

**THE CORRELATION BETWEEN SELF-CONTROL AND  
ACADEMIC GRIT AMONG WORKING STUDENTS IN  
UIN AR-RANIRY BANDA ACEH**

**THESIS**

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BANDA ACEH  
2022**

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GRIT AMONG WORKING STUDENTS IN UIN AR-RANIRY BANDA  
ACEH**

**THESIS**

**Submitted to *Fakultas Psikologi*  
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The Bachelor Degree of Psychology (S.Psi)**

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**THESIS**

**It has been defended in *Sidang Munaqasah*  
In front of the board of Examiner for the working paper  
And has been accepted in partial fulfillment of the requirements  
For the Bachelor Degree of Psychology**

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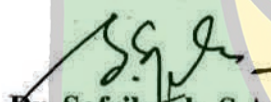
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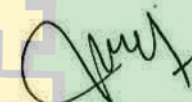
  
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## DECLARATION OF ORIGINALITY

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Menyatakan bahwa dalam skripsi ini terdapat karya yang pernah diajukan untuk memperoleh gelar sarjana di suatu perguruan tinggi, dan sepanjang pengetahuan saya juga tidak pernah terdapat karya atau pendapat yang pernah ditulis atau diterbitkan oleh orang lain kecuali yang secara tertulis diujuk dalam naskah ini dan disebutkan dalam daftar pustaka. Jika di kemudian hari ada tuntutan dari pihak lain atas karya saya, dan ternyata memang ditemukan bukti bahwa saya telah melanggar pernyataan ini, maka saya siap menerima sanksi berdasarkan aturan yang berlaku di Fakultas Psikologi UIN Ar-Raniry Banda Aceh

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Yang menyatakan,



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## TABLE OF CONTENT

<b>APPROVAL LETTER FROM SUPERVISOR .....</b>	<b>ii</b>
<b>SIDANG MUNAQASYAH-EXAMINER SIGNATURE .....</b>	<b>iii</b>
<b>DECLARATION OF ORIGINALITY .....</b>	<b>iv</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>v</b>
<b>TABLE OF CONTENT.....</b>	<b>viii</b>
<b>LIST OF TABLES .....</b>	<b>x</b>
<b>ABSTRACT .....</b>	<b>xi</b>
 <b>CHAPTER I INTRODUCTION.....</b>	 <b>1</b>
A. Background of Study.....	1
B. Research Question.....	7
C. The Aim of Study .....	7
D. The Significance of Study.....	7
E. Research Authenticity .....	9
 <b>CHAPTER II LITERATURE REVIEW .....</b>	 <b>12</b>
A. Grit .....	12
1. Definition of Grit.....	12
2. Aspects of Grit.....	13
3. Factors Influencing Grit.....	13
B. Self-Control.....	16
1. Definition of Self-Control.....	16
2. Aspects of Self-Control.....	18
3. Factors Influencing Self-Control.....	20
C. Correlation Between Self-Control and Grit .....	21
D. Hypothesis.....	22
 <b>CHAPTER III RESEARCH METHOD.....</b>	 <b>23</b>
A. Research Approach and Method .....	23
B. Research Variables.....	23
C. Operational Definition.....	24
1. Self-Control.....	24
2. Academic Grit.....	24
D. Research Participants .....	24
1. Population.....	24
2. Sample .....	25
E. Data Collection Techniques .....	26
1. Instrument.....	26
2. Validity Test.....	31
3. Item Discrimination Test.....	34
4. Reliability Test.....	38
F. Research Preparation and Implementation.....	40
1. Research Administration .....	40
2. Try Out and Research Implementation .....	40



G. Data Analysis Technique .....	42
1. Data Processing .....	42
2. Assumption Test .....	44
3. Hypothesis Test .....	45
<b>CHAPTER IV RESULT AND DISCUSSION.....</b>	<b>47</b>
A. Research Subject Description.....	47
1. Subject according to gender .....	47
2. Subject according to age .....	47
3. Subject according to faculty .....	48
4. Subject according to batch.....	49
5. Subject according to place of origin .....	50
6. Subject according to parent's job.....	50
7. Subject according to place of staying.....	51
8. Subject according to reason of working .....	51
9. Subject according to type of work schedule .....	52
10. Subject according to type of work.....	52
11. Subject according to length of work.....	53
B. Result.....	53
1. Categorization of Research Data .....	53
C. Data Analysis .....	58
1. Assumption Test.....	58
2. Hypothesis Test .....	60
D. Discussion .....	61
<b>CHAPTER V CONCLUSION AND SUGGESTION .....</b>	<b>65</b>
A. Conclusion.....	65
B. Suggestion .....	65
<b>REFERENCES.....</b>	<b>67</b>
<b>LAMPIRAN.....</b>	<b>72</b>

## LIST OF TABLES

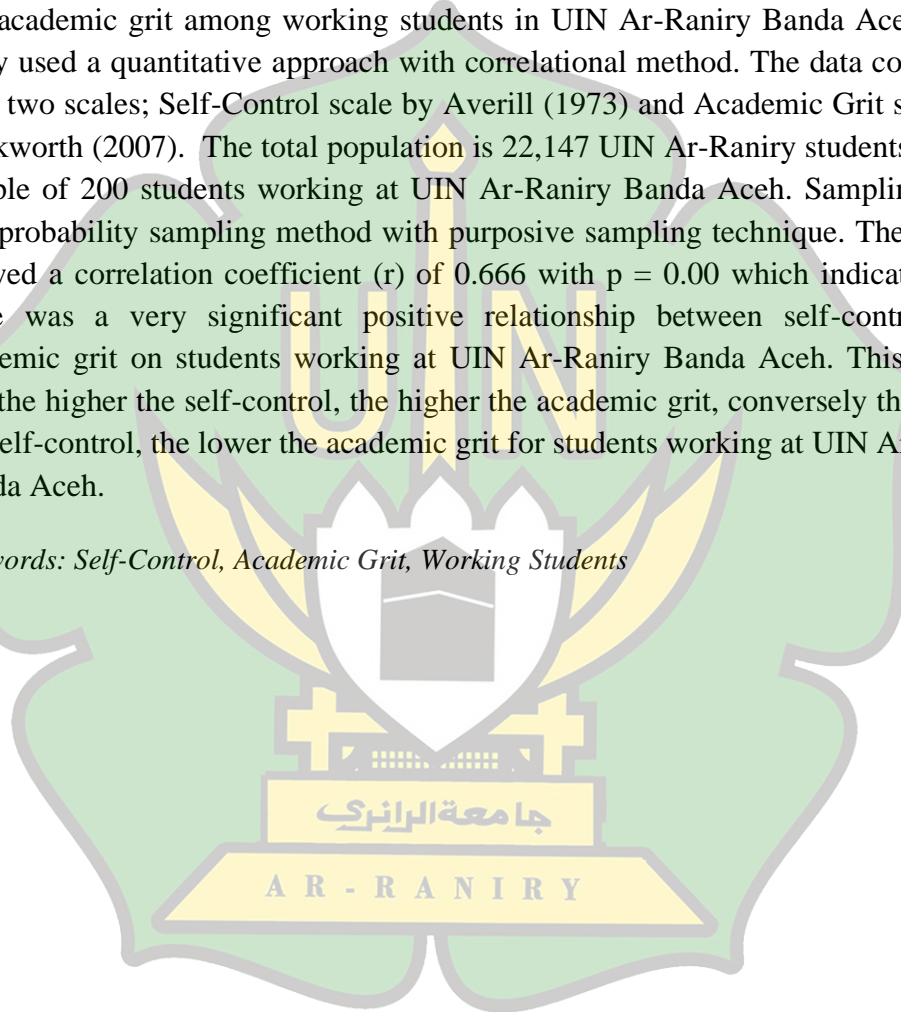
Tabel 3.1	Scale Item Score on Self-Control .....	28
Tabel 3.2	Self-Control Blueprint Before Try Out.....	28
Tabel 3.3	Scale Item Score on Academic Grit.....	31
Tabel 3.4	Academic Grit Blueprint Before Try Out .....	31
Tabel 3.5	CVR Coefficient Self-Control Scale.....	33
Tabel 3.6	CVR Coefficient Grit Scale .....	33
Tabel 3.7	Self-Control Item Differentiate Scale .....	35
Tabel 3.8	Final Self-Control Blueprint Before Try Out .....	36
Tabel 3.9	Academic Grit Item Differentiate Scale .....	37
Tabel 3.10	Final Blueprint Academic Grit Scale.....	38
Tabel 3.11	Reliability classification of Alpha Cronbach.....	39
Tabel 4.1	Subject according to gender.....	47
Tabel 4.2	Subject according to age .....	48
Tabel 4.3	Subject according to faculty .....	49
Tabel 4.4	Subject according to batch.....	49
Tabel 4.5	Subject according to place of origin .....	50
Tabel 4.6	Subject according to parents' job.....	51
Tabel 4.7	Subject according to place of staying .....	51
Tabel 4.8	Subject according to reason of working .....	52
Tabel 4.9	Subject according to type of work schedule .....	52
Tabel 4.10	Subject according to type of work .....	53
Tabel 4.11	Subject according to length of work .....	53
Tabel 4.12	Research Data Description Academic Self-Control .....	54
Tabel 4.13	Self-control categorization.....	55
Tabel 4.14	Research Data Description Academic Grit Scale .....	56
Tabel 4.15	Academic grit categorization .....	57
Tabel 4.16	Normality Test result .....	58
Tabel 4.17	Linearity Test result.....	59
Tabel 4.18	Hypothesis Test result.....	60
Tabel 4.19	Analysis Measure of Association .....	61

## **The Correlation Between Self-Control and Academic Grit Among Working Students in UIN Ar-Raniry Banda Aceh**

### **ABSTRACT**

It is the fact that a number of university students decided to work during their study. The aim of this study was to determine the correlation between self-control and academic grit among working students in UIN Ar-Raniry Banda Aceh. This study used a quantitative approach with correlational method. The data collection used two scales; Self-Control scale by Averill (1973) and Academic Grit scale by Duckworth (2007). The total population is 22,147 UIN Ar-Raniry students with a sample of 200 students working at UIN Ar-Raniry Banda Aceh. Sampling used non-probability sampling method with purposive sampling technique. The results showed a correlation coefficient ( $r$ ) of 0.666 with  $p = 0.00$  which indicated that there was a very significant positive relationship between self-control and academic grit on students working at UIN Ar-Raniry Banda Aceh. This means that the higher the self-control, the higher the academic grit, conversely the lower the self-control, the lower the academic grit for students working at UIN Ar-raniry Banda Aceh.

*Keywords: Self-Control, Academic Grit, Working Students*



## CHAPTER I

### INTRODUCTION

#### A. Background of Study

Education holds a vital role in one's quality and potential. In Indonesia, formal education started with kids enrolling in Kindergarten (TK), Elementary School (SD), Junior High School (SMP), High School (SMA), and then proceeding to the university level (Oktarina & Adelina, 2020). University students are the students enrolled in a specific field in public or private universities to become a generation who are highly educated so that they can apply their knowledge in real life (Setiawan & Legowo, 2018). Students are responsible on their academic success, knowing what is on the course syllabus, purchasing all required material, attending all classes, taking notes in class, submitting tasks on time, scheduling appointments outside the class if needed, read the course materials and stay caught up, behave responsibly and respectfully, ask the professor for help and make sure to get the required grade in each course (Texarkana College, 2021).

The success of a student's learning can be determined by his high academic grade and prosperous quality of life after graduating from college (Metriyana, 2014). Hodsay (2016) added students who are classified as high academic achievers are those who get a GPA of 3.50 out of 4 and above and master academic ethics. Recently, research has begun to consider personality traits such as grit, as a predictor of student academic performance in college (Duckworth, Peterson, Matthews, & Kelly, 2007; Strayhorn, 2014).

Grit is defined as perseverance and passion for long-term goals (Duckworth et al., 2007). Some statements that describe grittier students include behaviors such as not being discouraged by setbacks, maintaining focus on a project, being a hard worker, completing tasks, and being diligent. Of the personality factors, Duckworth et al. (2007) studied grit in a population of Ivy League psychology undergraduates. Duckworth et al. (2007) found that students with higher grit had higher GPAs in college, yet those same students entered college with lower SAT scores. Research conducted by Strayhorn (2014) was centered on black males attending a Predominantly White Institution (PWI), and his results showed that grittier black males had higher GPAs in college, higher HSGPAs (High School Grade Point Average), and higher ACT (American College Test) scores compared to less gritty black males.

Furthermore, some research also shows the influence of grit on Indonesian students' academic performance. Vivekananda (2017) examined the grit rate among psychology students at Maranatha Christian University and found that the majority of the 423 respondents have high Grit (93.44%) while the other 6.6% have low Grit. This matter shows that the students of the Psychology Faculty, Maranatha Christian University Bandung have the tenacity and enthusiasm to achieve the long-term goal of becoming a Bachelor of Psychology. Amalia and Aviani (2018) also found a significant positive relationship between grit with academic achievement in bidikmisi Psychology students at Padang State University with  $r_{xy} = 0.536$ .



This is proven that grit is a non-cognitive trait that also influences the academic performance of Indonesian students. However, apart from academic demands, university students nowadays also could take part and be involved in many activities outside the class, one of them is working. Working while studying is not a new thing in recent years. Many reasons encourage students to be employed; economic factors, gaining work experience, the desire to be financially independent, and some just want to spend their spare time. Mardelina (2017) mentioned the reasons behind working students are related to finance, spending spare time, aiming to be independent, and exploring hobbies. The US Department of Education (2017) reported that 43 percent of all full-time undergraduate students and 81 percent of part-time students were employed while enrolled. The proportion of full-time students working for pay was higher in 2017 than in 2010, when 41 percent were employed, but lower than in 2005 when 50 percent worked for pay while enrolled. Employment rates for part-time students follow a similar fluctuating pattern: 86 percent in 2005, 75 percent in 2010, and 81 percent in 2017. In all, more than 11.4 million undergraduate students (58 percent) worked for pay while enrolled in 2017.

The case in Indonesia itself, some students have problems with tuition fees, so they try to help parents with that (Denura, 2012). This condition force students to have a split role, both workers and employees at the same time. According to Planty (in Dadgar, 2012). Research involving 4642 university students found that around 77% of students were employed, up from 59% last year. Some respondents said they worked part-time, more than than 56% of

students who had jobs said they worked because they need to meet the cost of accommodation (BBC Indonesia, 2015).

This phenomenon shows that the students who are working while enroll in university tend to split their time and need to focus on both responsibilities. Watanabe (2005) also stated that there are negative impacts that students who work must be aware of. These impacts are the difficulty giving time and focus to both working and studying, having fatigue, getting the lower academic achievement, experiencing delays in graduation, and the worst consequence is dropping out of university because they are more concerned with work than study. This statement was proved in research conducted by Silfiana (2021) which found that working students from University Tadulako, PPKN Department batch 17 experienced a decline in grades (GPA) of 3% to 5%, exhausted which results in being late to class and cannot manage to hand in assignments on time which affect academic achievement, there are even some students who have to retake courses in the next semester.

This phenomenon also happened in UIN Ar-Raniry Banda Aceh. The researcher began the research by interviewing three working students of UIN Ar-Raniry Banda Aceh on 17th and 18th March 2022. Below are the explanation from respondents:

Interview 1:

*“emm... I have this target to graduate soon when I was still in the first semester, but when I started to work and teach (as a job) I pay more attention to other things and became ignorant to my study,*

*when I finally make money by my-self I become more ignorant and postpone my study... I have been so busy with the work so I don't focus on my study anymore but work” (ES, Personal Interview, Student of Psychology Faculty. March 17, 2022)*

Interview 2:

*“It has influence actually, the work makes us ignorance toward our responsibility on the study and when we get paid from work that makes us wanna work and make more money so we forget the study. Sometimes putting so much attention to work makes me forget about the target I have in studying and became lazy to do the thesis. Because when I work, I feel like studying is not really important, in the end, we just study to get a job” (M, Personal Interview, Students of Syari'ah and Law Faculty, March 17, 2022).*

Interview 3:

*“There is a big impact to study, moreover for those who focus more on work like me myself, it is so obvious that working ruin studying, to be honest study is my last priority after work and organization. So, it is obvious study is ignored I just study without purpose I don't pay attention for it” (IM. Personal Interview, Student of faculty of etiquette and humanities, March 18, 2022).*

From the three interviews can be concluded that working impacts the studying process of the working students in UIN Ar-Raniry. They tend to pay

more attention to other things beside academic goal and don't pay attention to studying. Students also said working ruins studying, they do not focus on study anymore, are busy with the work, become ignorant to study and responsibility in the study, forget about the target they have in study, feel like studying isn't really important anymore, become lazy to do thesis and study become the last priority.

To overcome this situation, the student needs self-control to maintain expected results in their study. Duckworth et al. (2007) & SRI (Stanford Research Institute) International (2018) stated that one of the factors that influence grit is effortful control. Self-control is the ability to control, restrain impulses and regulate attention when faced with distractions while pursuing goals (Duckworth, 2011).

University students with higher levels of self-control are found to have higher grades, better interpersonal relationships, reflect university citizenship behavior, and exhibit more emotional stability than those students with less self-control (Tangney, Baumeister, & Boone, 2004; Zettler, 2011). For example, having higher levels of self-control is more important than IQ in predicting school performance, grades, and attendance in college students (Duckworth & Seligman, 2005; Wolfe & Johnson, 1995).

