



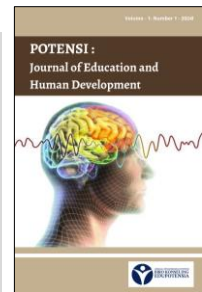
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Grit and Mindset Among College Students: How do they affect students in completing their thesis?

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ABSTRACT

Final-year students face various challenges in the thesis preparation process, including problem identification, topic selection, data collection and analysis, seeking references, and difficulties with academic advisors. This study aims to examine the correlation between mindset and grit among final-year students at Universitas Muhammadiyah Tasikmalaya. Using a quantitative approach with a correlational design, this research investigates the relationship between mindset and grit. The sample consists of 206 out of 442 final-year students at Universitas Muhammadiyah Tasikmalaya, selected through random sampling. Data analysis employed the Pearson product-moment technique. Results indicate a positive correlation between grit and growth mindset ($r = 0.514$, $p=0.001$), while grit shows no correlation with a fixed mindset ($r = -0.031$, $p = 0.657$). These findings suggest that classical guidance services can enhance grit by fostering a growth mindset.



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Introduction

The COVID-19 pandemic that struck Indonesia has had an extraordinary impact on all aspects of life, particularly in the field of education (Mierinna, 2020). During the pandemic, many learning methods from elementary education to higher education had to transition to online formats, which indirectly altered learning conditions and affected students' mental health. Since the onset of online learning, many students have reported feeling extremely fatigued, stressed, depressed, bored, overwhelmed by assignments, and confined to their homes (Wijayanti et al., 2021). Although there were many assignments prior to this shift, students could still meet with friends, engage face-to-face with instructors, socialize, and collaborate on tasks, which made the workload feel more manageable. Final-year students are required to complete their theses on time, which presents a unique challenge. The implementation of online learning during the COVID-19 pandemic is not without its difficulties; numerous issues accompany online learning, one of which is the challenge of academic completion (Fajrin et al., 2020; Ratnafuri & Muslihata, 2020). Undergraduate students (S1/D4) have a maximum study period of seven years, as stipulated in the Ministry of Education and Culture Regulation No. 3 of 2020 regarding National Higher Education Standards. Therefore, if a student is unable to complete their studies within this seven-year timeframe, they will be expelled (drop out). Furthermore, Ministry of Education and Culture Regulation No. 49 of 2014 establishes that the normal study load for S1/D4 programs is 144 credits, with a maximum study duration of five years. Nevertheless, students are currently given an additional two years,

allowing for a maximum study duration of seven years. However, many students still face expulsion due to their inability to fulfill their academic obligations within this timeframe.

This situation poses a significant problem for all final-year students, as they encounter various challenges at each stage of thesis development. Mugiarto (2018) identified several issues faced by students in completing their final assignments, including difficulty in selecting a problem to address, formulating a title, collecting and analyzing data, and referencing. Common challenges for students working on their theses include difficulties in finding literature, lack of experience in academic writing, and challenges in accessing their thesis advisors. Delays in completing studies, as reported in research by Sukma (2014), are significantly influenced by learning behaviors and academic stress. Raharjo (2014) also found that students do not complete their studies on time due to academic issues, lack of motivation, financial problems, and organizational challenges. Additionally, some students pursue majors that were not their own initiative, which can hinder their ability to engage meaningfully with their field of study from the outset of their college experience, resulting in academic difficulties. Approximately 20% of students are enrolled in programs not of their own choosing (Raharjo, 2014).

A preliminary study of the 2019 cohort of FKIP students at Universitas Muhammadiyah Tasikmalaya revealed several issues they faced while working on their final assignments. Many students reported challenges with their thesis advisors, difficulties in determining their research problems, and obstacles in finding literature for their theses. Some students expressed uncertainty about their ability to graduate on time, while others felt very confident about meeting this goal. Based on this preliminary study, 50% of the students felt uncertain about graduating on time, 47.7% were very confident in their ability to graduate on schedule, and 1% felt doubtful about graduating within the expected timeframe. Additionally, the issues faced by students in completing their final assignments included 45.5% encountering problems with their thesis advisors, 43.2% struggling to find literature, and 11.4% having difficulties in determining their research problems.

