

Grit in College Students: Literature Review

Grit pada Mahasiswa: Studi Literature Review

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ABSTRACT

Grit is an important aspect of student academic performance. Various studies on grit have been conducted, but no one has examined individual differences in grit among college students. The purpose of this study is to determine individual differences related to grit in college students. The method used is a literature study on research articles published in reputable international journals. A search for reputable international journals in the 2018-2022 range used the Science Direct page, with the keywords grit, individual differences, and motivation. The search returned 10 articles that matched the criteria. The article was then analyzed using a literature review. The results of the study show that individual differences have a relationship with student grit. The implication of this research is to show that accommodating various individual differences in the learning process is very much needed by students. The persistence of effort and consistency of interest which are the dimensions of grit are also influenced by individual differences. Grit has a very important role for students in achieving the goals set.

ABSTRAK

Grit merupakan salah satu aspek penting dalam performa akademik mahasiswa. Beragam kajian mengenai grit telah dilakukan, namun belum ada yang menelaah mengenai perbedaan individu dalam grit di kalangan mahasiswa. Tujuan studi ini untuk mengetahui perbedaan individu yang terkait dengan grit pada mahasiswa. Metode yang digunakan adalah studi literatur pada artikel-artikel hasil penelitian yang dipublikasikan di jurnal internasional bereputasi. Penelusuran jurnal internasional bereputasi pada rentang tahun 2018-2022 menggunakan laman Science Direct, dengan kata kunci grit, perbedaan individu, dan motivasi. Penelusuran menghasilkan 10 artikel yang sesuai dengan kriteria. Artikel kemudian dianalisis menggunakan telaah literatur. Hasil studi menunjukkan bahwa perbedaan individu memiliki hubungan dengan grit pada mahasiswa. Implikasi dari penelitian ini adalah menunjukkan bahwa mengakomodasi berbagai perbedaan individu dalam proses pembelajaran sangat diperlukan mahasiswa. Perseverance of effort dan consistency of interest yang merupakan dimensi dari grit juga dipengaruhi oleh perbedaan individu. Grit memiliki peran yang sangat penting bagi

mahasiswa dalam mencapai tujuan yang telah ditetapkan.

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The challenge of a student in facing lectures is to complete the tasks at hand and the lecture material undertaken will increase in the following semester (Vivekananda, 2017). The many obstacles and challenges faced by students to achieve their goal of becoming a scholar certainly require effort and persistence in undergoing the entire learning process. Intrinsic motivation from the student's personality also determines their determination in trying to get good academic achievement. One of the personality traits that help students to maintain their intrinsic motivation is grit.

A student's tendency to maintain perseverance and passion for challenging long-term goals, where persisting with their goals over a long period of time until a student achieves those goals. Grit is one of the topics regarding individual differences. Grit is defined as the consistency of an individual's interest and perseverance that is useful for achieving long-term goals. (Duckworth et al., 2007; Schmidt et al., 2019). Individuals who have grit are those who stay focused on the task and work towards its completion or achievement (Singh & Chukkali, 2021).

Gritty individuals view an achievement or accomplishment as a marathon. When other individuals feel disappointed and bored with something that encourages them to change course by changing goals or even retreat and stop trying altogether, individuals with high grit will keep trying at the thing or goal they have chosen. Grit is an important component of students' individual and professional lives. Grit is considered a valuable component in an individual's workforce development, but also a predictor of achievement and success. (Kannangara et al., 2018; Mason, 2018). Students with higher grit show higher engagement, leading

to higher academic productivity. (Hodge et al., 2018). Grit enables individuals to work hard in the face of challenges, sustaining effort and interest, despite failure, adversity, or lack of progress. Grit entails working hard in the face of challenges, sustaining effort and interest over many years despite failure, adversity, and lack of progress.

