 | 37.1 | 91.4 |
| | Strongly Agrees | 16 | 8.6 | 8.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_LINGUISTIC**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 16 | 1 | .5 | .5 | .5 |
| | 24 | 1 | .5 | .5 | 1.1 |
| | 25 | 1 | .5 | .5 | 1.6 |

| | | | | | |
|---|---|---|---|---|---|
| | 27 | 1 | .5 | .5 | 2.2 |
| | 28 | 3 | 1.6 | 1.6 | 3.8 |
| | 29 | 4 | 2.2 | 2.2 | 5.9 |
| | 30 | 16 | 8.6 | 8.6 | 14.5 |
| | 31 | 3 | 1.6 | 1.6 | 16.1 |
| | 32 | 5 | 2.7 | 2.7 | 18.8 |
| | 33 | 11 | 5.9 | 5.9 | 24.7 |
| | 34 | 15 | 8.1 | 8.1 | 32.8 |
| | 35 | 7 | 3.8 | 3.8 | 36.6 |
| | 36 | 20 | 10.8 | 10.8 | 47.3 |
| | 37 | 17 | 9.1 | 9.1 | 56.5 |
| | 38 | 17 | 9.1 | 9.1 | 65.6 |
| | 39 | 18 | 9.7 | 9.7 | 75.3 |
| | 40 | 12 | 6.5 | 6.5 | 81.7 |
| | 41 | 10 | 5.4 | 5.4 | 87.1 |
| | 42 | 5 | 2.7 | 2.7 | 89.8 |
| | 43 | 1 | .5 | .5 | 90.3 |
| | 44 | 3 | 1.6 | 1.6 | 91.9 |
| | 45 | 1 | .5 | .5 | 92.5 |
| | 46 | 9 | 4.8 | 4.8 | 97.3 |
| | 47 | 1 | .5 | .5 | 97.8 |
| | 48 | 1 | .5 | .5 | 98.4 |
| | 49 | 1 | .5 | .5 | 98.9 |
| | 50 | 2 | 1.1 | 1.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**2. Frequency Table of Logical/Mathematical Intelligence**

**I can easily compute numbers in my head**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 2.7 | 2.7 | 2.7 |
| | Disagree | 10 | 5.4 | 5.4 | 8.1 |
| | Decided | 72 | 38.7 | 38.7 | 46.8 |
| | Agrees | 80 | 43.0 | 43.0 | 89.8 |
| | Strongly Agrees | 19 | 10.2 | 10.2 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**Math and or science were among my favorite subjects in school**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 16 | 8.6 | 8.6 | 8.6 |
| | Disagree | 30 | 16.1 | 16.1 | 24.7 |
| | Decided | 94 | 50.5 | 50.5 | 75.3 |
| | Agrees | 39 | 21.0 | 21.0 | 96.2 |
| | Strongly Agrees | 7 | 3.8 | 3.8 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I enjoy playing games or solving brainteasers that require logical thinking**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 9 | 4.8 | 4.8 | 6.5 |
| | Decided | 84 | 45.2 | 45.2 | 51.6 |
| | Agrees | 65 | 34.9 | 34.9 | 86.6 |
| | Strongly Agrees | 25 | 13.4 | 13.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I like to set up little "what if" experiments (for example, "what if I double the amount of water I give to my rosebush each week")**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 26 | 14.0 | 14.0 | 14.5 |
| | Decided | 104 | 55.9 | 55.9 | 70.4 |
| | Agrees | 44 | 23.7 | 23.7 | 94.1 |
| | Strongly Agrees | 11 | 5.9 | 5.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**My mind searches for patterns, regularities, or logical sequences in things**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 2.7 | 2.7 | 2.7 |
| | Disagree | 10 | 5.4 | 5.4 | 8.1 |
| | Decided | 95 | 51.1 | 51.1 | 59.1 |
| | Agrees | 64 | 34.4 | 34.4 | 93.5 |
| | Strongly Agrees | 12 | 6.5 | 6.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I'm interested In new developments in science**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 27 | 14.5 | 14.5 | 16.7 |
| | Decided | 76 | 40.9 | 40.9 | 57.5 |
| | Agrees | 61 | 32.8 | 32.8 | 90.3 |
| | Strongly Agrees | 18 | 9.7 | 9.7 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I believe that almost everything has a rational explanation**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 5 | 2.7 | 2.7 | 3.2 |
| | Decided | 58 | 31.2 | 31.2 | 34.4 |
| | Agrees | 91 | 48.9 | 48.9 | 83.3 |
| | Strongly Agrees | 31 | 16.7 | 16.7 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I sometimes think in clear, abstract, wordless, imageless concept**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 6 | 3.2 | 3.2 | 3.8 |
| | Decided | 69 | 37.1 | 37.1 | 40.9 |
| | Agrees | 87 | 46.8 | 46.8 | 87.6 |
| | Strongly Agrees | 23 | 12.4 | 12.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I like finding logical flaws in things that people say and do at home and work**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 14 | 7.5 | 7.5 | 8.6 |
| | Decided | 92 | 49.5 | 49.5 | 58.1 |
| | Agrees | 62 | 33.3 | 33.3 | 91.4 |

| | | | | | |
|---|---|---|---|---|---|
| | Strongly Agrees | 16 | 8.6 | 8.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I feel more comfortable when something has been measured, categorized, analyzed, or qualified in some way.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 10 | 5.4 | 5.4 | 6.5 |
| | Decided | 68 | 36.6 | 36.6 | 43.0 |
| | Agrees | 78 | 41.9 | 41.9 | 84.9 |
| | Strongly Agrees | 28 | 15.1 | 15.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_MATH**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 14 | 1 | .5 | .5 | .5 |
| | 17 | 2 | 1.1 | 1.1 | 1.6 |
| | 24 | 3 | 1.6 | 1.6 | 3.2 |
| | 25 | 2 | 1.1 | 1.1 | 4.3 |
| | 26 | 4 | 2.2 | 2.2 | 6.5 |
| | 27 | 2 | 1.1 | 1.1 | 7.5 |
| | 28 | 3 | 1.6 | 1.6 | 9.1 |
| | 29 | 3 | 1.6 | 1.6 | 10.8 |
| | 30 | 19 | 10.2 | 10.2 | 21.0 |
| | 31 | 8 | 4.3 | 4.3 | 25.3 |
| | 32 | 11 | 5.9 | 5.9 | 31.2 |
| | 33 | 18 | 9.7 | 9.7 | 40.9 |
| | 34 | 25 | 13.4 | 13.4 | 54.3 |
| | 35 | 16 | 8.6 | 8.6 | 62.9 |
| | 36 | 16 | 8.6 | 8.6 | 71.5 |
| | 37 | 9 | 4.8 | 4.8 | 76.3 |
| | 38 | 6 | 3.2 | 3.2 | 79.6 |
| | 39 | 6 | 3.2 | 3.2 | 82.8 |
| | 40 | 10 | 5.4 | 5.4 | 88.2 |
| | 41 | 4 | 2.2 | 2.2 | 90.3 |
| | 42 | 3 | 1.6 | 1.6 | 91.9 |
| | 43 | 4 | 2.2 | 2.2 | 94.1 |
| | 44 | 6 | 3.2 | 3.2 | 97.3 |
| | 45 | 1 | .5 | .5 | 97.8 |
| | 46 | 2 | 1.1 | 1.1 | 98.9 |
| | 48 | 1 | .5 | .5 | 99.5 |
| | 49 | 1 | .5 | .5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**3. Frequency Table of Spatial/Visual Intelligence**