Research conducted by Oktarina and Adelina (2020) about self-control and grit involving 175 respondents found that there is a significant influence of self-control on grit. The student who has high self-control also has high grit, in contrast, the student with low self-control has low grit. Based on this phenomenon, the researcher is interested to conduct research entitle "the

correlation between self-control and grit among working students in UIN Ar-Raniry Banda Aceh”

## **B. Research Question**

Based on the explanation above, the researcher in this research formulates the research question as follows; Is there any correlation between self-control and academic grit among working students in UIN Ar-Raniry Banda Aceh?

## **C. The Aim of Study**

Based on the research question above, the aim of the study can be stated as follow: To find out the correlation between self-control and academic grit among working students in UIN Ar-Raniry Banda Aceh.

## **D. The Significance of Study**

The significance of this study can be classified into two categories, theoretical significance, and practical significance as follow;

1. Theoretical significance
  - a. The results of this study can be references and data to Industrial and Organizational Psychology as well as educational psychology, especially regarding Self Control and Grit in working students.



- b. This research can also be used as a reference theory for further researchers who are interested in researching Self Control and Grit in working students.

## 2. Practical significance

### a. For working students

Students who face the same conditions as the subjects in this study can take this research as a guide in arranging courses and other activities outside the class to get successful studying and working at the same time.

### b. For University

Universities can use the result of this study as a reference in conducting programs and rules related to student activities which increase stakeholders' awareness of students' problems regarding students' academic issues and their activities outside the classes.

### c. For Parents

The result of the study is a guide for parents to know their children's university schedules and responsibilities, especially for parents with working students. This study will help parents to support, assist and understand their children better in the study.

d. For the future researcher

This research could be a reference for the next researcher who will examine the same variable as there are still limited resources about this problem.

#### **E. Research Authenticity**

The authenticity of this research is based on the results of previous research, where that research have relatively the same characteristics such as topic, research methods, and research studies. Although they have similar characteristics, there are also differences in terms of subject, number of subjects, research variables, dataanalysis, and methods used.

Research with the grit variable was also carried out by Christiana and Sembiring (2017) about *Pengaruh Growth dan Fixed Mindset terhadap Grit pada Mahasiswa Fakultas Psikologi Universitas X Bandung* (The Effect of Growth and Fixed Mindset on Grit in Students of the Faculty of Psychology, University of "X" Bandung) using the quantitative method with a contributonal design. There is a sample size of 299 people. The research also uses an accidental sampling technique. The data analysis technique used multiple linear regression analysis. The difference in this research is in the respondent, sampling technique, place, design, and X variable.

Furthermore, Oktarina and Adelina (2020) also examined *Pengaruh Self-Control terhadap Grit pada Mahasiswa yang Menjadi Panitia Kegiatan* (the effect of self-control on the grit of the student joining committee). This is quantitative research using a correlational method located in Bandung and

involving 175 research respondents joining the student senate committee. Data analysis techniques using a simple linear regression method. The difference between this research is in place and respondents.

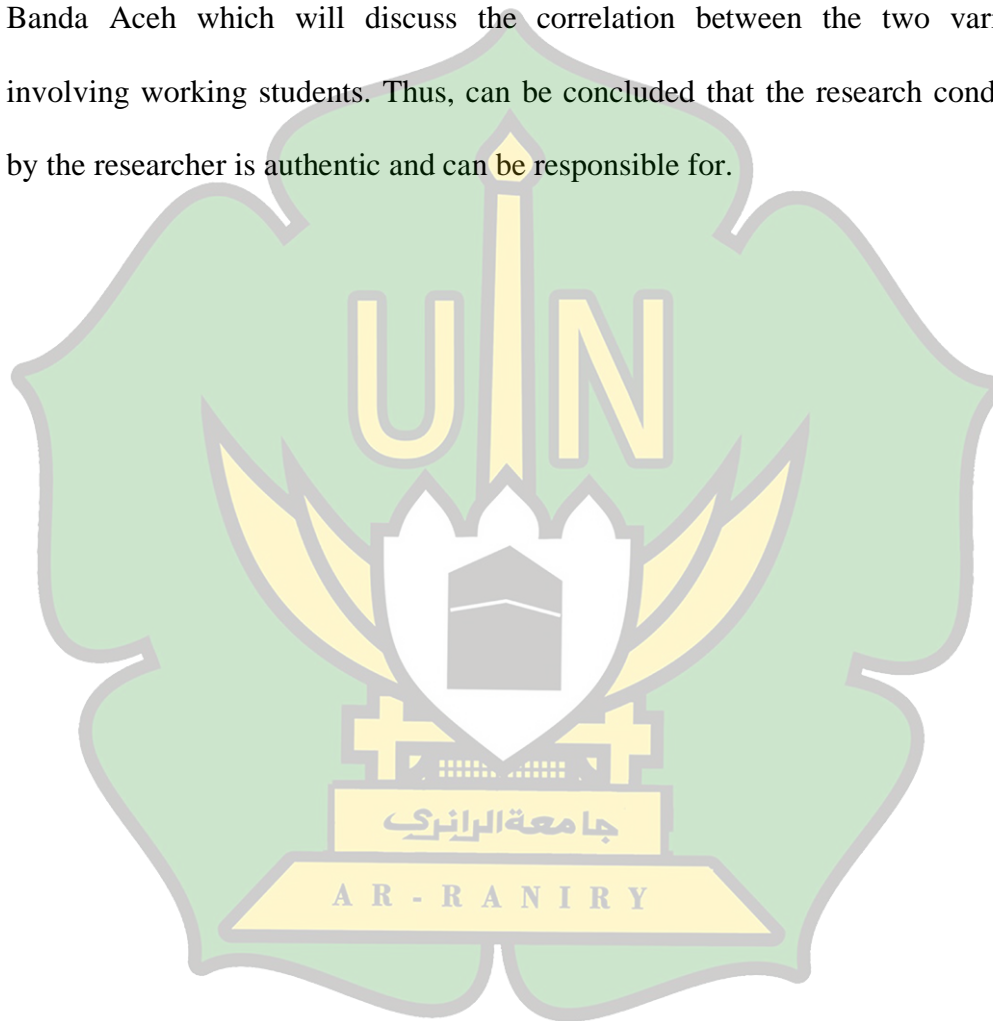
Mas'udah (2019) also conducted research about grit in his thesis entitled *Pengaruh Growth Mindset Terhadap Grit Akademik pada Mahasiswa yang Mengikuti Organisasi* (The Effect of a Growth Mindset on Academic Grit in Students Who Join Organizations). This is quantitative research conducted at the University of Semarang using the cluster random sampling technique. There are 354 Semarang State University students joining the organization as the subject of this research from cluster random sampling. This research has a difference in variables, sampling technique, subjects, and research locations.

Another study was conducted by Permatasari (2020) to determine the effect of self-control and social support on grit on train YouTubers in Bandung entitle "*Pengaruh Kontrol diri dan Dukungan Sosial Terhadap Grit pada Youtuber Kereta Api*". This is quantitative research with a causality correlational design. There are 50 train Youtubers as respondents from the total sampling technique. Data collection using questioner. This research has a difference in the subject, design, and research location.

Sholihah (2018) also examined about *peran Growth Mindset dan pengendalian diri terhadap grit akademik pada mahasiswa bekerja* (the role of the growth mindset and self-control on academic grit in working students). This is quantitative research. Data were collected from 200 working students of STIE YPPI Rembang. There were three measuring instruments used in the study:

academic grit scale, growth mindset scale, and self-control scale. The difference in this study is the variable and research location.

Throughout the research presented above, the researcher has not found exact similar research that examines self-control and grit, especially at UIN Ar-Raniry Banda Aceh which will discuss the correlation between the two variables involving working students. Thus, can be concluded that the research conducted by the researcher is authentic and can be responsible for.



## CHAPTER II

### LITERATURE REVIEW

#### A. Grit

##### 1. Definition of Grit

Grit is a new variable proposed by Duckworth et al (2007) who defined grit as perseverance and passion for long-term goals. Grit is a person's ability to maintain perseverance and overcome challenges to achieve long-term expected results (Duckworth, 2016).

Holdan, Lias, Locke, Elfen, and Buzzelli (2018) gave the meaning of grit as a person's strength to live life to achieve success, the person does not give up easily no matter how difficult the situation and keeps trying continuously to achieve the goals that have been set even though it takes a long time. Akbağ and Umme (2017) explained that grit is a behavior that continues to be goal-oriented, even though there are various obstacles, difficulties, and despair that make a person better prepared to face every challenge in life. Robert (2009) stated that grit is encouragement in a person that can improve various skills for achieving success. Wong (2018) defined that grit is formed from courage, belief, enthusiasm, and persistence that cannot be separated.

Based on some definitions above, the researcher decided to use the self-control theory by Duckworth et al (2007) who defined grit as perseverance and passion for long-term goals. The researcher chose the theory of grit from Duckworth et al (2007) because the definition of grit is related to the academic grit phenomenon and context of the research conducted by the researcher.



## 2. Aspects of Grit

Duckworth, et al. (2007) identified two aspects of grit, consistency of interest and perseverance of effort.

### a. Consistency of Interest

Consistency of interest is indicated by the ability of maintaining the same interest in one goal not easily distracted for the long term (Duckworth et al., 2007). Students who continue their education and still maintain their foremost and main goals, complete assignments on time, are not easily distracted by new things, consistent interest over a long period of time will get expected results so that students can achieve good academic achievements and goals (Duckworth et al., 2007).

### b. Perseverance of Effort

Individuals who have perseverance try to be able to complete the work even though there are obstacles. Hardworking, diligent, always trying to achieve long-term goals, and not afraid to face obstacles (Duckworth et al., 2007).

## 3. Factors Influencing Grit

Duckworth et al. (2007) & SRI International (2018) stated the factors that influence grit are achievement, education, age, thoroughness, effortful control, strategy, and growth mindset.

a. Achievement

Duckworth et al. (2007) explained that someone who has higher education, mature age, and conscientiousness is 35% less likely to change careers. Grit has a positive relationship of 25% with GPA or academic achievement. It means that students who have a high grit level will have a high academic achievement (Duckworth et al., 2007).

b. Education

Education affects a person's grit. Individuals who have a high level of education have a higher grit level than individuals who are less educated at the same age level. In line with this, someone who has high grit tends to want a high level of education (Duckworth et al., 2007).

c. Age

A person's age affects a person's grit level. The more mature a person's age, the higher the grit they have compared to their younger age. The older someone the more experience to deal with a problem (Duckworth et al., 2007).

d. Effortful Control

The findings of Duckworth (2011) self-control and self-discipline are psychological resources that shape perseverance. Self-discipline is the ability to direct one's desires and strengths to achieve goals, within the individual to understand the plan of

action to be taken and to regulate thoughts and emotions (Duckworth, 2011). While self-control is the ability to control, restrain impulses and regulate attention when faced with distractions while pursuing goals (Duckworth, 2011).

e. Strategy

Strategies and tactics to face challenges are psychological resources that make students more persistent. The practical, initiative and productive abilities are needed by individuals to solve problems. Individuals will be strong to survive when they have strategies and tactics (SRI International, 2018). Student learning strategies are needed to stay afloat in achieving goals. The learning strategy is needed in setting goals, planning strategies, implementing, seeing results, and evaluating results (SRI International, 2018).

f. Growth Mindset

Yeager & Dweck (2012) in their research stated that the growth mindset affects students' grit. Duckworth (2007) explained a growth mindset can increase one's grit. Mindset is used to see and value the world, including attitudes, values, dispositions, basic beliefs, and ways of perceiving oneself (Dweck, 2006).

A growth mindset is a mindset that believes one's potential and psychological attributes can be developed through practice and more effort in facing difficult challenges and having a

positive outlook on life. When they experience failure, they look for strategies and solutions, asking for help from others when needed (Yeager & Dweck, 2012).

Based on this explanation, it is known that the factors that affect grit are achievement, education, age, thoroughness, effortful control, strategy, and growth mindset. This research focuses on the growth mindset that affects grit.

## **B. Self-Control**

### **1. Definition of Self-Control**

Averill (1973) explained that self-control is an individual's ability to modify behavior in managing unwanted information by interpreting their ability to choose an action based on a belief. Lazarus (in Talib, -2010) suggested that self-control represents one's decisions through cognitive considerations in aligning the behavior that has been arranged to improve certain results and achievements as expected.

Tangney, Baumeister, and Boone (2004) define self-control as the capacity to change and adapt to oneself in order to have better and appropriate behavior between self and the world. In other words, self-control is an individual's ability to determine his behavior based on certain standards such as morals, values, and rules in society to lead to positive behavior. Ghufon and Risnawita (2010) explained that self-control is a person's ability to sensitively analyze one's situation and environment. In line with that, Synder and Gangestad (in Ghufon & Risnawita, 2010) stated that the concept of direct self-control is very suitable to

see the correlation between individuals and the community environment in regulating the impression of society in accordance with situational cues in behavior.

Furthermore, Tangney, Baumeister, and Boone (2004) defined self-control as the ability to change and adapt to oneself to produce better, more optimal, and appropriate behavior between oneself and the world. In other words, self-control is an individual's capacity to regulate his behavior based on certain standards such as morals, values, and rules in society in order to lead to positive behavior.

Borba (2008) self-control is the ability of the body and mind to do what it is supposed to do. Self-control can encourage individuals to make the right choices when facing temptation, even though at that time bad thoughts and ideas arise in the individual. Meanwhile, Ardilasari and Firmanto (2017) believed that self-control is one of the main functions of a person, where self-control can be developed and used by the individual to lead to success in life.

Based on the theory of some of these definitions, the definition of self-control used in this research is the definition from Averill (1973) which stated that self-control is an individual's ability to modify behavior in managing unwanted information by interpreting an individual's ability to choose an action based on a belief. The researcher chose Averill's (1973) self-control theory because this definition fits the context of the research conducted by the researcher and has been widely used in previous studies related to this research.



## 2. Aspects of Self-Control

According to Averill (1973), there are three aspects of self-control which are classified as follows:

### a. Behavioral Control

Behavioral control is an individual's ability to modify an unpleasant situation, both include the ability to regulate implementation (regulated administration) and the ability to regulate stimulus (stimulus modifiability).

### b. Cognitive Control

Cognitive control is a person's way of interpreting, assessing, or combining an event in a cognitive framework. Cognitive control is the ability to process unwanted information to reduce stress.

### c. Decision Control

Controlling decisions is the ability of individuals to choose and determine the desired goals. The ability to control decisions will function well when individuals have the opportunity, freedom, and various alternatives in taking an action.

There are five aspects of self-control according to Tangney, Baumeister, and Boone (2004):

### a. Self-Discipline

This aspect assesses the individual's self-discipline in doing something. Discipline is how an individual focuses on the task.

Individuals who have self-discipline are able to refrain from other things that can interfere with their concentration.

b. Deliberate/Non-Impulsive Action

This aspect assesses the individual's tendency to take an unimpulsive action. Individuals with deliberate tendencies have good judgment, are cautious, and are not in a hurry in making decisions or taking action.

c. Healthy Habits

Regulate individual healthy habits or lifestyles. Individuals with a tendency to healthy habits will be able to refuse something that can have a bad impact on them even though it is enjoyable. The individual will prioritize things that have a positive impact even if the impact is not received directly.

d. Work Ethics

Assess the individual's ethics in carrying out daily activities. Individuals who have work ethics will be able to complete tasks without being distracted by things outside of their duties.

e. Reliability

Assess the individual's ability to handle a challenge. Individuals who have reliability are able to carry out long-term plans for certain achievements.

Based on the discussion of the aspects above, in this research the researcher used the aspects proposed by Averill (1973) to develop a self-control scale, these aspects are more suitable for use in this research.

### **3. Factors Influencing Self-Control**

According to Ghufroon and Risnawita (2012) self-control is influenced by several factors consisting of internal factors (from the individual self) and external factors (individual environment).

#### **a. Internal Factor**

The internal factor that contributes to self-control is age. The older a person is, the better they are able to control themselves.

#### **b. External factor**

These external factors include family environmental factors, the family environment, especially parents, determines how one's ability to control themselves. The results of Naischah's research (2000) showed that adolescents' perceptions of more democratic parental discipline tend to be followed by high self-control abilities. Therefore, if parents train children to be disciplined intensely from an early age and remain consistent despite all the consequences that the children do, then this attitude of consistency will be internalized by the children and become self-control for them.

### C. Correlation Between Self-Control and Grit

When undergoing lectures, students who work will face temptations from themselves and the environment. For example, having a lot of fun after class can distract students from their goals to complete lecture assignments and work. Therefore, students who do work need self-control to fulfill every demand and responsibility from university and work as employees.

According to Kurniawan (1995), self-control is a potential that can be developed and used by individuals during processes in life, including in dealing with conditions in the surrounding environment. An individual who has high grit will be able to maintain focus on his goals or not be distracted from his goals and interests and have persistence in carrying out his efforts to achieve his goals (Duckworth & Quinn, 2009).