Kusuma et al. (2021) state that these difficulties can ultimately lead to feelings of laziness, stress, loss of motivation, and, in some cases, procrastination in completing their theses, or even deciding not to finish them at all. Students' lack of preparedness for this semester, compounded by numerous challenges, forces them to choose whether to "persevere" under these conditions until graduation or to "withdraw" from completing their final assignments. The behavior of students who are able to endure when facing problems, obstacles, and challenges in pursuit of their long-term goals is found to be a characteristic of individuals with high levels of grit. The factors that enable students to achieve their goals and succeed academically are determined by grit (Izaach, 2017; Sugara, 2018). Grit is classified as a personality trait. Duckworth (2007) defines grit as the tendency of an individual to maintain perseverance and passion in the face of long-term challenges. Each individual persists with the goals they set for themselves over extended periods until those goals are achieved. Duckworth et al. (2007) introduced the construct of grit, defined as the trait of perseverance toward long-term goals, demonstrating that grit can facilitate achievement that transcends mere talent. Specifically, grit requires significant capacity to sustain effort and interest (consistency) over months or even longer to accomplish goals. Duckworth & Gross (2014) asserts that grit generates a strong work ethic in confronting challenges, enabling sustained effort year after year despite experiencing failures.

According to Duckworth & Gross (2014), grit compels individuals to work harder when facing challenges and allows them to maintain their effort and interest over time, even when experiencing feelings of frustration and difficulty without any visible progress. Vivekananda (2017) identifies two essential components of grit: consistency of interest (Passion) and perseverance of effort. Consistency of interest refers to the extent to which a person's efforts remain directed toward a single goal, while perseverance of effort reflects how hard an individual works to achieve that goal. With grit, individuals become more focused on positive goals, making them more selective in their behavior to avoid actions that do not support their achievement (Septiania & Proborini, 2020). Vivekananda (2017) further states that students with grit are unlikely to change their interests easily; they do not easily become distracted by challenges or problems in their learning process and remain focused on their goal of graduating. Students who possess grit tend to be more optimistic, critical of their performance, and maintain a mindset focused solely on perseverance and growth (Duckworth, 2016). Grit is one of the strongest factors, compared to others, determining student graduation. Students who graduate on time are those who exhibit high levels of grit (Septania & Proborini, 2020; Melvina, 2022).

Grit and resilience are often regarded as key elements in coping with mental health pressures and are important concepts to study for understanding behaviors that lead to success, irrespective of external factors that influence the academic process (Winarto et al., 2019; Sugara et al., 2020). Grit is considered a non-cognitive factor. Takiuddin & Husnu (2020) assert that success in education is not determined solely by cognitive factors; non-cognitive factors also play a significant role. One such non-cognitive factor is grit. Grit is a psychological component within individuals that drives them to achieve goals and aspirations, characterized by a high level of determination to reach desired objectives. Several studies highlight the role of grit in supporting individuals'

success in achieving their goals. According to Critopoulou et al. (2018), the role of grit in education positively correlates with various educational variables, indicating that grit can support individuals' success in the learning environment.

Fernandez et al. (2020) indicate that grit can serve as a predictor of an individual's success both in work and in the learning process. As a non-cognitive component, grit encourages individuals to work diligently toward realizing their focus on objectives. The focus on achieving set goals and persistence in efforts can lead to success in one's endeavors. The contribution of grit is highly significant for achieving success, as individuals with high levels of grit are determined and focused, enabling them to achieve maximum results and ultimately guiding them to their success. The consequences of low grit among students include a lack of persistence, irregular study habits, susceptibility to distractions or new ideas, inability to set long-term goals, and diminished motivation (Duckworth, 2007). Additionally, Mueller et al. (2017) assert that low grit can result in individuals becoming pessimistic, lacking confidence, easily giving up, losing enthusiasm, and frequently changing their goals due to newfound interests. Mangiwa (2021) adds that individuals with low grit may find it more challenging to complete tasks they have started, or they may lose the motivation to continue pursuing what they are working on or desire. Lee & Sohn (2017) state that students with low grit are more likely to experience difficulties in their studies or may even drop out of their programs.