Grit is a construct derived from positive psychology that can be defined as trait-level perseverance of effort and consistency of interest. (Duckworth et al., 2007; Schmidt et al., 2019). Perseverance of effort is an effort made seriously by someone to achieve goals along with the ability to survive within a certain period of time. This can be shown by the behavior of being willing to work hard, persevere through challenges, and stick to what has become his choice. In this case, it can be interpreted that individuals who have chosen their field of work are expected to have the perseverance to continue to develop and be more optimal in their good work. High effort perseverance shows the ability to complete the work or problems being faced. Students will persist in working on assignments given by lecturers, be able to submit assignments or reports according to the deadline given, and be able to make the best use of the time they have. Students are not afraid to face obstacles and obstacles, where if they make mistakes in the process they will not stop trying and also accept all forms of input given by friends and lecturers.. This student is diligent and works hard to achieve his goal of graduating with a Bachelor of Psychology.

Consistency of interest is a description of how consistent the efforts made by individuals are in achieving a goal (Duckworth et al., 2007). This consistency can be seen from interests and goals that are

not easily changed or distracted and focus on the original goals that have been set. If you encounter a problem, you can solve it well and do not easily turn to other things or other work. High consistency of interest shows the ability to maintain interest in the goals that have been set. Students who have high grit can maintain interest and remain consistent in carrying out every task in the lecture process and are consistent in achieving achievements and carrying out their goals to achieve the best results. Students will not be easily affected by distractions that exist during the lecture process. Students are also not easily distracted by additional activities outside the academic process and continue to do their obligations as a student in obeying all academic demands.

Grit in an individual has the dimensions of passion (passion, enthusiasm, enthusiasm in doing something), deliberate practice (repeating with diligence and determination with great effort in order to be proficient / mastering something), sense of purpose (having clear goals in life), and hope (hope that what has been attempted will produce optimal results). Parenting, the playing field of grit, and the culture of grit are also related to (Duckworth et al., 2007; Park et al., 2018). Individuals who have passion for their activities will be more passionate and eager to do and complete what they have started. Passion also allows a student to be persistent in carrying out daily lecture activities because of the love for the field of science that has been chosen and pursued. The second important element is deliberate practice. A student who has this element will continuously try to train himself so that his abilities can develop more optimally, such as when participating in training, seminars, and discussions related to his scientific field in order to become more proficient and competent in that field. Deliberate practice is also closely related to a sense of purpose. Individuals with a high sense of purpose will be able to persist in

doing deliberate practice because they know that the efforts they make have a clear purpose and direction. Sense of purpose is also related to something beyond money, purpose is not only focused on material possessions but a noble intention that has the hope that what is done can benefit others and the surrounding environment. The last element is hope. With hope, individuals will be more resilient to any obstacles or obstacles faced because they have hope that all the efforts they make will definitely produce a good result. Although grit research has been widely researched before, so far researchers have not found research that focuses on knowing individual differences related to grit in college students. Understanding individual differences is a key factor in the academic world, especially in higher education, so it is important to study comprehensively in order to understand the characteristics of grit in students.

Method

This research is a literature review that discusses individual differences in relation to student grit. By conducting a literature review, trends in a field of research can be identified, so that further research opportunities can be identified in order to contribute to the body of knowledge in a particular area. Researchers are looking for literature on grit, especially those that examine how grit is in the student age group. Systematically the steps of writing a literature review are as shown below:

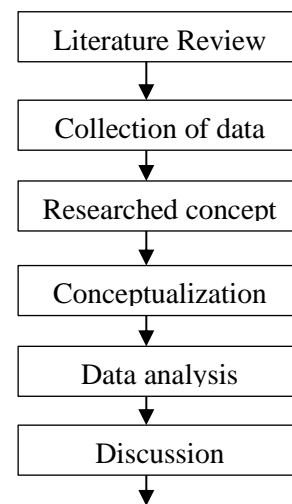


Figure 1. The flow of the concept under study
(Source: personal document)

The data used comes from literature review journals that contain the concept under study. The research articles that are the focus of the study are research articles that have been published in reputable international journals (from 2018 to 2022) and searched through ScienDirect with the subject area of psychology and social science using keywords: grit, individual differences, motivation. These variables are thought to have an important role in student grit during their education in higher education.

