

## How to Cultivate Perseverance and Passion for Long-term Goals? Review of Grit Predictors

Surahman<sup>1</sup>, Iswinarti<sup>1\*</sup>

<sup>1</sup>(Master in Psychology, University of Muhammadiyah Malang, Indonesia)

**ABSTRACT:** Grit as a positive non-cognitive trait is defined as persistence, tenacity, consistency, and awareness as well as the desire to achieve long-term goals. This literature review aims to determine the factors that influence grit. After the extraction of 274 journals; 13 journals were discussed in this literature review. The result is that there are psychological and demographic variables that significantly influence the grit level. Psychological variables evolving grit consist of growth mindset, task goal orientation, conscientiousness, contesting orientation, mastery goal structure, hope, happiness, engagement, meaning, pleasure, agreeableness, neuroticism, intelligence/imagination, learning-approach goal orientation, and passion. Demographic variables that cultivate grit are family influence and gender. To prove a theoretical study on the grit predictors, longitudinal and experimental research is required.

**Keywords:** perseverance, passion for long term goals, grit, predictor, review

### I. INTRODUCTION

Grit is defined as perseverance and passion for achieving long-term goals over a long time[1]. Grit emphasizes long-term efforts, intensity, and consistency rather than short-term ones. Grit raises a strong workforce against challenges, sustained business, and interests from year to year despite failures and obstacles in the process[1], [2]. Individuals with grit show a commitment to long-term goals and interests, as well as a high work ethic. National spelling bee participants who demonstrate a high level of grit will prepare themselves to practice on their own compared to participants who exhibit lower grit. Practicing itself is a strong predictor of performance during the competition[3].

Grit, as a non-cognitive variable in positive psychology, is built by two aspects, namely consistency of interest and perseverance of effort[1]. Consistency of interest is indicated by the ability to maintain interest in one goal. The individuals also do not change the goals that have been set and are not easily distracted for a long time. Perseverance of effort relates to the strong attempts of individuals in facing challenges to obtain the desired goals. Resilience in high-quality efforts shows the ability to complete the work that is being performed[4].

Grit is influenced by external and internal factors. Several factors from outside of the individual affecting one's grit include parenting, culture, and opportunities to practice. On the other side, the internal factors that build one's grit are interest, continuous training, goal setting, and growth mindset[4]. Grit is important to review. It ignites a positive contribution in the field of education and other fields.

Based on the research results of Mason, it is known that grit can improve academic performance[5]. This is also in line with the research of Mulcahy-Dunn et al. [6] that grit could improve student performance as measured by reading and math skills. Besides, grit can also be a strong predictor of academic productivity and engagement [7], achievement goals [8], learning satisfaction [9], as well as academic achievement [10]–[12]. Grit does not only affect students but also the teacher's performance when teaching[13]. Apart from education, grit also influences mental health.

Research result Blalock et al. explained that students who have high grit may highly reduce the effect of negative life events on suicidal ideation[14]. According to Kleiman et al. suicidal ideation can be lowered by grit if moderated by gratitude[15]. Other researchers point out that non-suicidal self-injury (NSSI) can downgrade suicide attempts when moderated by grit[16]. Grit allows someone to increase his subjective well-being [17], [18] and reduces the influence of stress [19], burnout [19]–[21], as well as depression [22], [23].

Regarding its importance to be instilled in every individual, it is necessary to study the factors that can increase one's grit through a literature review.

Previously, there was a literature review on grit conducted by Datu et al. which discusses the effect of grit on academic outcomes and examines grit from a Western (individual) and Eastern (collective) cultural perspective [24]. Christopoulou et al. also conducted a literature review of the effect of grit on positive outcomes in education [25]. Another literature review was also conducted by Direito et al. which examines grit in research engineering higher education based on research population, methods, topics, and results [26]. These literature reviews focus on cross-cultural studies, research structures, and the positive effects of grit. However, there has not been found a literature review regarding the factors that influence or predictors of grit.

Based on the novelty aspect and the positive contribution of grit to several other psychological variables, this literature review must be carried out. So that this literature review aims to examine the factors that influence grit.

## II. METHOD

Data is taken from research journals that are in accordance with the topic being discussed. The target population in this literature review is all research journals that equal to the criteria for discussion. Determination of population in the literature review according to Cooper [27] utilizes exclusion and inclusion criteria. Inclusion criteria are used to determine which research journals are equivalent to the criteria being discussed. Then, the exclusion criteria are to determine the research journals correlating the criteria for the topic being discussed.

In this study, journals were selected from previous studies that examined the factors that influenced grit. The period of the journals included in the journal was published from 2014 to 2020. We compile data from the latest journals because the arguments and studies carried in older research journals may have been invalidated by them.

Systematic searches were also carried out in international journals. Journal searches were carried out through several search engines such as google scholar, eric.ed.gov, journals.sagepub, researchgate.net, onlinelibrary.wiley, and tandfonline. The keyword to search related journal articles included 'grit', 'predictor of grit', 'perseverance of effort', and 'consistency of interest'. After a selection of 274 journals, 13 journals were identified in discussing the factors that influence grit.

## III. RESULTS

The research journals included in this literature review were published from 2014 to 2020. There are 2 journals published in 2014, 1 journal published in 2015, 3 journals published in 2017, 3 journals published in 2018, 2 journals published in 2019, and 2 journals published in 2020. Furthermore, the countries where the research took place mentioned in this literature review are America, China, Turkey, and Norway. The participants consist of athletes [28], [29], college students [30]–[32], students [4], [33]–[35], and teachers [4], [36].

