

Exploring the Relationship between Grit and Flourishing: Are There Gender Differences?

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Abstract

Grit and flourishing are important constructs that focus on self-potential of individuals, yet there are mixed findings about gender differences in grit and flourishing. Therefore, the objective of this study was to examine the relationship between grit and flourishing among university students. In addition, this study also aimed to examine gender differences in grit and flourishing. This study employed a survey design by administering a questionnaire to 143 undergraduate students. The Short Grit Scale was used to measure grit and The Flourishing Scale was used to measure flourishing. Pearson correlation analysis and regression were used in this study. The findings of the study found that there was a significant relationship between grit and flourishing. Meanwhile, the results of regression analysis showed that 21% of the variance was contributed by grit to flourishing. Results also showed no significant difference of grit and flourishing based on gender. Findings of this study imply the importance of grit and flourishing in helping to increase the potential of individuals. Further research can explore the role of grit and flourishing in empowering self-efficacy and well-being among individuals.

Keywords: Grit, Flourishing, Well-Being, Positive Psychology, Gender

Introduction

Most psychological studies focus on solving psychological problems such as depression, mental illness, anxiety and stress (Le Fevre et al., 2003; Luthans et al., 2007; Simmons & Nelson, 2001) thus ignoring the positive aspects associated with potential and strength (Seligman, 1998). As a result, concepts of well-being and human potential are increasingly being discussed in the field of positive psychology. Positive psychology is the scientific study of positive individual experiences, traits or attributes and institutions that help develop an individual's potential and experiences (Duckworth et al., 2005). In particular, the positive psychological approach focuses on aspects of mental health, quality of life and well-being of human life. This can be achieved through the development of the potential of the individual himself, positive emotional stimulation and strong personal formation to deal with life's

challenges. Moreover, the field of positive psychology also has the goal of optimizing personal functioning, increasing self-satisfaction and building a more meaningful life (Isen & Reeve, 2005; Schiffrin & Nelson, 2010). In other words, the field of positive psychology is a field of psychology that aims to build quality individuals and societies who possess strength and goodness so that they can thrive and achieve well-being (Seligman & Csikszentmihalyi, 2000; Bakker & Schaufeli, 2008).

Joseph and Wood (2010) believe this positive psychological functionality is an important element in understanding a person's mental health status. Keyes (2002; 2005) has explained that full mental health functioning is considered as flourishing (flourishing) while mental health dysfunction is called languishing (languishing). Seligman (2011) on the other hand said that flourishing is one of the highest levels of well-being. It also leads to optimal psychological functioning and self-potential (Seligman et al., 2005).

The positive emotions experienced by a person have a positive effect on the development of skills, psychological resources and abilities that can improve an individual's well-being (Fredrickson, 1998). Mental intelligence (intelligence quotient) has often been used as an indicator to predict outcomes in life. However, there is still the question of why individuals who have the same IQ yet producing different outcomes. This question has led to the concept of "grit" being referred to as a personality trait that can predict long-term success (Duckworth et al., 2007).

The term grit has been conceptualized as the motivation to successfully achieve a goal (Duckworth et al., 2007). Grit is defined as a motivational orientation based on interest and perseverance in achieving long-term goals or passion and perseverance to long-term goals (Duckworth et al., 2007). Grit is built looking at the similarities possessed by individuals who have already reached their maximum potential in their lives as examples of those who are successful and talented in a field and have outstanding achievements. Successful individuals do not rely on talent alone but are also seen as having grit and consistency over a long period of time.

Although research on grit mostly focuses on achievement, there is some empirical evidence that shows grit influences non-achievement related outcomes. Grit is said to have a relationship with school satisfaction and feelings of belonging in the school environment (Bowman, Hill, Denson & Bonkema, 2015), job satisfaction and harmony in life (Vainio & Daukantaite, 2016), as well as well-being and positive affect (Singh & Jha, 2008; Salles et al., 2014) and in reducing suicidal ideation (Kleiman et al., 2013) among adults. Adults who seek well-being through engagement and meaning also tend to have higher grit values as opposed to focusing on pleasure alone (Von Culin et al., 2014).