In each journal that has been selected based on the criteria, a conclusion is made that describes the related explanation of grit in students. Before the author makes a conclusion from several literature results, the author will identify in a brief summary form in the form of a table containing the author's name, year of writing, title, method, sample, instrument (measuring instrument), and results. After the results of writing from several works of literature have been collected, the author will analyze the antecedent factors and the impact of grit on students in the form of discussion. The inclusion criteria in this literature are English articles with a focus on students and publication dates in the last 5 years starting from 2018 to 2022, the suitability of writing keywords, and the relationship between the results of writing and discussion. Exclusion criteria are publication articles not in publication form, incomplete parts, and books.

The main focus of this literature review is on the antecedents and impact of

grit on university students. Based on the search database, 569 articles were identified and eligibility criteria were carried out consisting of articles in 2022 (142 articles), 2021 (130 articles), 2020 (121 articles), 2019 (85 articles), and 2018 (91 articles). Furthermore, 127 journals were identified and obtained and 17 journals were excluded studies. Excluded studies were again carried out based on the inclusion criteria so that the total number of articles eligible for review was 10 journals focusing on students, the results of the article review were then analyzed through the review analysis table. Among the 10 journals reviewed, 3 journals had a cross-sectional design, 2 journals with correlation analysis, 2 journals with regression analysis, and 3 journals with model testing.

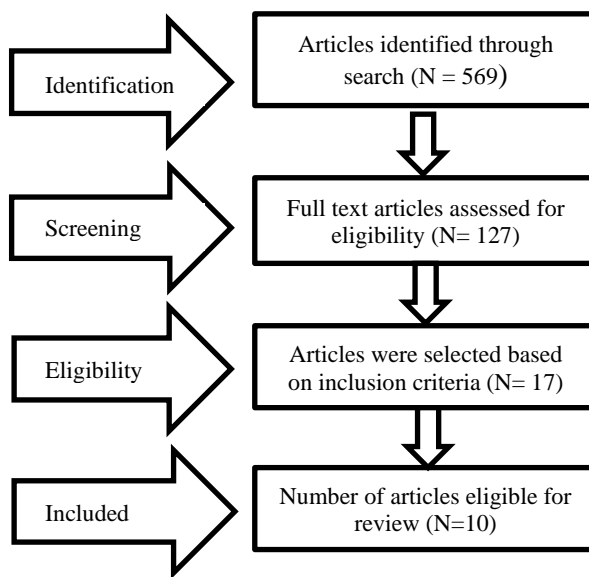


Figure 2. Article Search Process
(Source: personal document)

Result

In this literature study, empirical research articles related to individual differences and grit in college students were analyzed. Predictors of student grit are specifically related to individual differences. The results of the general teacher self-efficacy analysis are listed in the following table:

Table 1. Review Analysis

| Authors (Year) | Title | Method | Sample | Instrument | Result |
|-----------------------|--|------------------------------------|-----------------------|--|---|
| Ma et al (2020) | The Mediation Model of Grit Among Chinese College Students | Quantitative, Correlational design | 380 college students | The scale of measurement: questionnaire | The happiness orientation dimension, the social competence dimension and the grit dimension are significantly related. Happiness orientation can have a positive predictive effect on social competence. Grit has a positive predictive effect on social competence. Grit plays a fully mediating role between happiness orientation and social competence. |
| Filion et al (2020) | Passion and grit in the pursuit of long-term personal goals in college students | Quantitative, CFA, SEM Analysis | 425 college students | The scale of measurement: questionnaire | There is a positive correlation between motivation and grit. Harmonious passion is only positively associated with perseverance. In contrast, obsessive passion was negatively associated with both perseverance and grit. and consistent with aspects of grit. In turn, only perseverance with effort was associated with advancing personal goals and with changes in well-being over the semester. personal goals and with changes in well-being over the semester |
| Light & Nencka (2019) | Predicting educational attainment: Does grit compensate for low levels of cognitive ability? | Quantitative: Regression Analysis | 4448 college students | Measurement scale: questionnaire interview | Grit is positively associated with high-ability college students where these high-ability students adopt self-regulated learning processes that utilize their grit. For these students, grit and |