**I often see clear visual images when I close my eyes**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 17 | 9.1 | 9.1 | 10.8 |
| | Decided | 86 | 46.2 | 46.2 | 57.0 |
| | Agrees | 52 | 28.0 | 28.0 | 84.9 |
| | Strongly Agrees | 28 | 15.1 | 15.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I'm sensitive to color, line, shape, space, and others.**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 8 | 4.3 | 4.3 | 4.3 |
| | Disagree | 19 | 10.2 | 10.2 | 14.5 |
| | Decided | 67 | 36.0 | 36.0 | 50.5 |
| | Agrees | 64 | 34.4 | 34.4 | 84.9 |
| | Strongly Agrees | 28 | 15.1 | 15.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I frequently use a camera or camcorder to record what I see around me**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 13 | 7.0 | 7.0 | 10.2 |
| | Decided | 58 | 31.2 | 31.2 | 41.4 |
| | Agrees | 59 | 31.7 | 31.7 | 73.1 |
| | Strongly Agrees | 50 | 26.9 | 26.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I enjoy doing jigsaw puzzles, mazes, and other visual puzzles.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 24 | 12.9 | 12.9 | 13.4 |
| | Decided | 77 | 41.4 | 41.4 | 54.8 |
| | Agrees | 56 | 30.1 | 30.1 | 84.9 |
| | Strongly Agrees | 28 | 15.1 | 15.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have vivid dreams at night**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 17 | 9.1 | 9.1 | 10.2 |
| | Decided | 65 | 34.9 | 34.9 | 45.2 |
| | Agrees | 79 | 42.5 | 42.5 | 87.6 |
| | Strongly Agrees | 23 | 12.4 | 12.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I can generally find my way around unfamiliar territory**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 28 | 15.1 | 15.1 | 17.2 |
| | Decided | 93 | 50.0 | 50.0 | 67.2 |
| | Agrees | 47 | 25.3 | 25.3 | 92.5 |
| | Strongly Agrees | 14 | 7.5 | 7.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I like to draw such as, an abstract image, doodle, or a view.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 8 | 4.3 | 4.3 | 4.3 |
| | Disagree | 29 | 15.6 | 15.6 | 19.9 |
| | Decided | 76 | 40.9 | 40.9 | 60.8 |
| | Agrees | 49 | 26.3 | 26.3 | 87.1 |
| | Strongly Agrees | 24 | 12.9 | 12.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**Geometry was easier for me than algebra in school**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 14 | 7.5 | 7.5 | 7.5 |
| | Disagree | 40 | 21.5 | 21.5 | 29.0 |
| | Decided | 82 | 44.1 | 44.1 | 73.1 |
| | Agrees | 33 | 17.7 | 17.7 | 90.9 |
| | Strongly Agrees | 17 | 9.1 | 9.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I can comfortably imagine how something might appear if it were looked down on from directly above in bird's-eye view**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Disagree | 19 | 10.2 | 10.2 | 10.2 |
| | Decided | 96 | 51.6 | 51.6 | 61.8 |
| | Agrees | 44 | 23.7 | 23.7 | 85.5 |
| | Strongly Agrees | 27 | 14.5 | 14.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I prefer looking at reading material that is heavily illustrated**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 7 | 3.8 | 3.8 | 4.8 |
| | Decided | 64 | 34.4 | 34.4 | 39.2 |
| | Agrees | 75 | 40.3 | 40.3 | 79.6 |
| | Strongly Agrees | 38 | 20.4 | 20.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_SPATIAL**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 15 | 1 | .5 | .5 | .5 |
| | 18 | 1 | .5 | .5 | 1.1 |
| | 19 | 1 | .5 | .5 | 1.6 |
| | 23 | 1 | .5 | .5 | 2.2 |
| | 24 | 2 | 1.1 | 1.1 | 3.2 |
| | 26 | 2 | 1.1 | 1.1 | 4.3 |
| | 27 | 4 | 2.2 | 2.2 | 6.5 |
| | 28 | 9 | 4.8 | 4.8 | 11.3 |
| | 29 | 9 | 4.8 | 4.8 | 16.1 |
| | 30 | 25 | 13.4 | 13.4 | 29.6 |
| | 31 | 9 | 4.8 | 4.8 | 34.4 |
| | 32 | 7 | 3.8 | 3.8 | 38.2 |
| | 33 | 18 | 9.7 | 9.7 | 47.8 |
| | 34 | 13 | 7.0 | 7.0 | 54.8 |
| | 35 | 11 | 5.9 | 5.9 | 60.8 |
| | 36 | 13 | 7.0 | 7.0 | 67.7 |
| | 37 | 11 | 5.9 | 5.9 | 73.7 |
| | 38 | 9 | 4.8 | 4.8 | 78.5 |
| | 39 | 5 | 2.7 | 2.7 | 81.2 |
| | 40 | 8 | 4.3 | 4.3 | 85.5 |
| | 41 | 5 | 2.7 | 2.7 | 88.2 |
| | 42 | 5 | 2.7 | 2.7 | 90.9 |
| | 43 | 3 | 1.6 | 1.6 | 92.5 |
| | 44 | 6 | 3.2 | 3.2 | 95.7 |
| | 45 | 3 | 1.6 | 1.6 | 97.3 |
| | 46 | 1 | .5 | .5 | 97.8 |
| | 47 | 2 | 1.1 | 1.1 | 98.9 |

| | | | | | |
|---|---|---|---|---|---|
| | 48 | 1 | .5 | .5 | 99.5 |
| | 50 | 1 | .5 | .5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**4. Frequency Table of Musical Intelligence**

**I have a pleasant singing voice**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 18 | 9.7 | 9.7 | 11.8 |
| | Decided | 77 | 41.4 | 41.4 | 53.2 |
| | Agrees | 66 | 35.5 | 35.5 | 88.7 |
| | Strongly Agrees | 21 | 11.3 | 11.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I can tell when a musical not is off-key**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 29 | 15.6 | 15.6 | 17.2 |
| | Decided | 76 | 40.9 | 40.9 | 58.1 |
| | Agrees | 56 | 30.1 | 30.1 | 88.2 |
| | Strongly Agrees | 22 | 11.8 | 11.8 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I frequently listen to music on the radio, play music on my phone, through YouTube, Spotify, etc.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 26 | 14.0 | 14.0 | 17.2 |
| | Decided | 81 | 43.5 | 43.5 | 60.8 |
| | Agrees | 52 | 28.0 | 28.0 | 88.7 |
| | Strongly Agrees | 21 | 11.3 | 11.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I play a musical instrument**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 11 | 5.9 | 5.9 | 7.5 |
| | Decided | 61 | 32.8 | 32.8 | 40.3 |
| | Agrees | 80 | 43.0 | 43.0 | 83.3 |
| | Strongly Agrees | 31 | 16.7 | 16.7 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**My life would be poorer if there were no music in it**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 9 | 4.8 | 4.8 | 4.8 |
| | Disagree | 21 | 11.3 | 11.3 | 16.1 |
| | Decided | 59 | 31.7 | 31.7 | 47.8 |
| | Agrees | 61 | 32.8 | 32.8 | 80.6 |
| | Strongly Agrees | 36 | 19.4 | 19.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I sometimes catch myself while doing an activity sing a song or other tune that is ringing in my head.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 11 | 5.9 | 5.9 | 9.1 |
| | Decided | 73 | 39.2 | 39.2 | 48.4 |
| | Agrees | 79 | 42.5 | 42.5 | 90.9 |
| | Strongly Agrees | 17 | 9.1 | 9.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I can easily keep time to a piece of music with a simple percussion instrument**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 12 | 6.5 | 6.5 | 7.0 |
| | Decided | 79 | 42.5 | 42.5 | 49.5 |
| | Agrees | 71 | 38.2 | 38.2 | 87.6 |
| | Strongly Agrees | 23 | 12.4 | 12.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I know the tunes to many different songs or musical pieces**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 17 | 9.1 | 9.1 | 12.4 |
| | Decided | 89 | 47.8 | 47.8 | 60.2 |
| | Agrees | 58 | 31.2 | 31.2 | 91.4 |
| | Strongly Agrees | 16 | 8.6 | 8.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 11 | 5.9 | 5.9 | 7.0 |
| | Decided | 87 | 46.8 | 46.8 | 53.8 |
| | Agrees | 68 | 36.6 | 36.6 | 90.3 |
| | Strongly Agrees | 18 | 9.7 | 9.7 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I often make tapping sounds or sing little melodies while working, studying, or learning something new.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 6 | 3.2 | 3.2 | 4.3 |
| | Decided | 68 | 36.6 | 36.6 | 40.9 |
| | Agrees | 77 | 41.4 | 41.4 | 82.3 |
| | Strongly Agrees | 33 | 17.7 | 17.7 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_MUSIC**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 13 | 1 | .5 | .5 | .5 |
| | 17 | 1 | .5 | .5 | 1.1 |
| | 20 | 1 | .5 | .5 | 1.6 |
| | 22 | 1 | .5 | .5 | 2.2 |
| | 24 | 1 | .5 | .5 | 2.7 |