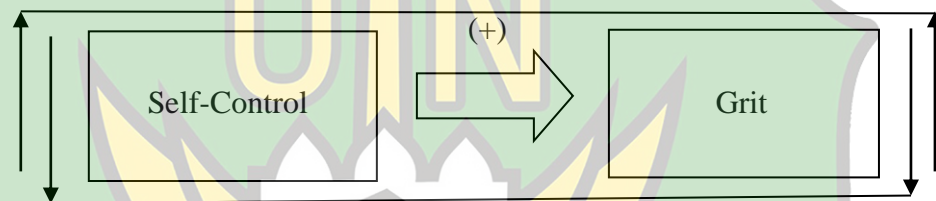
Duckworth et al. (2007) & SRI International (2018) stated self-control is one of the factors influencing grit. Self-control is the ability to control, restrain impulses and regulate attention when facing distractions while pursuing goals (Duckworth, 2011). Individuals who have self-control will make decisions and take effective action steps to produce something desired and avoid unwanted consequences as well as in terms of controlling their attitude and decisions as working students.

This is supported by research conducted by Oktarina and Adelina (2020). The researcher examined the correlation between self-control and grit involving 175 students in Bandung. The result of the study showed a significant correlation between self-control on grit. The student who has high self-control also has high grit, in contrast, the student with low self-control has low grit. Permatasari (2020)

also examined the effect of self-control and social support on grit on train YouTubers in Bandung. This study involved 50 respondents and showed a significant impact on self-control toward grit.

Based on the results of previous research using the same variables, it appears that there is a positive correlation between self-control and grit. The higher self-control, the higher grit in an individual, the lower self-control, the lower grit.

The correlation between the two variables in a description can be seen in the following picture.



#### D. Hypothesis

Based on the theoretical review above, the researcher proposes a hypothesis in this research; that there is a positive correlation between self-control and grit behavior. The higher self-control, the higher grit in an individual, the lower self-control, the lower grit.



### **CHAPTER III**

#### **RESEARCH METHOD**

##### **A. Research Approach and Method**

This research used a quantitative approach. According to Azwar (2017), the quantitative approach is research where the analysis emphasizes quantitative data (numbers) collected through measurement procedures and processed by statistical methods. All variables involved must be clearly identified and measurable, and the relationship between the variables examined is present correlational or structural and tested empirically.

This research used the correlational method. Correlational research investigates the extent to which the variations in one variable are related to variations in one or more other variables, based on the correlation coefficient (Azwar, 2016).

##### **B. Research Variables**

Research variable according to Sugiyono (2017) is an attribute or trait, the value of a person, object, or activity that has a certain variation set by the researcher to be studied and concluded. Variables are divided into two independent variables and dependent variables. An Independent variable is a variable that affects or is the cause of the change or occurrence of certain variables. While the dependent variables are influenced or are the result of the independent variables.

Based on the description of the problems that have been discussed previously, the variables used in this research are as follows:

1. Independent Variable (X) : Self-Control
2. Dependent Variable (Y) : Academic Grit

### **C. Operational Definition**

#### **1. Self-Control**

Self-control is the individual's ability to change behavior in managing unwanted information by interpreting it and the individual's ability to choose an action based on what he believes. The level of self-control in this research was measured using a self-control scale with aspects proposed by Averill (1973): behavioral control, cognitive control, and decision control.

#### **2. Academic Grit**

Grit is perseverance and passion for long-term goals. In this research, the researcher focuses on academic grit. Academic grit is the consistency of interest and persistence in trying to achieve long-term goals in the field of education.

The level of academic grit in this research was measured using a grit scale with aspects proposed by Duckworth et al (2007): consistency of interests and perseverance of effort.

### **D. Research Participants**

#### **1. Population**

The population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and draw conclusions (Sugiyono, 2017). The population in this research is all the actives' students in UIN Ar-Raniry Banda Aceh a total of 22.147 students

(Source: Information and Communication Technology (ICT) Center UIN Ar-Raniry, 2022)

## 2. Sample

According to Sugiyono (2017), a sample is part of the number and characteristics of the population. For this reason, samples taken from the population must be truly representative. Sample measurement is a step to determine the size of the sample taken in carrying out research. This sampling obtained a group of people who can describe and represent the actual population.

This research used non-probability sampling with a purposive sampling technique. According to Arifin (2012), purposive sampling is a sampling technique based on the consideration of certain aims and on certain criteria or characteristics that have been set beforehand. Creswell (2012) added that with the purposive sampling, the researcher chose the participants intentionally with the standard that the participants were information-rich about the topic researched. It could be concluded that certain criteria and standards needed to be set to get as much information from the participants

Below is the sample characteristic of this research:

- a. Actively registered as a student in UIN Ar-Raniry Banda Aceh
- b. The students are currently not on their leave or non-active
- c. Students who are doing a part-time job or full-time job

As the sample of working students at UIN Ar-Raniry is not known or identified regarding the sample size, the number of samples cannot be present accurately. Traditionally, statistics considers a sample size of more than 60 people

to be large enough to be called a large sample. However, methodologically the size of a representative sample must be referred to the heterogeneity of the population. Furthermore, Azwar (2015) suggest a sample of more than 60 people is sufficient. For the sample to be more representative of the population, in this research, the researcher took 200 participants as research samples.

In conclusion, the researcher decided to choose 200 students from the population who meet the characteristics listed above as the sample of this research.

## **E. Data Collection Techniques**

### **1. Instrument**

The first step in the implementation of research is to prepare a measuring instrument for collecting research data in the form of a scale. A scale is a tool or mechanism by which individuals are distinguished as to how they differ from one another on the variables of interest to this research.

Each scale consists of two statements called favorable and unfavorable, where the favorable is a statement that supports the measured variable while the unfavorable statement is a statement that does not support the measured variable (Azwar, 2016).

The scales are compiled using the Likert scale. A Likert scale is a tool used to measure a person's attitudes, opinions, and perceptions about social phenomena. By using a Likert scale, the variables to be measured are translated into variable indicators. Then the indicator is used as a startingpoint for compiling

instrument items which can be in the form of questions or statements (Sugiyono, 2013).

There are two scales used in this research, the Self-Control scale based on the aspect of Averill (1973) and the Academic Grit scale based on the aspect of Duckworth et al. (2007).

#### a. Self-Control Scale

The self-control scale of this research was designed by the researcher herself based on the theory of Averill (1973). Averill (1973) revealed three aspects of self-control:

##### 1) Behavioral Control

Behavioral control is an individual's ability to modify an unpleasant situation, both include the ability to regulate implementation (regulated administration) and the ability to regulate stimulus (stimulus modifiability).

##### 2) Cognitive Control

Cognitive control is a person's way of interpreting, assessing, or combining an event in a cognitive framework. Cognitive control is the ability to process unwanted information to reduce stress.

##### 3) Decision Control

Controlling decisions is the ability of individuals to choose and determine the desired goals. The ability to control decisions will function well when individuals have the



opportunity, freedom, and various alternatives in taking an action.

The scale has four alternative answers, strongly agree (SS), agree (S), disagree (TS), and strongly disagree (STS). The rating scale is rated from four to one for the favorable item, and from one to four for the unfavorable item.

Tabel 3.1

*Scale Item Score on Self-Control*

	Answers	Item	
		Favorable	Unfavorable
	SS (Strongly Agree)	4	1
	S (Agree)	3	2
	TS (Disagree)	2	3
	STS (Strongly Disagree)	1	5

Tabel 3.2

*Self-Control Blueprint Before Try Out*

No	Aspect	Indicator	Item		Total	%
			Favorable	Unfavorable		
1	Behavioral Control	a. The individual's ability to modify an unpleasant situation related to the ability to regulate implementation	1, 3, 15	23, 25, 41	12	27,3 %
		b. The individual's ability to manage unpleasant situations related to the ability to regulate stimuli	2, 4, 20	24, 26, 42		
2	Cognitive Control	a. Individual's ability to interpret, an event within a	6, 9	28, 30	12	27,3 %

		cognitive framework			
		b. The individual's ability to assess, or combine an event in a cognitive framework	16, 22	35, 44	
		c. Individual's ability to process unwanted information to reduce pressure	10, 21	33, 43	
		a. The individual's ability to choose the desired destination	5, 7	31, 27	
		b. Individual's ability to determine desired goals	12, 17	29, 34	
		c. Individual's ability to control decisions because they have the opportunity	14, 19	32, 37	
3	Decision Control	d. Individuals to control decisions because they have freedom	11, 18	36, 39	
		e. Individual's ability to control decisions because they have various alternatives in carrying out an action	8, 13	38, 40	20 45,4 %
<b>Total</b>				44	100%

## b. Academic Grit Scale

The grit scale was modified by the researcher from Duckworth (2012) according to two aspects of grit introduced by Duckworth, et.al. (2007). Duckworth, et.al. (2007) proposed two aspects of grit called consistency of interest and perseverance of efforts.

### 1) Consistency of Interest

Consistency of interest relates to the ability of individuals to be consistent in the same interest in the long term. Individuals who have a high consistency of interest do not change the goals that have been set, are not easily distracted, and maintain interest in the long term.

### 2) Perseverance of Effort

Perseverance of effort is related to the individual's ability to be persistent in facing challenges. Individuals who have the ability to be persistent in facing challenges show their skills to complete the work or business that is being done. The persistence of the individual will make him not afraid to face challenges and obstacles, diligent, hardworking, and trying to achieve long-term goals.

The scale has five alternative answers, strongly agree (SS), agree (S), sometimes agree (N), disagree (TS), and strongly

disagree (STS). The rating scale is rated from five to one for the favorable item, and from one to five for the unfavorable item.

Tabel 3.3

*Scale Item Score on Academic Grit*

Answers	Item	
	Favorable	Unfavorable
SS (Strongly Agree)	5	1
S (Agree)	4	2
N (Sometimes Agree)	3	3
TS (Disagree)	2	4
STS (Strongly Disagree)	1	5

Tabel 3.4

*Academic Grit Blueprint Before Try Out*

No	Aspect	Item		Total	%
		Favorable	Unfavorable		
1	Consistency of Interests	1, 4, 16, 11	3, 6, 13, 7	8	50%
2	Perseverance of Effort	2, 8, 10, 5	15, 9, 12, 14	8	50%
	Total			16	100%

## 2. Validity Test

According to Azwar (2013), validity comes from the word validity which means the extent to which the determination and accuracy of a measurement instrument in carrying out its measuring function. A test can be said to have high validity if the test performs its measuring function or provides precise and accurate measurement results following the purpose of the test.

The validity test in this research is content validity, the content of the test must remain relevant and not out of the limit of the measurement objective. Content validity testing does not use statistical analysis but uses ratios (logic). Where testing of the scale requires several competent raters to state that an item is

relevant to the purpose of measuring the scale. The scale compiled will be assessed by several reviewers who hold at least a graduate certificate (S2) and have expertise in the field of Psychology (expert judgment). With these relevant items, if in general, the appraisers have the same opinion, then the validation process for the items is complete (Azwar, 2015).

The computation of validity that the researcher uses in this research is the CVR (Content Validity Ratio), which is obtained from the results of the assessment of a group of experts called SME (Subject Matter Expert). SMEs are asked to state whether the content of an item is said to be essential to support the purpose of what it is intended to measure. An item is said to be essential if the item can present the measurement objectives well (Azwar, 2012). The CVR number moves between -1.00 to +1.00 with  $CVR = 0.00$  meaning that 50% of the SME in the panel stated that the item was essential and valid (Azwar, 2017). The CVR statistics are formulated as follows.

*The statistical formula of CVR*

$$CVR = \frac{2ne - 1}{n}$$

A R - R A N I Y

Explanation:

Ne = Numbers *SME* who consider an item "essential"

N = Numbers *SME* who take the test

The computation result of the content validity ratio of the self-control scale and grit scale are estimated and quantified by testing the contents of the scale through expert judgment from several experts to



check whether each item reflects the behavioral characteristics the researcher will measure. Therefore, to achieve this validity, the scales that have been prepared will be assessed by 3 expert judges, which can be seen in tables 3.5 and 3.6.

Tabel 3.5

*CVR Coefficient Self-Control Scale*

No	CVR Coefficient	No	CVR Coefficient	No	CVR Coefficient
1	1	16	1	31	1
2	1	17	1	32	1
3	0,3	18	1	33	1
4	0,3	19	1	34	1
5	1	20	0,3	35	1
6	1	21	1	36	1
7	1	22	1	37	1
8	1	23	0,3	38	1
9	1	24	1	39	1
10	1	25	1	40	1
11	1	26	1	41	0,3
12	1	27	1	42	0,3
13	1	28	1	43	1
14	1	29	1	44	1
15	1	30	0,3		

Tabel 3.6

*CVR Coefficient Grit Scale*

No	CVR Coefficient	No	CVR Coefficient	No	CVR Coefficient
1	1	7	1	13	1
2	1	8	1	14	1
3	1	9	1	15	1
4	1	10	1	16	1
5	1	11	1		
6	1	12	1		

### 3. Item Discrimination Test

Before the researcher conducts the reliability analysis, the researcher first conducts an item differentiation analysis, the extent to which the item is able to distinguish between individuals or groups of individuals who have and do not have the measured attributes (Azwar, 2016). The calculation of the differentiating power of items uses the product-moment correlation coefficient from Pearson. Pearson's formula for computing the total item-item correlation coefficient (Azwar, 2016).

The criteria in selecting the items that the researcher used were based on the total item correlation using the rix limit of  $\geq 0.3$  for the self-control item and the rix limit of  $\geq 0.3$  for the grit item (Sugiyono, 2016). Each item that reaches a correlation coefficient of at least  $\geq 0.3$  difference is considered suitable to use, on the other hand, items that have a coefficient of less than  $\geq 0.3$  are interpreted as unfit for use.

$$r_{ix} = \frac{\sum ix - (\sum i)(\sum x)/n}{\sqrt{[\sum i^2 - (\sum i)^2/n][\sum x^2 - (\sum x)^2/n]}}$$

Explanation:

i = Item Score

x = Scale Score

n = Sample size

a. Item Differentiate Test of Self-Control Scale

The results of the analysis of the differentiating of each item on the Self-Control scale can be seen in Table 3.7 below:

Tabel 3.7

*Self-Control Item Differentiate Scale*

No	Rix	No	Rix	No	rix
1	0.504	16	0.522	31	0.581
2	0.551	17	0.555	32	0.665
3	<b>0.103</b>	18	0.601	33	0.540
4	0.529	19	0.528	34	0.668
5	0.610	20	0.605	35	0.553
6	0.545	21	0.580	36	0.683
7	0.529	22	0.573	37	0.538
8	0.551	23	<b>0.255</b>	38	0.516
9	0.592	24	0.345	39	0.631
10	0.557	25	0.447	40	0.560
11	0.528	26	0.486	41	0.573
12	0.614	27	0.605	42	0.559
13	0.564	28	0.470	43	0.547
14	0.524	29	0.560	44	0.560
15	0.473	30	0.514		

Based on the table above, from 44 items, there are 2 items with a correlation coefficient value below 0.3, those are items 3 and 23 so that these items are not selected or fall out. While the other 42 items obtained values above 0.3 so that it can be continued for the reliability test.

Based on the results of the item discrimination and reliability analysis above, the researcher describes the blueprint of self-control in table 3.8.

Tabel 3.8

*Final Self-Control Blueprint Before Try Out*

No	Aspect	Indicator	Item		Total
			<i>Favorable</i>	<i>Unfavorable</i>	
1	Behavior alcontrol	a. The individual's ability to modify an unpleasant situation related to the ability to regulate implementation	1, 15	25, 41	10
		b. The individual's ability to manage unpleasant situations related to the ability to regulate stimuli	2, 4, 20	24, 26, 42	
2	Cognitive control	a. Individual's ability to interpret, an event within a cognitive framework	6, 9	28, 30	12
		b. The individual's ability to assess, or combine an event in a cognitive framework	16, 22	35, 44	
		c. Individual's ability to process unwanted information to reduce pressure	10, 21	33, 43	
3	Decision Control	a. The individual's ability to choose the desired destination	5, 7	31, 27	
		b. Individual's ability to determine desired goals	12, 17	29, 34	

c.	Individual's ability to control decisions because they have the opportunity	14, 19	32, 37	20
d.	Individuals to control decisions because they have freedom	11, 18	36, 39	
e.	Individual's ability to control decisions because they have various alternatives in carrying out an action	8, 13	38, 40	
<b>Total</b>				<b>42</b>

b. Item Differentiate Test of Academic Grit Scale

The results of the analysis of the differentiating of each item on the Academic Grit scale can be seen in table 3.9 below:

Tabel 3. 9

*Academic Grit Item Differentiate Scale*

No	Rix	No	Rix	No	Rix
1	0.446	7	0.412	13	0.357
2	0.587	8	0.369	14	<b>0.288</b>
3	0.403	9	0.417	15	0.356
4	0.472	10	0.434	16	<b>-0.460</b>
5	0.500	11	0.509		
6	0.388	12	0.408		

Based on the table above, from 16 items, there are 2 items with a correlation coefficient value below 0.3, are items 14 and 16 so that these items are not selected or fall out. While the other 14 items



obtained values above 0.3 so that it can be continued for the reliability test.

Based on the results of the item discrimination and reliability analysis above, the researcher describes the blueprint of self-control in table 3.10.