According to Duckworth (2007), factors influencing grit can be categorized into internal and external factors. Internal factors that can affect grit include education, age, conscientiousness, career changes, achievements, mindset, effortful control, and tactical strategies. In contrast, external factors influencing grit include socioeconomic status and social support. Chrisantiana and Tesselonika (2017) note that one of the factors worth examining is mindset. Dweck (2015) states that students' beliefs about their abilities are key to their motivation and achievement, and she found that changing these mindsets can enhance their performance and abilities. Hariadi et al. (2021) discuss a phenomenon where final-year students lack preparedness for the semester that requires completing their final assignments. Some students manage to overcome the challenges they face, while others do not. Chrisantiana & Sembiring (2017) indicate that the difficulty in persisting, being diligent, and having the enthusiasm to complete their final assignments is influenced by individual differences in mindset. Mindset reflects how individuals view their own abilities and intelligence—whether they believe these are fixed or can change.

Dweck (2015) identifies two types of mindset namely fixed and growth mindset. Individuals who believe that their abilities, character, potential, and intelligence are inherent and unchangeable exhibit a fixed mindset. Conversely, those who believe that effort and control can develop their abilities, character, potential, and intelligence possess a growth mindset. Hohanadel & Finamore (2015) suggest that students with a growth mindset are more likely to have a developing outlook, positive opinions, greater effort in overcoming difficulties with their final projects, and motivation in challenging situations that extend beyond mere skills. As a result, they adopt a more positive approach and strategize to put forth greater effort when facing difficult challenges. In contrast, individuals with a fixed mindset tend to lack positive self-belief and show less effort in achieving their desired outcomes.

Sawitri (2017) asserts that individuals with a fixed mindset believe their intelligence and potential were established at birth and are genetic, resulting in perceived limitations that cannot be altered through training or effort. This belief leads them to conclude that attempts to change their circumstances are futile. Conversely, individuals with a growth mindset believe that their fundamental qualities can be changed or enhanced through effort and hard work, even in the face of significant challenges. This belief motivates growth-minded individuals to continue learning and striving, as they are confident that their efforts can enhance their abilities. According to Dweck (2015), students who value effort are said to have a growth mindset. They view abilities as skills that can be changed. Students who consider intelligence to be an inherent trait that cannot be altered tend to exert minimal effort to achieve success, thus demonstrating a fixed mindset. Humairoh (2021) indicates that students who believe their abilities can be developed (growth mindset) will outperform those who believe their abilities are fixed (fixed mindset). Hohanadel & Finamore (2015) further note that students who perceive themselves as possessing a growth mindset tend to have a developing perspective, positive opinions, and greater efforts to overcome difficulties in their final projects, remaining motivated in challenging situations.

Based on the above description, fixed and growth mindsets can be distinguished by beliefs regarding intelligence, talent, traits, attitudes toward challenges and obstacles, the effort exerted, the acceptance of criticism and suggestions, and the willingness to draw inspiration from others' experiences. Finanda (2022) claims that individuals with a growth mindset are more productive in their learning, resulting in higher GPAs. Mindset plays a crucial role within the academic realm, influencing how students engage in their activities during college. The application of a growth mindset impacts academic achievement, and implementing growth mindset practices in education can be viewed as an innovative approach necessary for improving academic progress (Jorif

& Burleigh, 2022). Kaparang & Gahauna (2020) note that mindset is a belief that guides how we handle situations, choose responses, and determine actions. Mindset enables individuals to identify opportunities, being understood as a mental attitude shaped by an individual's thoughts and behaviors (Meier & Kropp, 2010).