| | | | | | |
|---|---|---|---|---|---|
| | 26 | 2 | 1.1 | 1.1 | 3.8 |
| | 27 | 3 | 1.6 | 1.6 | 5.4 |
| | 28 | 4 | 2.2 | 2.2 | 7.5 |
| | 29 | 1 | .5 | .5 | 8.1 |
| | 30 | 20 | 10.8 | 10.8 | 18.8 |
| | 31 | 12 | 6.5 | 6.5 | 25.3 |
| | 32 | 15 | 8.1 | 8.1 | 33.3 |
| | 33 | 14 | 7.5 | 7.5 | 40.9 |
| | 34 | 18 | 9.7 | 9.7 | 50.5 |
| | 35 | 17 | 9.1 | 9.1 | 59.7 |
| | 36 | 14 | 7.5 | 7.5 | 67.2 |
| | 37 | 10 | 5.4 | 5.4 | 72.6 |
| | 38 | 7 | 3.8 | 3.8 | 76.3 |
| | 39 | 6 | 3.2 | 3.2 | 79.6 |
| | 40 | 11 | 5.9 | 5.9 | 85.5 |
| | 41 | 4 | 2.2 | 2.2 | 87.6 |
| | 42 | 7 | 3.8 | 3.8 | 91.4 |
| | 43 | 6 | 3.2 | 3.2 | 94.6 |
| | 44 | 3 | 1.6 | 1.6 | 96.2 |
| | 45 | 3 | 1.6 | 1.6 | 97.8 |
| | 46 | 2 | 1.1 | 1.1 | 98.9 |
| | 48 | 1 | .5 | .5 | 99.5 |
| | 50 | 1 | .5 | .5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**5. Frequency Table of Bodily/Kinesthetic Intelligence**

**I engage in at least one sport or physical activity on a regular basis**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 10 | 5.4 | 5.4 | 5.4 |
| | Disagree | 18 | 9.7 | 9.7 | 15.1 |
| | Decided | 75 | 40.3 | 40.3 | 55.4 |
| | Agrees | 67 | 36.0 | 36.0 | 91.4 |
| | Strongly Agrees | 16 | 8.6 | 8.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I find it difficult to sit still for long periods of time**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 7 | 3.8 | 3.8 | 3.8 |
| | Disagree | 44 | 23.7 | 23.7 | 27.4 |
| | Decided | 69 | 37.1 | 37.1 | 64.5 |
| | Agrees | 51 | 27.4 | 27.4 | 91.9 |
| | Strongly Agrees | 15 | 8.1 | 8.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I like to work with my hand at concrete activities such as sewing, weaving, carving, carpentry, or model building**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 8 | 4.3 | 4.3 | 5.4 |
| | Decided | 48 | 25.8 | 25.8 | 31.2 |
| | Agrees | 55 | 29.6 | 29.6 | 60.8 |
| | Strongly Agrees | 73 | 39.2 | 39.2 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**My best ideas often come to me when I'm out for a long walk or a jog or when I'm engaging in some other kind of physical activity**

| | | Frequenc | Percent | Valid | Cumulative |
|---|---|---|---|---|---|

| | | y | | Percent | Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 15 | 8.1 | 8.1 | 8.1 |
| | Disagree | 33 | 17.7 | 17.7 | 25.8 |
| | Decided | 77 | 41.4 | 41.4 | 67.2 |
| | Agrees | 41 | 22.0 | 22.0 | 89.2 |
| | Strongly Agrees | 20 | 10.8 | 10.8 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I often like spend my free time outdoors**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 14 | 7.5 | 7.5 | 7.5 |
| | Disagree | 45 | 24.2 | 24.2 | 31.7 |
| | Decided | 62 | 33.3 | 33.3 | 65.1 |
| | Agrees | 41 | 22.0 | 22.0 | 87.1 |
| | Strongly Agrees | 24 | 12.9 | 12.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I frequently use hand my gestures or other forms of body language when conversing with someone**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 6 | 3.2 | 3.2 | 4.3 |
| | Decided | 69 | 37.1 | 37.1 | 41.4 |
| | Agrees | 69 | 37.1 | 37.1 | 78.5 |
| | Strongly Agrees | 40 | 21.5 | 21.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I need to touch things in order to learn more about them**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 2.7 | 2.7 | 2.7 |
| | Disagree | 21 | 11.3 | 11.3 | 14.0 |
| | Decided | 92 | 49.5 | 49.5 | 63.4 |
| | Agrees | 47 | 25.3 | 25.3 | 88.7 |
| | Strongly Agrees | 21 | 11.3 | 11.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I enjoy daredevil amusement rides or similar thrilling physical experiences, such as roller coaster, etc.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 7 | 3.8 | 3.8 | 3.8 |
| | Disagree | 30 | 16.1 | 16.1 | 19.9 |
| | Decided | 87 | 46.8 | 46.8 | 66.7 |
| | Agrees | 40 | 21.5 | 21.5 | 88.2 |
| | Strongly Agrees | 22 | 11.8 | 11.8 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I would describe myself as well coordinated**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 23 | 12.4 | 12.4 | 14.0 |
| | Decided | 75 | 40.3 | 40.3 | 54.3 |
| | Agrees | 56 | 30.1 | 30.1 | 84.4 |
| | Strongly Agrees | 29 | 15.6 | 15.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I need to practice a new skill rather than simply reading about it or seeing a video that describe it.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 16 | 8.6 | 8.6 | 11.8 |
| | Decided | 74 | 39.8 | 39.8 | 51.6 |
| | Agrees | 64 | 34.4 | 34.4 | 86.0 |
| | Strongly Agrees | 26 | 14.0 | 14.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_BODILY**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 13 | 1 | .5 | .5 | .5 |
| | 15 | 1 | .5 | .5 | 1.1 |
| | 16 | 1 | .5 | .5 | 1.6 |
| | 19 | 2 | 1.1 | 1.1 | 2.7 |
| | 23 | 2 | 1.1 | 1.1 | 3.8 |
| | 24 | 3 | 1.6 | 1.6 | 5.4 |
| | 25 | 2 | 1.1 | 1.1 | 6.5 |
| | 26 | 3 | 1.6 | 1.6 | 8.1 |
| | 27 | 9 | 4.8 | 4.8 | 12.9 |
| | 28 | 4 | 2.2 | 2.2 | 15.1 |
| | 29 | 6 | 3.2 | 3.2 | 18.3 |
| | 30 | 26 | 14.0 | 14.0 | 32.3 |
| | 31 | 15 | 8.1 | 8.1 | 40.3 |
| | 32 | 10 | 5.4 | 5.4 | 45.7 |
| | 33 | 11 | 5.9 | 5.9 | 51.6 |
| | 34 | 14 | 7.5 | 7.5 | 59.1 |
| | 35 | 15 | 8.1 | 8.1 | 67.2 |
| | 36 | 6 | 3.2 | 3.2 | 70.4 |
| | 37 | 6 | 3.2 | 3.2 | 73.7 |
| | 38 | 6 | 3.2 | 3.2 | 76.9 |
| | 39 | 3 | 1.6 | 1.6 | 78.5 |
| | 40 | 10 | 5.4 | 5.4 | 83.9 |
| | 41 | 3 | 1.6 | 1.6 | 85.5 |
| | 42 | 5 | 2.7 | 2.7 | 88.2 |
| | 43 | 6 | 3.2 | 3.2 | 91.4 |
| | 44 | 5 | 2.7 | 2.7 | 94.1 |
| | 45 | 5 | 2.7 | 2.7 | 96.8 |
| | 47 | 2 | 1.1 | 1.1 | 97.8 |
| | 49 | 2 | 1.1 | 1.1 | 98.9 |
| | 50 | 2 | 1.1 | 1.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**6. Frequency Table of Interpersonal Intelligence**