Tabel 3.10  
*Final Blueprint Academic Grit Scale*

No	Aspect	Item		Total	%
		<i>Favorable</i>	<i>Unfavorable</i>		
1	Consistency of Interests	1, 4, 11	3, 6, 13, 7	7	50%
2	Perseverance of Effort	2, 8, 10, 5	15, 9, 12	7	50%
Total				14	100%

#### 4. Reliability Test

After conducting a discrimination test, the researcher conducted a reliability test. Azwar (2016) argues that reliability is the extent to which the results are relatively the same in several measurements of the same subject group. The reliability of the questionnaire will be calculated using the Alpha Cronbach technique. The test calculated the reliability coefficient of the Self-Control scale and academic grit scale using the Alpha Cronbach technique with the formula as follows (Azwar, 2016).

$$\alpha = 2 \left[ 1 - \frac{(s_{y1}^2 + s_{y2}^2)}{s^2} \right]$$

Explanation:

$S_{y1}^2$  and  $s_{y2}^2$  = Variant score Y1 and variant score Y2

$S^2$  = Variant score X

According to Guilford (in Sugiyono, 2017) the reliability coefficient criteria

Cronbach's alpha can be categorized in table 3.11 as follows:

Tabel 3.11

*Reliability classification of Alpha Cronbach*

Criteria	Coefisien
Strongly Reliable	>0.900 (Very High)
Reliable	0.700 – 0.900 (High)
Reliable Enough	0.400 – 0.700 (Medium)
Less Reliable	0.200 – 0.400 (Low)
Not Reliable	<0.200 (Very Low)

a. Result of Self-Control Scale Reliability Test

The results of the reliability test on the Self-Control scale obtained a value of = 0.946, then the researcher conducted a second reliability analysis by removing non-selected items (low discriminating power) and the results of the scale analysis in the second stage obtained the results of = 0.950, which means the reliability of the Self-Control scale is very high or strongly reliable.

b. Result of Academic Grit Reliability Test

The results of the reliability test on the Academic Grit scale obtained a value of = 0.769, then the researchers conducted a second stage of reliability analysis by removing items that were not selected (low discriminating power) and the results of the scale analysis in the

second stage obtained the results of  $\alpha = 0.814$ , which means the reliability of the Academic Grit scale is high.

## **F. Research Preparation and Implementation**

Before the researcher conducted the research, the researcher prepared a Self-control and Academic Grit scale which would later be used to collect data on the respondents. The research scale must first pass the validity test by expert judgment. After the scale testing was completed, the researcher then prepared the scale in the form of a google form which would be distributed via WhatsApp and personal contact to reach respondents.

### **1. Research Administration**

Before conducting the research, the researcher prepared administrative documents to conduct the research legally. The researcher applied for a research permit to the academic division of the Faculty of Psychology, UIN Ar-Raniry on 8<sup>th</sup> May and a week later a research permit from the Faculty of Psychology was given to the researcher.

### **2. Try Out and Research Implementation**

The research process is carried out after the researcher completes the proposal/comprehensive seminar. The researcher used the used tryout method (single trial administration) where the psychological scale was only given once to a group of individuals as a sample. The reason the researcher used the tryout method was due to the limited number of subjects, the researcher base which is

not in the research location and time constraints in this study, and this approach was seen as economical, practical and high efficient (Azwar, 2009).

The testing of the measuring instrument was carried out for several days. Furthermore, this trial data is also used for research data because it uses a single trial administration. After the trial scale was completed, the researcher scored, tabulated it into excel, and analyzed the two using SPSS 25.0. The research implementation is shared by sending the following link: <https://bit.ly/3IUJQsl>

The distribution of research questionnaires was carried out online. The trial and research were carried out for 21 days, starting from May 24 to June 15, 2022, by distributing the research questionnaire google-form link online through groups and contacting personally via the whatsapp application. After the data collection period was completed and 200 respondents were collected, then the researchers scored and analyzed the data with the help of the SPSS version 25.0 program. The requirements for filling out the respondent's online scale must be in accordance with the characteristics or research criteria determined by the researcher. If the characteristics or criteria are in accordance with the respondent's condition, the subject can fill out the online scale. After all the required scales were collected again, the data collection process was stopped, and the research continued to the next stage for data analysis.

## **G. Data Analysis Technique**

The data analysis technique is a way to answer the problem formulation or test the hypothesis. The aim is to obtain conclusions from the results of the research. There are several data analysis techniques used in this research:

### **1. Data Processing**

The following are several stages of data processing in this study according to Mulyadi (2012):

#### **d. Data editing (Editing)**

Editing is an examination of data or correction of data that has been collected. Editing is done because it is possible that the incoming data (raw data) does not meet the requirements or does not meet the needs. Data editing is done to complete deficiencies or eliminate errors contained in the raw data.

Editing is checking the clarity and completeness of filling out the data collection instrument. Editing of the questionnaire that has been filled out by the respondent to find errors in the questionnaire or lack of harmony in filling out the questionnaire.

Here are some things to consider in the editing process:

#### **1. Sampling**

It is necessary to check whether sample has met the sampling rules or not. Checking the sample category, the type of sample used and determining the number of samples.

As the sample the researchers took were working students of UIN Ar-Raniry Banda Aceh.

## 2. Data Clearance

Correcting whether the data collected can be read clearly if there is handwriting or an abbreviation that is not clear, it is necessary to verify the data collection.

## 3. Data Completeness

This stage is to check whether the respondent's data are complete or any missing, if it is missing then there are two possibilities, whether there is indeed no answer and the possibility of the respondent refusing to answer the scale of the researcher.

## 4. Answer Compatibility

Checking the compatibility of respondents' answers is done to avoid the occurrence of contradicting respondents' answers

## e. Coding and Data Transformation

Coding (coding) data is the provision of certain codes on each data including providing categories for the same type of data. Codes are certain symbols in the form of letters or numbers that provide data identity. The code given can have the meaning of quantitative data (in the form of a score). For example, in favorable categorization the values strongly agree: 4, agree: 3, disagree: 2,



and strongly disagree: 1 and unfavorable categorization values strongly agree: 1, agree: 2, disagree: 3, and strongly disagree: 4.

f. Data Tabulation

Tabulation is the process of placing data in tabular form by creating tables containing data according to analysis needs. The table made should be able to summarize all the data to be analyzed.

Tabulation in this study was carried out using the help of computer programs, namely Microsoft Word, Microsoft Excel, and the SPSS program. The questionnaire that has been filled out by the respondent will be directly entered into the computer program.

## 2. Assumption Test

The assumption test is to determine the relationship between the independent variable (X) and the dependent variable (Y). The assumption test is also used to find out information about the distribution of the variables used and which will later be tested for linearity and hypotheses (Tobari, 2015). There are two assumption tests carried out in this research, the normality test, and the linearity test.

a. Normality Test

A normality test is a test used to determine whether the data is normally distributed or not. Data analysis was carried out to test for normality non-parametrically using the statistical technique One Sample Kolomogrow Smirnov Test from the SPSS version 25.0 program for windows. The rules used are the significant number or

probability value  $> 0.05$  then the data is normally distributed and vice versa if the significance number or probability value is  $< 0.05$  then the data is not normally distributed (Santoso, 2017).

b. Linearity Test

After conducting the normality test, the researcher then tested the linearity of the relationship. Gunawan (2016) states that the relationship linearity test is a requirement for all relationship hypothesis tests that aim to see whether the relationship between two variables forms a linear straight line. The linearity test was carried out to prove that the independent variable had a relationship with the dependent variable (Hanief & Himawanto, 2017). The linearity test in the Statistical Package for Social Science (SPSS) version 25.0 for windows program used deviation from linearity which can be seen in the Anova table. The rules used to determine the linearity of the two relationships are the independent variable and the dependent variable. Two variables are said to have a linear relationship if the significant value for deviation from linearity  $p > 0.05$  means that the relationship is linear. (Widhiarso, 2010).

### 3. Hypothesis Test

The next step is for the researcher to test the hypothesis. The hypothesis test proposed in this research is self-control with academic grit of working students. The statistical method that has been designed by the researcher in testing this hypothesis was the Person product-moment correlation

statistical method with a significance value of  $p < 0.05$ . The purpose of using the Pearson product-moment correlation statistical method is to see the correlation or relationship between the independent variable and the dependent variable. Analysis of research data used with the help of a computer program Statistical Package for Social Science (SPSS) version 25.0 for windows.



## CHAPTER IV

### RESULT AND DISCUSSION

#### A. Research Subject Description

This study uses a population of UIN Ar-Raniry Banda Aceh students who study while working. The number of subjects in this study was 200 people based on recommendations from Croker & Algina (in Azwar, 2017). After the researchers distributed the questionnaires, there were 200 respondents who filled out the questionnaires.

##### 1. Subject according to gender

Based on the results of research in the field, it shows that the number of male samples is 75 people (37%) and the number of female samples is 125 people (63%). It can be said that the sample that dominates in this study is a female sample, as shown in table 4.1 below:

Tabel 4.1

*Subject according to gender*

Subject Description	Category	Total (n)	Percentage (%)
Gender	Male	75	37%
	Female	125	63%
Total		200	100%

##### 2. Subject according to age

The age of students ranged from 18-25 years. According to Willis, S (2011), the age of 18 to 24 years is the age of early adulthood (young adulthood). Based on this study, the age of the youngest subjects was 18 years to the oldest 26 years. Table 4.2 shows that the predominant age in this study was 20 years as

many as 61 people (30%), then 23 years for 53 students (26%) and followed by the age of 21 years as many as 40 people (20%). Then, at the age of 20 years there are 20 students (10%) and there are 14 students at age 24. Furthermore, the age 25 and 19 have the same total students which are 6 (3%) and the last is the age 18 with 1 student (0%).

Tabel 4.2

*Subject according to age*

Subject Description	Category	Total (n)	Percentage (%)
Age	18	1	0%
	19	6	3%
	20	20	10%
	21	40	20%
	22	61	31%
	23	52	26%
	24	14	7%
	25	6	3%
<b>Total</b>		200	100%

### 3. Subject according to faculty

Based on the faculties, the subject that dominates this research is the Faculty of Education and teacher Training where there are 57 students (28%) then Science and Technology faculty 23 students (12%), Psychology faculty, as many as 23 people (11%), Adab and Humanities faculty as many as 22 people (11%) then the Islamic Economics and Business faculty as many as 19 people (9%), the Tarbiyah and the Da'wah and Communication faculty as many as 15 people. (8%), then the faculty of Sharia and Law as many as 13 people (7%), faculties of Social and Governmental Sciences as many as 14 people (7%), and finally Ushuludin and Philosophy faculties as many as 14 people (7%).

Tabel 4. 3

*Subject according to faculty*

<b>Subject Description</b>	<b>Category</b>	<b>Total (n)</b>	<b>Percentage(%)</b>
Faculty	Fakultas Tarbiyah dan Keguruan	57	28%
	Fakultas Sains dan Teknologi	23	12%
	Fakultas Psikologi	23	11%
	Fakultas Adab dan Humaniora	22	11%
	Fakultas Ekonomi Bisnis dan Islam	19	9%
	Fakultas Dakwah dan Komunikasi	15	8%
	Fakultas Ushuluddin dan Filsafat	14	7%
	Fakultas Ilmu Sosial dan Pemerintahan	14	7%
	Fakultas Syariah dan Hukum	13	7%
	<b>Total</b>	200	100%

#### 4. Subject according to batch

The table below shows that dominant subject is from batch 2018 where there are 50 students (25%) then batch 2017 for 45 students (22%) and batch 2019, 29 students (19%), batch 2019 37 students (19%). Furthermore there 14 students (7%) for batch 2020, 11 students (6%) batch 2015 and 4 students (2%) batch 2021.

Tabel 4.4

*Subject according to batch*

<b>Subject Description</b>	<b>Category</b>	<b>Total (n)</b>	<b>Percentase (%)</b>
Batch	2015	11	6%
	2016	39	19%
	2017	45	22%
	2018	50	25%
	2019	37	19%
	2020	14	7%
	2021	4	2%
	<b>Total</b>	200	100%



## 5. Subject according to place of origin

According to place of origin, the working students mostly come from Aceh (95%), while 5 students (3%) Sumatra Utara, 3 (2%) from Bandung, 1 (0%) Palembang and 1 (0%) student from Luar negeri.

Tabel 4. 5

*Subject according to place of origin*

Subject Description	Category	Total (n)	Percentage (%)
Place of origin	Aceh	190	95 %
	North Sumatra	5	3%
	Bandung	3	2%
	Palembang	1	0%
	Abroad	1	0%
<b>Total</b>		200	100%

## 6. Subject according to parent's job

According to parents' job, KBJI (Klasifikasi Baku Jenis Pekerjaan Indonesia) 2002, there are 9 type of job in Indonesia; Pejabat lembaga legislatif, tenaga profesional, teknisi dan asisten tenaga profesional, tenaga tata usaha, tenaga usaha jasa dan tenaga penjualan di toko, tenaga usaha pertanian, tenaga pengolahan dan kerajinan, operator dan perakitan mesin, pekerja kasar, tenaga kebersihan, anggota TNI Polri. most of the working students' parent work as tenaga profesional, 93 parents (47%) such as PNS and hold a role in government, another 60 parents work for tenaga jasa and penjualan (30%), Usaha pertanian dan peternakan 33 parents (16%) , 8 other jobless (4%), 4 parents TNI/Polri (2%) and 2 parents (1%) pekerja kasar.

Tabel 4. 6

*Subject according to parents' job*

Subject Desc	Category	Total (n)	Percentage (%)
Parents' job	Tenaga professional	93	47%
	Jasa dan penjualan	60	30%
	Usaha pertanian/peternakan	33	16%
	Uncategorized	8	4%
	TNI/Polri	4	2%
	Pekerja kasar	2	1%
<b>Total</b>		200	100%

### 7. Subject according to place of staying

Data collected shows 93 students (46%) live in rental house, 80 students (40%) live in parents house, 21 students (11%) live in relative house and 6 students (3%) live in dormitory.

Tabel 4. 7

*Subject according to place of staying*

Subject Des	Category	Total (n)	Percentage (%)
Place of staying	Rental House	93	46 %
	Parent's House	80	40%
	Relative House	21	11%
	Dormitory	6	3%
<b>Total</b>		200	100%

### 8. Subject according to reason of working

Data collected shows 146 students (73%) work for financial support, 80 students (40%) work to enhance experience, 16 students (8%) work to explore passion.

Tabel 4. 8

*Subject according to reason of working*

Subject Des	Category	Total (n)	Percentage (%)
Reason of working	Financial support	146	73 %
	Enhance experience	80	40%
	Explore passion	16	8%
<b>Total</b>		200	100%

### 9. Subject according to type of work schedule

According to Glints (2021) there are six type of work schedule: full-time, part-time, flexible, freelance, shift, stable working hours. Based on the research, students work schedule 181 students (91%) work part time, another 12 (6%) work fulltime while 5 (2%) have flexible work schedule and 2 (1%) students work as freelancer.

Tabel 4. 9

*Subject according to type of work schedule*

Subject Description	Category	Total (n)	Percentage (%)
Work schedule	Part-time	181	91 %
	Full time	12	6%
	Flexible	5	2%
	Freelance	2	1%
<b>Total</b>		200	100%

### 10. Subject according to type of work

According to Arum (2022), there all several work which students can do during studying: teacher, social media manager, photographer, writer, barista, translator, reseller (online shop), online transportation driver (ojek online), make-up artist and freelance. The table shows that dominant subject work as teacher

where there are 79 students (40%) then uncategorized for 53 students (26%) and online shop, 41 students (20%), ojek online 12 students (6%). Furthermore there 10 students (5%) as barista, 5 students (3%) as social media manager.

Tabel 4. 10

*Subject according to type of work*

Subject Des	Category	Total (n)	Percentase (%)
Type of work	Teacher	79	40%
	Uncategorized	53	26%
	Online shop	41	20%
	Online transport driver	12	6%
	Barista	10	5%
	Social media manager	5	3%
	<b>Total</b>	200	100%

#### 11. Subject according to length of work

The result found that a number of students 60 students (30%) have been working for less than a year, 112 students (56%) been working for 1-2 years, 28 students (14%) work for 3-5 years.

Tabel 4. 11

*Subject according to length of work*

Subject Description	Category	Total (n)	Percentage (%)
Length of work	Less than a year	60	30%
	1-2 years	112	56%
	3-5 years	28	14%
<b>Total</b>		200	100%

## B. Result

### 1. Categorization of Research Data

The researcher divided the categorization of the sample using categorization based on the normal distribution model with ordinal categorization. According to Azwar (2017), the purpose of this categorization is to place individuals into

groups whose positions are tiered according to a continuum (from low to high) based on the measured attributes. This categorization will be obtained by categorizing the subject scores based on the size of the population standard deviation unit ( $\sigma$ ). The research data is used as a limitation in the categorization of the research sample which consists of three categories low, medium and high.