Various issues arising during the college process may cause students to adopt a fixed mindset and exhibit low levels of grit, which hampers their ability to cope with stressors effectively (Calo et al., 2019). There is one type of mindset capable of motivating individuals to foster changes in grit: the growth mindset (Credé et al., 2017). Duckworth et al. (2017) concludes that possessing a growth mindset allows individuals to develop grit. Hochanadel & Finamore (2015) also conclude in their research that teaching growth mindset and grit to students facilitates the attainment of long-term goals and the means by which students achieve them. Grit and mindset are crucial, especially in helping students face academic obstacles and challenges throughout their college experience. Research by Pebrian and Susanti (2020) reveals that mindset positively influences grit in students. Prior research by Wahidah & Rayanto (2019) also indicated that growth mindset plays a significant role in enhancing grit and school well-being among students. Additionally, growth mindset correlates positively with self-efficacy and academic performance, thereby encouraging individuals to achieve higher academic success (Diao et al., 2020). Growth mindset enhances individuals' sense of control, stimulates interest and hope while learning, and helps maintain academic engagement (Schmidt et al., 2017; Sugara et al., 2024).

It is known that growth mindset can foster grit among students through the positive belief that hard work improves skills and abilities. As a result, individuals with a growth mindset possess a greater desire to learn, embrace challenges, strive to eliminate obstacles, learn from others' critiques, and draw inspiration from others' successes (Kannangara et al., 2018; Sugara et al., 2023). In conclusion, mindset is closely related to an individual's learning process. Based on the above analysis, the researcher asserts that the mindset held by students when facing challenges and failures in their studies is connected to grit. Therefore, to enhance grit among students, guidance and counseling services are necessary to understand the various behaviors exhibited by students during their academic processes. Students with high levels of grit will regard academic tasks as meaningful not only for themselves but also beneficial for others and the world (Jin & Kim, 2017).

Method

Participants

This study employed a correlational research design with a sample of 206 students from Universitas Muhammadiyah Tasikmalaya, selected using simple random sampling. Data were collected through the Grit Scale for Adolescents and the Dweck Mindset Instrument. Additionally, a demographic questionnaire was administered to gather information about the students' age, gender, ethnicity, and study program.

Procedure

Two main instruments were used in this study: the Grit Scale for Adolescents to measure grit levels among final-year students, and the Dweck Mindset Instrument (DMI) to assess students' mindsets. The instruments were administered online, and participants were recruited voluntarily to complete both measures. The researchers provided an explanation of the study's purpose and ensured participants' confidentiality.

Measures

Students Grit Scale (Pratama, 2022)

This instrument, developed by Pratama (2022), measures the level of grit in students and includes 16 statements that assess aspects of perseverance, persistence, and adversity. Respondents rated each statement on a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Grit Scale demonstrated adequate reliability with a Cronbach's alpha value of 0.70 and exhibited good construct validity.

Mindset Inventory

The instrument was developed and created by Dweck (2006). It is used to assess how an individual perceives their intelligence. This instrument is designed to measure whether a person's mindset leans towards a fixed mindset or a growth mindset. Mindset Inventory consists of 16 statement items that encompass the dimensions of intelligence and talent. Respondents are asked to respond to the statement items according to how they feel, using a Likert scale of 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (somewhat agree), 5 (agree), and 6 (strongly agree). The mindset inventory shows a Cronbach's alpha reliability coefficient of 0.64, indicating a satisfactory degree of reliability as a research measurement tool.

Data Analysis

The statistical analysis used in this study is parametric analysis. To determine the effect between two variables, simple linear regression techniques are employed. All analyses are conducted using Excel Office (2019) and SPSS Windows version 26.

Results and Discussions

The results of the study are described in four sections. First, it presents the demographic data of the students. Second, it discusses the overall distribution of grit and the distribution of subscale domains among the students, along with the overall distribution of mindset, which is divided into two subscales among the students. Third, it presents the findings on the differences in grit and mindset based on gender. Fourth, it shows the correlation between total grit and subscales associated with fixed mindset and growth mindset. The total number of respondents was 206 students.