Literature Review

A study by Vainio and Daukantaite (2016) attempted to understand how grit can be associated with three aspects of well-being namely, psychological well-being, life satisfaction and harmony in life. This relationship can be explained through organismic valuing theory, which suggested that individuals are naturally motivated to develop toward high potential. Sense of coherence and authenticity were used as mediators, while gender was used as moderators. As expected, grit has a high positive correlation with all aspects of well-being. Sense of

coherence and authenticity became fully significant mediators for life satisfaction and harmony in life, and only partially for psychological well-being. This indirectly illustrated that to be resilient in the pursuit of a goal required a sense of coherence and authentic relationship in order to fulfill well-being. Gender on the other hand, as a moderator showed different findings with males showing a strong effect on grit and well-being (in the first study between grit and harmony; in study 2 between grit and psychological well-being) even after the moderating variables were controlled. Due to this, Vainio and Daukantaitė (2016) suggested future studies take into account the role of gender in understanding the relationship between grit and well-being.

Robinson (2015) has studied the relationship between grit using GRIT-S on the engagement of nursing students. Engagement and its dimensions such as skills, emotional interaction and performance were measured using the Student Course Experience Questionnaire (SCEQ). The findings of the study found that high grit scores were related to overall engagement. More specifically, high grit scores have a strong correlation with student skills. Although student engagement is a multi-dimensional concept, empirical evidence suggested a relationship between grit and engagement.

Ryan and Deci (2001) explained that a good life will help to increase one's potential towards achieving self-perfection. Well-being in the eudaimonic perspective also emphasized aspects of self-development, success and achievement (Huta & Waterman, 2013). This was also supported by Ryff and Singer (2008) who stated that well-being was the key to the eudaimonic paradigm by suggesting that high well-being can be achieved by maintaining internal resources through self-acceptance, positive relationships with others, mastery of feelings and surrounding circumstances, and having autonomy. Individually, self-development refers to the process of perseverance in life when circumstances fluctuate and purpose in life refers to feelings of something valuable in life (Ryff, 1989; Ryff & Singer, 2008). Next, Keyes, Shmotkin and Ryff (2002) have compared the concept of psychological well-being with subjective well-being that did not take into account aspects of purpose in life and self-development as dimensions of well-being. Indirectly, this makes psychological well-being a better concept because of its emphasis on eudaimonic aspect.

Jain and Sunkarapalli (2019) have studied the relationship between grit and flourishing on undergraduate students. A total of 240 undergraduate students from year one and year three in the city of Hyderabad, India were involved in this study. The Grit-S questionnaire was used to measure grit and the Flourishing Scale was used to measure flourishing. Results of the study found that there were significant differences in the level of grit and flourishing of year one and year three students. In addition, grit also has a significant relationship with flourishing. This was also supported by Valdez and Datu (2020) who have studied the association between gratitude, grit and flourishing among 236 high school students in the Philippines. The findings of the study found that gratitude and grit were associated with high levels of flourishing.

In another recent study, Padhy, Hariharan and Mutnury (2021) has examined the psychosocial factors that contribute to flourishing. The objective of this study was to look at the relationship between grit, vitality and flourishing. A total of 449 study respondents aged 18 to 57 years were involved in this study. Findings showed that grit and vitality were significant

predictors of flourishing. Padhy, Hariharan and Mutnury (2021) also suggested that studies on the impact of grit on flourishing should be explored more widely.

Kumar and Rathee's (2019) study found significant differences between males and females for the dimension of perseverance of efforts. Females showed higher scores than males, illustrating that females have higher consistency of effort and dedication to achieve long-term goals than males (Rogoza et al., 2016). Similar finding was obtained by Christensen and Knezek (2014) who used a 12-item grit instrument and found a significant difference ($p = .011$) between female and male students, which involved 151 high school students in the United States. This may be due to women being more competent in some skills related to increased levels of grit such as multi-tasking (Kuptsova & Ivanova, 2016).

However, the study of Sigmundsson, Guðnason and Johannsdóttir (2021) found no significant difference of grit between males and females. This finding was consistent with the findings of Sigmundsson et al (2020) who also found that there was no difference in grit scores between males and females. A preliminary study of Duckworth et al (2007) also showed that there were no significant differences of male and female on grit scores. Studies on gender differences in grit scores are still considered inconsistent and can be debated looking at the different findings (Duckworth et al., 2007; Duckworth & Quinn, 2009; Ali & Rahaman, 2012; Eskreis-Winkler et al., 2014).

