

# Influence of Maslow's Need Hierarchy on the Grit of Undergraduate Students

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**ABSTRACT:** Grit is a combination of passion and perseverance which is creating a new wave in the field of Psychological research in individual's achievement and success. The purpose of the study was to determine whether Maslow's hierarchical needs influence a person's grit growth. A sample of 182 college students was taken for this research. The tools which were employed for the purpose of collecting the data were Short-grit S scale, General belongingness scale, Rosenberg self-esteem scale and self-actualization inventory. The data was then statistically analysed using the Pearson correlation test, simple linear regression and multiple linear regression. Later on, it was concluded that there is a relationship between the Grit of an individual and their need for belongingness, self-esteem and self-actualization. It was also seen that growth of grit and Maslow's hierarchical needs are co-dependent on each other.

**KEYWORDS:** Grit, Maslow's need hierarchy, Belongingness, Self-esteem, Self-actualization.

## I. INTRODUCTION

Grit is important in one's life as it helps in enhancing the performance of an individual in various aspects of life. A proper motivation given to a gritty person can help him to achieve a higher goal smoothly. According to Duckworth, grit can be characterized as “perseverance and passion for long-term goals”. Passion is an intense emotion to a specific subject. The intensity of passion determines our motive to fulfil a particular task. According to Oxford Dictionary, “Perseverance in doing something differently or delay in achieving success”. In many cases, grit is often confused with achievement, but it's not actually that. The distinctive factor of grit is that the person never loses their hope even after having many attempts of failure. Focus and stamina are two most observed qualities in a gritty person when compared with a normal person (Duckworth et al., 2007). The feeling of boredom is much lesser in a gritty person because of their passion related to a particular subject. According to Duckworth major traits of grit are purpose, hope, interest and practice (Duckworth, 2016b). A purpose is more or less a motivation to do certain work. It is the reason why one pursues their desired goal without backing-down even when failure strikes. Interest is the passion to do a particular set of tasks and at the end leads the person to fully enjoy the work they do. Practice is a process by which one keeps trying until they achieve the goal. A gritty person always prefers a scientific way of practice. Hope is a strong feeling of attaining positive outcomes. It determines the optimistic nature of a person towards a particular task. Studies indicate that gritty students attain more academic achievement than non-gritty peers (Duckworth et al., 2007, Arslan et al., 2013). Prolonged practice, zeal and hard work improve academic excellence in a gritty person (Duckworth et al., 2007; Duckworth et al., 2009).

Maslow's hierarchy of needs is the most established motivation theory till now. Maslow was one of the great pioneers of the humanistic school of psychology. He highlighted the optimistic nature of human beings which further strengthen the idea of self-actualization. Maslow stated that human beings are categorized as “wanting animals” as his craving never ends. According to him, a person's behaviour is the result of satisfying his certain needs. Maslow developed his five-level hierarchy of needs by analysing the development and growth of his students. His hierarchy of needs provides

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a great understanding to the behavioural motivation of a human being. The Cambridge dictionary defines motivation as “enthusiasm for doing work”. Maslow's hierarchy of needs says that there are two kinds of needs: deficiency needs or D-need and being need or B-needs, both of them are essential components of motivation. D-needs transpire from the person's basic existential needs but in the case of B-needs, it is the quest to attain self-actualization. Based on the principle of relative potency Maslow postulated the hierarchy of needs which are physiological needs, safety needs, belonging and love needs, self-esteem needs, and self-actualization needs (Maslow et, al. 1970a). Physiological needs are the most basic and fundamental needs which comprise both physical survival and biological maintenance. Needs like food, drink, sleep, oxygen, shelter and sex belongs to physiological needs. Safety needs are once innate tendencies to be protected and stay secure. Any deficiency in this need will lead the person's feeling of insecurity. Amy M. Hemphill, (2018) found that there is a relationship between Maslow's hierarchy of needs and the grit of a student. A study to study the relation between Maslow's hierarchy of needs and academic performance was concluded by Frances, (2011).

According to Maslow's hierarchy of needs, belongingness is the third basic deficiency need. This need arises when both physiological and safety needs are satisfied. It is the basic need for belonging to a group or a community. From an evolutionary perspective, belongingness was a strong motive in increasing the chance of survival of one's species. This need will regulate the socially acceptable behaviors by promoting them and demoting socially unaccepted behaviours in the process which is the cornerstone of our society and culture. According to Maslow, this need is comparatively harder to achieve in this modern society.