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|-----------------------|--|---|-----------------------|---|--|
| | | | | | cognitive ability complement each other in the learning process, especially when tasks are relatively challenging. Grit is an important factor in achieving success in college. |
| Werner et al (2019) | Examining the unique and combined effects of grit, trait self-control, and conscientiousness in predicting motivation for academic goals: A commonality analysis | Quantitative, exploratory, and confirmatory factor analysis | 551 college students | The scale of measurement: questionnaire | The quality of motivation, which is relatively autonomous, can control motivation. This is a potential explanation for the relationship between grit and academic goal attainment. |
| Frontini et al (2021) | Passion, grit, and mindset in undergraduate sport sciences students | A cross-sectional survey design | 106 college students | The scale of measurement: questionnaire | No significant differences in passion, grit, and mindset between genders. There is a relationship between passion, grit, and mindset |
| Vazsonyi et al (2019) | To grit or not to grit, that is the question | Quantitative, confirmatory factor analysis | 1907 college students | The scale of measurement: questionnaire | Grit can predict achievement and success in a desired direction. Self-control is beneficial for academic or educational as well as occupational success. The importance of grit as a unique and independent characteristic that stands out for the achievement of long-term goals. long-term goal achievement. |
| Chen et al (2021) | Grit and motivation for learning English among Japanese | Quantitative, Rasch model | 441 college students | The scale of measurement: questionnaire | Positive global self-constructs, positive L2 domain self-constructs and positive L2 motivational |

| | | | | | |
|--------------------------|---|--|----------------------|---|--|
| | university students | | | re | constructs and negative L2 motivational variables have a relationship. Grit and motivation are important for language learning. |
| Ain et al (2021) | Role of emotional intelligence and grit in life satisfaction | Quantitative: Pearson Product Moment Coefficient of correlation, Independent Sample t-test, one-way between group analysis of variance (ANOVA) and multiple regression | 350 college students | The scale of measurement: questionnaire | Emotional intelligence and grit have a positive impact on life satisfaction levels, There is a moderately strong relationship between grit and emotional intelligence. Academic year and academic major did not show significant differences in emotional intelligence and grit. |
| Shamshirian et al (2021) | Passion, grit, and mindset of Iranian wrestlers: A socio-psychological approach | Quantitative: a cross-sectional | 230 college students | The scale of measurement: questionnaire | There is a positive relationship between passion, grit, and a growth mindset. However, there is no difference in the level of competence and achievement |
| Liao & Chen (2022) | Happiness takes effort: Exploring the relationship among academic grit, executive functions, and well-being | Quantitative: Regression Analysis | 214 college students | The scale of measurement: questionnaire | Executive functions, grit, and well-being tend to be interconnected. Cognitive abilities, namely executive functions, can be influenced by the environment, while well-being changes from one moment to the next based on subjective assessments of personal experiences. |

In some of the journals reviewed above, it was concluded that grit has a relationship with several psychological variables including happiness orientation

and social competence (Ma et al., 2020), motivation and *harmonious passion* (Filion et al., 2020), *high ability* (Light & Nencka, 2019), *academic goal attainment* (Werner et

al., 2019), *passion* dan *mindset* (Frontini et al., 2021; Shamshirian et al., 2021), long-term achievement and success (Vazsonyi et al., 2019), *self constructs* (Chen et al., 2021), emotional intelligence (Ain et al., 2021), *executive functions* dan *well being* (Liao & Chen, 2022).

In total, this literature review consists of 10 journals. Based on these journals, it is reported that grit is an individual behavior in maintaining perseverance of effort and consistency of interest for a long duration to achieve a certain goal which consists of aspects of determination, resilience, and focus. Research conducted by Light & Nencka (2019) revealed that grit is interrelated with high-ability students where these high-ability students adopt a self-regulated learning process that utilizes their grit.