**I'm the sort of person that people come to for advice and counsel at work or in my neighborhood**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 24 | 12.9 | 12.9 | 14.5 |
| | Decided | 84 | 45.2 | 45.2 | 59.7 |
| | Agrees | 61 | 32.8 | 32.8 | 92.5 |
| | Strongly Agrees | 14 | 7.5 | 7.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I prefer team sports like badminton, volleyball, or softball over solo sports like swimming and jogging**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 19 | 10.2 | 10.2 | 13.4 |
| | Decided | 68 | 36.6 | 36.6 | 50.0 |

| | | | | | |
|---|---|---|---|---|---|
| | Agrees | 64 | 34.4 | 34.4 | 84.4 |
| | Strongly Agrees | 29 | 15.6 | 15.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**When I have a problem, I'm more likely to seek out another person for help than attempt to work it out on my own**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 12 | 6.5 | 6.5 | 6.5 |
| | Disagree | 17 | 9.1 | 9.1 | 15.6 |
| | Decided | 85 | 45.7 | 45.7 | 61.3 |
| | Agrees | 62 | 33.3 | 33.3 | 94.6 |
| | Strongly Agrees | 10 | 5.4 | 5.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have at least three close friends**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 15 | 8.1 | 8.1 | 11.3 |
| | Decided | 48 | 25.8 | 25.8 | 37.1 |
| | Agrees | 61 | 32.8 | 32.8 | 69.9 |
| | Strongly Agrees | 56 | 30.1 | 30.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I favor social pastimes such as monopoly or Ludo games over individual recreations such as video games and solitaire.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 2.7 | 2.7 | 2.7 |
| | Disagree | 12 | 6.5 | 6.5 | 9.1 |
| | Decided | 76 | 40.9 | 40.9 | 50.0 |
| | Agrees | 66 | 35.5 | 35.5 | 85.5 |
| | Strongly Agrees | 27 | 14.5 | 14.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I enjoy challenge of teaching another person, or groups of people, what I know how to do.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 14 | 7.5 | 7.5 | 8.6 |
| | Decided | 62 | 33.3 | 33.3 | 41.9 |
| | Agrees | 87 | 46.8 | 46.8 | 88.7 |
| | Strongly Agrees | 21 | 11.3 | 11.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I consider myself a leader (or others have called me that)**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 7 | 3.8 | 3.8 | 3.8 |
| | Disagree | 19 | 10.2 | 10.2 | 14.0 |
| | Decided | 84 | 45.2 | 45.2 | 59.1 |
| | Agrees | 56 | 30.1 | 30.1 | 89.2 |
| | Strongly Agrees | 20 | 10.8 | 10.8 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I feel comfortable in the midst of a crowd**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 12 | 6.5 | 6.5 | 6.5 |
| | Disagree | 28 | 15.1 | 15.1 | 21.5 |
| | Decided | 70 | 37.6 | 37.6 | 59.1 |
| | Agrees | 56 | 30.1 | 30.1 | 89.2 |
| | Strongly Agrees | 20 | 10.8 | 10.8 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I like to get involved in social activities connected with my work, crunch, or community**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 8 | 4.3 | 4.3 | 4.3 |
| | Disagree | 10 | 5.4 | 5.4 | 9.7 |
| | Decided | 95 | 51.1 | 51.1 | 60.8 |
| | Agrees | 60 | 32.3 | 32.3 | 93.0 |
| | Strongly Agrees | 13 | 7.0 | 7.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I would rather spend my evenings at a lively party than stay at home alone**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 16 | 8.6 | 8.6 | 8.6 |
| | Disagree | 33 | 17.7 | 17.7 | 26.3 |
| | Decided | 73 | 39.2 | 39.2 | 65.6 |
| | Agrees | 51 | 27.4 | 27.4 | 93.0 |
| | Strongly Agrees | 13 | 7.0 | 7.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_INTERPERSONAL**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 14 | 1 | .5 | .5 | .5 |
| | 20 | 1 | .5 | .5 | 1.1 |
| | 21 | 1 | .5 | .5 | 1.6 |
| | 22 | 4 | 2.2 | 2.2 | 3.8 |
| | 25 | 4 | 2.2 | 2.2 | 5.9 |
| | 26 | 2 | 1.1 | 1.1 | 7.0 |
| | 27 | 5 | 2.7 | 2.7 | 9.7 |
| | 28 | 7 | 3.8 | 3.8 | 13.4 |
| | 29 | 7 | 3.8 | 3.8 | 17.2 |
| | 30 | 20 | 10.8 | 10.8 | 28.0 |
| | 31 | 15 | 8.1 | 8.1 | 36.0 |
| | 32 | 8 | 4.3 | 4.3 | 40.3 |
| | 33 | 16 | 8.6 | 8.6 | 48.9 |
| | 34 | 17 | 9.1 | 9.1 | 58.1 |
| | 35 | 12 | 6.5 | 6.5 | 64.5 |
| | 36 | 13 | 7.0 | 7.0 | 71.5 |
| | 37 | 9 | 4.8 | 4.8 | 76.3 |
| | 38 | 6 | 3.2 | 3.2 | 79.6 |
| | 39 | 9 | 4.8 | 4.8 | 84.4 |
| | 40 | 6 | 3.2 | 3.2 | 87.6 |
| | 41 | 4 | 2.2 | 2.2 | 89.8 |
| | 42 | 4 | 2.2 | 2.2 | 91.9 |
| | 43 | 4 | 2.2 | 2.2 | 94.1 |
| | 44 | 3 | 1.6 | 1.6 | 95.7 |
| | 45 | 4 | 2.2 | 2.2 | 97.8 |
| | 46 | 1 | .5 | .5 | 98.4 |
| | 48 | 1 | .5 | .5 | 98.9 |
| | 49 | 1 | .5 | .5 | 99.5 |

| | | | | | |
|---|---|---|---|---|---|
| | 50 | 1 | .5 | .5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**7. Frequency Table of Intrapersonal Intelligence**