Table 1. Student Demographic Data

Variable	N	Persentase
<i>Gender</i>		
Man	60	29%
Woman	146	71%
<i>Age (M+SD)</i>	22.24 ± 0.736	
<i>Ethnicity</i>		
Sunda	198	96%
Jawa	6	3%
Betawi	1	1%
Batak	1	0%
<i>Residence</i>		
With Parents	153	74%
Cost	53	26%
<i>Faculty/ Study Program</i>		
Guidance and Counseling	76	37%
Elementary School Teacher Education	32	16%
Early Childhood Teacher Education	8	4%
Information Technology Education	8	4%
Sendratasik Education	6	3%
S1 Nursing	56	27%
D3 Nursing	1	1%
D3 Midwifery	2	1%
Mechanical Engineering	4	2%
Electrical Engineering	1	0%
Environmental Engineering	3	1%
Mining Engineering	9	4%

Table 1 presents the demographic characteristics of the participants with age ($M=22.24$ years, $SD=0.736$). The youngest participant is 19 years old, while the oldest is 27 years old. The total number of respondents is 206 students, comprising 29% male and 71% female. In terms of residence, 74% live with their parents, and 26% live independently (in boarding houses). Regarding ethnicity, 96% identify as Sundanese, 3% as Javanese, and 1% as Betawi. Among the respondents, 37% are enrolled in the guidance and counseling program, 16% in elementary school teacher education, 4% in early childhood education, 4% in information technology education, 3% in arts education, 27% in nursing (Bachelor's degree), 1% in nursing (Diploma III), 1% in midwifery (Diploma III), 2% in mechanical engineering, 1% in environmental engineering, and 4% in mining engineering.

Table 2 presents the descriptive statistics for grit and mindset among students. The results for grit show a total grit score ($M = 53.57$, $SD = 6.93$). Within the three dimension of the grit subscale, the perseverance

dimension ($M = 26.18$, $SD = 3.62$), while the persistence dimension ($M = 14.15$, $SD = 2.26$). In the adversity dimension ($M = 13.23$, $SD = 2.15$). Additionally, the results for total mindset ($M = 3.73$, $SD = 1$).

Table 2. Distribution of Grit and Mindset Among Final-Year Students

Scale	Mean	Standar Deviasi
Total Grit	53.57	6.93
Perseverance	26.18	3.62
Persistence	14.15	2.26
Adversity	13.23	2.15
Total Mindset	3.73	1.00

Table 3. Distribution of Grit and Mindset in Final Year Students by Gender

Sub scale	Male		Female		F	p
	M	SD	M	SD		
Total Grit	53.37	7.68	52.78	6.59	0.305	0.582
Perseverance	26.60	3.65	25.99	3.58	1.206	0.273
Persistence	14.92	2,55	13.79	2.02	11.341	0.009
Adversity	13.72	2.26	13.00	2.07	4.821	0.029
Fixed mindset	20.80	5.65	20.70	6.05	0.019	0.890
Growth mindset	28.00	4.34	28.00	3.68	0.610	0.440

Table 3 presents the descriptive statistics regarding the differences in grit and mindset profiles among male and female students. The results indicate no significant difference in overall grit profiles between males ($M = 53.37$, $SD = 7.68$) and females ($M = 52.79$, $SD = 6.59$). For males, the highest score is in the perseverance domain ($M = 26.60$, $SD = 3.65$), while for females, the highest score is also in the perseverance domain ($M = 25.99$, $SD = 3.58$). Statistical analysis using one way ANOVA reveals significant differences in the grit domain, specifically in persistence ($F = 11.341$, $p = 0.009$), and in the adversity domain ($F = 4.821$; $p = 0.029$). Furthermore, the results for the fixed mindset domain show no significant difference between males ($M = 20.8$; $SD = 5.65$) and females ($M = 20.7$; $SD = 6.05$). For males, the highest achievement score is in the growth mindset dimension ($M = 28$; $SD = 4.34$), and for females, the highest achievement score is also in the growth mindset domain ($M = 28$; $SD = 3.68$). No differences are observed between males and females in this domain.