#### a. Self-Control Data Categorization

Descriptive data analysis was carried out by looking at the descriptive hypothetical data (which may occur) and empirical (based on the reality in the field) of self-control variable. The description of the research data is as follow:

Tabel 4. 12

*Research Data Description Academic Self-Control*

Variable	Hypothetical Data				Empirical Data			
	Xmax	Xmin	M	SD	Xmax	Xmin	M	SD
<i>Self-Control</i>	168	42	1106	21	168	98	137.96	16.88

The following explains the formula for finding a hypothetical score:

1. Xmax (Maximum Score) is the result of multiplying the number of scale items with the highest value from the weighting of the answer choices
2. Xmin (minimum score) is the result of multiplying the number of scale items with the lowest value from the weighting of the answer choices
3. M (Mean) with the formula = (max score+min score)/2
4. SD (Standard Deviation) with the formula  $s = (\text{max-min score})/6$

Based on the results of the statistical test of the research data in table 4.12 above, the descriptive analysis hypothetically shows that the

minimum total score is 42, the maximum is 168, the mean value is 106 and the standard deviation is 21 while the empirical data shows that the minimum total score is of 98, a maximum of 168, a mean value of 137,96 and a standard deviation of 16,881. The description of the data from the research results is used as a limitation in categorizing the research sample which consists of three categories, namely low, medium, and high using the ordinal categorization method. The following is the categorization formula on the self-control scale:

$$\begin{aligned} \text{Low} &= X < M - 1SD \\ \text{Medium} &= M - 1SD \leq X < M + 1SD \\ \text{High} &= M + 1SD \leq X \end{aligned}$$

Detail:

$$\begin{aligned} X &= \text{Range number of question} \\ M &= \text{Mean} \\ SD &= \text{Standard Deviation} \end{aligned}$$

Tabel 4. 13  
*Self-control categorization*

Category	Interval	Frequency (n)	Percentage %
Low	$X < 121,08$	38	19%
Medium	$121,08 \leq X < 154,84$	123	61.5%
High	$154,84 < X$	39	19.5%

Based on table 4.13 above, the results of the categorization self-control on the respondents of this study empirically data show that 38 students who work while studying have low self-control (9%), 123 students who work



while studying have medium self-control (61.5 %) and 39 students who work has high self-control (19.5%).

### b. Academic Grit Data Categorization

The researcher describes a descriptive analysis of the academic grit scale in the form of hypothetical data analysis to see the possibilities that occur in the field and empirical data analysis to see the actual situation in the field. The description of the research data is as follows:

Tabel 4. 14

*Research Data Description Academic Grit Scale*

Variable	Hypothetical Data				Empirical Data			
	Xmax	Xmin	M	SD	Xmax	Xmin	M	SD
Academic Grit	70	14	42	9,33	68	29	52,96	7,60

**The following explains the formula for finding a hypothetical score:**

1. Xmax (Maximum Score) is the result of multiplying the number of scale items with the highest value from the weighting of the answer choices
2. Xmin (minimum score) is the result of multiplying the number of scale items with the lowest value from the weighting of the answer choices
3. M (Mean) with the formula  $= (\text{max score} + \text{min score}) / 2$
4. SD (Standard Deviation) with the formula  $s = (\text{max} - \text{min score}) / 6$

Based on the results of the statistical test of the research data in table 4.14 above, the descriptive analysis hypothetically shows that the minimum total score is 14, the maximum is 70, the mean value is 42 and the standard

deviation is 9.33 while the empirical data shows that the minimum total score is of 29, a maximum of 68, a mean value of 52,96 and a standard deviation of 7,607. The description of the data from the research results is used as a limitation in categorizing the research sample which consists of three categories, namely low, medium, and high using the ordinal categorization method. The following is the categorization formula on the academic grit scale:

Low	$= X < M - 1SD$
Medium	$= M - 1SD \leq X < M + 1SD$
High	$= M + 1SD \leq X$
Detail:	
X	= Range number of question
M	= Mean
SD	= Standard Deviation

Tabel 4. 15  
*Academic grit categorization*

Category	Interval	Frequency (n)	Percentage %
Low	$X < 45,36$	37	18.5%
Medium	$45,36 \leq X < 60,56$	122	61.0%
High	$60,56 < X$	41	20.5%

Based on table 4.15 above, the results of the categorization of git academic on the respondents of this study empirically data show that 37 students who work while studying have low academic grit (18.5%), 122 students who study while working have medium academic grit (61.0 %) and 41 students who study part-time work has high academic grit (20.5%).

## C. Data Analysis

### 1. Assumption Test

The assumption test is a data test used to find out whether the research data meets the requirements for further analysis in order to answer the research hypothesis (Sudaryono, 2021).

#### a. Normality Test

The distribution normality test is a technique used to determine whether the data population is normally distributed or not. Sugiyono (2017). Testing the normality of the data in this study using the SPSS statistical version 25 windows program with the Kolgomorov-Smirnov test technique. Another alternative step of the Kolgomorov-Smirnov normality test is to use the Monte Carlo method. The purpose of the Monte Carlo method is to see if the data is normally distributed or not. The following are the test results of the two research variables which can be seen in table 4.16.

Tabel 4. 16

*Normality Test result*

Research Variable	Coefficient K-SZ	P
Academic grit	0,057	0,398
Self-Control	0,077	0,007

It can be concluded that the significance value of the normality test using Monte Carlo is normally distributed because the significance value or  $P > 0.05$ , this is indicated by the significance value of the academic grit variable, which is 0.398 and the significance value of the

self-control is variable is 0.007 so that the conclusion is that the grit academic scales are normally distributed and can be applied to the entire population while self-control variable is not normally distributed.

b. Linearity Test

The linearity test is a test used to determine whether two variables significantly have a linear relationship or not. Two variables are said to have a relationship if the significance value in the linearity test is  $> 0.05$ , using the test for linearity in the Anova table (Luwihono & Palpialy, 2021). The results of the linearity test of the relationship carried out on the two research variables obtained the data listed in table 4.17 below:

Tabel 4. 17  
*Linearity Test result*

Research Variable	F for Deviation from Linearity	P
Academic grit	1,027	0,439
Self-Control		

Based on table 4.16 above, the results of the linearity test of the relationship carried out using the statistical IMB SPSS version 25 windows program obtained a test for linearity  $F = 1,027$  and  $P = 0.439$  ( $P > 0.05$ ). This means that the two scales have a linear nature, so it can be concluded that there is a linear relationship between self-control and academic grit.

## 2. Hypothesis Test

After testing the assumptions, then the researcher does hypothesis test, at first, the researcher planned to do person correlation product moment as the method but based on the normality test, the result shows that the self-control variable is not normally distributed which mean the Pearson product moment cannot be used for hypothesis test. The researcher then decides to use spearman rho as the statistical analysis. Correlation analysis was conducted to analyze the relationship between self-control and academic grit among working students in UIN Ar-Raniry Banda Aceh. The following results of the hypothesis analysis can be seen in table 4.18

Tabel 4. 18  
*Hypothesis Test result*

Research Variable	Spearman rho Correlation Product Moment	P
Academic grit	0,666	0,000
Self-Control		

Based on the results of the hypothesis test in table 4.17 above, it shows that the correlation coefficient of  $r = 0.666$  with a significance of 0.000 indicates that there is a very significant positive relationship between self-control and the academic grit. Thus, this shows that the higher the self-control, the higher the academic grit, and conversely the lower the self-control, the lower the academic grit. The results of the analysis of this study indicate that the significance value is  $p = 0.000$  ( $p < 0.05$ ), which means that

the research hypothesis is accepted. The relative contribution of the results of the two variables can be seen in table 4.19

Tabel 4. 19

*Analysis Measure of Association*

Measures of Association	R <sup>2</sup>
Academic grit Self-Control	0,445

Based on table 4.18 above, it shows that this study obtained a relative contribution between the two variables with a value of R Square ( $R^2$ ) = 0.445, which means that there is 44.5% of the influence of self-control on academic grit while the other 55.5% is influenced by other factors.

**D. Discussion**

This study aims to determine the correlation between self-control and academic grit among working students in UIN Ar-Raniry. In this study, women dominated with 125 students (63%) and men with 75 students (37%). While the age category of students is dominated by 20 years as many as 61 people (30%), then 23 years for 53 students (26%) and followed by the age of 21 years as many as 40 people (20%). Then, at the age of 20 years there are 20 students (10%) and there are 14 students at age 24. Furthermore, the age 25 and 19 have the same total students which are 6 (3%) and the last is the age 18 with 1 student (0%).

The correlation analysis shows that there is a positive relationship between the two variables (the hypothesis is accepted), which means that there is a positive relationship between students' self-control and their academic grit. So that the higher the self-control, the higher academic grit among working students in UIN



Ar-Raniry and vice versa, the lower the self-control, the lower the academic grit for the students of working students in UIN Ar-Raniry.

Based on the results of empirical data research conducted by researchers, it shows that on average the working students in UIN Ar-Raniry have medium academic grit as many as 122 students (61.0%), while the rest are in a low category as many as 37 students (18.5%) and 41 students (20.5%) in high category.

While the results of the research from empirical data categorization of self-control have a medium average score of 123 (61.5%) in working students in UIN Ar-Raniry, 39 students (19.5%) in the low category and 38 students (19%) have high categorization. This shows that the working students in UIN Ar-Raniry have low, medium, and high self-control and academic grit. The students with high grit indicate the willingness to pursue their academic goals, during the process of working on challenging task, gritty individuals reported having more struggle or effort to resolve the problem (Silvia, 2013). The gritty individual will refuse to give up even when faced with difficult challenges (Duckworth et al, 2007), and are willing to persist in longer time to fix the difficulties (Lucas et al, 2015) as well as having the ability to ignore distracting attempts break his focus while working on the task he received (Kalia et al, 2018).

There are also students who have a low academic grit, so it has a low consistency of interest (Passion) and business persistence (Perseverance). This shows that students tend to behave that tends to easily change interests, especially when they experience failure in the academic process. In addition, they are also

less able to survive in doing many course assignments and feel unable to concentrate on attending long lecture hours. This makes them often give up or are unable to survive to achieve their academic goals (Vivekananda, 2017).

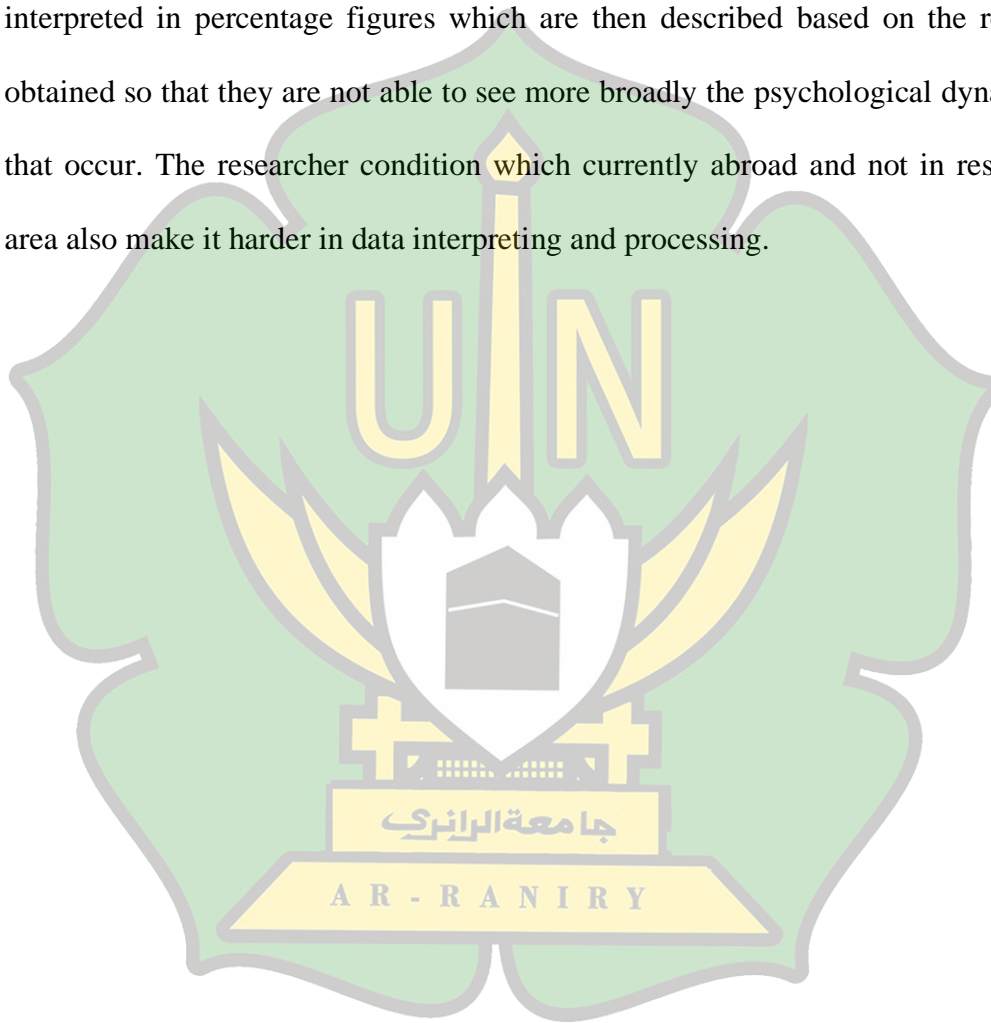
While the relative contribution between the two variables is obtained with a value of R Square ( $R^2$ ) = 0.445, which means that there is 44.5% of the influence of self-control on academic grit while the other 55.5% is influenced by other factors. The results of this study are also in line with the theory that I put forward by Duckworth et al. (2007) & SRI International (2018) which stated the factors that influence grit is self-control, while other factors are achievement, education, age, thoroughness, strategy, and growth mindset. Based on the result above it can be concluded that there is a relationship self-control and academic grit, so students who have high self-control will increase their academic grit as well.

The results of this study support the previous research conducted by Yunus (2018), based on the empirical data obtained, it is proven that there is a significant relationship between self-control and grit with a correlation coefficient of 0.000 which means a change self-control will increase the grit of participants.

Furthermore, the results of a study conducted by Oktarina and Adelina (2020) also examined *Pengaruh Self-Control terhadap Grit pada Mahasiswa yang Menjadi Panitia Kegiatan* (the effect of self-control on the grit of the student joining committee) show that there is a relationship between the two variables with a value of  $r = 0.666$  and  $P\text{-value} = 0.000$ . The conclusion of this study is that there is a relationship between self-control and academic grit which is positive with a strong and significant.

Based on the result above it can be concluded that there is a relationship between self-control and academic grit, so students who have high self-control will increase their academic grit as well.

This study has several limitations, the quantitative approach used is only interpreted in percentage figures which are then described based on the results obtained so that they are not able to see more broadly the psychological dynamics that occur. The researcher condition which currently abroad and not in research area also make it harder in data interpreting and processing.



## CHAPTER V

### CONCLUSION AND SUGGESTION

#### A. Conclusion

Based on the results of data analysis and the previous discussion, it can be concluded that there is a positive relationship between self-control and academic grit among working students in UIN Ar-Raniry Banda Aceh, with a correlation coefficient value of  $r = 0.666$  with a significance of 0.000. This shows that the higher self-control, the higher academic grit, and conversely the lower the self-control, the lower academic grit. The hypothesis proposed in this study was accepted.

#### B. Suggestion

There are some suggestions that researchers can give for practical and theoretical purposes for those who will research with similar variables are:

##### 1. For working students

It is suggested that students who have low academic grit pay more attention to studying and limit their other activities besides working and studying.

##### 2. For university

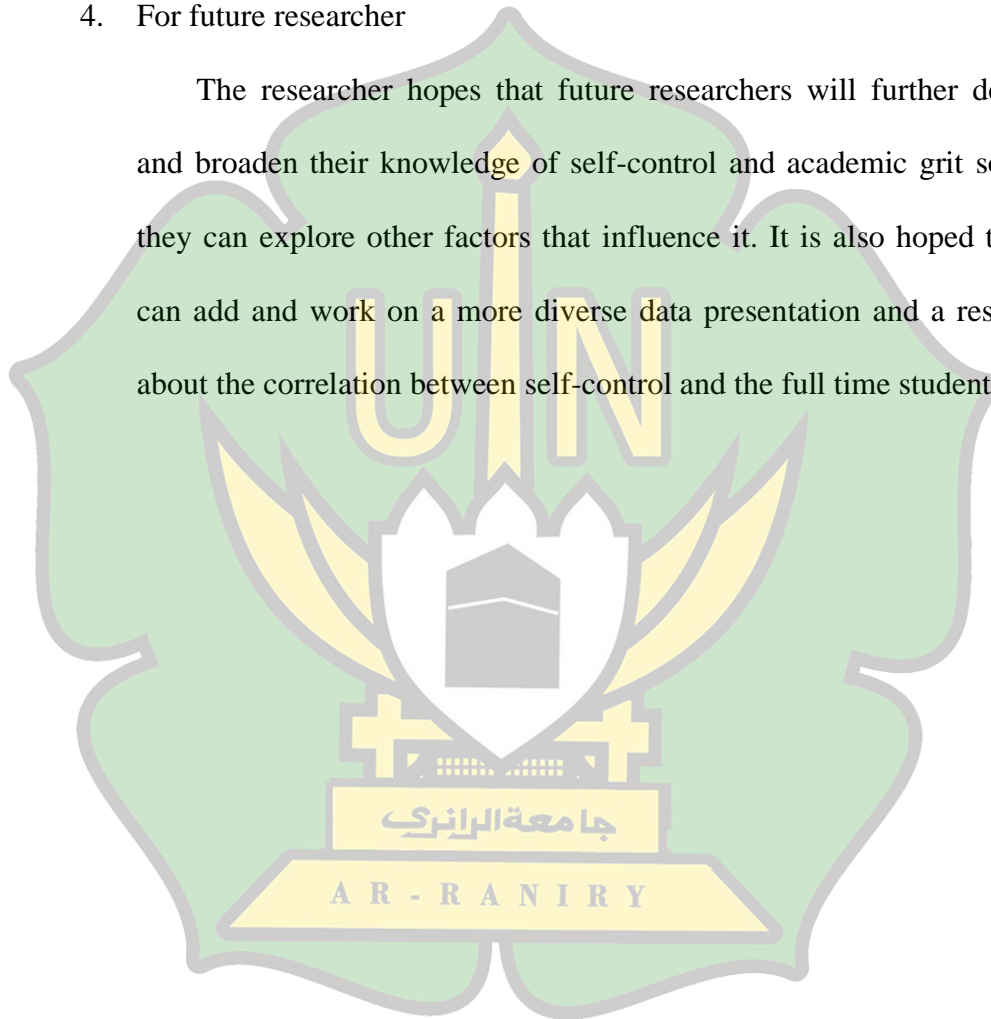
It is hoped that the university can use the result of this research as motivation for suggestions for working students to have higher academic grit so the students could be successful both in studying and working.