As for flourishing, De la Fuente, Sánchez-Queija, Parra and Lizaso (2019) examined gender differences in flourishing. A total of 1502 university students in Spain aged between 18 to 29 years were involved in this study. The results of the study found that flourishing score among women was higher than that of men. This was also supported by the study of Schotanus-Dijkstra et al. (2015) who found that females showed higher flourishing scores than males, and there were also studies that found males have higher levels of flourishing than females (Keyes 2007; Keyes et al., 2002). This was also supported in studies involving adolescents, where the results found lower levels of well-being among female adolescents than male adolescents (Patalay & Fitzsimons, 2018). This was consistent with Howell and Buro's (2014) study involving samples undergraduate students in Canada who found female students had higher flourishing scores than male students.

Results of gender differences in flourishing scores are still inconsistent (Ferguson & Gunnell, 2016; Batz & Tay, 2017). These differences were also influenced by various factors including age and culture (Ahrens & Ryff, 2006). In most studies, researchers have failed to find significant differences in well-being between men and women (Waterman et al., 2010). Therefore, the importance of looking at gender differences in grit and flourishing variables needs to be assessed in order to understand the role of gender in this issue.

Research Objectives

Specifically, the objectives of this study are to:

1. examine the relationship between grit and flourishing
2. examine the role of grit as a predictor of flourishing
3. assess the differences in grit and flourishing based on gender

Research Method

Research Design

To ensure that a study runs smoothly, the research design is a very important step because it describes the methodology of the study to be conducted. Therefore, proper selection needs to be done to ensure that the study is truly effective. This research was a survey-based, correlational cross-sectional study.

Respondents

In this study, a total of 143 final year students from the Faculty of Education, Universiti Kebangsaan Malaysia were involved in this study. This research used a purposive sampling technique.

Research Instruments

The Grit Short Scale (Duckworth et al., 2007) consisted of 8 items was used to measure grit and the Flourishing Scale instrument (Diener et al., 2009) comprised of 8 items was used to measure flourishing. The reliability of the grit instrument showed acceptable internal consistency, with Cronbach alphas ranging from .73 to .83 while results of Confirmatory Factor Analysis retained the original two factors namely Consistency of Interest and Perseverance of Effort (Duckworth et al., 2007). The Flourishing Scale also showed acceptable psychometric properties among student samples (Diener et al., 2009; Howell & Buro, 2014), full-time employee sample (Silva & Caetano, 2011), and community sample (Tang et al., 2014).

Results and Discussion

Demographic Profile

Table 1 shows a descriptive analysis of the demographic profiles of 140 respondents (97.9%) consisting of respondents aged between 20 to 24 years were involved in the study. While a total of 3 respondents (2.1%) were respondents aged between 25 to 29 years. As for the division of respondents according to gender, there were a total of 36 male respondents (25.2%) and a total of 107 female respondents (74.8%). In terms of race, the majority were Malays with a total of 125 people (87.4%), followed by other races (3.5%), and Chinese (7.7%), and Indian (1.4%). Next, the majority of respondents obtained a CGPA of 3.00-3.49 with a total of 73 respondents (51.0%), followed by a CGPA of 3.50-4.00 with 64 respondents (44.8%), and a total of 6 respondents (4.2%) obtaining CGPA of 2.50-2.99.

Table 1: Demographic Data

Demographic		Frequency (N=143)	Percentage (%)
Age	20-24 years old	140	97.9
	25-29 years old	3	2.1
Gender	Male	36	25.2
	Female	107	74.8
Ethnicity	Malay	125	87.4
	Chinese	11	7.7
	Indian	2	1.4
	Others	5	3.5
CGPA	2.50-2.99	6	4.2
	3.00-3.49	73	51.0
	3.50-4.00	64	44.8

Relationship between Grit and Flourishing

Result of Pearson correlation in Table 2 shows that there was a significant relationship between grit with flourishing, $r = .461$, $p < .0001$.