Self-esteem needs are basically described as an optimistic view and acceptance from others as well as oneself. Maslow classified this need into two: the need for respect from others and the need for self-respect. Self-respect consists of positive attitude and confidence in one's talents, views and behaviour. Affirmation, acknowledgement and appreciation comprise the respect from others. Deficiency in this need leads to insecurity, depression and many psychological problems. It is the rearmost deficiency need which is needed in Maslow's hierarchical model of needs.

Self-actualization is a common term used in different personality theories in which most of them have a modest variation. The concept of self-actualization came into prominence by the establishment of Maslow's hierarchy of needs theory. Maslow defined self-actualization as "the desire for self-fulfilment, namely the tendency for him (the individual) to become actualized in what he is potentially. This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming" (Maslow,1943). Self-actualization is the process of obtaining one's true potential and reaching the maximum abilities of an individual. It is the B-need because it differs from person to person. The satisfaction of the four basic needs will trigger the meta-motivation for self-actualization. This meta-motivation will result in restlessness and discontentment unless they satisfy their growth need for self-actualize.

## II. RELATED WORKS

Amy M. Hemphill (2018) conducted a study on grit and belongingness in school students and hence, concluded that there exists a relationship between both the factors. There exists a relationship between belongingness with grit and academic performance (Charles, 2018). There are studies associated with social identity and belongingness with academic achievements (Walton, 2007a; Cohen, 2008; Miller, 1975). These studies state that when people identify themselves with a particular set of groups, their performance is influenced by the Identity and nature of that group. Social identity such as a person's race or gender can also have a dramatic effect on the factors which determine the success of an individual. The effects of stereotypes in achievement outcomes are also immense (Schmader, 2003; Steele et al., 2002).

There exists a relation between grit and self-esteem (Li, 2018; Robert, 2018; mazen, 2012). Subjective perception of self is interdependent with main performance indicators (Peixoto 2003; Jackson et al. 2001). In the case of academic

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achievement, it is established that academic self-concept has a positively skewed relation (Aryana, 2010; Muijs 1997; Hoge et al. 1995). It is also established that there is a significant correlation between self-esteem and subjective well-being (Du 2017).

The relation between Self-actualization and academic performance have been established in the previous researchers (William,2007; Freitas,2011; Stewart, 1968). There are researches who associate creativity as an important Self-Actualization factor with grit (Joanne,2012, 2012, 2015; Grohman,2017).

There is a significant amount of studies conducted based on the relation between grit and academic achievement (Larkin, 2016; Midkiff et al., 2017; Muenks et al., 2017). Similarly, the association between well-being and grit has also been studied (Sax et al., 2014; Schiffrin et al., 2014; Clark, 2015). Maslow's hierarchy of needs has a great influence on academic achievement (Freitas et al., 2011). It is proved that belongingness and self-esteem have a correlation with academic successes. Self-actualization greatly influences the wellbeing and academic performance of a student.

### III. NEED AND SIGNIFICANCE OF THE STUDY

In this age of rapid growth and change, Grit and motivation can be the key factors to attain success in an individual's life. This research will benefit institutions to understand and work on the satisfaction of the Maslow's hierarchical needs in students to attain higher successes in all-round development. It will provide a ray of light to the teachers and administrators on the path of making significant changes in their pupils' productivity. Will instruct the parents to be more aware of the satisfaction of each need of their child. This research can enlighten students with the factors that influence their success.

### IV. OBJECTIVE

The main objective of the study is to determine the effect of grit with the higher needs like belongingness, self-esteem and Self-Actualization in Maslow's hierarchy of needs.

### V. PROCEDURE

Undergraduate college students were taken as the sample population for the study. Both aided and unaided students belonging to Christ college Irinjalakuda were selected by random sampling. Students were asked to respond to the short grit scale, general belongingness scale, Rosenberg self-esteem questionnaire and Self-Actualization Activity Inventory after providing them the instructions. The data was analysed using SPSS 25 through Pearson correlation, simple linear regression and multiple linear regression to test the stated hypothesis.

### VI. SAMPLES AND TOOLS USED

Random sampling was used to collect a sample of 187 undergraduates. Short grit scale (2009) developed by Angelina Duckworth had been used to calculate students' grit. There are 8 items in the scale. It has an internal consistency of .73 to .83, consistency of interest alphas ranged from .73 to .79 and perseverance of effort alphas ranged from .60 to .78. The General Belongingness Scale (GBS), developed by Malone et al. (2012), and have 12 items. Cronbach's alpha coefficient for the overall scale was  $\alpha = .81$ , Test-retest reliability coefficient as  $r = .80$  and internal consistency coefficient for the overall scale was found as  $r = .89$ . Rosenberg self-esteem Questionnaire (RSQ) was developed by Rosenberg, M. (1965). It's made up of 10 items to test global self-esteem. The scale has comparatively high reliability with test-retest range between .82 to .88, and Cronbach's alpha of the range .77 to .88. Self-Actualization Activity Inventory (SAAI) (D'Souza et al.,2015) is a 15-item scale. it has a Cronbach's  $\alpha$  reliabilities as self-transcendence 0.64, aesthetic 0.64, cognitive 0.76, self-actualization 0.73 and total 0.77