Discussion

Grit predicts study success and cumulative grade point average at graduation (Chang, 2014)). Grit is also an asset for students in adjusting to higher education. (Nahamani et al., 2022). Students who have a good way of managing their learning can make it easier for them to get the desired achievement. Self-regulated learning is important for students because it will affect the way of thinking about learning so that they always strive for the goals or expectations they have in the future. Students who have good self-regulated learning will be able to manage their learning with various academic demands. Wolters & Hussain (2015) explored whether grit can be used to predict student engagement in self-regulated learning. Their research found that perseverance of effort only predicts achievement a priori. Therefore, student engagement in self-regulated learning may serve as a mediating pathway through which this aspect of grit is

associated with better academic outcomes.. Martin et al. (2018) asserts that the quality and quantity of motivation changes with learners' cognitive development as they age. In addition, several studies have examined learners' grit levels during the school years. Therefore, grit in the first year of university can be considered as a predictor of students' completion of studies and perseverance in developing their competencies continuously. Jin & Kim (2017) also explains that persistent individuals will be more able to achieve their goals and fulfill their needs or self-satisfaction so that they will strive to face challenges and maintain their efforts.

Motivation is able to explain the relationship between grit and *academic goal attainment* (Werner et al., 2019). This is supported by Filion et al. (2020) that there is a positive correlation between motivation and grit. Individual performance is limited by innate factors and cognitive skills and requires deliberate effort as part of an individual's attempt to change or improve the characteristics of their performance (Bazelais et al., 2016). Previous research has examined the relationship between personality grit and motivation and found a positive relationship between intrinsic motivation and individual grit (Muenks et al., 2017). Students who have higher grit will be more diligent and industrious, less easily discouraged by setbacks or failures, more focused on projects or goals, and more likely to complete tasks. Conversely, students with lower grit are not as diligent, easily distracted by other ideas and plans and unable to set long-term goals and focus on them. Thus, students who have high grit, the study difficulties they face will encourage them to improve their performance and evaluate their efforts.

In the review analysis table, in general, the findings show that it is necessary to accommodate various individual differences in the learning process. Credé et al. (2017)

stated that gender differences in grit seem negligible. It is unclear whether existing gender differences in motivation will have an impact on grit. Therefore, based on previous research conducted by Christensen & Knezek (2014) and Zimmerman & Brogan (2015) revealed that women have higher grit and better self-regulation practices than men. The statement is also confirmed by Choi & Loui (2015) and Bottomley (2015) which states that female students perceive themselves as hardworking and diligent, and able to overcome setbacks. A metaanalysis of grit highlighted the importance of considering the cultural context of the research sample when analyzing grit in relation to other constructs (Hasan et al., 2022). This puts forward the idea that the manifestation of the two dimensions of grit theory namely perseverance of effort and consistency of interest may differ depending on the cultural context. Perseverance of effort is more dominant and stable in collectivistic cultures, unlike the consistency of interest domain of grit which shows ambivalence due to the constant influence of external factors other than oneself (Bowman et al., 2015; Datu et al., 2016).

Research conducted by Ain et al. (2021) revealed that emotional intelligence and grit have a positive impact on the level of life satisfaction. Similar opinions were also revealed in research Liao & Chen (2022) that well being changes from one moment to the next based on subjective assessments of personal experiences and as a personality trait, grit can serve as an inspiring factor, i.e. motivating people to function fully and well.

Grit is an individual personality trait that can determine how individuals interact in various environments and can predict individual success and job retention. (Duckworth, 2016). Of the ten articles, there is one article that states that there is no significant difference in passion, grit, and mindset between genders. (Frontini et al., 2021). Individuals who have passion for

their activities will be more passionate and eager to do and finish what they have started. Any challenge or obstacle they face will be able to find a solution and solve it well. Passion also allows a student to be persistent in carrying out daily lecture activities because of the love for the field of science that has been chosen and pursued (Duckworth et al., 2007; Park et al., 2018).