Tabel 4. Correlation between Grit and Mindset Among Final-Years Students

Sub scala	Growth Mindset	p	Fixed Mindset	p
Total Grit	0,514	0,001	-0,031	0,657
Perseverance	0,523	0,001	-0,028	0,695
Persistence	0,251	0,001	-0,030	0,664
Adversity	0,336	0,001	-0,067	0,339

Table 4 shows the correlation between grit and mindset. The first finding indicates that total grit has a significant positive relationship with growth mindset ($r = 0.513$, $R^2 = 0.26$). Thus, the growth mindset contributes 26% to grit. The second finding reveals a significant positive correlation between growth mindset and all aspects of grit, which include perseverance, persistence, and adversity. The third finding indicates that there is no correlation between grit and fixed mindset across all aspects of grit, namely perseverance, persistence, and adversity. This suggests that fixed mindset does not influence the level of grit among students.

Discussion

Grit is defined as an individual's trait or characteristic that involves the ability to maintain effort and consistency of interest in achieving long-term goals, even when facing failures and difficulties (Duckworth, 2016).

Individuals who possess grit tend to exhibit high levels of perseverance and resilience, which enables them to be persistent and remain focused on their goals. Grit is characterized by the perseverance to achieve a long-term or high-level goal in the face of challenges and difficulties, encompassing psychological resources such as academic thinking, effort, and strategies to accomplish it (Shechtman et al., 2013; Rusadi et al., 2021; Sari et al., 2022). The level of grit that individuals possess demonstrates differences in the strength of grit exerted in achieving goals (Pratama, 2022). According to Duckworth (2017), grit serves as an internal drive for individuals to enhance various important skills necessary for success, such as creative thinking, collaboration skills, and the ability to adapt to change (Prakoso et al., 2021). Research has found that there are four psychological assets that can help enhance grit: interest, practice, purpose, and hope (Duckworth, 2016; Lomas & Schimscal, 2018). Grit develops with age; as individuals grow older, they tend to appreciate the value of hard work and perseverance in pursuing specific goals. This study found no significant difference in grit between males and females, consistent with the findings of Carter (2020), which indicate that there is no significant difference in grit between genders.

Mindset is defined as an attitude or state of mind that influences how an individual perceives and responds to the situations they face (Prastiwi, 2019). Mindset can be divided into two categories: fixed mindset and growth mindset (Dweck, 2017). Individuals with a fixed mindset tend to avoid situations or challenges that may test their abilities and believe that their intelligence and talent are immutable (Duckworth, 2021). In contrast, individuals with a growth mindset believe that personal qualities, such as talent and intelligence, can be developed through effort or strategies (Dweck, 2017). Mindset plays a crucial role in the academic realm, impacting how students view their classes and engage in their academic pursuits in higher education. The growth mindset is recognized as a predictor of academic achievement, as individuals with this mindset not only direct more effort but are also characterized by their willingness to try new strategies (Claro et al., 2016). Individuals with a growth mindset tend to achieve better academic performance compared to those with a fixed mindset and demonstrate a persistence attitude when faced with challenges and difficulties (Barbouta & Kotrotsiou, 2020). A person with a growth mindset views intelligence and abilities as malleable traits, leading them to be more diligent and focused on long-term learning and valuable work (Mangels et al., 2006). They are also better equipped to handle tasks and remain motivated when encountering difficulties and challenges (Dweck et al., 2014; Renaud-Dube et al., 2015; Jach et al., 2018).

The findings of this study on grit indicate a significant difference between males and females in the domains of persistence and adversity. Males have a higher interpretation of persistence compared to females. This aligns with research findings that explain how gender influences persistence; specifically, males tend to persist longer in their learning when receiving positive feedback than females. Females show less persistence in enhancing their performance in certain professions due to cultural ties to family responsibilities, as well as lower self-esteem and lack of environmental support (Rozek, 2012). In the domain of adversity, differences between males and females were also observed, consistent with research findings that indicate age affects males' resilience when facing problems. Generally, adult males exhibit a greater sense of responsibility compared to females (Agustina & Suniasih, 2021). However, males in childhood and adolescence tend to be less aware of their own issues or those of others. Therefore, males over the age of 30 are more likely to exhibit resilience when confronted with life's challenges (Wahid & Ridfah, 2020; Yoga, 2016). This is supported by the assertion that males are generally more rational and tougher as protectors, although these traits are often perceived externally. Conversely, females are typically seen as more emotional, gentle, and sensitive, resulting in males being calmer than females when dealing with problems (Agustina & Suniasih, 2021).