### 3. For Parents

It is hoped that parents can be more open to talking with students and trying to understand their needs according to study and work so that the students have more support to do well in both responsibilities.

### 4. For future researcher

The researcher hopes that future researchers will further deepen and broaden their knowledge of self-control and academic grit so that they can explore other factors that influence it. It is also hoped that it can add and work on a more diverse data presentation and a research about the correlation between self-control and the full time students.



## REFERENCES

- Akbağ, M., & Ümmet, D. (2017). Predictive Role of Grit and Basic Psychological Needs Satisfaction on Subjective Well-Being for Young Adults. *Journal of Education and Practice*, 8(26), 127-135.
- Amalia, D., & Aviani, Y. (2018). Hubungan Antara Grit dan Prestasi Akademik pada Mahasiswa Bidikmisi, *Jurnal Riset Psikologi* 2018 (4). Retrieved from <http://repository.unp.ac.id/id/eprint/21619>
- Ardilasari, N., Firmanto, A. (2017). Hubungan Self Control Dengan Perilaku Cyberloafing Pada Staf Negeri Sipil. *Jurnal Ilmiah Psikologi Terapan* Vol. 5 No.1. Diakses dari <http://ejournal.umm.ac.id/index.php/jipt/article/viewFile/3882/4333>
- Arifin, Z. 2012. *Evaluasi Pembelajaran*. Bandung: PT. Remaja Rosdakarya Offset.
- Averill, J. R. (1973). Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80(4), 286–303. <https://doi.org/10.1037/h0034845>
- Azwar, S. (2012). *Penyusunan Skala Psikologi (Edisi 2)*. Yogyakarta: Pustaka Pelajar.
- Azwar, S. (2015). *Reliabilitas dan validitas*. Yogyakarta: Pustaka Pelajar
- Azwar, S. (2016). *Konstruksi Tes Kemampuan Kognitif*. Yogyakarta: Pustaka Pelajar.
- Azwar, S. (2016). *Penyusunan skala psikologi*. Yogyakarta: Pustaka Pelajar.
- Azwar. (2017). *Metode penelitian psikologi*. Yogyakarta: Pustaka Pelajar.
- Borba, M. (2008). *Membangun Kecerdasan Moral, Tujuh Kebajikan Utama Agar Anak Bermoral Tinggi*. Alih Bahasa: Lina Jusuf. Jakarta: PT. Gramedia Pustaka Utama.
- Chrisantiana, T. G., & Sembiring, T. (2017). Pengaruh Growth dan Fixed Mindset terhadap Grit pada Mahasiswa Fakultas Psikologi Universitas “X” Bandung. *Humanitas (Jurnal Psikologi)*, 1(2), 133.

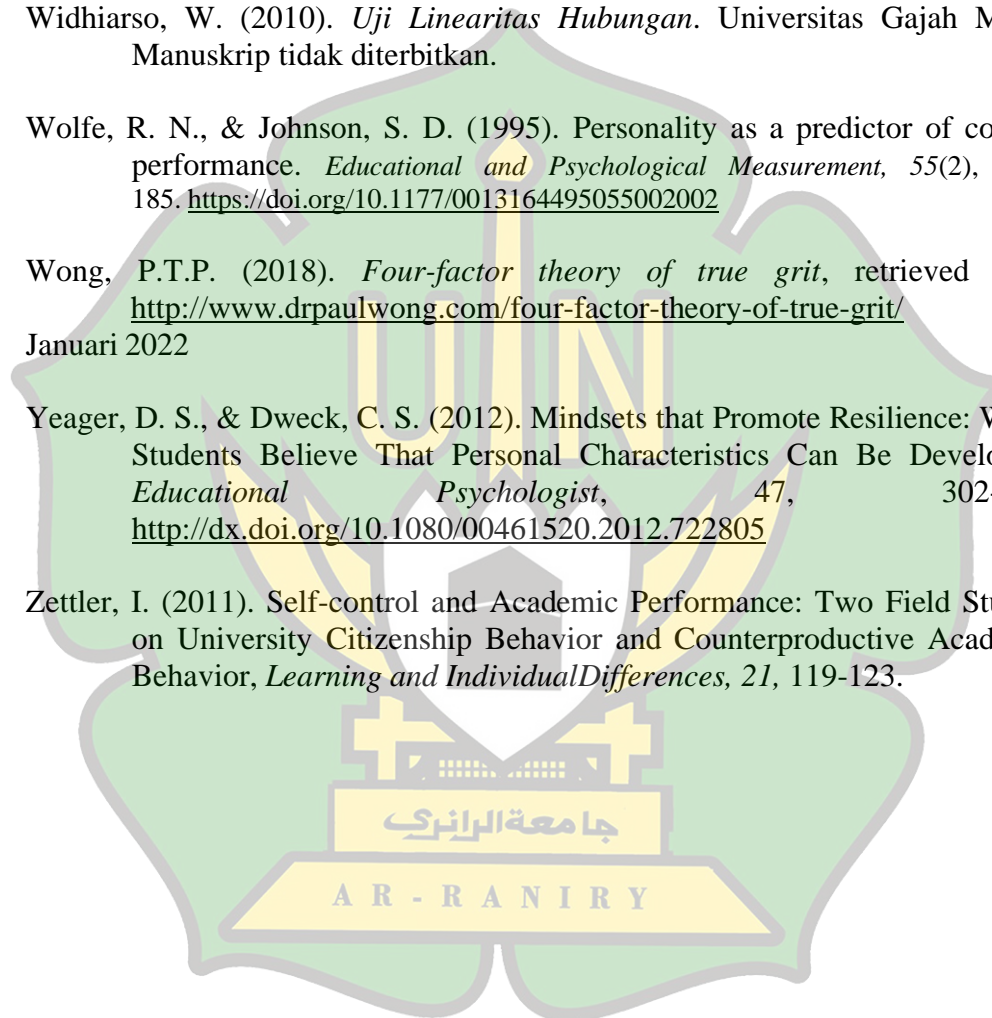


- Creswell, J. W. (2012). *Educational Research Planning, Conducting, and Evaluating Quantitative And Qualitative Research* (4th ed.). Boston, MA Pearson.
- Denura, F. (2012, Maret 30). *halaman internet*. Dipetik Desember 11, 2020, dari <http://www.scholae.co/web/read/451/kuliah.sambil.kerja.tuntutan.ekonomi.atau.belajar>
- Duckworth, A. & Seligman, P. (2005) Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science*, 16(12), 939-944.
- Duckworth, A. L. (2011). *The Significance of Self-Control*. Philadelphia, 108(7).
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and Passion for Long-term Goals. *Journal of personality and social psychology*, 92(6), 1087-1098. DOI: 10.1037/0022-3514.92.6.1087
- Duckworth, A.I. (2016). *The power of passion and perseverance*. Vermilion: United Kingdom.
- Duckworth, A.L., & Quinn, P.D., (2009) Development and Validation of the Short Grit Scale (GritS). *Journal of Personality Assessment*, 91, 166-174.
- Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. New York: RandomHouse.
- Educational & Psychological Measurement*, 55, 177-185
- Ghufron, M. Nur & Risnawita. (2012). *Teori-teori Psikologi*. Jogjakarta: Ar-Ruzz. Media.
- Ghufron, M.N & Risnawita, R.S. (2010). *Teori-Teori Psikologi*. Yogyakarta: Ar-Ruzz
- Gunawan. (2016). *Statistika Inferensial*. Jakarta: Rajawali Pers.
- Hanief, Y. N., & Himawanto, W. (2017). *Statistika Pendidikan*. Yogyakarta
- Hodsay, Zahrudin. (2016). Perbedaan Indeks Prestasi Kumulatif (IPK) Mahasiswa Antara Gaya Belajar Visual, Auditorial Dan Kinestetik Pada Program Studi Pendidikan Akuntansi Fkip Universitas Pgri Palembang. Universitas PGRI Palembang: *Jurnal Profit 3* (1) Jakarta: Kencana Perdana Media Group.

- Holdan, E., Lias, A., Locke, R., Elfen, H., & Buzzelli, A. (2018). Succes Without Grit: An Exploratory Study of Individuals with Low Grit Scores and High Academic Performance. *International Journal of Current Research*, 73250-73252.
- Indonesia, B. (2015, Agustus 10). *Mahasiswa yang Bekerja sambil Kuliah Meningkat*.
- Jex, S.M. (2002). *Organizational Psychology: A Scientist-practitioner Approach*. New York: John Wiley & Sons.
- Justine, J., & Theresia, E. (2019). Grit dan Self-Control pada Mahasiswa Fakultas Kedokteran. *Humanitas (Jurnal Psikologi)*, 3(2), 141 - 154. <https://doi.org/10.28932/humanitas.v3i2.2172>
- Kurniawan. 1995. *Pengaruh Kematangan Emosi dan Dukungan Suami terhadap Kepekaan Pengasuhan Ibu*. Skripsi. (Tidak diterbitkan). Jakarta: Fakultas Psikologi Universitas Indonesia.
- M.Dadgar. (2012). *The Academic Consequences of Employment for Students Enrolled in Community College*. CCRC working paper no.46. New York: Community College Research Center, Columbia University.
- Mardelina, E., & Muhson, A. (2017). Mahasiswa Bekerja dan Dampaknya pada Aktivitas Belajar dan Prestasi Akademik. *Jurnal Ekonomia*, 201-209.
- Metriyana, M. (2014). *Studi Komparatif Pengaruh Motivasi, Perilaku Belajar, Self- Efficacy dan Status Kerja terhadap Prestasi Akademik antara Mahasiswa Bekerja dan Mahasiswa Tidak Bekerja*, Skripsi. Dipublikasikan: Universitas Diponegoro, Semarang.
- Oktarina, D. C., & Adelia I (2020). Pengaruh *Self-Control* terhadap *Grit* pada Mahasiswa yang Menjadi Panitia Kegiatan. *Journal Humanitas*, 4(1). 15-26
- Permatasari, Wahyuni (2020) *Pengaruh Kontrol Diri dan Dukungan Sosial Terhadap Grit pada Youtuber Kereta Api*. Diploma thesis, UIN Sunan Gunung Djati Bandung
- Prakoso, T., Rengganis, D. R. P., & Fitriana, N (2021). Hubungan Antara Grit Dengan Organizational Citizenship Behavior (Ocb) Pada Mahasiswa Yang Bekerja Paruh Waktu di Universitas X Yogyakarta. Naskah Publikasi Program Studi Psikologi. Diakses dari <http://eprints.mercubuana-yogya.ac.id/id/eprint/11256>
- Roberts, Y. (2009). *Grit: the Skills for Success and How They are Grown*. London, UK: The Young Foundation.

- Santoso, S.(2017). *Menguasai Statistik Dengan SPSS 24*. Jakarta: PT Alex. Media Komputindo
- Septiania, S., Ishar, M., & Sulastri. (2018). Pengaruh Grit Terhadap Prokastinasi Akademik Mahasiswa Fakultas Psikologi Muhammadiyah Lampung. *Prosiding Seminar Nasional Psikologi Universitas Muhammadiyah Lampung*, 1 (1).
- Sholihah, N. (2018). *Peran Growth mindset dan Pengendalian Diri Terhadap Grit Akademik pada Mahasiswa Bekerja*. Thesis. retrieved from <http://etd.repository.ugm.ac.id/penelitian/detail/154951> on March 2022
- Silfiana. 2021. *The Impact of Working while Studying on Academic Achievement (Case Study of 2017 Batch of Pancasila and Civic Education Students, Tadulako University)*. Thesis. Tadulako Univesity. Palu.
- SRI International. (2018). *Promoting Grit, Tenacity, and Perseverance: Critical Factors for Success in the 21st Century*. SRI International, Menlo Park, CA.
- Strayhorn, T. L. (2014). What role Does Grit Play in Academic Success Of Black Male Collegians At Predominately White Institutions? *Journal of African American Studies*, 18(1), 1-10.
- Sugiyono. (2013). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung:Alfabeta.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV.Alfabeta.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004), High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success, *Journal of Personality*, 72(2), 271-323.
- Texarkana College Catalog (2021). *Student Responsibilities*. Retrieved from <https://catalog.texarkanacollege.edu/article/student-responsibilities/> on March 2022
- Thalib. S. B. (2010). *Psikologi Pendidikan Berbasis Analisis Empiris Aplikatif*. Kencana. Retrieved from <http://repository.um-palembang.ac.id/id/eprint/9872>

- Vivekananda, N. L. A (2017). Studi Deskriptif mengenai *Grit* pada Mahasiswa Fakultas Psikologi Universitas Kristen Maranatha Bandung. *Journal Humanitas*. 1 (3).
- Watanebe, L. E. (2005). The Effects of College Student Employment on Academic Achievement. *The University of Central Florida Undergraduate Research Journal*, 38-47.
- Widhiarso, W. (2010). *Uji Linearitas Hubungan*. Universitas Gajah Mada: Manuskrip tidak diterbitkan.
- Wolfe, R. N., & Johnson, S. D. (1995). Personality as a predictor of college performance. *Educational and Psychological Measurement*, 55(2), 177–185. <https://doi.org/10.1177/0013164495055002002>
- Wong, P.T.P. (2018). *Four-factor theory of true grit*, retrieved from <http://www.drpaulwong.com/four-factor-theory-of-true-grit/> pada Januari 2022
- Yeager, D. S., & Dweck, C. S. (2012). Mindsets that Promote Resilience: When Students Believe That Personal Characteristics Can Be Developed. *Educational Psychologist*, 47, 302-314. <http://dx.doi.org/10.1080/00461520.2012.722805>
- Zettler, I. (2011). Self-control and Academic Performance: Two Field Studies on University Citizenship Behavior and Counterproductive Academic Behavior, *Learning and Individual Differences*, 21, 119-123.





LAMPIRAN



### Skala Penelitian Variabel Kontrol Diri

Pernyataan		SS	S	TS	STS
1.	Ketika mendapat nilai ujian yang jelek, saya berusaha untuk belajar lebih giat lagi				
2.	Saya dapat mengontrol untuk tidak melewatkan satupun tugas kuliah meskipun banyak pekerjaan lain di luar kampus				
3.	Saat portal mahasiswa bermasalah, saya tidak berusalah melaporkannya ke akademik				
4.	Saya tetap berangkat kuliah tepat waktu tanpa menghiraukan rayuan teman				
5.	Saya mampu memilih keputusan yang baik untuk diri saya				
6.	Saya selalu berpikir bahwa kegagalan yang saya alami merupakan kemenangan yang tertunda				
7.	Saya memilih untuk tetap mengumpulkan tugas walaupun terlambat karena tidak ingin mendapat nilai semkain rendah				
8.	Saya akan tetap mengerjakan ujian dengan jujur meskipun temat bersedia memberikan contekan				
9.	Ketika nilai saya rendah karena sering terlambat, berarti saya harus berusaha lebih disiplin				
10.	Saya orang lain merendahkan kemampuan saya di kelas, saya akan berusaha lebih keras				
11.	Saya tetap berusaha lulus tepat waktu meskipun orangtua tidak pernah menuntut saya				
12.	Saya akan membuat jadwal kegiatan bila banyak hal yang harus saya lakukan				
13.	Ketika dosen tidak hadir dan menitipkan tugas, saya selalu menyelesaikannya di kampus meskipun saya bisa langsung pulang				
14.	Saya dapat menahan untuk tidak terlalu banyak main game saat final/midterm meskipun saya punya banyak waktu luang				
15.	Saya tidak suka begadang karena hal tersebut sering membuat saya bangun kesiangn dan terlambat kuliah				
16.	Ketika harus melakukan persentasi di kelas, saya tau harus mulai dari mana				
17.	Saya tidak bergantung pada orang lain dan membuat keputusan berdasarkan keinginan pribadi				
18.	Saya dapat menentukan hal terbaik bagi diri saya ketika saya diberi kebebasan membuat keputusan pribadi				
19.	Saya akan tetap mengerjakan ujian dengan jujur meskipun dosen tidak mengawas dengan ketat				
20.	Meskipun teman mengajak saya bolos, saya tetap masuk kelas walaupun telat				
21.	Ketika menghadapi kejadian yang buruk, saya selalu berpikir positif				
22.	Menurut saya membeli buku mata kuliah tertentu lebih baik daripada mengabiskan uang untuk foya-foya				
23.	Sepulang kuliah saya lebih memilih nongkrong Bersama teman daripada langusng mengerjakan tugas yang harus dikumpulkan segera				