**I regularly spend time alone mediating, reflecting, or thinking about important life questions**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 20 | 10.8 | 10.8 | 11.8 |
| | Decided | 85 | 45.7 | 45.7 | 57.5 |
| | Agrees | 50 | 26.9 | 26.9 | 84.4 |
| | Strongly Agrees | 29 | 15.6 | 15.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have attended counseling sessions or personal growth seminars to learn more about myself**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 14 | 7.5 | 7.5 | 7.5 |
| | Disagree | 42 | 22.6 | 22.6 | 30.1 |
| | Decided | 81 | 43.5 | 43.5 | 73.7 |
| | Agrees | 35 | 18.8 | 18.8 | 92.5 |
| | Strongly Agrees | 14 | 7.5 | 7.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I am able to respond to obstacles with resilience**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 34 | 18.3 | 18.3 | 19.9 |
| | Decided | 92 | 49.5 | 49.5 | 69.4 |
| | Agrees | 42 | 22.6 | 22.6 | 91.9 |
| | Strongly Agrees | 15 | 8.1 | 8.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have a special hobby or interest that I keep pretty much to myself**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 15 | 8.1 | 8.1 | 9.1 |
| | Decided | 59 | 31.7 | 31.7 | 40.9 |
| | Agrees | 67 | 36.0 | 36.0 | 76.9 |
| | Strongly Agrees | 43 | 23.1 | 23.1 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have some important goals for my life that I think about on a regular basis**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 8 | 4.3 | 4.3 | 5.4 |
| | Decided | 62 | 33.3 | 33.3 | 38.7 |
| | Agrees | 75 | 40.3 | 40.3 | 79.0 |
| | Strongly Agrees | 39 | 21.0 | 21.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have a realistic view of my strengths and weaknesses (borne out by feedback from other sources)**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 16 | 8.6 | 8.6 | 9.1 |
| | Decided | 81 | 43.5 | 43.5 | 52.7 |
| | Agrees | 67 | 36.0 | 36.0 | 88.7 |
| | Strongly Agrees | 21 | 11.3 | 11.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I would prefer to spend weekends alone at home rather than tourist object with lots of people around**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 3 | 1.6 | 1.6 | 1.6 |
| | Disagree | 20 | 10.8 | 10.8 | 12.4 |
| | Decided | 72 | 38.7 | 38.7 | 51.1 |
| | Agrees | 57 | 30.6 | 30.6 | 81.7 |
| | Strongly Agrees | 34 | 18.3 | 18.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I consider myself to be strong willed or independent minded**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 8 | 4.3 | 4.3 | 5.4 |
| | Decided | 57 | 30.6 | 30.6 | 36.0 |
| | Agrees | 81 | 43.5 | 43.5 | 79.6 |
| | Strongly Agrees | 38 | 20.4 | 20.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I keep a personal diary or journal to record the events of my inner life**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 10 | 5.4 | 5.4 | 5.4 |
| | Disagree | 37 | 19.9 | 19.9 | 25.3 |
| | Decided | 81 | 43.5 | 43.5 | 68.8 |
| | Agrees | 42 | 22.6 | 22.6 | 91.4 |
| | Strongly Agrees | 16 | 8.6 | 8.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I am self-employed or have at least thought seriously about starting my own business.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 2 | 1.1 | 1.1 | 1.1 |
| | Disagree | 10 | 5.4 | 5.4 | 6.5 |
| | Decided | 94 | 50.5 | 50.5 | 57.0 |
| | Agrees | 53 | 28.5 | 28.5 | 85.5 |
| | Strongly Agrees | 27 | 14.5 | 14.5 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_INTRAPERSONAL**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 12 | 1 | .5 | .5 | .5 |
| | 19 | 1 | .5 | .5 | 1.1 |
| | 23 | 1 | .5 | .5 | 1.6 |
| | 24 | 1 | .5 | .5 | 2.2 |

| | | | | | |
|---|---|---|---|---|---|
| | 25 | 3 | 1.6 | 1.6 | 3.8 |
| | 26 | 1 | .5 | .5 | 4.3 |
| | 27 | 6 | 3.2 | 3.2 | 7.5 |
| | 28 | 4 | 2.2 | 2.2 | 9.7 |
| | 29 | 5 | 2.7 | 2.7 | 12.4 |
| | 30 | 24 | 12.9 | 12.9 | 25.3 |
| | 31 | 13 | 7.0 | 7.0 | 32.3 |
| | 32 | 19 | 10.2 | 10.2 | 42.5 |
| | 33 | 16 | 8.6 | 8.6 | 51.1 |
| | 34 | 14 | 7.5 | 7.5 | 58.6 |
| | 35 | 9 | 4.8 | 4.8 | 63.4 |
| | 36 | 9 | 4.8 | 4.8 | 68.3 |
| | 37 | 8 | 4.3 | 4.3 | 72.6 |
| | 38 | 7 | 3.8 | 3.8 | 76.3 |
| | 39 | 9 | 4.8 | 4.8 | 81.2 |
| | 40 | 7 | 3.8 | 3.8 | 84.9 |
| | 41 | 5 | 2.7 | 2.7 | 87.6 |
| | 42 | 7 | 3.8 | 3.8 | 91.4 |
| | 43 | 4 | 2.2 | 2.2 | 93.5 |
| | 44 | 1 | .5 | .5 | 94.1 |
| | 46 | 3 | 1.6 | 1.6 | 95.7 |
| | 47 | 1 | .5 | .5 | 96.2 |
| | 48 | 2 | 1.1 | 1.1 | 97.3 |
| | 49 | 2 | 1.1 | 1.1 | 98.4 |
| | 50 | 3 | 1.6 | 1.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**8. Frequency Table of Naturalistic Intelligence**

**I love spending time in nature (hiking, gardening, farming or just walking, etc.).**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 6 | 3.2 | 3.2 | 3.2 |
| | Disagree | 15 | 8.1 | 8.1 | 11.3 |
| | Decided | 53 | 28.5 | 28.5 | 39.8 |
| | Agrees | 75 | 40.3 | 40.3 | 80.1 |
| | Strongly Agrees | 37 | 19.9 | 19.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I belong to some kind of volunteer organization related to nature and I'm concerned about helping to save nature from further destruction**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 7 | 3.8 | 3.8 | 3.8 |
| | Disagree | 28 | 15.1 | 15.1 | 18.8 |
| | Decided | 83 | 44.6 | 44.6 | 63.4 |
| | Agrees | 39 | 21.0 | 21.0 | 84.4 |
| | Strongly Agrees | 29 | 15.6 | 15.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I thrive on having animals around the house**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 7 | 3.8 | 3.8 | 3.8 |
| | Disagree | 16 | 8.6 | 8.6 | 12.4 |
| | Decided | 72 | 38.7 | 38.7 | 51.1 |
| | Agrees | 68 | 36.6 | 36.6 | 87.6 |
| | Strongly Agrees | 23 | 12.4 | 12.4 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have a hobby that involves nature in some way (e.g., bird watching, observing nature around the house)**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 7 | 3.8 | 3.8 | 3.8 |
| | Disagree | 18 | 9.7 | 9.7 | 13.4 |
| | Decided | 84 | 45.2 | 45.2 | 58.6 |
| | Agrees | 51 | 27.4 | 27.4 | 86.0 |
| | Strongly Agrees | 26 | 14.0 | 14.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I've enrolled community centers or colleges related to nature (Mapala, pramuka and etc.).**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 21 | 11.3 | 11.3 | 11.3 |
| | Disagree | 40 | 21.5 | 21.5 | 32.8 |
| | Decided | 68 | 36.6 | 36.6 | 69.4 |
| | Agrees | 36 | 19.4 | 19.4 | 88.7 |
| | Strongly Agrees | 21 | 11.3 | 11.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I'm quite good at telling the difference between kinds of trees, dog, birds, or other types of flora or fauna**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 30 | 16.1 | 16.1 | 18.3 |
| | Decided | 77 | 41.4 | 41.4 | 59.7 |
| | Agrees | 51 | 27.4 | 27.4 | 87.1 |
| | Strongly Agrees | 24 | 12.9 | 12.9 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I like to reads and magazines or watch television shows or movies that feature nature in some way**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 19 | 10.2 | 10.2 | 12.4 |
| | Decided | 66 | 35.5 | 35.5 | 47.8 |
| | Agrees | 71 | 38.2 | 38.2 | 86.0 |
| | Strongly Agrees | 26 | 14.0 | 14.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**When on vacation, I prefer to go off to a natural setting (park, campground, hiking trail) rather than to a hotel/resort or city/cultural location**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 1 | .5 | .5 | .5 |
| | Disagree | 13 | 7.0 | 7.0 | 7.5 |
| | Decided | 66 | 35.5 | 35.5 | 43.0 |
| | Agrees | 57 | 30.6 | 30.6 | 73.7 |
| | Strongly Agrees | 49 | 26.3 | 26.3 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I love to visit zoos, aquariums, or other places where the natural world is studied.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 5 | 2.7 | 2.7 | 2.7 |