Some studies highlight the importance of examining the independent effects of the two aspects of perseverance of effort and consistency of interests, rather than the overall concept of grit (Credé et al., 2017b; Muenks et al., 2017; Datu et al., 2016b; Disabato et al., 2019; Hagger & Hamilton, 2019). Taken together, these findings suggest that the effect of grit on outcomes is primarily driven by perseverance of effort, but not by consistency of interests i.e. passion, as defined by Duckworth good in terms of *achievement* (Credé et al., 2017b) and *psychological wellbeing* (Disabato et al., 2019). In addition, perseverance of effort has been shown to be positively associated with achievement (Rimfeld et al., 2016; Credé et al., 2017b; Muenks et al., 2017; Steinmayr et al., 2018).

Students who have a strong meaning in life will trigger an increase in their quality of life and then bring enormous life satisfaction. Perseverance with an effort that is linked to the advancement of personal goals results in well-being during the semester (Filion et al., 2020). This is in accordance with what was revealed by Cruz et al. (2021) that grit is an individual's continuous effort in maintaining perseverance and enthusiasm in achieving long-term goals despite obstacles, obstacles, challenges, difficulties, or discouragement. Failure caused by external factors from the individual does not make them feel disappointed in the causative factor and is a natural thing to face so that they remain focused on their goals without being distracted by disappointed venting behavior.

Sociocultural aspects play an important role in the values formed in the concept of the grit of a student. Research conducted by Ma et al. (2020) shows that grit plays a fully mediating role between happiness orientation and social competence so cultivating students' perseverance also pays attention to fostering students' happiness orientation, which can increase the persistence of students' interest in doing anything and task persistence and facilitate the growth of positive motivation and lead learners to explore the value of life. Grit in each individual varies, and it is this variation that determines how individuals interact in a variety of environmental situations (Hwang et al., 2020).

Based on 10 articles that examine grit in students, only 1 article uses the concept of academic grit (Liao & Chen, 2022), the other 9 articles still use general grit and have not used the concept of academic grit specifically. Academic grit is an individual character or ability that includes determination and resilience in pursuing long-term goals in the field of education. (Clark & Malecki, 2019). Academic grit is closely related to educational constructs such as motivation, self-control, self-regulated learning, academic self-efficacy, individual differences, academic achievement, and student well-being. When students have high academic grit, they tend not to give up easily and continue to strive to achieve their academic goals despite failures and difficulties (Credé & Niehorster, 2012 ; Wang, 2021).

By overcoming academic obstacles and challenges, academic grit always encourages and guides the learner to learn new topics (Skinner et al., 2016). Research conducted by Singh & Chukkali (2021) suggests that grit entails working hard to face challenges, and sustaining effort and interest over the years despite failures, difficulties, and plateaus in progress.

Individuals who have academic grit are those who remain focused on a task and work towards its completion or achievement. Academic grit refers to a student's ability to stay focused and persevere in the face of obstacles and failure in an academic context. (Alhadabi & Karpinski, 2020).

Self-control is an ability that individuals have related to attention, emotions, and actions carried out or how to control their behavior in completing their short-term targets. Thus, grit will be able to complement students' self-control abilities in matters that are long-term. Vazsonyi et al. (2019) also revealed that grit and self-control are beneficial for a student's academic and work success. Self-control makes individuals able to organize a focus while grit will make individuals consistent in achieving long-term targets. This is complementary because there are individuals who are able to regulate their focus and behavior to resist temptation but are unable to be consistent in continuing to move toward long-term goals.

Beliefs in self-competence are part of the evaluation that contributes to beliefs about self-efficacy, interest, and anxiety, and educators are encouraged to help learners develop self-efficacy and reduce anxiety by not making relative comparisons of learners but rather should focus on feedback that develops competence (Chen et al., 2021). Grit and self-efficacy also contribute to improving individual performance. Individual performance is positively related to grit and self-efficacy (Fabelico & Afalla, 2020). Students who have high self-efficacy tend to increase persistence in learning, persistence in education is certainly very important to improve performance in learning. High performance in education is certainly influenced by many factors such as self-efficacy and persistence. Persistence is one part of grit that can improve student learning performance which includes non-academic factors.