In Table 1, six research journals examine growth mindset as a predictor of grit [28], [31], [33], [35]–[37]. The other predictors are mastery goal structure [4], hope [30], task goal orientation [28], contesting orientation [29], Big Five Personality [34], learning-approach goal orientation [32], passion [37], and happiness, engagement, meaning, and pleasure [38]. Apart from psychological variables, there are demographic variables that also affect grit, for instance, gender and family influence [29], [34], [37].

Table 1. List of Grit's Predictors

No	Author	Predictor Variable	Subject
1	Albert et al., 2019	Growth mindset Task goal orientation	81 football players
2	Fite et al., 2017	Conscientiousness	142 participants
3	Shields et al., 2017	Contesting orientation Gender	799 athletes
4	Park et al., 2018	Mastery of goal structure	1277 students and 57 teachers
5	Vela et al., 2015	Hope	128 students
6	Wang et al., 2018	Growth mindset	234 students
7	Zeng et al., 2019	Growth mindset	472 teachers
8	Zhao et al., 2018	Growth mindset	1842 students
9	Von Culin et al., 2014	Happiness Engagement	15875 participants 317 adults

		Meaning Pleasure	
10	Lin & Chang, 2017	Agreeableness Conscientiousness Neuroticism Intellect / imagination Family influence	1504 students
11	Akin & Arslan, 2014	Learning-approach orientation	goal 509 students
12	Sigmundsson et al., 2020	Passion Growth mindset Gender	146 participants
13	Park et al., 2020	Growth mindset	1667 students

#### IV. DISCUSSION

Grit as a positive non-cognitive trait is defined as persistence, tenacity, ambition, and awareness. It is also recognized as the need for achievement which is influenced by several factors. Research conducted by Sigmundsson demonstrates that grit can be developed through passion. Individuals, who have enthusiasm, devotion, or passion so that they are motivated to achieve certain goals and achievements own several necessary factors to advance their grit [37].

Although the concepts of conscientiousness and grit have in common [40] however, it is acknowledged that conscientiousness can affect grit. Individuals who have the discipline to focus on achieving goals and prioritizing tasks would shape their grit greatly [34], [39]. Apart from conscientiousness; other Big-Five Personality sections such as agreeableness, neuroticism, and intellect or imagination can foster one's grit [34].

Another predictor of grit is contesting orientation, which explains that athletes who compete for victory and cultivate strong motivation to obtain the result, demonstrate a significant effect on their grit. This study disclosed that although there was an effect of contesting orientation on grit, the effect was negligible. Therefore, intervention is obligated to increase the relationship between the two variables [29]. Grit in athletes according to Albert et al. could also be upgraded with the goal orientation task [28]. This occurs when athletes revamp their abilities, comprehend new tasks, and motivate themselves to continue to work hard beyond time. These efforts by the athletes direct them to achieve long-term goals.

Vela et al. also found another one of grit predictors, which is hope [30]. The study, which was conducted in America, explains that student's grit increases if they establish a clear pathway in achieving their goals as well as acquiring belief in pursuing those goals. Then, according to Von Culin et al. [38], happier individuals are gritty if they work towards themselves through meaning and engagement rather than through pleasure. Also, individuals with engagement and meaning own higher grit than those who seek pleasure. Happiness, meaning, engagement, and pleasure can affect grit.

Another psychological variable that prominently evolves grit is the growth mindset. Athletes who believe that abilities can be developed and perceive that success is obtained through effort and hard work retain higher grit [28]. Individuals who have a growth mindset believe that talent can be developed through hard work, strategy, and input from others. They consistently seek new approaches and interpret failure as a momentary setback and an opportunity for growth. Unlike most gifted individuals, the ones who employ the growth mindset are usually more focused on learning and developing. Gritty individuals tend to believe that their abilities can be tempered or developed rather than fixed [31], [33], [35]–[37].

Students with high mastery goal orientation will also have high grit. It is produced as the students with the perception of a mastery goal orientation prefer challenging tasks to obtain opportunities to learn and continue to develop. When they encounter obstacles, they respond adaptively by showing positive manners and looking for problem-solving solutions. Students who perceive school as a mastery goal orientation tend to show long-term passion and perseverance, which in turn are predicted to produce high learning outcomes. This journal also explains that the teacher can implicitly or explicitly direct students to possess grit. Learning environment such as the relationship between teachers and students is another possibility that affects the relationship between these two variables [4].

There are four aspects of achievement goal orientation, however, only a learning-approach goal orientation may affect grit. Students who have a learning-approach goal orientation will attempt to discover solutions rather than blame themselves when facing failures. There are efforts to learn new skills to increase their understanding and competence in achieving long-term goals [32].

Apart from psychological variables, there are demographic variables that also affect grit, such as family influence and gender. Students would feel a strong family influence in the form of psychological and social

support. The families also assist when achieving short-term or long-term goals. Such a family profile can facilitate perseverance [34]. Gender also affects grit, where women have higher grit than men [37]. In the context of sports, gender also influences grit [29].

## V. CONCLUSION

Based on the discussion, it is acknowledged that grit can be influenced by psychological and demographic variables. Psychological variables evolving grit comprise of growth mindset, task goal orientation, conscientiousness, contesting orientation, mastery goal structure, hope, happiness, engagement, meaning, pleasure, agreeableness, neuroticism, intellect/imagination, learning-approach goal orientation, dan passion. Demographic variables that affect grit are family influence and gender. Research has explained the positive effects and factors that affect grit. In the future, grit research requires to be carried out from the perspective of collectivity and individualist culture. Longitudinal and experimental research approaches to prove theoretical studies on grit may be advanced in the future. Qualitative studies to explore the social and cultural factors in Indonesia that compose grit should be investigated further.

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