Another finding of this research reveals that grit has a positive correlation with growth mindset, while grit correlates negatively with fixed mindset. The results explain that the more an individual possesses a positive mindset (growth mindset), the higher their level of grit. Students with a growth mindset demonstrate greater grit compared to those with a fixed mindset. Conversely, students with a negative mindset (fixed mindset) exhibit lower levels of grit. This is in line with the research by Hariadi, Putri & Sunayono (2021), which found a significant relationship between growth mindset and grit. This means that a growth mindset positively correlates with grit, indicating that as students' growth mindset increases, so does their level of grit. Students with high levels of grit achieve greater success and exhibit more perseverance. Both grit and growth mindset are determining variables for success in academic literature and the workforce (Sethi, 2019). The growth mindset significantly influences grit, as students' persistence and enthusiasm are affected by their belief that their abilities can be developed through effort and hard work (Chrisantiana & Sembiring). This study's findings align with the notion that all three aspects of grit—perseverance, persistence, and adversity—positively correlate with growth mindset. Conversely, fixed mindset no correlation with grit, meaning fixed mindset does not contribute to grit, as individuals with a fixed mindset are inclined to believe that their intelligence and potential are innate and cannot be changed through effort or hard work (Sembiring, 2017). The results of this study are supported by previous research conducted by Schmidt et al. (2017), which stated that a growth mindset can enhance a sense of control, stimulate interest and hope when learning, thereby maintaining academic engagement. Moreover, a

growth mindset facilitates not only academic performance and engagement but also relates to effort and self-regulation during learning and orientation toward achieving goals. Consequently, individuals can autonomously manage and regulate various aspects that guide their behavior, motivation, and thoughts to reach their desired goals (Muttaqin, 2022). In conclusion, the growth mindset contributes to enhancing students' grit, as students with a growth mindset tend to exhibit higher levels of grit.

This finding has implications for guidance and counseling services in higher education, focusing on enhancing grit through a growth mindset. A growth mindset helps students develop a positive self-concept, resilience, and an optimistic disposition (Jin & Kim, 2017; Pryiomka, 2018; Waring et al., 2019; Sugara & Fadhilah, 2024). Students can cultivate their mindset and grit to achieve long-term goals by internalizing motivation to persevere. A growth mindset can enhance academic progress as students' needs are met when employing learning practices that encompass a growth mindset (Dweck, 2006). Research by Fitri et al. (2022) indicates that growth mindset training can significantly improve participants' grit scores. The growth mindset training process helps participants develop continuously, seek alternative strategies when facing problems, and avoid giving up easily when confronted with failure, thus enhancing their intelligence to understand learning, learn effectively, and complete tasks. A growth mindset also encourages students to focus on overcoming the difficulties they face, teaching them to believe that intelligence can be developed, thereby improving their academic success (Blackwell et al., 2007).

Conclusions

As previously explained, the purpose of this study is to examine the correlation between mindset and grit among final-year students. Based on the research findings, there is a significant positive correlation between growth mindset and grit. This research highlights the phenomenon that growth mindset has a positive impact on enhancing grit. The growth mindset within individuals influences their perseverance, persistence, and ability to face adversity. Individuals with a growth mindset tend to exhibit higher levels of grit. The strategy employed to enhance grit is through guidance and counseling services via classical guidance. It is hoped that students will be positively influenced to persevere in difficult situations and develop a positive mindset (growth mindset) that contributes to a high level of grit.

Declaration

Ethics Approval

This research was approved by the Institutional Review Board at the Universitas Muhammadiyah Tasikmalaya and was performed in accordance with ethical standards for research with human participants.

Informed Consent

All participants included in the current study provided informed consent immediately after clicking the survey link. Any participants who failed to complete the informed consent or declined were excluded from the study.

Conflict of Interests

The authors declared no conflict of interest concerning research and publication of this article.

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