Individual grit and cognition have a lot to do with a student's long-term success and achievement (Frontini et al., 2021; Shamshirian et al., 2021). Achievement is a combination of innate talent and effort (Duckworth et al., 2007) et al., 2007). Grit and cognitive ability complement each other in the learning process, especially when tasks are relatively challenging and grit is an important factor in achieving success in college (Light & Nencka, 2019). Grit as a non-cognitive component can encourage students to realize their goal focus. Focusing on achieving goals and being persistent in the process can help students succeed. Furthermore, previous studies have also shown that grit increases with age and this is important in understanding how a student's level of grit may change as they complete their undergraduate degree (Chang, 2014).

Grit gives learners the ability to see a goal from start to finish (Reed & Jeremiah, 2017). In addition, grit is a unique and independent characteristic that stands out for the achievement of long-term goals (Vazsonyi et al., 2019). High grit can help students to become competent graduates in their field of expertise (Duckworth et al., 2007; Bazelais et al., 2016). Adjusting to a student-centered way of learning will require independence and effort or the active role of students as learners. Students with higher grit show higher engagement, leading to higher academic productivity (Hodge et al., 2018). Students with high grit scores scored higher academically than those with low grit scores (Mason, 2018). Thus, students who have a high grit score will be diligent and productive, as well persevere in difficult times, able to complete multiple and challenging tasks.

Grit is a deterrent to procrastination because the grit is the strength, patience, and perseverance that help learners to overcome challenges and set long-term goals (Çelik & Sariçam, 2018). Research results Lim et al. (2021) It was found that there is a positive

influence both directly and indirectly between grit on academic self-adjustment. Research conducted by Khedmatian et al. (2022) stated that students with high grit will be eager to start learning activities and improve their skills in managing the balance between abilities and challenges. They tend to use a variety of adaptation style strategies such as framing, planning, and active adaptation which will ultimately improve their adaptation skills.

From the results of reviewing the analysis of research journals that have been conducted and reviewing discussions of various reference sources, it shows that grit in students from a psychological perspective still needs to be studied more comprehensively, especially related to academic achievement so that it is expected to maximize the potential of students in achieving their long-term goals and understanding individual differences with various dynamics.

Conclusion

Based on the results of the literature review, shows that grit is related to several other psychological variables such as motivation, social competence, high ability, self-regulated learning, passion, mindset, self-control, self-efficacy, and emotional intelligence. Grit is also a variable that determines the graduation and academic achievement of a student. Furthermore, grit has a relationship with academic goal attainment. Grit also predicts happiness, life satisfaction, and student well-being. Thus grit has a very important role for students in achieving the goals that have been set.

Suggestion

Based on the results of the literature study conducted related to individual differences in grit in students, it is hoped that future researchers can expand the scope of

journal articles by using a more varied reputable journal search page so that it can explain more deeply and in detail related to the description of grit in students.

The results of the literature review of individual differences and student grit state that grit is also one of the variables that determine a student's graduation and academic achievement. Furthermore, grit has a relationship with academic goal attainment. Grit also predicts happiness, life satisfaction and student well-being. Based on this, further empirical research is needed to clarify the role of other variables in relation to student grit.

On the parties related to student grit, including universities and lecturers. For universities, it is necessary to facilitate students to continue to have high grit in carrying out academic tasks by paying attention to individual differences to be able to develop programs and activities that are suitable for students. Meanwhile, lecturers need to continue to provide a learning environment that can support student grit in academic activities by paying attention to individual differences and several variables that can support student grit such as motivation, social competence, high ability, self-regulated learning, passion, mindset, self-control, self-efficacy, and emotional intelligence.

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