| | | | | | |
|---|---|---|---|---|---|
| | Disagree | 13 | 7.0 | 7.0 | 9.7 |
| | Decided | 47 | 25.3 | 25.3 | 34.9 |
| | Agrees | 54 | 29.0 | 29.0 | 64.0 |
| | Strongly Agrees | 67 | 36.0 | 36.0 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**I have a garden and enjoy working regularly in it.**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Strongly Disagree | 4 | 2.2 | 2.2 | 2.2 |
| | Disagree | 23 | 12.4 | 12.4 | 14.5 |
| | Decided | 55 | 29.6 | 29.6 | 44.1 |
| | Agrees | 75 | 40.3 | 40.3 | 84.4 |
| | Strongly Agrees | 29 | 15.6 | 15.6 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**TOTAL_NATURALIST**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 10 | 1 | .5 | .5 | .5 |
| | 14 | 1 | .5 | .5 | 1.1 |
| | 15 | 1 | .5 | .5 | 1.6 |
| | 16 | 1 | .5 | .5 | 2.2 |
| | 21 | 1 | .5 | .5 | 2.7 |
| | 22 | 2 | 1.1 | 1.1 | 3.8 |
| | 23 | 3 | 1.6 | 1.6 | 5.4 |
| | 24 | 3 | 1.6 | 1.6 | 7.0 |
| | 25 | 1 | .5 | .5 | 7.5 |
| | 26 | 1 | .5 | .5 | 8.1 |
| | 27 | 1 | .5 | .5 | 8.6 |
| | 28 | 8 | 4.3 | 4.3 | 12.9 |
| | 29 | 2 | 1.1 | 1.1 | 14.0 |
| | 30 | 17 | 9.1 | 9.1 | 23.1 |
| | 31 | 9 | 4.8 | 4.8 | 28.0 |
| | 32 | 16 | 8.6 | 8.6 | 36.6 |
| | 33 | 18 | 9.7 | 9.7 | 46.2 |
| | 34 | 7 | 3.8 | 3.8 | 50.0 |
| | 35 | 7 | 3.8 | 3.8 | 53.8 |
| | 36 | 11 | 5.9 | 5.9 | 59.7 |
| | 37 | 12 | 6.5 | 6.5 | 66.1 |
| | 38 | 14 | 7.5 | 7.5 | 73.7 |
| | 39 | 10 | 5.4 | 5.4 | 79.0 |
| | 40 | 6 | 3.2 | 3.2 | 82.3 |
| | 41 | 4 | 2.2 | 2.2 | 84.4 |
| | 42 | 7 | 3.8 | 3.8 | 88.2 |
| | 43 | 5 | 2.7 | 2.7 | 90.9 |
| | 44 | 4 | 2.2 | 2.2 | 93.0 |
| | 45 | 3 | 1.6 | 1.6 | 94.6 |
| | 46 | 1 | .5 | .5 | 95.2 |
| | 47 | 2 | 1.1 | 1.1 | 96.2 |
| | 48 | 1 | .5 | .5 | 96.8 |
| | 49 | 1 | .5 | .5 | 97.3 |
| | 50 | 5 | 2.7 | 2.7 | 100.0 |
| | Total | 186 | 100.0 | 100.0 | |