24.	Saya tidak mampu mengatur waktu untuk mementingkan kuliah disaat nilai saya menurun				
25.	Meskipun saya memiliki banyak tugas, saya tidak berusaha menyicilnya				
26.	Nilai jelek pada mata kuliah tertentu membuat saya menjadi malas belajar mata kuliah tersebut				
27.	Saya selalu kebingungan untuk mengambil keputusan bila dihadapkan pada beberapa pilihan				
28.	Menurut pendapat saya tidak lulus satu mata kuliah bukanlah masalah besar				
29.	Saya tidak dapat menentukan jalan untuk mencapai apa yang saya inginkan				
30.	Ketika saya tidak memahami materi dikelas berarti saya memang tidak pintar				
31.	Walaupun besok ujian, hari ini saya tetap nongkrong sampai larut malam				
32.	Saat punya waktu luang, saya tidak berusaha mengulang kembali pelajaran yang belum saya pahami dengan baik				
33.	Ketika orang lain berpikir negatif kepadaya, saya sangat mudah terbawa pikiran				
34.	Saya tidak dapat memutuskan untuk memprioritaskan hal yang saya butuhkan				
35.	Bagi saya kuliah tidak perlu terlalu rajin meskipun dosen sering menegur saya karena tidak mengumpulkan tugas				
36.	Saya seringkali menghabiskan waktu luang sia-sia disaat saya bisa menggunakannya untuk mengerjakan tugas				
37.	Saya lebih senang melanjutkan tidur saya di rumah atau kos daripada mengikuti kuliah siang				
38.	Saya akan mengikuti ajakan teman untuk bolos kuliah dan menonton film di rumah				
39.	Saya selalu sulit memprioritaskan mata kuliah tertentu disaat saya bebas memilih mata kuliah setiap semester				
40.	Saya tetap bekerja saat minggu ujian meskipun ada teman yang bisa menggantikan posisi saya				
41.	Saya tidak peduli dengan akibat yang timbul jika saya sering terlambat masuk kuliah				
42.	Saya pernah bolos kuliah karena punya semangat belajar				
43.	Saya tidak dapat berpikir positif terhadap omongan orang yang menjelekkan saya				
44.	Saya tidak bisa menilai mana yang lebih penting antara kuliah dan organisasi				

### Skala Penelitian Variabel *Academic Grit*

Pernyataan		SS	S	TS	STS
1.	Kegiatan baru tidak mengalihkan saya dari tanggungjawab akademik				
2.	Saya telah meraih tujuan yang membutuhkan usaha bertahun-tahun				
3.	Saya tidak bisa mewujudkan target yang saya usahakan bertahun-tahun				
4.	Saya memiliki minat tinggi dalam hal akademik dari tahun ke tahun				
5.	Saya mahasiswa yang rajin dalam menyelesaikan tanggungjawab akademik				
6.	Setiap beberapa bulan saya menjadi tatarik pada kegiatan lain selain kegiatan akademik				
7.	Saya kesulitan menjaga fokus untuk tetap belajar sepanjang waktu tanpa mengerjakan hal lain				
8.	Saya menyelesaikan segala tugas perkuliahan yang telah saya mulai				
9.	Saya tidak berhasil mengatasi masalah dalam hal akademik				
10.	Kegagalan dalam hal akademis tidak membuat saya patah semangat				
11.	Saya bisa tetap fokus menyelesaikan tugas meskipun dibutuhkan waktu berjam-jam				
12.	Kegagalan dalam target perkuliahan membuat saya patah semangat				
13.	Minat saya terhadap akademik berubah dari tahun ke tahun				
14.	Saya mahasiswa yang mudah menyerah dalam hal akademik				
15.	Saya sering membuat target dalam hal akademis tetapi kemudian teralih fokus kepada hal selain akademis				
16.	Saya terobsesi terhadap target perkuliahan dan menyelesaikannya hingga akhir				

جامعة الرانيري

A R - R A N I R Y

# Self-Control Scale

S / Q	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	Total	
1	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	2	4	3	4	4	4	4	2	4	4	4	4	4	4	1	4	4	3	4	158
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3	4	4	3	2	3	3	3	3	3	3	3	4	4	3	3	3	3	4	3	3	3	2	2	1	1	2	2	2	2	2	3	2	1	2	2	2	2	2	2	2	2	2	1	106
4	4	3	3	3	3	4	3	3	3	3	3	2	3	4	3	3	3	2	3	3	3	3	3	2	3	3	3	3	4	3	3	3	3	3	4	3	3	2	3	3	3	3	127	
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16	3	3	3	3	3	3	3	3	3	3	3	2	2	2	3	3	3	3	3	3	3	2	2	2	3	3	2	3	2	2	3	3	3	3	3	3	3	3	2	3	3	3	3	116
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18	4	4	3	3	3	3	3	4	3	4	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	3	3	126

1 9	4	4	4	4	3	3	3	4	4	4	1	2	2	1	4	4	4	3	2	2	2	2	3	3	2	4	3	3	2	3	3	3	4	3	3	3	2	2	3	3	3	12 4			
2 0	3	4	4	3	3	3	2	1	3	3	3	3	3	2	3	4	4	2	1	3	3	3	2	3	2	3	3	3	3	3	3	3	2	3	3	3	2	3	3	3	3	11 9			
2 1	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	4	3	4	4	4	4	3	4	4	4	2	4	3	4	4	4	4	4	4	4	4	4	4	16 1			
2 2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	16 7				
2 3	4	4	3	4	4	4	3	4	4	4	3	1	4	3	4	4	4	4	4	4	4	4	2	4	2	4	4	4	4	4	3	1	3	4	1	4	4	4	4	4	4	14 9			
2 4	3	2	4	3	2	4	4	4	2	2	2	1	4	2	1	3	3	4	4	3	4	3	2	3	1	1	2	3	4	2	1	3	4	3	4	4	4	1	4	3	1	4	11 8		
2 5	3	3	3	3	3	3	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	3	2	3	3	3	3	2	3	3	3	2	3	2	3	3	11 8
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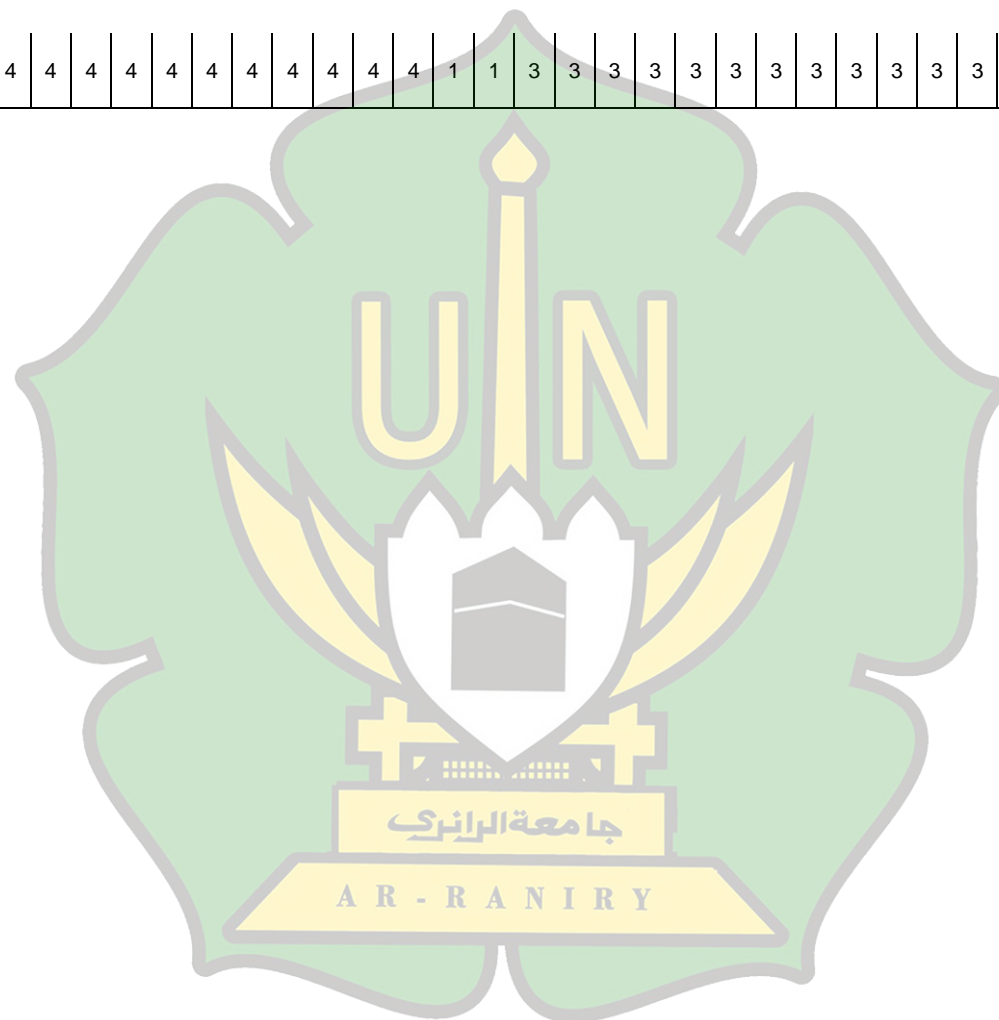
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### Academic Grit Scale

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11	1	1	1	5	5	1	5	5	5	1	1	5	5	5	46
12	4	4	2	4	4	2	2	4	2	4	4	2	2	2	42
13	5	4	3	5	4	2	4	4	4	5	4	4	3	5	56
14	4	3	3	4	4	4	3	5	4	4	4	4	4	5	55
15	2	5	1	5	5	1	4	5	4	5	5	5	2	1	50
16	3	3	3	3	3	3	3	4	3	3	4	2	3	3	43
17	2	2	1	5	5	1	3	4	5	5	5	3	1	5	47
18	4	3	4	3	3	3	3	4	3	4	4	4	3	3	48
19	2	4	4	5	4	4	3	5	4	2	1	1	4	4	47
20	4	4	2	4	4	3	3	4	4	3	3	3	2	4	47
21	5	4	4	4	5	4	5	5	5	3	5	4	3	5	61
22	3	3	3	3	3	3	3	4	3	3	3	3	3	3	43
23	5	4	5	5	5	2	5	5	5	1	2	1	4	5	54
24	4	3	4	4	4	3	1	4	1	4	5	3	3	3	46
25	4	3	2	3	4	3	3	4	4	3	4	4	3	3	47
26	5	5	3	3	5	1	2	4	4	5	5	5	5	5	57

27	5	4	3	4	4	2	2	4	4	4	4	4	3	3	50
28	5	4	2	4	5	2	4	5	4	5	4	5	4	4	57
29	4	3	4	4	3	1	1	4	5	3	5	3	2	3	45
30	5	4	3	4	4	1	2	4	3	5	4	5	3	3	50
31	5	2	2	4	5	2	2	4	4	4	2	3	3	4	46
32	4	4	2	3	3	2	2	4	4	4	2	3	2	4	43
33	4	4	3	4	4	2	3	5	4	4	4	4	3	4	52
34	3	2	2	3	5	4	3	4	4	3	3	4	3	4	47
35	3	3	3	3	3	3	4	3	3	3	4	4	4	3	46
36	4	4	2	5	4	2	2	4	2	4	4	3	2	2	44
37	4	2	3	4	4	3	2	3	3	2	4	2	4	3	43
38	4	4	3	4	5	2	3	4	4	4	5	4	3	4	53
39	4	4	2	4	4	2	2	4	3	3	4	1	2	2	41
40	5	4	2	4	3	1	1	4	3	5	4	3	2	5	46
41	4	5	2	3	3	3	2	3	4	3	4	3	3	5	47
42	4	2	2	4	4	2	4	4	4	4	3	4	4	4	49
43	4	5	4	5	3	4	4	4	3	2	3	4	3	4	52
44	4	4	4	4	5	4	5	3	5	1	4	5	3	5	56
45	4	3	3	4	4	5	3	4	5	4	3	3	2	4	51
46	5	5	3	5	5	1	3	5	5	5	4	5	5	4	60
47	5	5	3	5	3	3	2	5	3	4	5	4	4	3	54
48	3	3	3	3	4	2	2	5	4	4	4	3	3	4	47
49	4	2	2	2	4	2	2	3	4	2	3	3	2	4	39
50	4	4	2	3	3	4	3	3	3	3	3	3	3	3	44
51	5	5	1	5	4	2	3	5	4	5	5	4	2	3	53
52	2	3	2	4	5	3	4	5	4	1	5	4	4	4	50
53	4	3	3	1	1	3	3	5	3	4	2	2	3	1	38
54	4	4	2	4	3	3	3	4	3	3	3	2	2	2	42
55	4	2	2	3	3	2	1	4	3	4	3	4	3	4	42

56	3	2	4	4	3	4	3	5	4	4	4	3	4	3	50
57	5	4	1	4	4	1	1	5	4	5	5	5	2	4	50
58	5	4	2	3	4	2	3	4	4	4	4	4	2	4	49
59	4	4	2	4	4	2	2	5	2	5	3	3	3	2	45
60	4	4	2	4	4	2	2	4	4	4	4	4	4	4	50
61	5	5	2	4	4	2	2	5	1	4	4	4	3	3	48
62	4	2	2	2	3	2	2	4	3	3	2	3	2	3	37
63	1	3	3	3	3	3	3	3	3	3	3	3	3	3	40
64	4	3	2	4	4	2	1	4	4	4	3	3	2	4	44
65	5	3	3	4	4	2	2	5	4	4	4	4	3	4	51
66	5	5	4	4	4	2	2	4	5	5	4	5	2	5	56
67	2	4	3	3	3	3	3	3	3	3	3	3	3	3	42
68	5	3	3	3	3	3	3	5	4	5	4	4	2	4	51
69	5	3	2	4	3	3	3	4	5	1	4	3	3	3	46
70	4	3	3	2	2	2	3	4	2	2	3	4	2	5	41
71	5	4	1	5	5	1	1	5	4	5	5	5	2	5	53
72	2	4	2	4	5	2	4	5	5	5	5	5	4	4	56
73	4	4	2	4	4	2	2	4	3	4	3	4	2	3	45
74	5	5	3	4	5	1	1	5	1	4	5	5	1	5	50
75	5	3	2	3	3	2	2	3	4	2	4	2	2	3	40
76	5	4	4	4	4	3	3	4	4	5	3	4	3	4	54
77	4	4	2	4	3	2	2	4	4	3	2	3	2	5	44
78	3	3	3	3	3	3	3	3	3	3	3	3	3	3	42
79	3	3	2	4	2	2	1	4	2	4	3	3	2	2	37
80	4	3	2	3	4	3	2	4	4	4	4	4	3	4	48
81	4	4	2	3	3	3	3	3	4	3	4	3	2	4	45
82	3	4	3	3	5	3	3	5	3	3	4	2	3	3	47
83	5	5	4	4	5	4	4	5	4	2	5	3	4	4	58
84	5	5	1	5	4	4	4	5	4	5	5	4	2	4	57



85	5	5	1	5	4	4	4	5	4	5	5	4	4	2	57
86	5	5	1	5	4	1	4	5	4	5	4	4	3	4	54
87	5	5	4	5	4	1	4	5	4	4	4	4	2	2	53
88	5	3	2	3	4	2	3	5	4	5	3	4	5	3	51
89	4	4	2	4	4	2	2	4	4	4	4	4	4	4	50
90	4	4	4	4	4	4	2	4	4	4	4	2	2	2	48
91	4	4	2	4	4	2	2	4	3	3	2	2	4	4	44
92	5	5	1	5	5	1	4	5	5	5	3	5	2	2	53
93	4	3	3	4	4	2	4	4	4	4	4	4	4	3	51
94	3	3	4	3	4	3	4	4	3	4	3	4	4	4	50
95	3	3	3	3	4	3	3	3	3	3	4	3	3	2	43
96	4	4	3	5	5	3	5	5	5	5	5	5	5	5	64
97	5	5	4	4	4	4	4	4	4	4	2	4	4	5	57
98	5	5	2	4	5	2	2	5	1	4	4	4	4	4	51
99	4	4	3	4	4	3	4	4	4	4	4	4	4	4	54
100	4	4	3	4	5	2	2	4	4	4	4	4	3	4	51
101	4	3	3	4	4	2	3	4	4	4	3	4	4	4	50
102	4	3	2	3	4	2	2	3	4	4	4	4	3	3	45
103	4	4	2	4	5	4	4	4	2	4	4	4	4	4	53
104	4	3	3	4	4	2	3	4	4	4	4	4	4	4	51
105	3	3	2	4	4	3	4	4	4	4	3	4	4	3	49
106	4	4	3	4	4	2	3	4	4	4	3	4	3	4	50
107	5	5	1	5	5	4	4	5	4	4	4	4	4	4	58
108	4	4	3	4	4	2	3	4	4	4	3	3	4	4	50
109	4	4	3	4	4	2	3	4	4	4	4	4	4	4	52
110	4	4	3	4	4	3	3	4	4	5	3	5	4	4	54
111	5	5	4	5	5	4	4	5	4	5	5	4	4	4	63
112	4	4	4	5	5	4	4	5	4	5	5	4	4	4	61
113	5	5	4	5	5	4	4	5	4	5	5	4	4	4	63