Table 2: Results of correlation between grit and flourishing

	Flourishing
Grit	.461**

* $p < .0001$

Grit as Predictor towards Flourishing

The results from multiple regression analysis as shown in Table 3, showed R^2 value of .21, $F = 37.98$, $p < .001$ indicating that 21% of the variance was contributed by grit to flourishing. In other words, grit significantly predicted flourishing with Beta = .461, $t = 6.163$, $p < .0001$.

Table 3: Results of simple linear regression grit as predictor towards flourishing

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	22.646	3.276		6.914	.000
Grit	.771	.125	.461	6.163	.000

Findings of this study are consistent with the findings of previous studies that showed significant influence between grit and flourishing (Jain & Sunkarapalli, 2019; Padhy, Hariharan & Mutnury, 2021). Although most previous studies have linked grit and well-being (Salles et al., 2014; Vainio & Daukantaitė, 2016), grit has also been shown to affect flourishing. As flourishing is considered as one of the new constructs for measuring well-being (Seligman, 2011), the relationship between grit and flourishing is also very closely linked. Well-being in

the eudaimonic perspective is very much concerned with aspects of self-development, success and achievement (Huta & Waterman, 2013). This is also supported by Ryff and Singer (2008) who state that well-being is the key to the eudaimonic paradigm by suggesting that high well-being can be achieved by maintaining internal resources through self-acceptance, positive relationships with others, mastery of feelings and surrounding circumstances, and having autonomy.

Past studies have also shown that students who dominate the environment tend to learn to pursue goals and are categorized as those who are task-bound, optimistic-oriented and positively affected (Boekaerts, 1993). Moreover, goal mastery is often associated with pleasant emotional experiences (Kaplan & Maehr, 1999; Turner et al., 1998; Linnenbrink, 2005; Roeser et al., 2002; Sideridis, 2005; Pekrun et al., 2006; Daniels et al., 2008), an increase in self-esteem (Dykman, 1998; Sideridis, 2005; Skaalvik, 1997), a low degree of depressive symptoms (Dykman, 1998; Sideridis, 2005) and anxiety (Daniels et al., 2008; Skaalvik, 1997).

Gender Differences in Grit and Flourishing

Results showed that there was no significant difference in grit based on gender, $t = 0.164$, $p > .05$. There was also no significant difference of flourishing based on gender, $t = 1.56$, $p > .05$. This is in contrast with previous studies by De la Fuente et al (2019); Schotanus-Dijkstra et al (2015) who found females showed higher flourishing scores than males. There are also studies that found males have higher levels of flourishing than females (Keyes, 2007; Keyes, Shmotkin & Ryff, 2002). This indirectly proves that studies regarding gender differences in flourishing are still inconsistent and need further studies.

Table 4: Results of t test for gender differences in grit and flourishing

Grit	N	Mean	SD	t	sig
Male	36	26.02	4.43	.164	.686
Female	107	25.79	4.23		
Flourishing	N	Mean	SD	t	sig
Male	36	43.53	6.21	1.56	.213
Female	107	42.24	7.42		

Conclusion

Grit and flourishing are among the new constructs in positive psychology. Studies linking grit to flourishing are still few with most studies linking grit to well-being. Although flourishing is a new construct that has to do with well-being but flourishing is more focused on eudaimonic than hedonic approach. This study found that grit significantly predicted flourishing. In addition, results indicated no gender differences in grit and flourishing. Findings of this study imply that grit as the characteristic for consistency of interest and perseverance of effort are important predictor for a person's well-being which is measured by flourishing trait. In addition, both males and females showed no significant difference in grit and flourishing, indicating male and female university students exhibit similar grit and flourishing characteristics which can be used to develop their potential in seeking success in life.

There are several limitations of this study among which is only two variables were examined. Examination of multiple variables related to personality, resilience, life satisfaction and mental health indicators would add in-depth understanding to the development of well-being

among university students. Further research can also explore the role of grit and flourishing in empowering self-efficacy and well-being among individuals. Apart from that, the number of respondents of this study was small and not representative of the university population as evidenced from the unbalanced number of male and female respondents. Future studies should investigate further the role of gender in influencing grit and flourishing as there are still inconsistencies and not much is known regarding what makes males and females differ in grit and flourishing.

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