**Appendix 9 Total percentage per each Intelligences**

| No Respondent | Linguistics | Mathematical | Spatial | Bodily/ Kinesthetic | Musical | Inter personal | Intra personal | Naturalistic |
|---|---|---|---|---|---|---|---|---|
| 1 | 32 | 40 | 33 | 37 | 19 | 32 | 30 | 31 |
| 2 | 36 | 35 | 34 | 35 | 33 | 34 | 35 | 37 |
| 3 | 40 | 38 | 30 | 30 | 36 | 32 | 32 | 39 |
| 4 | 34 | 17 | 36 | 37 | 44 | 28 | 42 | 36 |
| 5 | 34 | 24 | 30 | 35 | 28 | 39 | 35 | 32 |
| 6 | 35 | 41 | 35 | 39 | 34 | 35 | 37 | 32 |
| 7 | 38 | 40 | 35 | 39 | 32 | 36 | 38 | 32 |
| 8 | 36 | 35 | 31 | 34 | 35 | 28 | 32 | 34 |
| 9 | 33 | 38 | 38 | 38 | 28 | 34 | 30 | 33 |
| 10 | 34 | 17 | 32 | 31 | 24 | 30 | 27 | 30 |
| 11 | 39 | 34 | 38 | 37 | 37 | 34 | 36 | 36 |
| 12 | 40 | 36 | 35 | 37 | 32 | 36 | 31 | 39 |
| 13 | 32 | 35 | 33 | 27 | 27 | 32 | 33 | 33 |
| 14 | 30 | 31 | 28 | 33 | 35 | 31 | 33 | 30 |
| 15 | 34 | 35 | 36 | 34 | 34 | 27 | 39 | 30 |
| 16 | 39 | 30 | 40 | 30 | 40 | 35 | 35 | 23 |
| 17 | 38 | 26 | 40 | 46 | 30 | 22 | 39 | 14 |
| 18 | 37 | 34 | 33 | 35 | 37 | 29 | 34 | 35 |
| 19 | 36 | 39 | 34 | 40 | 38 | 37 | 39 | 37 |
| 20 | 16 | 14 | 15 | 13 | 13 | 14 | 12 | 15 |
| 21 | 36 | 34 | 26 | 28 | 27 | 33 | 28 | 26 |
| 22 | 36 | 34 | 32 | 32 | 33 | 34 | 33 | 33 |
| 23 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 31 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 24 | 38 | 36 | 36 | 33 | 30 | 36 | 32 | 37 |
| 25 | 42 | 35 | 44 | 36 | 49 | 38 | 49 | 34 |
| 26 | 39 | 30 | 36 | 39 | 34 | 36 | 39 | 28 |
| 27 | 39 | 36 | 38 | 39 | 43 | 42 | 48 | 50 |
| 28 | 25 | 25 | 24 | 20 | 26 | 21 | 29 | 23 |
| 29 | 36 | 40 | 39 | 34 | 27 | 38 | 27 | 31 |
| 30 | 34 | 36 | 37 | 31 | 34 | 32 | 38 | 33 |
| 31 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 28 |
| 32 | 30 | 31 | 34 | 31 | 31 | 33 | 32 | 35 |
| 33 | 29 | 26 | 31 | 32 | 29 | 28 | 30 | 25 |
| 34 | 36 | 33 | 33 | 34 | 31 | 34 | 33 | 32 |
| 35 | 34 | 27 | 31 | 31 | 23 | 29 | 30 | 29 |
| 36 | 32 | 34 | 33 | 34 | 35 | 33 | 31 | 32 |
| 37 | 38 | 37 | 33 | 36 | 29 | 37 | 33 | 38 |
| 38 | 35 | 33 | 29 | 32 | 35 | 25 | 30 | 23 |
| 39 | 41 | 33 | 38 | 41 | 43 | 41 | 38 | 40 |
| 40 | 40 | 36 | 37 | 33 | 30 | 22 | 36 | 34 |
| 41 | 36 | 33 | 47 | 22 | 42 | 20 | 36 | 43 |
| 42 | 46 | 34 | 34 | 43 | 38 | 37 | 48 | 48 |
| 43 | 37 | 33 | 35 | 36 | 33 | 37 | 41 | 40 |
| 44 | 34 | 31 | 29 | 30 | 32 | 30 | 30 | 31 |
| 45 | 37 | 26 | 35 | 37 | 36 | 39 | 37 | 40 |
| 46 | 39 | 33 | 30 | 37 | 35 | 34 | 31 | 28 |
| 47 | 39 | 33 | 33 | 35 | 36 | 33 | 31 | 30 |
| 48 | 37 | 36 | 42 | 38 | 40 | 33 | 35 | 38 |
| 49 | 37 | 33 | 32 | 32 | 31 | 31 | 33 | 33 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 50 | 40 | 34 | 38 | 32 | 34 | 36 | 33 | 36 |
| 51 | 34 | 34 | 33 | 27 | 30 | 31 | 33 | 36 |
| 52 | 41 | 35 | 32 | 36 | 35 | 37 | 34 | 33 |
| 53 | 40 | 36 | 36 | 34 | 33 | 37 | 37 | 38 |
| 54 | 46 | 44 | 41 | 42 | 38 | 43 | 43 | 37 |
| 55 | 34 | 31 | 32 | 34 | 44 | 30 | 42 | 37 |
| 56 | 39 | 28 | 30 | 34 | 32 | 31 | 35 | 32 |
| 57 | 29 | 26 | 28 | 26 | 27 | 29 | 30 | 32 |
| 58 | 30 | 34 | 29 | 31 | 29 | 32 | 34 | 28 |
| 59 | 34 | 33 | 28 | 33 | 32 | 32 | 32 | 33 |
| 60 | 36 | 36 | 35 | 32 | 19 | 28 | 25 | 28 |
| 61 | 30 | 24 | 31 | 39 | 45 | 39 | 42 | 45 |
| 62 | 39 | 35 | 26 | 28 | 35 | 33 | 32 | 31 |
| 63 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 64 | 42 | 42 | 41 | 40 | 47 | 36 | 46 | 47 |
| 65 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 66 | 32 | 29 | 19 | 30 | 25 | 26 | 41 | 35 |
| 67 | 36 | 34 | 29 | 35 | 34 | 29 | 29 | 35 |
| 68 | 42 | 43 | 42 | 43 | 43 | 42 | 37 | 42 |
| 69 | 48 | 45 | 46 | 43 | 43 | 45 | 43 | 39 |
| 70 | 46 | 42 | 42 | 43 | 40 | 46 | 39 | 39 |
| 71 | 38 | 35 | 35 | 35 | 30 | 35 | 31 | 36 |
| 72 | 46 | 44 | 43 | 44 | 44 | 42 | 47 | 44 |
| 73 | 36 | 41 | 35 | 31 | 32 | 27 | 40 | 33 |
| 74 | 47 | 48 | 42 | 44 | 45 | 31 | 40 | 45 |
| 75 | 33 | 31 | 32 | 31 | 27 | 25 | 29 | 31 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 76 | 42 | 44 | 38 | 42 | 31 | 40 | 50 | 41 |
| 77 | 38 | 30 | 34 | 30 | 33 | 34 | 38 | 33 |
| 78 | 46 | 46 | 45 | 48 | 49 | 49 | 50 | 50 |
| 79 | 28 | 34 | 28 | 24 | 29 | 30 | 32 | 41 |
| 80 | 44 | 41 | 44 | 46 | 45 | 43 | 42 | 42 |
| 81 | 38 | 36 | 44 | 37 | 40 | 25 | 31 | 31 |
| 82 | 41 | 36 | 37 | 38 | 45 | 32 | 30 | 33 |
| 83 | 50 | 44 | 50 | 50 | 50 | 50 | 50 | 50 |
| 84 | 41 | 37 | 37 | 26 | 31 | 28 | 25 | 24 |
| 85 | 46 | 34 | 44 | 44 | 43 | 45 | 37 | 27 |
| 86 | 40 | 38 | 37 | 37 | 30 | 31 | 30 | 32 |
| 87 | 37 | 30 | 30 | 32 | 27 | 27 | 34 | 31 |
| 88 | 37 | 32 | 30 | 34 | 37 | 34 | 36 | 38 |
| 89 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 90 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 91 | 30 | 30 | 30 | 28 | 30 | 30 | 30 | 28 |
| 92 | 38 | 36 | 40 | 29 | 35 | 43 | 28 | 30 |
| 93 | 31 | 34 | 29 | 36 | 34 | 27 | 42 | 45 |
| 94 | 37 | 35 | 33 | 33 | 16 | 39 | 27 | 38 |
| 95 | 31 | 39 | 31 | 38 | 42 | 44 | 28 | 16 |
| 96 | 44 | 33 | 47 | 30 | 36 | 26 | 23 | 50 |
| 97 | 39 | 33 | 33 | 38 | 34 | 35 | 30 | 35 |
| 98 | 38 | 34 | 30 | 36 | 34 | 36 | 33 | 33 |
| 99 | 40 | 34 | 37 | 33 | 47 | 31 | 27 | 21 |
| 100 | 30 | 39 | 31 | 45 | 30 | 41 | 27 | 43 |
| 101 | 37 | 38 | 36 | 33 | 24 | 37 | 33 | 32 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 102 | 37 | 35 | 37 | 31 | 30 | 34 | 37 | 33 |
| 103 | 50 | 30 | 34 | 40 | 44 | 35 | 33 | 47 |
| 104 | 39 | 33 | 34 | 36 | 26 | 35 | 32 | 38 |
| 105 | 38 | 35 | 35 | 33 | 30 | 34 | 34 | 37 |
| 106 | 37 | 35 | 34 | 33 | 31 | 35 | 32 | 37 |
| 107 | 46 | 43 | 45 | 42 | 44 | 44 | 42 | 38 |
| 108 | 33 | 24 | 27 | 30 | 30 | 30 | 27 | 36 |
| 109 | 37 | 37 | 40 | 40 | 40 | 33 | 38 | 39 |
| 110 | 33 | 25 | 29 | 40 | 30 | 48 | 24 | 49 |
| 111 | 39 | 37 | 39 | 36 | 34 | 36 | 32 | 37 |
| 112 | 24 | 29 | 30 | 30 | 50 | 27 | 32 | 50 |
| 113 | 45 | 40 | 45 | 45 | 40 | 31 | 31 | 38 |
| 114 | 36 | 35 | 36 | 33 | 31 | 34 | 33 | 35 |
| 115 | 33 | 32 | 28 | 32 | 27 | 33 | 32 | 36 |
| 116 | 38 | 30 | 28 | 32 | 35 | 36 | 32 | 32 |
| 117 | 40 | 33 | 29 | 34 | 33 | 35 | 31 | 34 |
| 118 | 39 | 34 | 31 | 35 | 31 | 37 | 36 | 38 |
| 119 | 41 | 35 | 29 | 36 | 31 | 39 | 33 | 39 |
| 120 | 41 | 39 | 41 | 41 | 40 | 40 | 38 | 42 |
| 121 | 46 | 43 | 40 | 42 | 42 | 41 | 43 | 43 |
| 122 | 36 | 33 | 27 | 28 | 35 | 31 | 34 | 37 |
| 123 | 38 | 32 | 36 | 40 | 38 | 33 | 33 | 32 |
| 124 | 34 | 32 | 33 | 35 | 31 | 33 | 36 | 36 |
| 125 | 37 | 37 | 34 | 35 | 25 | 36 | 36 | 37 |
| 126 | 33 | 46 | 43 | 41 | 41 | 44 | 49 | 33 |
| 127 | 34 | 37 | 37 | 33 | 24 | 33 | 39 | 22 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 128 | 38 | 36 | 35 | 35 | 31 | 34 | 34 | 38 |
| 129 | 38 | 34 | 36 | 36 | 30 | 30 | 25 | 24 |
| 130 | 36 | 36 | 33 | 35 | 29 | 36 | 32 | 39 |
| 131 | 38 | 34 | 37 | 31 | 30 | 35 | 33 | 38 |
| 132 | 36 | 34 | 35 | 32 | 33 | 31 | 32 | 37 |
| 133 | 37 | 33 | 34 | 35 | 34 | 34 | 31 | 37 |
| 134 | 36 | 34 | 36 | 38 | 34 | 34 | 35 | 39 |
| 135 | 33 | 38 | 44 | 43 | 43 | 45 | 46 | 46 |
| 136 | 39 | 37 | 36 | 34 | 39 | 29 | 30 | 30 |
| 137 | 33 | 28 | 30 | 32 | 31 | 30 | 31 | 33 |
| 138 | 40 | 28 | 33 | 30 | 40 | 40 | 39 | 31 |
| 139 | 37 | 38 | 39 | 35 | 35 | 40 | 42 | 34 |
| 140 | 40 | 37 | 23 | 30 | 39 | 22 | 30 | 22 |
| 141 | 41 | 39 | 48 | 43 | 37 | 38 | 46 | 43 |
| 142 | 41 | 44 | 36 | 31 | 42 | 36 | 36 | 34 |
| 143 | 36 | 31 | 33 | 32 | 30 | 33 | 34 | 33 |
| 144 | 36 | 33 | 33 | 36 | 32 | 35 | 34 | 38 |
| 145 | 36 | 32 | 30 | 35 | 36 | 38 | 33 | 40 |
| 146 | 27 | 27 | 28 | 30 | 31 | 38 | 40 | 42 |
| 147 | 39 | 34 | 39 | 40 | 38 | 31 | 35 | 36 |
| 148 | 35 | 30 | 34 | 45 | 23 | 30 | 34 | 40 |
| 149 | 30 | 34 | 37 | 34 | 33 | 35 | 26 | 28 |
| 150 | 33 | 30 | 37 | 34 | 36 | 33 | 31 | 34 |
| 151 | 34 | 35 | 18 | 27 | 35 | 37 | 37 | 24 |
| 152 | 46 | 40 | 38 | 37 | 30 | 40 | 40 | 30 |
| 153 | 30 | 31 | 27 | 35 | 31 | 29 | 31 | 32 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 154 | 28 | 30 | 28 | 35 | 32 | 35 | 29 | 36 |
| 155 | 49 | 49 | 40 | 33 | 29 | 31 | 32 | 42 |
| 156 | 28 | 35 | 30 | 35 | 33 | 28 | 31 | 32 |
| 157 | 38 | 34 | 34 | 33 | 28 | 34 | 29 | 32 |
| 158 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 159 | 33 | 32 | 24 | 33 | 35 | 34 | 39 | 33 |
| 160 | 33 | 29 | 29 | 36 | 32 | 31 | 34 | 32 |
| 161 | 35 | 36 | 31 | 34 | 35 | 30 | 41 | 30 |
| 162 | 41 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| 163 | 40 | 34 | 38 | 36 | 35 | 30 | 30 | 30 |
| 164 | 29 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 165 | 39 | 40 | 40 | 42 | 38 | 39 | 39 | 41 |
| 166 | 41 | 43 | 38 | 38 | 41 | 41 | 41 | 42 |
| 167 | 39 | 42 | 42 | 39 | 42 | 39 | 40 | 41 |
| 168 | 42 | 40 | 41 | 40 | 45 | 45 | 38 | 42 |
| 169 | 43 | 44 | 43 | 41 | 41 | 42 | 41 | 44 |
| 170 | 35 | 40 | 41 | 42 | 33 | 39 | 34 | 39 |
| 171 | 40 | 33 | 36 | 36 | 37 | 38 | 44 | 38 |
| 172 | 32 | 41 | 28 | 42 | 32 | 39 | 35 | 44 |
| 173 | 39 | 34 | 33 | 32 | 33 | 36 | 35 | 39 |
| 174 | 34 | 31 | 27 | 31 | 31 | 31 | 32 | 35 |
| 175 | 29 | 39 | 44 | 34 | 28 | 25 | 37 | 28 |
| 176 | 35 | 32 | 30 | 34 | 30 | 31 | 32 | 33 |
| 177 | 37 | 32 | 33 | 17 | 26 | 22 | 19 | 10 |
| 178 | 31 | 32 | 30 | 34 | 27 | 29 | 36 | 29 |
| 179 | 44 | 40 | 34 | 31 | 15 | 33 | 34 | 44 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 180 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 181 | 35 | 36 | 32 | 40 | 39 | 33 | 34 | 38 |
| 182 | 36 | 32 | 30 | 34 | 37 | 34 | 40 | 36 |
| 183 | 34 | 32 | 30 | 32 | 34 | 32 | 32 | 30 |
| 184 | 39 | 36 | 33 | 37 | 34 | 33 | 28 | 32 |
| 185 | 37 | 33 | 31 | 32 | 27 | 28 | 30 | 33 |
| 186 | 38 | 37 | 39 | 40 | 40 | 43 | 43 | 43 |
| Total Score | 6818 | 6404 | 6383 | 6478 | 6297 | 6305 | 6409 | 6472 |
| percentage | 36,66% | 34,43% | 34,32% | 34,83% | 33,85% | 33,90% | 34,46% | 34,80% |