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## VII. RESULT AND DISCUSION

The aim of the study was to understand the relation between Maslow's higher needs and an individual's grit. The data was collected and analysed using SPSS 25. Pearson's correlation, simple, linear regression and multiple linear regression were used to determine the relationship of grit with belongingness, self-esteem and self-actualization.

Table 1: Pearson's correlation between student's grit level with Belongingness, Self-esteem and Self-actualization.

Variable	M	SD	1	2	3	4
1. Grit	3.77	0.678	-			
2. Belongingness	59.25	11.89	.246**	-		
3. Self-esteem	18.57	4.2	.344**	.352**	-	
4. Self-actualization	42.68	5.42	.361**	.349**	.484**	-

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

From Table 1, it can be concluded that there was a significant difference in grit based on Belongingness ( $r(187) = .246$ ,  $p = .001$ ), self-esteem ( $r(187) = .344$ ,  $p = .000$ ), and self-actualization ( $r(187) = .361$ ,  $p = .000$ ). Such that students with higher belongingness (Mean= 59.25), self-esteem (Mean= 18.57), and self-actualization (Mean= 42.68) reported higher total grit (Mean = 3.77) than the individuals with lower belongingness, self-esteem, and self-actualization. The correlation results prove that the relationship of grit with belongingness, self-esteem, and self-actualization is highly significant with a weak positive correlation between grit and belongingness. But when it comes to grit with self-esteem and self-actualization there's a moderately strong positive correlation between them. The correlation between grit and self-actualization is found to be higher in strength when compared to the other two correlations. The strength of the correlation between grit and belongingness is found to be lower than the correlation between grit and self-esteem.

Table 2: Simple linear regression between student's grit level with Belongingness, Self-esteem and Self-actualization.

Variables	R	R <sup>2</sup>	Change R <sup>2</sup>	$\beta$	F value	Sig.
X = Grit Y = Belongingness	0.246	0.061	0.056	0.246	11.961	0.01
X = Grit Y = Self-esteem	0.344	0.119	0.114	0.344	24.907	0.01
X = Grit Y = Self-actualization	0.361	0.13	0.126	0.361	27.713	0.01

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Simple linear regression was further calculated to predict grit based on belongingness, self-esteem, and self-actualization. A significant regression equation was found ( $F(1,185) = 11.961, p < .01$ ), with an  $R^2$  of .061 for belongingness, ( $F(1,185) = 24.907, p < .01$ ), with an  $R^2$  of .119 for self-esteem and ( $F(1,185) = 27.713, p < .01$ ) with an  $R^2$  of .130 for self-actualization. These results are backed up by the previous research on this topic (Amy, 2018; Charles, 2018; Li, 2018; Robert, 2018; mazeen, 2012). Results show that there is a unidirectional relationship between the grit and the Maslow's higher hierarchy of needs.

Table 3: Multiple linear regression between student's grit level with Belongingness, Self-esteem and Self-actualization.

Predictors Variables	$\beta$	R	$R^2$	Change $R^2$	F value	Sig.
Self-actualization	0.096					
Self-esteem	0.199	0.419	0.176	0.162	12.986	0.01
Belongingness	0.231					

At last, multiple linear regression was calculated to predict grit based on belongingness, self-esteem, and self-actualization. A significant regression equation was found ( $F(3,183) = 12.986, p < .01$ ), with an  $R^2$  of .176. Students' predicted grit is equal to  $1.622 + .029$  (self-actualization)  $+ .032$  (self-esteem)  $+ .005$  (belongingness). According to Maslow, self-growth increases by satisfying every hierarchical need. There is an increase in the strength of grit as we go higher in Maslow's needs. An individual's grit is greatly dependent on their self-growth. This study proves that when each need is satisfied, that ultimately increases the grit of the person.

## VIII. LIMITATIONS

- The sample size was considered small.
- The study could not be generalized to a larger population as the study was narrowed to college students.
- The data was collected only from a single college.

## IX. CONCLUSION

The research has concluded that an individual's grit is influenced by their satisfaction for higher needs in Maslow's hierarchy. In all three needs self-actualization is the strongest predictor of grit, followed by self-esteem and at last belongingness.

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