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143	5	5	4	5	5	4	4	5	4	5	4	4	4	5	63
144	5	5	4	5	5	4	4	5	4	5	5	4	4	4	63
145	5	5	4	5	5	4	3	5	3	5	5	4	5	5	63
146	5	5	5	5	5	5	5	5	4	5	4	4	4	4	65
147	5	5	4	5	5	4	5	5	5	5	5	4	3	5	65
148	5	5	5	3	3	3	5	5	4	5	5	3	1	3	55
149	3	3	3	3	5	3	3	4	4	2	2	3	5	3	46
150	3	4	4	4	3	3	3	5	3	4	3	4	5	5	53
151	5	5	4	5	5	4	4	2	1	5	3	4	3	1	51
152	5	5	4	5	5	4	4	5	3	5	5	5	1	5	61
153	5	5	4	5	5	4	4	5	3	5	5	4	4	3	61
154	5	5	5	5	4	3	3	5	3	5	5	4	4	4	60
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156	5	4	4	4	5	4	3	4	3	4	5	4	3	3	55
157	5	5	2	5	3	5	4	3	4	3	3	3	3	3	51
158	5	4	4	5	3	2	2	3	2	4	4	3	4	5	50
159	4	4	2	4	5	3	3	5	4	5	5	4	4	4	56
160	5	5	4	5	5	4	4	5	4	2	5	1	3	4	56
161	4	4	3	4	4	3	4	4	4	4	4	4	3	4	53
162	4	4	5	4	5	2	4	5	5	5	5	5	2	5	60
163	4	4	4	4	5	2	4	4	4	4	4	4	2	4	53
164	5	5	3	5	2	4	4	5	4	2	2	4	4	4	53
165	5	5	4	4	5	3	3	5	4	2	5	1	3	4	53
166	5	5	4	5	5	2	2	3	4	5	5	4	5	3	57
167	5	5	4	2	5	4	4	5	4	3	5	5	4	4	59
168	5	5	3	5	5	2	2	4	1	4	1	1	3	4	45
169	5	5	4	5	5	4	1	5	4	5	5	4	4	4	60
170	5	5	3	2	5	4	4	3	4	5	5	5	5	4	59
171	5	5	4	5	4	4	4	5	4	5	5	4	4	4	62

[illegible]

## UJI REABILITAS TAHAP PERTAMA (SKALA KONTROL DIRI)

### Case Processing Summary

		N	%
Cases	Valid	200	100.0
	Excluded <sup>a</sup>	0	.0
	Total	200	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.946	.951	44

### Item Statistics

	Mean	Std. Deviation	N
VAR00001	3.72	.482	200
VAR00002	3.65	.519	200
VAR00003	2.78	.998	200
VAR00004	3.56	.590	200
VAR00005	3.58	.562	200
VAR00006	3.57	.535	200
VAR00007	3.59	.552	200
VAR00008	3.42	.668	200
VAR00009	3.59	.560	200
VAR00010	3.59	.532	200
VAR00011	3.52	.618	200
VAR00012	3.47	.641	200
VAR00013	3.17	.875	200
VAR00014	3.48	.641	200
VAR00015	3.26	.802	200
VAR00016	3.48	.626	200
VAR00017	3.47	.617	200
VAR00018	3.54	.529	200
VAR00019	3.37	.666	200
VAR00020	3.50	.602	200
VAR00021	3.47	.592	200

VAR00022	3.35	.654	200
VAR00023	2.62	.906	200
VAR00024	2.87	.866	200
VAR00025	2.97	.873	200
VAR00026	2.99	.842	200
VAR00027	2.83	.845	200
VAR00028	2.99	.836	200
VAR00029	3.07	.747	200
VAR00030	3.16	.751	200
VAR00031	3.16	.758	200
VAR00032	3.00	.799	200
VAR00033	2.95	.828	200
VAR00034	3.12	.677	200
VAR00035	3.23	.683	200
VAR00036	3.03	.750	200
VAR00037	3.24	.738	200
VAR00038	3.32	.663	200
VAR00039	3.10	.741	200
VAR00040	2.99	.874	200
VAR00041	3.25	.721	200
VAR00042	3.14	.755	200
VAR00043	3.12	.751	200
VAR00044	3.17	.710	200

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
VAR00001	139.63	289.852	.504	.	.945
VAR00002	139.70	288.392	.551	.	.945
VAR00003	140.57	293.854	.103	.	.949
VAR00004	139.79	287.433	.529	.	.945
VAR00005	139.77	286.447	.610	.	.945
VAR00006	139.78	288.183	.545	.	.945
VAR00007	139.76	288.151	.529	.	.945
VAR00008	139.93	285.493	.551	.	.945
VAR00009	139.76	286.837	.592	.	.945
VAR00010	139.76	288.023	.557	.	.945



VAR00011	139.83	286.946	.528	.	.945
VAR00012	139.88	284.675	.614	.	.945
VAR00013	140.18	281.073	.564	.	.945
VAR00014	139.87	286.582	.524	.	.945
VAR00015	140.09	284.911	.473	.	.945
VAR00016	139.87	286.908	.522	.	.945
VAR00017	139.88	286.388	.555	.	.945
VAR00018	139.81	287.297	.601	.	.945
VAR00019	139.98	286.035	.528	.	.945
VAR00020	139.85	285.706	.605	.	.945
VAR00021	139.88	286.398	.580	.	.945
VAR00022	140.00	285.281	.573	.	.945
VAR00023	140.73	289.683	.255	.	.947
VAR00024	140.48	287.477	.345	.	.946
VAR00025	140.38	284.428	.447	.	.946
VAR00026	140.36	283.871	.486	.	.945
VAR00027	140.52	280.522	.605	.	.944
VAR00028	140.36	284.424	.470	.	.945
VAR00029	140.28	283.720	.560	.	.945
VAR00030	140.19	284.791	.514	.	.945
VAR00031	140.19	282.992	.581	.	.945
VAR00032	140.35	279.949	.665	.	.944
VAR00033	140.40	282.664	.540	.	.945
VAR00034	140.23	282.721	.668	.	.944
VAR00035	140.12	285.145	.553	.	.945
VAR00036	140.32	280.651	.683	.	.944
VAR00037	140.11	284.430	.538	.	.945
VAR00038	140.03	286.351	.516	.	.945
VAR00039	140.25	282.131	.631	.	.944
VAR00040	140.36	281.206	.560	.	.945
VAR00041	140.10	283.940	.572	.	.945
VAR00042	140.21	283.587	.559	.	.945
VAR00043	140.23	283.960	.547	.	.945
VAR00044	140.18	284.470	.560	.	.945

## UJI REABILITAS SKALA CONTROL DIRI TAHAP 2

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.950	.953	42

### Uji reabilitas tahap pertama (Skala Grit)

#### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.769	.769	16

#### Case Processing Summary

		N	%
Cases	Valid	200	100.0
	Excluded <sup>a</sup>	0	.0
	Total	200	100.0

a. Listwise deletion based on all variables in the procedure.

#### Item Statistics

	Mean	Std. Deviation	N
VAR00001	4.34	.915	200
VAR00002	4.10	.995	200
VAR00003	3.11	1.106	200
VAR00004	4.12	.938	200
VAR00005	4.27	.882	200
VAR00006	2.95	1.129	200
VAR00007	3.13	1.138	200
VAR00008	4.31	.881	200
VAR00009	3.74	.898	200

VAR00010	4.09	1.102	200
VAR00011	4.08	1.044	200
VAR00012	3.66	1.020	200
VAR00013	3.34	1.025	200
VAR00014	3.88	.949	200
VAR00015	3.75	.934	200
VAR00016	2.49	.961	200

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
VAR00001	54.99	50.502	.446	.477	.751
VAR00002	55.23	48.047	.587	.568	.738
VAR00003	56.22	49.637	.403	.289	.754
VAR00004	55.21	50.003	.472	.367	.748
VAR00005	55.06	50.117	.500	.342	.747
VAR00006	56.38	49.693	.388	.411	.755
VAR00007	56.20	49.266	.412	.438	.753
VAR00008	55.02	51.698	.369	.214	.757
VAR00009	55.59	50.988	.417	.342	.753
VAR00010	55.24	49.229	.434	.442	.751
VAR00011	55.25	48.648	.509	.456	.744
VAR00012	55.67	50.214	.408	.356	.753
VAR00013	55.99	50.879	.357	.336	.758
VAR00014	55.45	52.298	.288	.345	.763
VAR00015	55.58	51.502	.356	.386	.758
VAR00016	56.84	63.261	-.460	.416	.817

## UJI REABILITAS TAHAP KE 2

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.814	.816	14

## UJI NORMALITAS

**One-Sample Kolmogorov-Smirnov Test**

	kontrol diri	Grit
N	200	200
Normal Parameters <sup>a,b</sup>		
Mean	137.96	52.96
Std. Deviation	16.881	7.607
Most Extreme Differences		
Absolute	.119	.063
Positive	.077	.057
Negative	-.119	-.063
Test Statistic	.119	.063
Asymp. Sig. (2-tailed)	.000 <sup>c</sup>	.054 <sup>c</sup>
Monte Carlo Sig. (2-tailed)	.007 <sup>d</sup>	.398 <sup>d</sup>
99% Confidence Interval		
Lower Bound	.005	.385
Upper Bound	.009	.410

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 926214481.

## UJI LINEARITAS

### Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Grit * kontrol diri	200	100.0%	0	0.0%	200	100.0%

### Report

Grit

kontrol diri	Mean	N	Std. Deviation
98	42.00	1	.
99	46.00	1	.
102	41.00	1	.
104	40.00	2	15.556
105	53.00	2	14.142
106	39.00	1	.
107	41.67	3	2.517
108	39.50	2	4.950
111	45.00	2	.000
113	46.00	2	1.414
114	37.00	1	.
115	43.50	2	4.950
116	43.00	1	.
117	48.00	4	5.944
118	46.60	5	2.074
119	45.00	4	2.160
120	49.67	3	5.686
121	56.00	1	.
122	49.40	5	10.213
123	53.00	1	.
124	44.00	3	5.196
125	44.00	2	1.414
126	49.00	12	3.618
127	50.00	6	1.095
128	42.00	1	.
129	54.00	2	4.243
130	49.00	2	7.071
132	52.33	3	2.082
133	52.25	4	6.898

134	57.00	2	8.485
135	52.33	3	1.155
136	54.00	4	7.165
137	51.50	2	2.121
138	51.33	3	2.309
139	54.00	3	2.646
140	58.67	3	1.528
141	52.00	1	.
142	50.40	5	6.580
143	54.22	9	6.667
145	51.50	2	.707
146	53.00	1	.
147	58.14	22	4.941
148	55.00	3	1.000
149	59.50	4	4.359
150	48.00	2	2.828
151	55.00	3	13.077
152	54.33	3	1.528
153	52.33	3	10.116
154	59.00	4	6.055
155	59.33	3	6.506
156	59.20	5	6.140
157	59.83	6	6.765
158	61.20	5	6.380
159	58.57	7	5.127
160	63.00	1	.
161	61.00	1	.
162	64.00	1	.
163	62.33	3	2.082
165	58.00	2	4.243
167	43.00	1	.
168	60.25	4	4.272
Total	52.96	200	7.607



ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Grit * kontrol diri	Between Groups	(Combined)	7066.619	60	117.777	3.680	.000
		Linearity	5126.455	1	5126.455	160.164	.000
		Deviation from Linearity	1940.164	59	32.884	1.027	.439
	Within Groups		4449.061	139	32.008		
	Total		11515.680	199			

Measures of Association

	R	R Squared	Eta	Eta Squared
Grit * kontrol diri	.667	.445	.783	.614

## UJI HIPOTESIS

Descriptive Statistics

	Mean	Std. Deviation	N
kontrol diri	137.96	16.881	200
Grit	52.96	7.607	200

Correlations

			Kontrol diri	Grit
Spearman's rho	Kontrol diri	Correlation Coefficient	1.000	.666**
		Sig. (2-tailed)	.	.000
		N	200	200
	Grit	Correlation Coefficient	.666**	1.000
		Sig. (2-tailed)	.000	.
		N	200	200

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## DATA EMPRIK

Statistics			
		kontrol diri	Grit
N	Valid	200	200
	Missing	0	0
Mean		137.96	52.96
Std. Deviation		16.881	7.607
Minimum		98	29
Maximum		168	68

## DATA HIPOTETIK

Variabel	Data Hipotetik			
<i>Kontrol Diri</i>	Xmak	Xmin	M	SD
	168	42	06	21

Variabel	Data Hipotetik			
<i>Grit</i>	Xmak	Xmin	M	SD
	70	14	42	,33

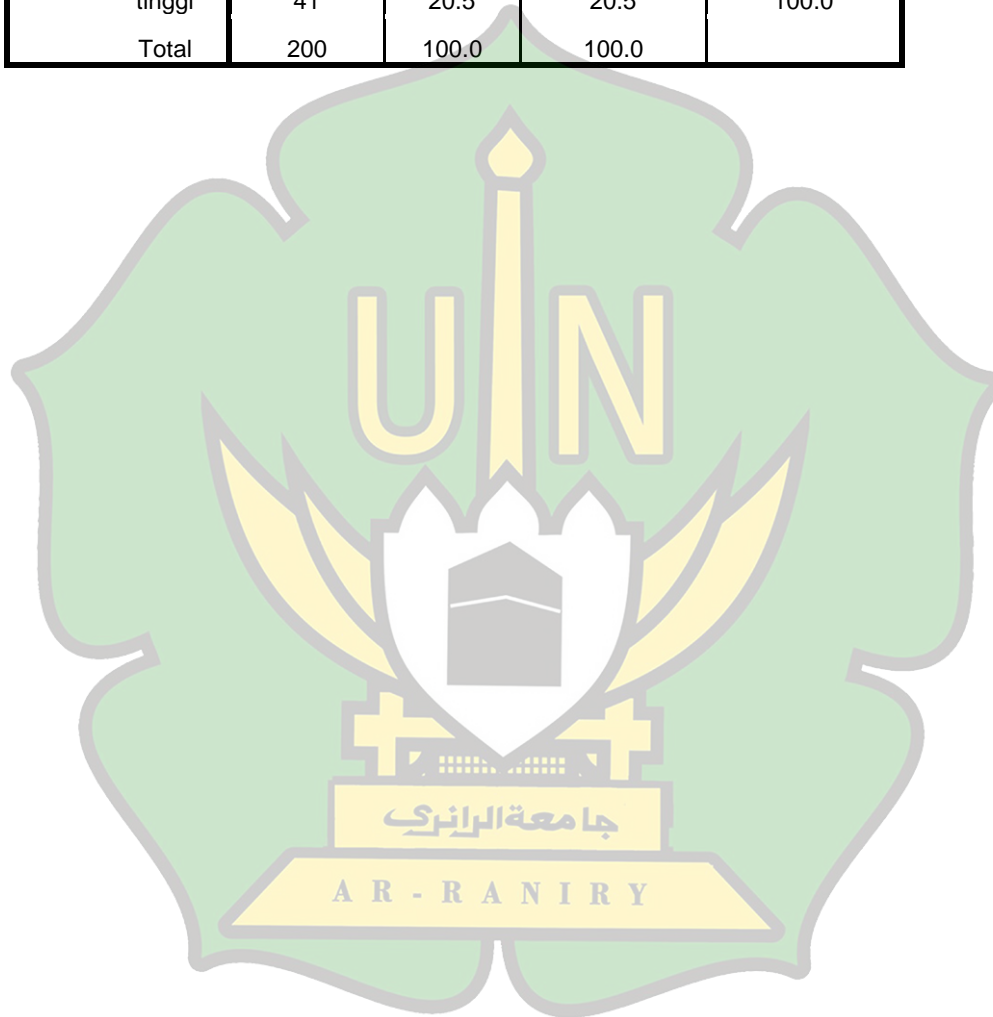
## KATEGORISASI

### Kategorisasi Kontrol Diri

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	rendah	38	19.0	19.0	19.0
	sedang	123	61.5	61.5	80.5
	tinggi	39	19.5	19.5	100.0
	Total	200	100.0	100.0	

**Kategorisasi Grit**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	rendah	37	18.5	18.5	18.5
	sedang	122	61.0	61.0	79.5
	tinggi	41	20.5	20.5	100.0
	Total	200	100.0	100.0	



## AUTOBIOGRAPHY

1. Name : Farhah
2. Place/ Date of Birth : Indrapuri, 19<sup>th</sup> September 1998
3. Gender : Female
4. Religion : Islam
5. Student ID : 170901178
6. Nationality : Indonesia
7. Address
  - a. District : Aceh Besar
  - b. Subdistric : Indrapuri
8. Province : Aceh
9. Phone No. : 085370221049
10. Email : [hadifarhah@gmail.com](mailto:hadifarhah@gmail.com)
11. Educational Background
  - a. Primary School : MIN Lampupok Raya
  - b. Middle School : MTsN Oemar Diyan
  - c. High School : SMAN 2 Unggul Ali Hasjmy
  - d. University : UIN Ar-Raniry
12. Parent
  - a. Father : Drs. Abdul Hadi Yusuf
  - b. Mother : Ainul Wardah
13. Occupation
  - a. Father : Civil Cervant
  - b. Mother : House Wife
14. Parent's Address
  - a. Father : Aceh Besar
  - b. Mother : Aceh Besar