**Appendix 10 Studi, Kelulusan Tepat Waktu dan Keberhasilan Studi dan IPK Lulusan**

**Studi, Kelulusan Tepat Waktu dan Keberhasilan Studi**

| Tahun Masuk | Jumlah Mahasiswa Diterima | Jumlah Mahasiswa yang Lulus pada ... | | | | | | | Jumlah ulusan sd Akhir TS | Rata-rata Masa Studi |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Akhir TS-6 | Akhir TS-5 | Akhir TS-4 | Akhir TS-3 | Akhir TS-2 | Akhir TS-1 | Akhir TS | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| TS-6 | 139 | | | | 2 | 51 | 17 | 42 | 112 | 5.9 |
| TS-5 | 131 | | | | | 3 | 44 | 32 | 79 | 5.4 |
| TS-4 | 126 | | | | | | 2 | 43 | 45 | 5.0 |
| TS-3 | 87 | | | | | | | 7 | 7 | 4.0 |

**IPK Lulusan**

| Tahun Lulus | Jumlah Lulusan | Indeks Prestasi Kumulatif (IPK) | | |
|---|---|---|---|---|
| | | Minimum | Rata-Rata | Maksimum |
| 1 | 2 | 3 | 4 | 5 |
| TS-2 | 85 | 3.01 | 3.32 | 3.71 |
| TS-1 | 85 | 2.99 | 3.28 | 3.58 |
| TS | 124 | 2.93 | 3.31 | 3.69 |